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FRAGILITY AND CLIMATE RISKS IN BANGLADESH

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FRAGILITY AND CLIMATE RISKS IN BANGLADESH

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ACRONYMS

ACLED	Armed Conflict Location and Event Data
AL	Awami League
BNP	Bangladesh Nationalist Party
CCAPS	Climate Change and African Political Stability
CEPSA	Complex Emergencies and Political Stability in Asia
CRED	Centre for Research on the Epidemiology of Disasters
EM-DAT	Emergency Events Database
FACTRS	Fragility and Conflict Technical and Research Services
GDP	Gross Domestic Product
ICG	International Crisis Group
ICS	Islami Chhatra Sibir
ISIS	Islamic State of Iraq and Syria
Jel	Jamaat-e-Islami
OFDA	Office of U.S. Foreign Disaster Assistance
SATP	South Asia Terrorism Portal
USAID	United States Agency for International Development

EXECUTIVE SUMMARY

It is widely recognized that Bangladesh faces among the highest levels of climate exposure globally. Yet its ability to build resilience depends on not only building its capacity to address specific climate risks, but also mitigating the fragility that can hinder the state's ability to operate in an effective and responsive manner. While Bangladesh has built significant state capacity to respond to climate hazards like cyclones and floods and has reduced state fragility in the social and economic spheres, sustained political turmoil and increasing violence in the country threaten to undermine continued progress.

In order to provide a more holistic view of how these phenomena interact, and to identify opportunities to generate co-benefits for development, this brief looks at each risk separately and then combined. First, the brief identifies the locations and populations across Bangladesh that face the greatest climate exposure risks and outlines the specific climate risks they face. Second, it discusses current fragility dynamics, spheres where the state has the greatest capacity to respond to public needs, and aspects of fragility that present the greatest potential sources of instability. Importantly, it understands fragility as being rooted in poor state capacity and poor state-society relationships, both of which can contribute to instability. Lastly, this brief describes how the state's compound fragility-climate risks serve to heighten insecurity in Bangladesh.

Bangladesh has the second largest number of people globally facing *very high* exposure—behind only China. Much of Bangladesh's territory consists of a low-lying delta plain, making it particularly susceptible to cyclones, storm surges, riverine flooding, and droughts. Bangladesh is densely populated and faces multiple climate hazards over much of its territory. As a result, the number of people exposed to climate hazards is large both as a proportion of the country's population and in absolute terms. Today, Bangladesh has more than 90 million people and 56 percent of its population living in *high* climate exposure areas. Further, Bangladesh has more than 53 million people, 33 percent of its population, and 35 percent of its territory facing not just *high* but *very high* climate exposure. Populations have adapted to seasonal flood and cyclone risks with periodic internal and international migration. Despite this adaptation, the country's climate exposure makes some areas inhospitable to human habitation and agriculture, contributing to permanent demographic shifts and pressures on urban areas that have the potential to exceed state capacity to meet growing public needs in those urban areas.

The ability to address climate risks depends greatly on state capacity and societal resilience. In recent decades, despite ongoing governance challenges, Bangladesh's preparedness and capacity for addressing its climate challenges have improved, making cyclones and flood events less deadly over time. Fragility risks remain, however, in key spheres of state activity. Overall, Bangladesh experiences *moderate* fragility compared to other countries globally. As compared to other South Asian countries, it experiences lower fragility than some countries like India and Pakistan but greater fragility than others like Sri Lanka. In recent years, Bangladesh's fragility stems more from poor and dwindling state legitimacy than from poor state effectiveness. The key fragility risks in Bangladesh are consistently poor state legitimacy in the political and economic spheres and worsening state legitimacy in the security sphere over the 15-year study period—all of which indicate low public confidence in the government's ability to meet public needs in these areas. Bangladesh has, however, also seen key gains in addressing other fragility risks, improving state legitimacy in the social sphere, and improving overall state effectiveness—particularly in the economic and social spheres. This speaks to growing state capacity to meet public needs in these areas.

While Bangladesh has built state capacity to address key climate, social, and economic challenges, these gains are threatened by sustained political turmoil and increasing violence in the country. These aspects of fragility in the political and security spheres manifest in three primary patterns in the country: a national conflict between two political parties, urban public discontent, and rural communal violence. The national conflict between rival political parties has been accompanied by cycles of violence during

elections and by increasing activity from extremist groups capitalizing on the political turmoil to gain ground. These growing political and security challenges undermine the state's ability to address the needs of discontented urban populations and rural communities—both of which face myriad and increasingly common climate hazards. Further, the predominance of state involvement in conflict with its opposition at the national level has meant that it is largely not involved in managing local communal conflict in rural areas—much of which centers around access to land in climate-affected areas. This combination of domestic forces is made even more precarious by the recent influx of Rohingya refugees from Burma, who are now living in overcrowded tent camps in highly climate-exposed areas along Bangladesh's southeast coast.

The fragility landscape in Bangladesh underscores that it is not only the climate risks and resulting livelihood and migration pressures that pose security risks to the state and populace. Poor management of the political and security spheres has resulted in additional challenges—notably the ongoing urban clashes tied to the political cycle and poor rural security and oversight—both of which could be exacerbated by growing climate pressures. The intersecting drivers of instability in Bangladesh provide key examples of the challenge posed by compound fragility-climate risks in the country. Mismanagement of the political and security spheres at the national level has left the state unable to maintain consistent control in urban areas and uninformed in managing local communal conflict focused on control of land in rural areas. As climate exposure makes some rural areas increasingly inhospitable, management of rural conflicts over land increasingly affected by climate change will be key to addressing the state's broader climate challenges. Further, as climate exposure drives migration out of climate-affected rural areas and into urban areas, often located along coastlines and rivers that are equally if not more exposed to climate risks, management of urban pressures intensified by the inflow of new people will also be key to successfully and peacefully addressing climate challenges.

Bangladesh's experience underscores how compound fragility-climate risks can heighten the insecurity of populations by increasing their vulnerability to instability and humanitarian emergencies. In Bangladesh, the state's fragility in the political and security spheres can pose a direct risk to people's livelihoods and even survival if the state does not build the capacity to mitigate rural conflict over degrading land resources and to manage urban pressures worsened not only by climate stressors directly but also by the arrival of migrants moving out of rural areas and by refugees fleeing violence in neighboring Burma. However, the experience of Bangladesh also underscores how examining compound fragility-climate risks may present a broadened set of opportunities and strategies for both reducing fragility and adapting to climate changes. In Bangladesh, poor state legitimacy—reflecting public perceptions that the state is unwilling or unable to meet public needs—contributes significantly to overall fragility. Thus, state actions that respond to public needs to reduce climate vulnerabilities could simultaneously reduce both climate risks and the legitimacy deficits that drive fragility in Bangladesh. Conversely, the state's inability to reduce public insecurities related to climate risks could further erode the state's political and security legitimacy and contribute to heightened fragility.

In recent decades, Bangladesh has made laudable gains in building state capacity to respond to specific climate hazards like cyclones and floods and in reducing state fragility in the social and economic spheres. However, sustained political turmoil and increasing violence in the country threaten to undermine continued progress in these areas. Thus, while much national and international funding is directed toward addressing climate adaptation and resilience in Bangladesh—and important gains are being made in those areas—continued progress could be hampered if the state's fragile political and security situation is not addressed simultaneously.

INTRODUCTION

States with high exposure to climate hazards face multi-faceted challenges, including physical and livelihood risks for the population that may force states to redirect scarce resources to adaptation or humanitarian response efforts and strain the capacity of states that, in many cases, are still solidifying democratic institutions and mechanisms for meeting public needs. Similarly, fragility can affect many aspects of a state's capacity and legitimacy across its political, economic, social, and security spheres. When states face fragility and climate risks simultaneously, the risks and challenges are compounded.

