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# Catastrophes, Confrontations, and Constraints

## How Disasters Shape the Dynamics of Armed Conflicts

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## 4 Disasters and Armed Conflict Dynamics: Evidence from 36 Cases

This is the core chapter of the book in terms of empirical data. It briefly describes the history of the armed conflict and the impacts of the disaster for all 36 cases under study before tracing the potential impacts of the disaster on conflict (de-)escalation for each case. The analysis is guided by the theoretical framework laid down in chapter 2 and will be synthesized in chapter 5. This chapter is reserved for qualitative studies of the 36 instances of disaster-conflict intersections covered by my analysis. I start by discussing those cases where disasters had an impact on armed conflict escalation, followed by the cases where disasters facilitated conflict de-escalation, and finally the cases where no disaster-conflict links were present.

### Cases of Conflict Escalation after Disasters

#### **Bangladesh 1991: The Chittagong Hill Conflict after Cyclone Gorky**

The Chittagong Hill Tracts is a hilly area in southeastern Bangladesh bordering India and Myanmar.<sup>1</sup> It hosts a large and heterogeneous tribal population known as Pahari or Jumma. More than 500,000 out of a total population of close to 950,000 people in 1991 identified as Pahari (BBS 1994). After Pakistan gained independence in 1947, the Chittagong Hill Tracts lost the special administrative status they had during British rule. Among the consequences were migration to the area from other regions of then East Pakistan as well as the political, economic, and cultural marginalization of the tribal communities. This process of migration and marginalization accelerated when Bangladesh became independent in 1971. The

1. The area comprises the three districts of Bandarban, Khagdachhadi, and Rangamati.

new government explicitly rejected demands for autonomy or the constitutional acknowledgment of the tribal people of the Chittagong Hill Tracts.

As a consequence, the Chittagong Hill Tracts People's Coordination Association (JSS) was established in 1972 to forward claims to autonomy. An armed wing, the Peace Force (SB), emerged shortly afterward and started to confront the Bangladeshi military from the mid-1970s onward. The JSS/SB largely waged guerrilla warfare. Despite significant troop deployments, a large resettlement program initiated in 1979, and the emergence of militias, the government was unable to achieve a military victory. Peace negotiations were ongoing during the late 1980s, leading the government to implement unilateral measures to increase the autonomy of the Chittagong Hill Tracts in 1989 (Ahmed 1993). These measures were welcomed by more moderate elites and younger people, who benefited from the development schemes implemented since the 1970s, but they faced fierce resistance by the JSS/SB. As a consequence, the armed conflict intensified while previously high popular support for the JSS/SB vanished, forcing it to rely more strongly on its bases in India (Uddin 2008).

A devastating cyclone (sometimes referred to as Gorky) and associated storm surges struck Bangladesh and especially the Chittagong Hill Tracts in late April 1991. It caused around 139,000 fatalities and massive destruction, including estimated economic damage of US\$3 billion (Haque and Blair 1992). While the losses were enormous, two factors limited the eruption of severe anti-government (or anti-settler) grievances in the Chittagong Hill Tracts. First, within Bangladesh, the cyclone was largely framed as a natural and inevitable event, especially given the country's track record of severe disasters (Dove and Khan 1995). Second, while poor and marginalized groups were the most severely affected by the cyclone (Chowdhury et al. 1993), its impact did not reflect the socio-political divides that were at the core of the conflict. Muinul Islam (1992) reports that people who had relocated to the area with government support since the 1970s were most vulnerable to the disaster.

Yet, the post-disaster period saw a significant intensification in violence, with 76 battle-related deaths in the 12 months prior to the cyclone and 268 fatalities in the subsequent year. A minor spike in violence occurred in the immediate aftermath of the disaster and a second, much larger spike in April 1992. This conflict intensification was largely driven by violence against civilians, mostly by pro-government forces: 242 of the 268 deaths

in the post-disaster period were civilians. The conflict has long been characterized by civilian victimization as the JSS/SB targeted (perceived) supporters of the government while government troops, militia, and some newly arrived (ethnic Bengali) settlers targeted (supposed) rebel supporters during counterinsurgency. According to Ala Uddin (2016: 326), “Many incidents of massacre, attack, and reprisal, indiscriminate arrest, torture, judicial and extrajudicial torture, killing, rape, sexual violence . . . and abduction took place.” But such an upsurge of civilian victimization was still unusual (Amnesty International 1992).