This study examines states with compound fragility-climate risks—those that face significant fragility and high exposure to multiple climate hazards. The reason for this is straightforward: responding to high exposure to even a single hazard requires substantial resources, infrastructure, and mobilization, yet a country that has high exposure to multiple hazards requires such resources, infrastructure, and mobilization many times over to address each of these diverse hazards. For a fragile state like Bangladesh that faces concurrent risks from rapid-onset hazards like cyclones, storm surges, and riverine flooding and slow-onset hazards like droughts, these diverse threats and required responses can exceed state capacity and social capital.

Bangladesh is widely recognized as a state facing among the highest levels of climate exposure globally. Yet its resilience depends on not only building its capacity to address its specific climate risks, but also mitigating the fragility risks that prevent the state from operating in an effective and responsive way. Thus, while Bangladesh has built state capacity to respond to climate hazards like cyclones and floods and has reduced state fragility in the social and economic spheres, sustained political turmoil and increasing violence in the country threaten to undermine continued progress in these areas.

In order to provide a more holistic view of how these phenomena interact, and to identify opportunities to generate co-benefits for development, this brief looks at each risk separately and then combined. First, the brief identifies the locations and populations across Bangladesh that face the greatest climate exposure risks and outlines the specific climate risks they face. Second, it discusses current fragility dynamics, spheres where the state has the greatest capacity to respond to public needs, and aspects of fragility that present the greatest potential sources of instability. Lastly, it describes how the state's compound fragility-climate risks serve to heighten insecurity in Bangladesh.

CLIMATE RISKS

The combination of high and increasing population density, low-lying geography, high poverty, and weak infrastructure make Bangladesh especially vulnerable to the adverse impacts of climate change.¹ It is often touted as one of the world's most vulnerable countries to the impacts of climate change. Much of Bangladesh's territory consists of a low-lying delta plain, making it particularly susceptible to cyclones, storm surges, riverine flooding, and droughts.

Bangladesh is densely populated throughout the country and faces multiple climate hazards over much of its territory. As a result, the number of people exposed to climate hazards is large, both as a proportion of the country's population and in absolute terms. Today, Bangladesh has more than 90 million people and 56 percent of its population living in *high* climate exposure areas. Further, Bangladesh has more than 53 million people, 33 percent of its population, and 35 percent of its territory facing not just *high* but

¹ USAID 2018.

very high climate exposure.² Bangladesh thus has the second largest number of people globally facing very high exposure—behind only China. The *percentage* of people exposed in Bangladesh also greatly exceeds global averages for population exposure. Globally, only 14 percent of the world’s population live in areas facing high climate exposure (compared to 56 percent of the population in Bangladesh), and globally only 6 percent of these people live in areas facing very high climate exposure (compared to 33 percent of Bangladesh’s population).

Located in the deltaic plains created by the Ganges, Jamuna, and Meghna rivers, the low-lying country is periodically inundated with water. Exposed to the Bay of Bengal, it has experienced several major cyclones, storm surges, and flood-related disasters, resulting in major loss of life as well as significant damage and destruction to livelihoods and properties across the country.

TABLE 1: INDICATORS USED TO ASSESS CLIMATE EXPOSURE

Hazard	Exposure in Bangladesh
Low-elevation coastal zones	Bangladesh has low elevation across extensive swaths of territory. These include the coastal zones in Khulna and Barisal divisions and extend further inland to the southern half of Dhaka division and along the Meghna River northward along the border between Dhaka and Sylhet divisions. Much of the country thus faces high exposure to future sea-level rise and associated flooding, storm surge, and salt-water intrusion that may make some areas unsuitable for agriculture and human habitation.
Cyclones	The southern half of Bangladesh is subject to cyclone risk.
Floods	A large portion of the country is flood-prone along the major rivers, including the Jamuna, Meghna, Ganges, and Padma rivers. The northeastern quadrant of the country is especially flood-prone. While the country has always been flood-prone, and in fact many of its agricultural activities and livelihoods depend on this cyclical inundation of water, climate projections suggest that flooding will intensify in Bangladesh due to increased rainfall, river run-off, and possibly—though more uncertain—increased cyclone activity. ³
Rainfall anomalies	The areas with the largest negative rainfall anomalies are along the central western frontier at the border of Rajshahi and Khulna divisions.
Chronic aridity	Bangladesh has moderate chronic aridity throughout the country.
Wildfires	The most wildfire-prone region is in the far east in Chittagong division.

This study’s climate exposure measure seeks to identify places that are vulnerable to a combination of climate hazards.⁴ It assesses climate exposure using historical data on six key hazards—rainfall anomalies, chronic aridity, wildfires, floods, cyclones, and low-elevation coastal zones—and combines them into a single composite measure to also assess overall risk.⁵ Bangladesh faces a confluence of

² High exposure areas are defined here as one standard deviation or more above the global mean exposure. Very high exposure areas are four standard deviations or more above the global mean exposure. For population-based metrics of climate exposure worldwide, see Smith, Krishnan, and Busby 2016. For territory-based metrics of climate exposure worldwide, see Krishnan, Busby, and Smith 2016.

³ United Kingdom Meteorological Office 2011; and Potsdam Institute for Climate Impact Research and Climate Analytics 2013.

⁴ The global climate exposure measure developed for this study for USAID is based on similar regional measures developed by Joshua W. Busby, Todd G. Smith, Nisha Krishnan, and Charles Wight for the Robert Strauss Center for International Security and Law’s U.S. Defense Department-funded programs on Climate Change and African Political Stability (CCAPS) and Complex Emergencies and Political Stability in Asia (CEPSA).

⁵ Cyclone winds are measured as the average sum of winds in kilometers per year based on the frequency and speed of cyclone events. Low coastal zones are measured in meters above sea level. Floods are measured as the number of flood events per 100 years. Wildfires are measured as the number of wildfire events per year. Chronic aridity is measured as the coefficient of variation (CV) based on monthly variation, with low CV reflecting consistent rainfall and high CV reflecting long periods of very little rain punctuated by short periods of high rainfall. Rainfall

climate hazards that contribute to its high overall climate exposure, as Table 1 describes and Figure 1 shows.

High-exposure areas in Bangladesh are spread across the country, as the overall climate exposure map in Figure 1 shows. These include pockets in all of the country's first-level administrative regions, known as divisions. Divisions with the largest extent of overall exposure include coastal Barisal and Khulna, as well as the more inland but still low-lying Dhaka and Sylhet divisions. Both Dhaka and Khulna divisions have large cities facing high exposure, notably Dhaka (with a population of more than 14 million) and Khulna (with more than 600,000 people).

USAID has noted that tropical cyclones hit Bangladesh, on average, every three years.⁶ Cyclone Bhola, which hit Bangladesh (then East Pakistan) and India's West Bengal in 1970, is considered to be the deadliest cyclone ever recorded, with an estimated 500,000 fatalities. The national government's inadequate response to the storm contributed to the country's quest for independence from Pakistan (then West Pakistan), underscoring the historical intersection of climate and political stressors. Bangladesh's climate-related challenges have only increased since, though mortality has declined due to better preparations.

Between 2000 and 2016, the country faced more than 100 climatological disasters, including cyclones, floods, droughts, and extreme temperatures. In this time, floods have affected the largest numbers of people—36 million in 2004 and nearly 14 million in 2007—but a single cyclone in 2007 was the deadliest disaster in Bangladesh in recent years.⁷ In November 2007, Cyclone Sidr, a category 5 cyclone, hit coastal Bangladesh, impacting in particular Satkhira, Khulna, Barguna, Patuakhali, and Bagerhat, among other districts in the southwest. The cyclone's effects were felt as far inland as Dhaka. More than 4,200 deaths were associated with the storm and as many as 8 million people were affected. In 2009, Cyclone Aila severely affected at least 11 of the country's 64 districts and particularly the Khulna and Satkhira districts. While reported fatalities were relatively low at 190, more than 7,000 people were injured and some 4 million were affected. More than 600,000 household structures, 5,000 educational and other institutional buildings, 157 bridges, and many roads and other hard infrastructure elements were damaged or destroyed by the storm.⁸ Most recently, Cyclone Mora struck Bangladesh in May 2017, displacing 500,000 Bangladeshis in coastal areas and damaging 20,000 homes in refugee camps.⁹

Bangladesh's response to more recent cyclones reflects progress in adaptive capacity and government capacity compared to earlier decades, when larger numbers of people died in the wake of comparable cyclones. Flood and cyclone risks have some seasonality, around which populations have adapted with periodic internal and international migration. Despite this adaptation, the country's level of climate exposure makes some areas inhospitable to human habitation and agriculture, contributing to permanent demographic shifts and increasing pressure on urban areas. These diverse impacts of climatic change have made Bangladesh a leader in early climate adaptation and resilience efforts—much of it supported by international donors. However, while Bangladesh has achieved several important milestones in advancing climate adaptation and disaster response capacity, Table 1 conveys that the country continues to face escalating climate risks across a range of hazards that could exceed the current response capacity of the state.

anomalies are measured as months of drought. For data sources, the rationale for each indicator, and the process used to map individual climate hazards and overall exposure, see Appendix A in Moran et al. 2018.

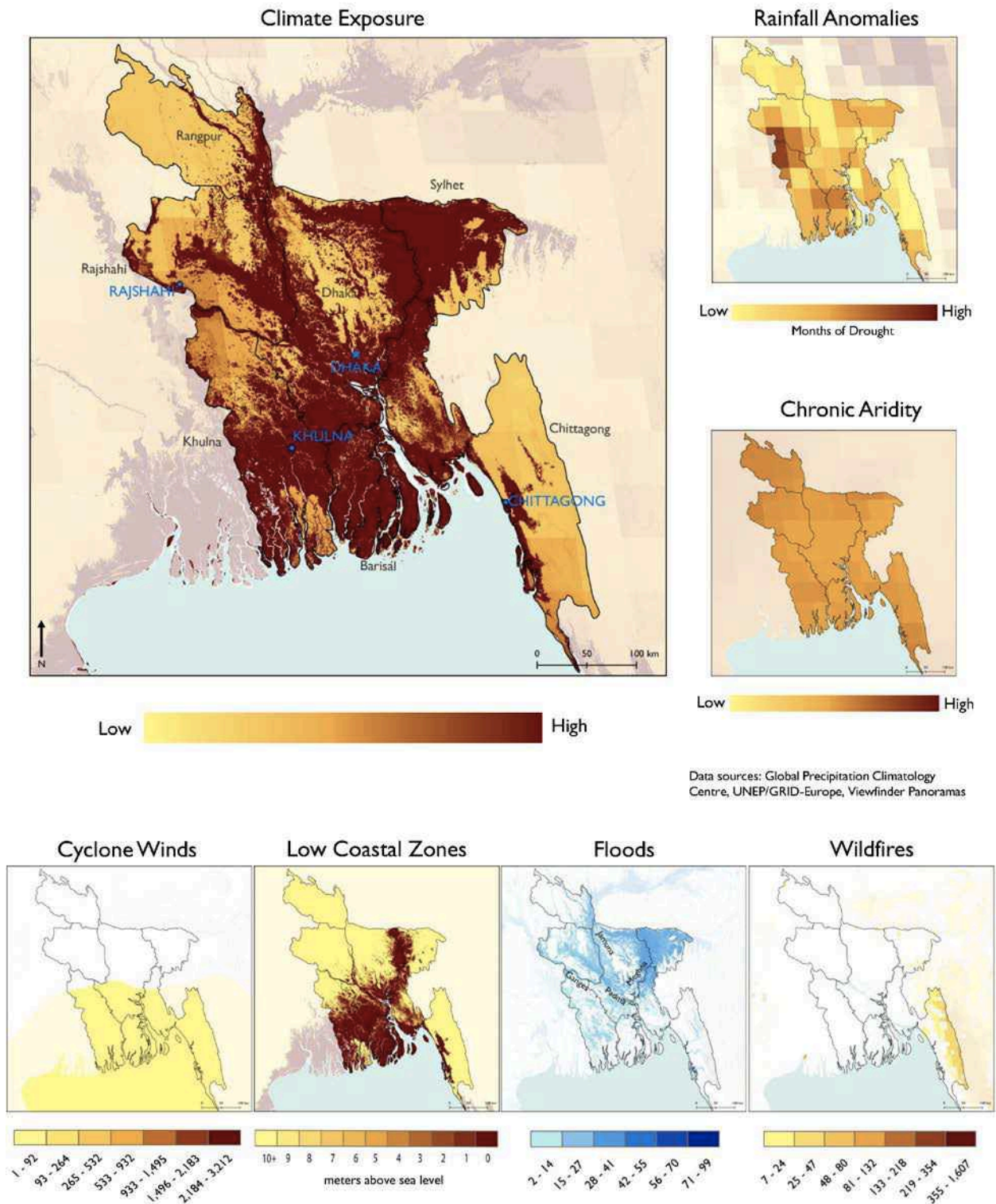
⁶ USAID 2018.

⁷ Guha-Sapir, Below, and Hoyois 2017.

⁸ IRIN 2009.

⁹ USAID 2018.

FIGURE 1: SOURCES OF CLIMATE EXPOSURE



FRAGILITY RISKS

Bangladesh's ability to address its considerable climate risks depends greatly on its state capacity and societal resilience. In recent decades, despite ongoing governance challenges, Bangladesh's preparedness and capacity for addressing its climate challenges have improved, making cyclones and flood events less deadly over time. Fragility risks remain, however, in key spheres of state activity.

This study understands fragility as being rooted in poor state capacity and poor state-society relationships, both of which can contribute to instability. It thus assesses fragility in state effectiveness (i.e. capacity of public sector institutions) and legitimacy (i.e. public support for government arrangements, officials, and practices) in four key spheres: political, security, economic, and social.¹⁰ The fragility measure used here is a country-level measure in which overall fragility reflects an accumulation of scores on a range of state effectiveness and legitimacy indicators, as Table 2 shows. Based on the accumulation of these indicator scores, each state receives an overall fragility score and a classification in one of five categories: *low*, *some*, *moderate*, *high*, and *highest* fragility.