The grievance pathway is unable to account for this conflict escalation given that the impact of the disaster on grievances was minimal and the intensification was mainly driven by government actors. Likewise, from an opportunity perspective, using violence against civilians rather than against the weakened military apparatus of the rebels made little sense. By contrast, the government of Bangladesh and its allies were concerned about the possibility of popular grievances fueling anti-Bengal resistance and hence support for the JSS/SB after the disaster. Memories of the devastating 1971 cyclone, which facilitated anti-Pakistan resentments and ultimately fuelled the Bangladeshi independence struggle, likely served as a cognitive point of reference in this context (Hossain 2018). The government was determined to avoid repeating this scenario in 1991. It is thus very plausible that conflict escalation was due to a preemptive costly signal by the government, which intended to demonstrate its determination in the struggle against the JSS/SB as well as its willingness to quell unrest and opposition among civilians.

### **Colombia 1999: Shaking Grounds, Shaking the Peace Process?**

Following a decade of violent clashes between the conservative government of Colombia and liberal political groups (1948–1958), the government started to perceive Communist groups as the bigger threat and took a repressive stake toward them in the late 1950s. Around the same time, Communist movements in Colombia grew more organized and violent. In 1964, the Southern Bloc Guerrilla (SBC) was formed out of various self-defense groups with the explicit goal of overthrowing the government. In 1966, the SBC changed its name to Revolutionary Armed Forces of Colombia (FARC). The FARC was successful in quickly establishing control over rural areas and in financing its insurgency through coca cultivation and

the drug trade. However, struggles for political control and fundamental reforms of the unequal socio-economic system remained the bottom line of the conflict.

The 1980s saw a complex peace process that eventually failed along with (and partially due to) the emergence of right-wing paramilitary groups killing (supposed) FARC leaders and supporters (Molano 2000). While these groups received military support and shared the government's anti-FARC stance, the government had very limited control over them (Serres 2000).<sup>2</sup> The intensity of the conflict increased throughout the 1990s despite a democratization process in 1991, with the rebels expanding their territorial control. In 1998, newly elected president Andrés Pastrana initiated another peace process with the FARC (Bejarano 2003; Chernick 2001).

Shortly after the official inauguration of the peace talks on January 9, 1999, a 6.1-magnitude earthquake affected the departments of Quindío and Risaralda in western-central Colombia on January 25 (Hashimoto and Miyajima 2002). The earthquake resulted in around 1,200 deaths and immediate economic losses of US\$1.9 billion, with large cities like Pereira and especially Armenia being heavily affected. The earthquake hit shortly before the start of the harvesting season in a major coffee-growing area (coffee being a major export good of Colombia). Earthquake-induced landslides destroyed parts of the Andean highway, substantively affecting imports and exports via Colombia's main port (Sanchez-Silva et al. 2000). As a consequence, Colombia's economy "shrank by nearly 6 percent in the first quarter of 1999" (Brancati 2007: 724). Meanwhile, the slow recovery of the water supply systems, a lack of national relief coordination, and the delayed arrival of rescue teams increased the hardship of the earthquake victims. Widespread looting and aid appropriation in particular caused significant local grievances (Restrepo and Cowan 2000).

In the remainder of 1999, peace negotiations between the Colombian government and the FARC stalled and violence escalated. The number of battle-related deaths (mostly non-civilians) increased from 915 in the 12 months prior to the earthquake to 1,295 in the subsequent year.