TABLE 2: INDICATORS USED TO ASSESS STATE FRAGILITY

Type	Effectiveness	Legitimacy
Political	Quality of public service # of successful coups d'état in last five years Government tax revenue as percent of GDP	Competitiveness of political participation Citizen participation in selecting government Asylum requests as percent of population
Security	Intensity of ongoing armed conflict Size of displaced population Proportion of country affected by conflict	State use of political terror Presence of militant groups against the state Number of rivaling military organizations
Economic	GDP per capita Poverty headcount ratio Primary commodity exports as percent of total	Control of corruption Rule of law and property rights protection # of days to start a business
Social	Infant mortality rate Child immunization rates Percent of population with access to improved water source	Military expenditures as percent of GDP Percent of parliamentary seats held by women Life expectancy at birth

Bangladesh experiences *moderate* fragility compared to other countries globally, and it experiences lower fragility than some South Asian countries like India and Pakistan but more fragility than others like Sri Lanka.¹¹ While its recent fragility levels are similar to its fragility level 15 years prior—a score of 34

10 This global fragility measure was compiled for this study by Roudabeh Kishi and Andrew Linke with contributions from Clionadh Raleigh, Ashley Moran, and USAID Office of Conflict Management and Mitigation personnel. It is similar in composition and outcome to USAID's internal methods and framework for analyzing fragility (see USAID 2005 and ARD Consortium 2005). *Total fragility* reflects both state effectiveness and legitimacy. Effectiveness indicators assess the capacity of public-sector institutions and practices. Legitimacy indicators assess the degree of public support for government arrangements, officials, and practices. These two sets of indicators are subdivided into political, security, economic, and social indicators to capture state effectiveness and legitimacy in each of these four key spheres. For cross-national fragility scores and raw data, see Kishi and Linke 2016. For data sources, the rationale for each indicator, and the process used to produce state scores, see Moran et al. 2018.

11 The range of *total fragility* scores across all countries in 2014 is 0 to 69. In 2014, scores for countries with *moderate* fragility ranged from 31 to 37, and scores for South Asian countries ranged from 21 to 58. India's higher fragility stems from its very low *security effectiveness* and *security*

in 2014 compared to 35 in 2000—it experienced greater fragility from 2005 to 2010 during heightened political turmoil, a military-backed caretaker government, and the return to an elected government.

Key Areas of Concern

Bangladesh's fragility in recent years stems more from poor state legitimacy than poor state effectiveness. The country's poor overall *legitimacy* scores are rooted in consistently poor *political legitimacy* and *economic legitimacy* scores, as well as worsening *security legitimacy* scores over the 15-year study period (see Table 3).¹² The country's poor *political legitimacy* scores stem largely from the difficulty of advancing alternative policy and leadership preferences in the political sphere. This reflects the dominance of a two-party rivalry in Bangladesh that has had the prime minister role alternate for the last 25 years largely between the two current heads of these parties, the Awami League's Sheikh Hasina and the Bangladesh Nationalist Party's Khaleda Zia. The country's worsening *security legitimacy* scores also relate to this longstanding political rivalry, with protests, riots, and state violence increasing around elections. The resulting instability has also created space for the emergence and persistence of extremist militant groups, as discussed in more detail in a subsequent section. The country's poor *economic legitimacy* scores stem from poor control of corruption and poor rule of law, as well as an increasingly difficult environment within which to start a business, which can lead people to seek economic opportunities outside the formal economy.

TABLE 3: STATE LEGITIMACY DEFICITS IN BANGLADESH

Year	Total Legitimacy Deficits	Political Legitimacy Deficits	Security Legitimacy Deficits	Economic Legitimacy Deficits	Social Legitimacy Deficits
% change 2000-2014	↑ 20%	↑	↑	-	↓
2014 score	18	6	5	6	1
2000 score	15	5	2	6	2

Note: The range of *total legitimacy* scores across all countries in 2014 is 0 to 38. *Total legitimacy deficits* for countries with *moderate* fragility in 2014 range from 10 to 28, with Bangladesh's score of 18 near the middle. *Total legitimacy deficits* for South Asian countries in 2014 range from 13 to 32, with Bangladesh's score of 18 in the lower half. In the percent change row, an up arrow denotes that the country's *legitimacy deficit* score went up over those 15 years, indicating an increase in fragility; a down arrow denotes that the country's *legitimacy deficit* score went down over those 15 years, indicating a decrease in fragility.

Data source: Kishi and Linke 2016.

Though poor state legitimacy makes up the larger part of fragility in Bangladesh, the country does have some aspects of state effectiveness that also remain areas of concern. The bulk of the country's effectiveness deficits lie in the political and social spheres (see Table 4). The country's mid-range *political effectiveness* scores stem from declining public service delivery and low tax revenue generation. The country's mid-range *social effectiveness* scores stem from improving but still not completely effective social services; in this area, key social services such as health care, improved water sources, and sanitation have improved in recent years—particularly relative to other countries in the region—but have not kept pace with gains seen in these areas globally.

As Table 4 shows, deficits in the *security effectiveness* of the state are comparatively low in Bangladesh. They did worsen somewhat since 2000, however, with increased displacement particularly in 2001 and

legitimacy, with a large portion of territory affected by armed conflict, more militant groups challenging the state, and a larger displaced population than Bangladesh. Global and regional fragility dynamics are discussed in Section 3.5 Global Fragility Patterns in Moran et al. 2018.

¹² This study's *total legitimacy* score comprises political, security, economic, and social indicators that capture state legitimacy in each of these spheres, as Table 2 shows. Fragility scores and raw data for all indicators discussed in this section are available in Kishi and Linke 2016.

2006. Growth in the displaced population in Bangladesh conveys that the state has been unable to fully provide human security for its population.

Key Areas of Improvement

Bangladesh is making important gains in addressing fragility risks in several areas. One particularly bright spot in state legitimacy in Bangladesh lies in the country's *social legitimacy* scores. These remained strong and improved over the 15-year study period, as Table 3 shows, reducing fragility in this area to levels well below the regional average for South Asia. This has been due to relatively high gender equality in the political sphere, increasingly high life expectancy, and low military spending as a percentage of GDP, which avoids the prioritization of military spending over social services provision.

Bangladesh has also seen marked improvement in its overall state *effectiveness* scores over the 15-year study period, with improvements specifically in *economic effectiveness* and *social effectiveness* scores, as Table 4 shows.¹³ The gains in *economic effectiveness* scores stem from reductions in the poverty rate and consistent improvements in GDP per capita, signaling growing government capacity to implement effective policies in the economic sphere. The gains in *social effectiveness* scores stem from improved child immunization rates, which reflect complex social-technical infrastructures that require coordination among many elements of society and are thus a strong indicator of growing government capacity in the social sphere.

TABLE 4: STATE EFFECTIVENESS DEFICITS IN BANGLADESH

Year	Total Effectiveness Deficits	Political Effectiveness Deficits	Security Effectiveness Deficits	Economic Effectiveness Deficits	Social Effectiveness Deficits
% change 2000-2014	↓ 20%	-	↑	↓	↓
2014 score	16	5	3	3	5
2000 score	20	5	2	7	6

Note: The range of *total effectiveness* scores across all countries in 2014 is 0 to 34. *Total effectiveness deficits* for countries with *moderate* fragility in 2014 range from 6 to 23, with Bangladesh's score of 16 near the middle. *Total effectiveness deficits* for South Asian countries in 2014 range from 8 to 32, with Bangladesh's score of 16 in the lower half. In the percent change row, an up arrow denotes that the country's *effectiveness deficit* score went up over those 15 years, indicating an increase in fragility; a down arrow denotes that the country's *effectiveness deficit* score went down over those 15 years, indicating a decrease in fragility.

Data source: Kishi and Linke 2016.

Overall, the consistent gains Bangladesh has made in the social and economic spheres reflect core areas of strength where the state has greater capacity to implement policies to address public needs. These strengths reinforce, and bode well for, the state's substantial efforts to address climate challenges, as many of the adaptation and resilience policies needed to respond to climate risk are implemented in the social and economic spheres. However, the aspects of state fragility that persist in the political and security spheres in Bangladesh have created identifiable vulnerabilities that are already contributing to instability and have the potential to hinder continued progress in addressing climate challenges in the future. The impact of these political and security vulnerabilities is discussed more in the next section.