Scholars have linked this conflict escalation to several factors, including the desire of the rebels to use military victories to improve their negotiating

2. In fact, fighting between paramilitary and government troops was far from uncommon.

position. The United States provided significant support to the Colombian government from late 1999 onward,<sup>3</sup> leading the military to believe it could win the war with renewed offensives (Chernick 2001; Richani 2005; Villaveces 2003). Other authors argue that the demilitarized zone established at the start of the peace process—characterized by an absence of government police and military personnel—enabled the FARC to increase its fighting capabilities and stage new attacks (Bejarano 2003). However, these arguments do not hold up when it comes to explaining the escalation of the conflict in the first months of the year 1999—that is, in the months after the earthquake. The FARC had numerous incentives to stage attacks before the peace process and would have needed some time to capitalize on the opportunity of the demilitarized zone. Further, the main source of US funding for the government, the Plan Colombia, was not approved until 2000 (Bejarano 2003; Richani 2005). Finally, the establishment of a demilitarized zone also reduced encounters between government and FARC fighters (Villaveces 2003).

The earthquake interacted with the above-mentioned factors and facilitated an escalation of the conflict, particularly in 1999. The grievances and costly signal pathways cannot account for this. The Quindío department, which was the most affected by the disaster, was never a rebel stronghold. Despite significant grievances, the Georeferenced Event Dataset (GED) of the Uppsala Conflict Data Program (UCDP) registers no conflict events in a 100-kilometer radius around the area that suffered the most destruction in the period from 1998 to 2000. Increased recruitment by FARC and pro-government groups or the use of violence as a communication strategy is also not reported.

Three opportunity factors account for the conflict escalation after the 1999 earthquake in Colombia. First, the loss of government income due to the recession undermined the army's fighting capabilities, at least until Plan Colombia kicked in during the year 2000 (Brancati 2007; LADB 1999). The link between the loss of coffee revenues and the higher armed conflict intensity via lower state capacity in Colombia is well established in the literature (Dube and Vargas 2006). Second, large investments in reconstruction<sup>4</sup> (coupled with lower revenues) forced the government to scale down "plans

3. US\$2.04 billion between 1999 and 2002 alone, at least 81% of which was used for purchasing weapons.

4. Reconstruction costs were more than US\$100 million.

to outflank the rebels and win over their base of support in other areas of the countryside” via investments in public services and infrastructure (Rother 1999). Third, the Ministry of Defence sent an additional 6,000 military and police personnel to the affected region in order to stop the looting and restore public order. This reduced the state’s presence in other areas (Rother 1999; Venturini 2012). The FARC capitalized on the weakness of the state to launch additional attacks in the post-earthquake period (Richani 2005).

### **Egypt 1994: Floods, Fire, and Fury**

During the 1960s, tensions between socialist-secularist nationalism (dominant in the government) and political Islam (repressed by the state) increased in Egypt. In the mid-1970s, the Islamic Group (IG)<sup>5</sup> was formed by students to campaign for an Islamic form of government. In contrast to similar groups (like the Muslim Brotherhood), IG pursued a radical pathway, including the use of violence against government representatives. Despite prominent individual attacks,<sup>6</sup> the group conducted only limited activities throughout the 1980s. This changed in the early 1990s. Aggrieved by harsh repression and supported by veterans who fought against the Soviet Union in Afghanistan, IG launched a guerrilla-style insurgency against the Egyptian state (Matesan 2020b).

IG received external support from Iran, Sudan, and al-Qaeda and was able to access training camps in Afghanistan. This enabled the group to exploit grievances from impoverished urban youths and religious extremists. By 1992, IG had established strongholds in Upper Egypt<sup>7</sup> and even temporarily took control of the Imbabah neighborhood in Cairo (Mubarak 1996; START 2015). The rebels killed hundreds of people during terrorist attacks, mostly Coptic Christians, police forces, and foreign tourists. Negotiations between the Egyptian government and the IG failed in 1993, and the government decided to increase violent countermeasures (Kepel 2002: 276–298; Matesan 2020a; Schuck 2016).

Very early on the morning of November 2, 1994, torrential rain struck Upper Egypt, resulting in heavy flooding along the Nile in the area between

5. The group is perhaps better known under its Arab name, al-Gamaa al-Islamiyya.
6. Including IG’s involvement in the assassination of President Anwar Sadat in 1981 by Islamic jihad.
7. Comprising the governorates of Assiut, Minya, and Sohag.

Luxor and El Minya. The disaster caused around 600 deaths, affected more than 100,000 people, and resulted in economic damage of US\$140 million. The area surrounding IG stronghold Assiut suffered the worst damage. The flood almost completely destroyed several villages and towns. A wave of “burning water” killed several hundred people in the town of Durunka when oil from a derailed tank car mixed with floodwater and ignited (Murphy 1994). Improper urban planning and a lack of flood preparedness by authorities contributed to the disaster’s impact (El-Batran and Arandel 1998). Aid was slow to arrive and was perceived to be insufficient by many affected people in areas with high poverty rates (perhaps also due to limited international support), leading to local grievances and protests. Ten days after the floods, many victims were still without temporary accommodations (Ayebe 1995; Lancaster 1994; UN DHA 1994).<sup>8</sup>

In the aftermath of the flood, conflict intensity increased significantly from 155 to 235 battle-related deaths (12 months before and after the disaster, respectively). The escalation was even more intense in the two governorates most affected by the disaster, Assiut and Minya, where the number of deaths rose from 79 to 184. One reason for this was certainly strategic decisions by the Egyptian government to scale up the counterinsurgency, and by IG to react to such repression with more open violence. However, these processes had started in late 1992 and can hardly explain a conflict escalation two years later (Hamzawy and Grebowski 2010; Schuck 2016).

It is plausible that flood-related grievances played a role in the conflict escalation. The lack of sufficient preparation and particularly the government’s slow and under-resourced response to the disaster contributed to local grievances, including in IG strongholds. This was particularly true for the young, urban poor, who were the key constituency of the IG (Kepel 2002: 293–294). President Hosni Mubarak did not even travel to the worst affected areas during his post-disaster visit, and “Prime Minister Atef Sedki was confronted by angry survivors” (Martone 1994). Islamic political groups (mostly the Muslim Brotherhood, but also the IG) filled the void by providing relief in a quick and unbureaucratic way (Ayebe 1995), powerfully illustrating the deficits of the Egyptian state and the “good intentions” and capabilities of the IG. According to several observers, this increased the

8. President Hosni Mubarak’s failure to visit the worst-affected areas during his post-disaster visit further raised these grievances.



motivation of locals to support radical Islamic groups (Berman 2003; Lancaster 1994). In other words, flood-related grievances and the provision of relief likely increased local support for IG, enabling the rebels to intensify the conflict with the Egyptian government.

### **India (Andhra Pradesh and Orissa) 1999: The Cyclone as an Opportunity for Naxalite Insurgents**

In 1967, grievances about poverty, land inequality, and a lack of government support triggered a peasant revolt in the village of Naxalbari, West Bengal. The protests spread quickly, and the Communist Party of India (Marxist-Leninist) joined forces with the rural peasants to form the Naxalite movement. The Indian state crushed the revolt by force. In the late 1970s, the Naxalites were reduced to small numbers and highly fractionalized (Mehra 2000). However, starting in the 1980s, the movement experienced a sustained growth in size and military strength. The group most strongly associated with this growth is the People's War Group (PWG),<sup>9</sup> formed in April 1980. In line with the larger goals of the Naxalite movement, the PWG sought to overthrow the Indian government and to establish a socialist, anti-imperialist state by military means. It quickly built a considerable base of support among peasants, laborers, members of lower castes (*Dalits*), tribal groups (*Adivasis*), and women in the economically underdeveloped, heavily forested areas of Andhra Pradesh (Chandra 2014; Gupta 2007).

The capabilities of the PWG continued to increase throughout the 1990s. It purchased or seized modern weapons, expanded its military apparatus, and gained influence in new areas (most notably Orissa<sup>10</sup>) (Kujur 2008; Ramana 2006). Neoliberal economic policies by the central government (including the promotion of export-oriented agriculture and food subsidy cuts) had a negative impact on many people in India's poverty-ridden east, which further strengthened support for the Naxalites. The PWG was also able to exercise territorial control in its core areas, enforcing minimum wages, providing jurisprudence, and collecting taxes. The group earned further revenues by extortion, drug cultivation, and appropriation of government funds

9. The official name of the group is the Communist Party of India—Marxist-Leninist (People's War). It split from the Communist Party of India (Marxist-Leninist) but remained part of the Naxalite movement.