¹³ This study's *total effectiveness* score comprises political, security, economic, and social indicators that capture state effectiveness in each of these spheres, as shown in Table 2. Fragility scores and raw data for all indicators discussed in this section are available in Kishi and Linke 2016.

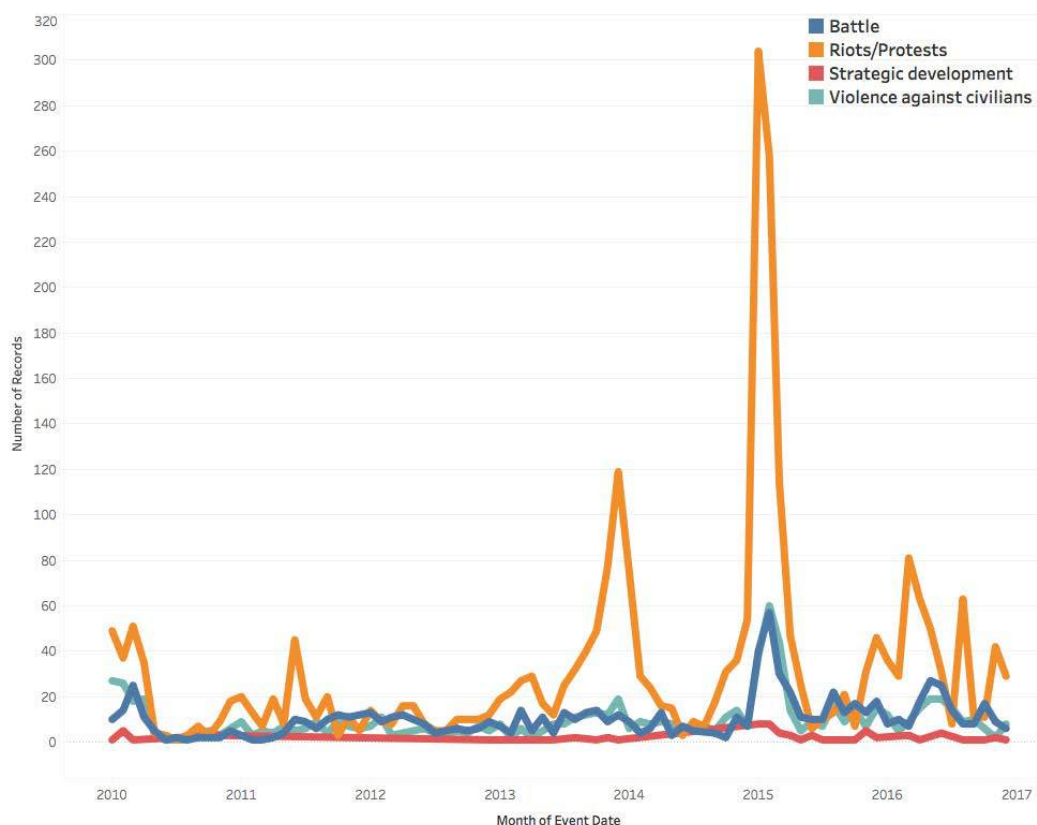
Key Sources of Fragility

While Bangladesh has built state capacity to respond to key climate, social, and economic challenges, these gains are threatened by sustained political turmoil and increasing violence in the country. This section explores these aspects of fragility in the political and security spheres of the state, which present the greatest potential sources of instability in Bangladesh today. Compared to the rest of South Asia, except for Pakistan, Bangladesh is a relatively violent country in terms of fatalities from political uprisings.¹⁴ The country endures intermittent violence that is largely related to government actions and political cycles. These trends reflect three mutually reinforcing patterns of instability in the political and security spheres: a national conflict between two political parties, urban public discontent, and separate communal violence that occurs primarily in rural areas.

As Figure 2 shows, the most significant conflict activity in Bangladesh is riots and protests, particularly in the form of hartals (or strikes) and protest events that occur around elections. In Bangladesh, riots and protests account for the majority of conflict events between 2010 and 2016 with a share of 65 percent, followed by battles (18 percent), violence against civilians (16 percent), and remote violence (1 percent). Figure 2 shows that the highest rates of protest and political violence co-occur with periods of high political competition, such as elections, which took place during this period in 2011, 2014 (followed by an election-related political crisis in early 2015), and 2016. The lowest rates of political violence and protest co-occur with stable political periods rather than with seasonal or climatic conditions.

14 The ACLED data used here define political violence as “the use of force by a group with a political purpose or motivation.” ACLED defines political violence through its constituent events, the intent of which is to produce a comprehensive overview of all forms of political conflict within and across states. A politically violent event is a single altercation where often force is used by one or more groups for a political end, although some instances—including protests and non-violent activity—are included in the dataset to capture the potential precursors or critical junctures of a conflict.” See Raleigh and Dowd 2017.

**FIGURE 2: POLITICAL VIOLENCE AND PROTEST EVENTS
IN BANGLADESH, 2010–2016**



Data source: ACLED 2017.

Confrontational politics are not new in Bangladesh, but they have intensified in recent years. Riots and protests in the country include activities like vandalism, bombings, and clashes between political opponents, rioters, and the police, resulting in high numbers of arrests. The roots of this spike in violence are in the historic rivalry between two political parties—the incumbent secular, socialist Awami League (AL) and its opposition, the Islamic-oriented Bangladesh Nationalist Party (BNP).

National Conflict Between Rival Political Parties

Political violence in Bangladesh is characterized primarily by national competition between two political parties. The ideological fault lines between the two major parties have marked Bangladesh's history since its independence in 1971. These fissures concern questions of secularism, Bengali nationalism, and the role of Islam.¹⁵ In December 2008, the AL coalition won the national parliamentary elections, ending the two-year military-backed caretaker government and instating AL leader Sheikh Hasina as prime minister.

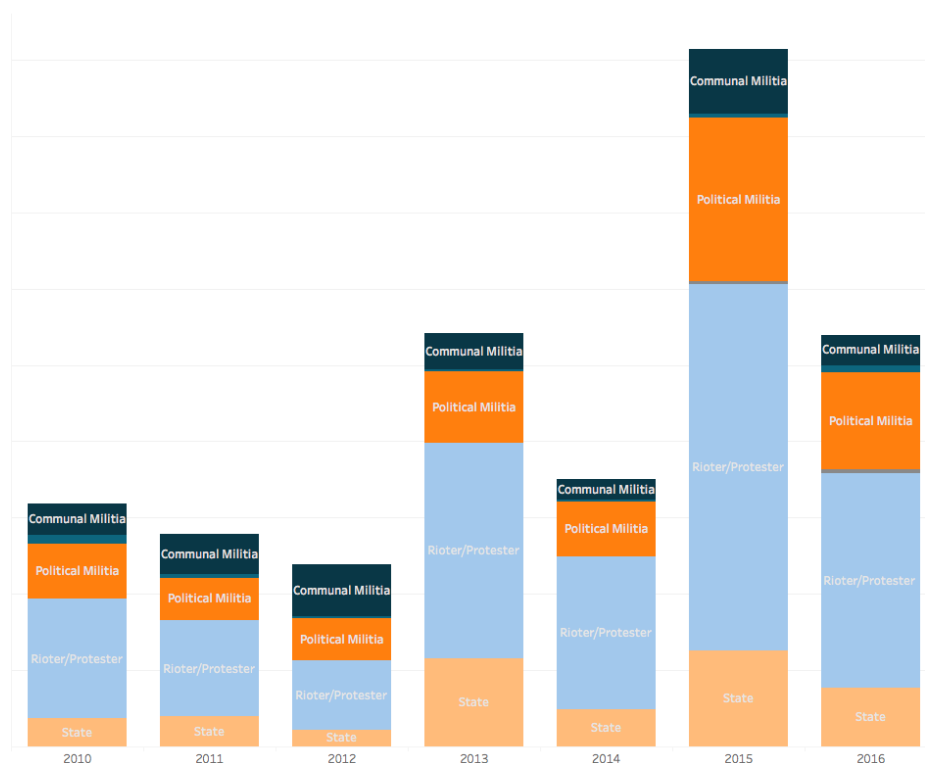
In the run-up to the 2016 local elections, the opposition BNP often declared transportation shutdowns and general hartals to force the government to resign and elections to take place. Opposition protests accompanied a rise in militia activity. The AL government often responded to the opposition's countrywide demonstrations with a crackdown on protesters and widespread detentions by the police. Media reports indicated that as many as 7,000 opposition activists were arrested during the increased