10. Just like Andhra Pradesh, Orissa is a federal state of India.

(Mahadevan 2012; Scanlon 2018). Several states, including Andhra Pradesh, reacted to these developments by extending the legal powers of the police and by forming militia-style police units (so-called greyhounds) to confront the insurgents (Ahuja and Ganguly 2007; Dubey 2013; Mehra 2000).<sup>11</sup>

In October 1999, the eastern coast of India was ravaged by two powerful cyclones. The first one caused relatively minor damage and 84 deaths in Orissa and Andhra Pradesh between October 17 and 19. The second cyclone, by contrast, brought wind speeds of up to 350 km/h, massive rainfall, and tidal surges as high as seven meters from October 28 to 30. Described by local inhabitants as the worst storm they had ever experienced, the cyclone resulted in 9,843 fatalities and economic damage of US\$2.5 billion. The mostly agricultural livelihoods of the region were devastated; entire harvests, up to half of all cattle, and tree plantations vital for local livelihoods were lost. Damage to infrastructure, commercial facilities, and fishing equipment was widespread as well. Poor hygiene conditions in the immediate aftermath of the storms caused outbreaks of diseases—in particular, cholera (BBC News 1999).

The coastal areas of Orissa suffered the brunt of the cyclone, but considerable destruction was observed up to 60 kilometers landward as well as in northern Andhra Pradesh. The government of Orissa was criticized for launching insufficient early warnings, not providing enough shelters, and acting too slow regarding relief provision and infrastructure reconstruction (Dash 2002). Andhra Pradesh, by contrast, performed these tasks relatively effectively (and could even provide relief to Orissa). Considerable international and particularly national aid was provided to Orissa, but its impact was limited by corruption, a lack of coordination, and the inaccessibility of many areas (K. Das 2002; Panigrahi 2003; Thomalla and Schmuck 2004; UN OCHA 2000).

The intensity of the PWG insurgency increased slightly after the cyclone. While the previous 12-month period saw 95 battle deaths, this number rose to 111 in the subsequent year. This increase was caused by combatant as well as civilian deaths and falls short of passing the significance threshold (five standard deviations) established earlier. One reason for the rising number of casualties might be the increasing cooperation between the different Naxalite groups, as the PWG merged with the Party Unity in 1998

11. The Indian military is not directly involved in the Naxalite conflict.

and also started negotiating with the Maoist Communist Centre (MCC) in the late 1990s<sup>12</sup> (Kujur 2008; Ramana 2006). The PWG's capability to fight the government also increased owing to the formation of local armed units in areas controlled by the group (Scanlon 2018).

That said, the cyclone also played a role in escalating the conflict. While the most disaster-affected district of Jagatsinghpur saw no conflict events during the relevant time period, the PWG was active in areas that experienced large-scale destruction in southern and eastern Orissa as well as in northern Andhra Pradesh (Mohanty 2010). The PWG "primarily survives on poverty, disparity and discontent among the masses" (Dubey 2013: 2) to recruit fighters and followers (Mehra 2000), and the cyclone had a major impact on rural livelihoods in a region that was already among the poorest in India. More than three years after the storm, many areas were economically worse off than before the cyclone struck, particularly in the agricultural sector (Pareeda 2002). In line with this, Kishore Gawande and colleagues (2017) find that land productivity shocks in agricultural areas tend to increase Naxalite conflict intensity (see also Eynde 2018). Furthermore, as a consequence of the cyclone, "food security of many households was severely endangered" (K. Das 2002: 4785). Statistical studies indicate that reduced food production (and hence food insecurity) increases conflict intensity in India by enabling rebel groups to recruit new followers (Wischnath and Buhaug 2014).

The post-disaster situation provided further opportunities to the PWG to escalate the conflict. Considerable national and international aid flows entered the affected regions, and Naxalite groups developed schemes to appropriate such funds by founding or infiltrating NGOs (Mahadevan 2012). Although such practices were widespread, there is no concrete evidence that this happened with cyclone-related funds. In addition, riots and looting (undertaken mostly by desperate survivors) occurred in the first few weeks after the disaster, requiring the deployment of additional police and military personnel (BBC News 1999; Jayasekera 1999). This provided the insurgents with additional room for maneuver. These opportunities diminished over time, and correspondingly, the increase in conflict intensity is limited to the first six months after the disaster (see figure 3.2). Solidarity and cooperation across socio-economic (including caste) divides, by

12. The PWG and the MCC eventually merged in 2004.

contrast, occurred in some local instances but had no impact on the wider conflict dynamics (Pareeda 2002). Rather, the PWG was able to exploit opportunities related to recruitment, pre-occupation of security forces, and possibly financing, enabling it to escalate the conflict with the government.