¹⁵ ICG 2015.

police activity from late 2015 to early 2016. Despite the widespread violence around the 2016 elections, the incumbent party was re-elected: the AL won more than 65 percent of the more than 4,000 contested seats, while the BNP won only 9 percent of seats.¹⁶

Extremist groups loosely connected to political elites and parties have been gaining ground in Bangladesh. As Figure 3 shows, the political militias associated with political parties are quite active—particularly compared to neighboring states—and they have increased their activity in recent years in association with the elections and post-election turmoil from 2014 to 2016.

**FIGURE 3: RELATIVE CONFLICT RATES BY ACTOR TYPE
IN BANGLADESH, 2010–2016**



Note: This chart compares conflict actor rates within Bangladesh, relative to each other.

Data source: ACLED 2017.

Further, the national political turbulence has allowed other religious and extremist militants to take advantage of the unstable political situation. Attacks by radical Islamic groups do not make up a large part of the political violence in Bangladesh, but they have gained a foothold. The Armed Conflict Location and Event Data (ACLED) project has recorded only 28 such events by radical Islamic groups in Bangladesh—which took place in the first eight months of 2016—out of a total of almost 600 events in that time period. While radical Islamic groups are not extremely active in the country, the Islamic State of Iraq and Syria (ISIS) makes up almost half (12) of the 28 events recorded in 2016.¹⁷ ISIS claimed responsibility for the July 2016 hostage crisis that led to the deaths of 20 mostly foreign hostages¹⁸—a style of attack that was unlike the prior ISIS killings of mostly Bangladeshi nationals and a few foreigners.

¹⁶ BNP 2016.

¹⁷ See ACLED events for Bangladesh in 2016, available at www.acleddata.com/asia-data.

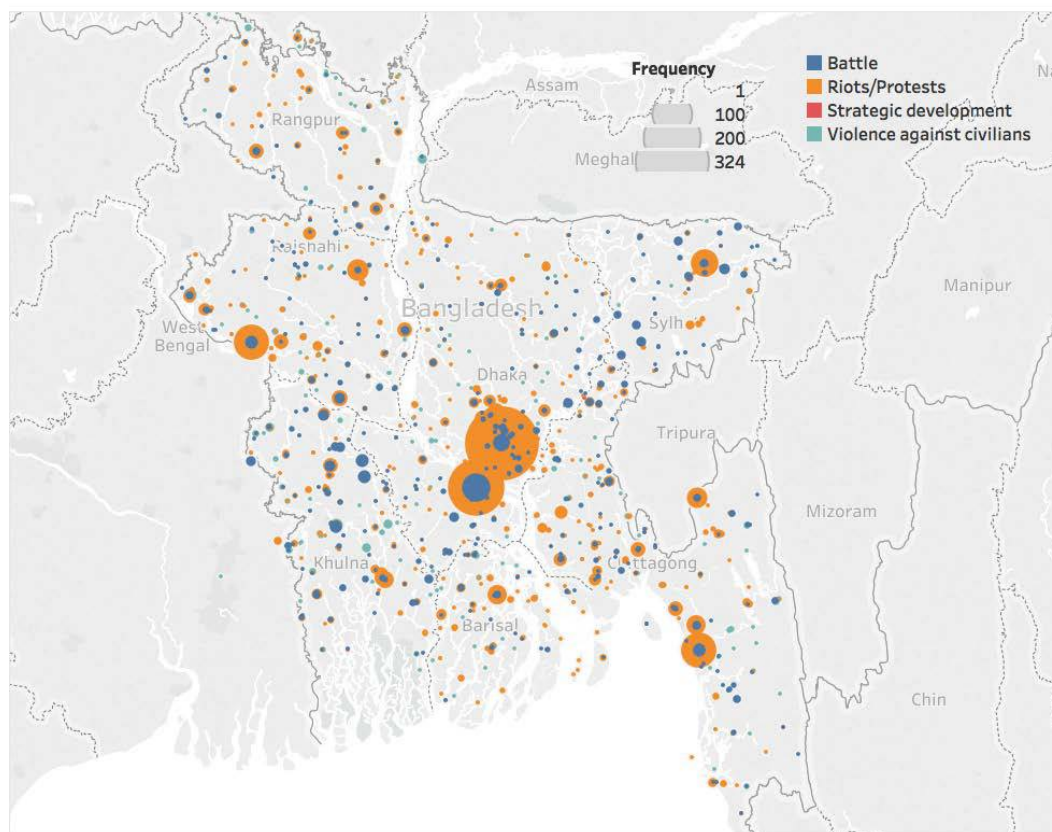
¹⁸ SITE 2016.

This new style of attack could thus threaten foreign investment, foreign aid, and regime positioning in a way that previous attacks have not.

Urban Public Discontent

As Figure 2 shows, the vast majority of events occurring across Bangladesh, as in South Asia generally, are riots and protests. While conflict activity is widespread across Bangladesh, riot and protest activity is concentrated in the urban centers (see Figure 4).

FIGURE 4: POLITICAL VIOLENCE AND PROTEST IN BANGLADESH, 2010–2016



Data source: ACLED 2017.

The high riot and protest rate in Bangladesh is destabilizing to individual security and the national economy, and it exacerbates the broader social cleavages that contribute to the conflict landscape. Amid violence and hartals, the majority of Bangladeshis continue with their routine, often taking on the risk of being attacked by hartal enforcers while proceeding to work. Relying on daily wages, the majority of Bangladeshis cannot afford to stay at home.

The economic health of the state is also adversely affected by the halt of activity around frequent high-violence periods, such as elections. The hartals and riots cause massive economic losses—estimated at 1 percent of GDP, according to the World Bank—when they occur.¹⁹ The garment industry, which makes up 75 percent of the country's exports and provides employment for a large number of

¹⁹ As a point of reference, Bangladesh's GDP in 2015 was USD \$195 billion.

Bangladeshis, is particularly affected by this security situation, as delivery schedules are disrupted and garment buyers have started to shift their orders to other countries.

Urban political turmoil not only severely affects Bangladesh's economy, but also provides space for Islamist militants to operate. Human rights advocates have voiced their fear that the often-lawless responses of police forces to violent protests are providing an opportunity for militant groups to attract new recruits from opposition supporters. Residual capacities of subversive and extremist elements—including Bangladesh Jamaat-e-Islami (Jel), which the Supreme Court declared illegal in 2013, and its student wing Islami Chhatra Sibir (ICS)—are still significant and their alliance with BNP remains strong. Both Jel and ICS have shown their propensity for violence in recent attacks, and they are believed to have links to extremist jihadi groups. Further, surviving fragments of a range of other extremist groups, including Jama'atul Mujahideen Bangladesh and Ansarullah Bangla Team, also became more active in 2016.²⁰

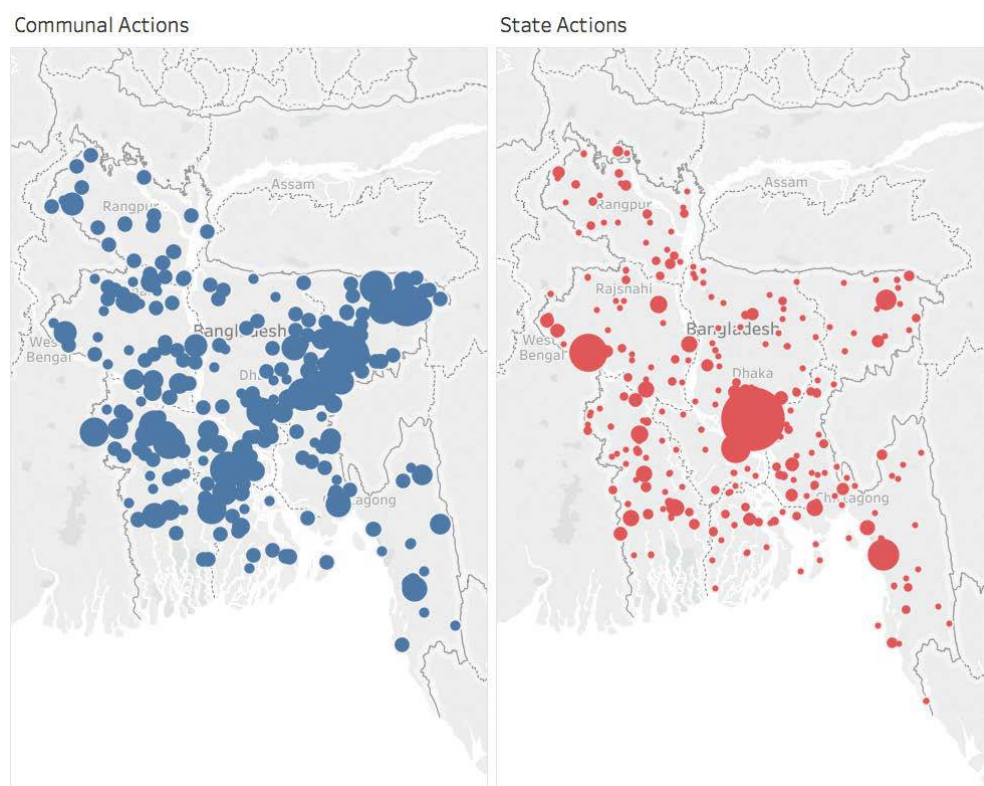
While the protests and riots in Bangladesh are destabilizing on these many levels, it is important to note that a high rate of these types of conflict suggests that the population feels the government has the capacity and reach to address its concerns. This suggests that the basis for positive state-society relationships is present, but the mechanisms for communication and reform require further support.

Rural Communal Violence

Bangladesh's troubled landscape of national political rivalries and urban public discontent has led to a lack of governmental attention to, and control in, rural areas. This has produced a third form of instability in Bangladesh: communal violence. Communal violence is especially prominent in rural areas, which are experiencing an increased number of land-grabbing incidents and violent clashes of communal groups seeking to establish supremacy. These land and traditional contests over power are occurring throughout Bangladesh—and largely in areas where the state exercises limited control. Figure 5 shows how the conflict activities of “communal” or “local” violent groups are clearly distinct from those involving the state. Communal violence is understood here as armed organized violence by groups under a community or identity mantle. This is distinguishable from urban discontent, which reflects aggregated cases of riots and protests.

²⁰ SATP 2016.

FIGURE 5: COMMUNAL AND STATE CONFLICT ACTIONS, 2010–2016



Data source: ACLED 2017.

The locations of conflict actor activities (seen in Figure 5), coupled with the relative rates of activity by these varied conflict actors (seen in Figure 3), indicate several critical features. First, the positions where the state is active in conflict largely coincide with where the state is being challenged by the opposition party. Second, these violent state actions—often urban—are in the same sites where riots and protests are occurring, and these sets of events often increase and decrease in tandem with each other, as Figure 2 shows. Third, the predominance of state involvement in conflict with its opposition means it is largely not involved in or managing local conflict.

Figure 5 makes clear that the sites of local community struggles are often not the sites of the state's actions. Local communities are dealing with issues that are distinct from the state's primary concerns. Local communities are thus acting as their own security and justice services in the absence of the state, which raises the associated problems that come with having localized security services that are largely based on group membership.

COMPOUND FRAGILITY-CLIMATE RISKS

Climate hazards thus place extreme stress on the state in terms of the population and land area exposed, with *very high* exposure risks dispersed over a large portion of the territory, narrowing livelihood choices and creating broad additional requirements for the state. Importantly, the fragility landscape in Bangladesh underscores that it is not only the climate risks and associated livelihood and internal migration pressures that pose security risks to the state and populace. Poor management of the political and security spheres has resulted in additional challenges—notably the ongoing urban clashes tied to the

political cycle and poor rural security and oversight—both of which could be exacerbated by growing climate pressures.

The intersecting drivers of instability in Bangladesh—a violent national political rivalry, urban public discontent, and rural communal violence—provide key examples of the challenge posed by compound fragility-climate risks in the country. Mismanagement of the political and security spheres at the national level has left the state unable to maintain order in urban areas and uninvolved in managing local communal conflict that is largely focused on control of land in rural areas.

As climate exposure makes some rural areas increasingly inhospitable to agriculture and human habitation, management of rural livelihood opportunities and rural land conflicts will be key to addressing the state's climate challenges. Further, as climate exposure drives internal migration out of climate-affected rural areas and into urban areas, often located along coastlines and rivers that are equally if not more exposed to climate risks,²¹ management of urban pressures intensified by the inflow of new people will also be key to addressing climate challenges. Yet these are also two areas already shown to be substantial weaknesses for the government given current conflict patterns in the country. This combination of domestic forces is made even more precarious by the recent influx of Rohingya refugees from Burma, who are now living in overcrowded tent camps in highly climate-exposed areas along Bangladesh's southeast coast.

Bangladesh's experience underscores how compound fragility-climate risks can heighten the insecurity of populations by increasing their vulnerability to instability and humanitarian emergencies. In Bangladesh, the state's fragility in the political and security spheres can pose a direct risk to people's livelihoods and even survival if the state does not build the capacity to mitigate rural conflict over degrading land resources and manage urban pressures worsened not only by climate stressors directly but also by the arrival of domestic and foreign migrants.

CONCLUSION

Bangladesh faces a confluence of climate risks, with a large number of people, large proportion of the population and large land area facing *very high* exposure to multiple hazards. This creates broad challenges for a country already experiencing other substantial stressors that place it in the moderate fragility category. If fragility worsens and Bangladesh is not able to address its climate risks, large numbers of people could become more vulnerable to the very high climate risks they already face.

The good news is that Bangladesh has made significant strides in building its preparedness and capacity to address its climate challenges, making cyclones and flood events less deadly over time. The country has also made laudable gains in reducing state fragility in the social and economic spheres. These reflect core areas of strength where the state has greater capacity to implement policies to address public needs. These strengths reinforce the state's efforts to address climate challenges, as many of the adaptation and resilience policies needed to respond to climate risks are implemented in the social and economic spheres. However, the aspects of state fragility that persist in the political and security spheres have created identifiable vulnerabilities that are already producing instability and have the potential to hinder continued progress in addressing climate challenges in the future. Thus, while much national and international funding is directed toward addressing climate adaptation and resilience in Bangladesh—and

21 For additional discussion of the overlapping risks of climate change, migration, and conflict in rural Bangladesh, see Bhattacharyya and Werz 2012.

important gains are being made in those areas—continued progress could be hampered if the state’s fragile political and security situation is not addressed.

Bangladesh’s experience highlights how even in countries with strong effectiveness in some spheres, capacity deficits in the security and political spheres can undermine the government’s overall ability to implement policies focused on preparing for (even near-term) future risks. This is particularly evident on cross-cutting issues like climate change that require integrated planning across sectors. This underscores the need for a coordinated approach in states with high compound risks to focus on reducing interrelated fragility and climate risks, lest improvement in mitigating one risk be undermined by lack of improvement in the other.

Further, examining compound fragility-climate risks presents a broadened set of opportunities for intervention and strategies for reducing fragility. Like most states with compound fragility-climate risks, in Bangladesh, poor state legitimacy contributes significantly to overall fragility. Thus, state actions that respond to public needs to reduce climate vulnerabilities could simultaneously reduce both climate risks and the legitimacy deficits that drive fragility in Bangladesh, if designed and implemented with that understanding of fragility in mind. Conversely, the state’s inability to reduce public insecurities related to climate risks could further erode the state’s political and security legitimacy and contribute to heightened fragility. These dynamics highlight the benefits of a coordinated approach in states with compound fragility-climate risks to focus on addressing interrelated fragility and climate risks simultaneously.

RESOURCES AVAILABLE FROM THIS STUDY

Reports

Ashley Moran, Joshua W. Busby, Clionadh Raleigh, Todd G. Smith, Roudabeh Kishi, Nisha Krishnan, and Charles Wight. 2018. *The Intersection of Global Fragility and Climate Risks*. Washington: U.S. Agency for International Development (USAID), Office of Conflict Management and Mitigation.

Ashley Moran, Clionadh Raleigh, Joshua W. Busby, Charles Wight, and Nisha Krishnan. 2018. *Fragility and Climate Risks in Bangladesh*. Washington: USAID Office of Conflict Management and Mitigation.

Ashley Moran, Clionadh Raleigh, Joshua W. Busby, and Charles Wight. 2018. *Fragility and Climate Risks in Colombia*. Washington: USAID Office of Conflict Management and Mitigation.

Ashley Moran, Clionadh Raleigh, Joshua W. Busby, and Charles Wight. 2018. *Fragility and Climate Risks in Nigeria*. Washington: USAID Office of Conflict Management and Mitigation.

Data and Maps

Joshua W. Busby, Todd G. Smith, Nisha Krishnan, and Charles Wight. 2016. *Subnational Climate Exposure Indicator Maps and Raster Layers*, Produced for USAID Office of Conflict Management and Mitigation. Austin: Robert Strauss Center for International Security and Law.

Todd G. Smith, Nisha Krishnan, and Joshua W. Busby. 2016. *Population-Based Metrics of Subnational Climate Exposure*, Produced for USAID Office of Conflict Management and Mitigation. Austin: Robert Strauss Center for International Security and Law.

Nisha Krishnan, Joshua W. Busby, and Todd G. Smith. 2016. *Territory-Based Metrics of Subnational Climate Exposure*, Produced for USAID Office of Conflict Management and Mitigation. Austin: Robert Strauss Center for International Security and Law.

Roudabeh Kishi and Andrew Linke. 2016. *Global Fragility Dataset*, Produced for USAID Office of Conflict Management and Mitigation. Austin: Robert Strauss Center for International Security and Law.

Roudabeh Kishi, Andrew Linke, Charles Wight, Ashley Moran, and Clionadh Raleigh. 2016. *National Fragility Indicator Maps*, Produced for USAID Office of Conflict Management and Mitigation. Austin: Robert Strauss Center for International Security and Law.

Todd G. Smith, Charles Wight, Nisha Krishnan, Roudabeh Kishi, Andrew Linke, Joshua W. Busby, Ashley Moran, and Clionadh Raleigh. 2016. *Climate and Fragility Bivariate Map Data*, Produced for USAID Office of Conflict Management and Mitigation. Austin: Robert Strauss Center for International Security and Law.

REFERENCES

- ARD Consortium: ARD Inc., University of Maryland, and ISciences, L.L.C. 2005. *Measuring Fragility, Indicators and Methods for Rating State Performance*, Produced for USAID Bureau for Democracy, Conflict, and Humanitarian Assistance/Office of Conflict Management and Mitigation. Washington: USAID.
- Armed Conflict Location and Event Data (ACLED) Project. 2017. www.acleddata.com/asia-data.
- Bangladesh Nationalist Party (BNP). 2016. *Union Parishad Election 2016: A Review*. Dhaka: BNP.
- Bhattacharyya, Arpita, and Michael Werz. 2012. *Climate Change, Migration, and Conflict in South Asia*. Washington: Center for American Progress.
- Guha-Sapir, Debarati, Regina Below, and Philippe Hoyois. 2017. EM-DAT: The CRED/OFDA International Disaster Database. Brussels: Université Catholique de Louvain.
- International Crisis Group (ICG). 2015. *Mapping Bangladesh's Political Crisis*, Asia Report No. 264. Brussels: ICG.
- IRIN. "Cyclone Aila Recovery Slower Than Sidr," *IRIN*, July 23, 2009.
- Islam, Arafatul. "Bangladesh paying a high price for ignoring terror threats," *DW*, July 4, 2016; and Joshua Hammer, "The Imperiled Bloggers of Bangladesh," *New York Times*, December 29, 2015.
- Kishi, Roudabeh, and Andrew Linke. 2016. *Global Fragility Dataset*, Produced for USAID Office of Conflict Management and Mitigation. Austin: Robert Strauss Center for International Security and Law.
- Krishnan, Nisha, Joshua W. Busby, and Todd G. Smith. 2016. *Territory-Based Metrics of Subnational Climate Exposure*, Produced for USAID Office of Conflict Management and Mitigation. Austin: Robert Strauss Center for International Security and Law.
- Moran, Ashley, Joshua W. Busby, Clionadh Raleigh, Todd G. Smith, Roudabeh Kishi, Nisha Krishnan, and Charles Wight. 2018. *The Intersection of Global Fragility and Climate Risks*. Washington: USAID Office of Conflict Management and Mitigation.
- Potsdam Institute for Climate Impact Research and Climate Analytics. 2013. *Turn Down the Heat: Climate Extremes, Regional Impacts and the Case for Resilience*. Washington: World Bank.
- Raleigh, Clionadh, and Caitriona Dowd. 2017. *ACLED Codebook*. Brighton: ACLED.
- SITE. "IS Claims Killing 22 'Crusaders' and Two Police Officers in Five-Man Raid in Dhaka," *SITE*, July 2, 2016.
- Smith, Todd G., Nisha Krishnan, and Joshua W. Busby. 2016. *Population-Based Metrics of Subnational Climate Exposure*, Produced for USAID Office of Conflict Management and Mitigation. Austin: Robert Strauss Center for International Security and Law.
- South Asia Terrorism Portal (SATP). 2016. *Bangladesh Assessment 2016*. New Delhi: SATP.
- United Kingdom Meteorological Office. 2011. *Climate Observations, Projections and Impacts: Bangladesh*. Devon: United Kingdom Meteorological Office.

USAID. 2005. *Fragile States Strategy*. Washington: USAID.

USAID. 2018. *Climate Risk in Bangladesh: Country Risk Profile*. Washington: USAID.

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