### **India (Assam) 1998: Floods, Recruitment Opportunities, and Conflict Persistence**

The emergence of the United Liberation Front of Assam (ULFA), founded in 1979, is closely tied to the Assam movement, which demanded the expulsion of non-indigenous groups from the federal state of Assam between 1979 and 1985 (and vanished afterward). However, unlike the Assam movement, the ULFA sought to unite people with different ethnic backgrounds living in Assam to gain independence, or at least autonomy from India (Baruah 2012). The group heavily criticized the centralized political decision making, the indifference of the Indian state toward development problems in Assam, and the unfair exploitation of the state's natural resources (in particular, oil, timber, and tea). Initially, the ULFA enjoyed broad public support, was able to generate income through local taxes and extortions (Bhaumik 2009: 252–258), had good relations with the Assam Gana Parishad (AGP) government in the state, and received weapons and training from other armed groups<sup>13</sup> as well as from the Pakistani Inter-Services Intelligence (ISI). The rebels grew to formidable strength. Reacting to this threat, the Indian government (supported by a newly elected state government) ordered several military offensives against the ULFA between 1990 and 1992 but was unable to quell the unrest.<sup>14</sup> The ULFA also shifted some of their bases to neighboring Bangladesh and Bhutan, making it harder for the Indian state to target them (Kotwal 2001).

However, a combination of intense military pressure, a reduction in public support due to atrocities committed, and high incentives set by the Indian government triggered the surrender of a significant number of ULFA cadres to the government from the mid-1990s onward. By March 1997, more than 5,000 fighters had left the group. The resulting Surrendered ULFA (SULFA) organization provided information to the military and

13. Notably, the Nationalist Socialist Council of Nagaland and the Kachin Independence Army.

14. Talks between ULFA leaders and the Indian government also took place in 1992 but yielded no results.

sometimes even engaged in battles with the ULFA. After a failed assassination attempt on AGP chief minister Prafulla Mahanta in 1997, government violence against the ULFA escalated (Mahanta 2013). Starting in 1996, and intensifying in 1998, multiple disappearances and direct killings of ULFA members or supporters and their relatives occurred (Baruah 2007; A. Dutta 2014; Saikia 2015).<sup>15</sup>

In August 1998, Assam experienced an extreme flood event that affected all districts of the state (Avinash 2014; D. Das 2014). The Brahmaputra, one of the world's largest rivers, flows through the state and swells during the monsoon season. As a result, a degree of flooding occurs every year in Assam, and the local population has generally adapted to this. However, the 1998 floods were the worst in decades. Several embankments of the Brahmaputra broke, leading to sustained destruction of agricultural land due to the deposit of river sediment. Authorities failed to issue an early warning. The floods resulted in 1,811 deaths, the destruction of at least 5,500 hectares of fertile land, and the need to resettle several villages, hence severely affecting the economic development of the already poor region (Goyari 2005; Kipgen and Pegu 2018; Varma and Mishra 2017). As Assam is a peripheral state and floods occur rather frequently, support for the flood victims by the Indian state and the international community was limited (Mukhim 2014).

On first view, the flood seems to have had little impact on the conflict dynamics as the number of battle-related deaths in the 12 months before and after the floods remains constant (71). However, qualitative evidence suggests that the flood played a minor role in preventing a de-escalation of the conflict, hence shaping its intensity. The ULFA faced a more organized Indian state in the late 1990s with a unified command structure (integrating police and military forces) and had lost the support of the AGP state government. At the same time, popular support for the rebels declined owing to several assassinations conducted by the ULFA, a large number of fighters surrendered, and the targeted killings took a further toll (Baruah 2007; Mahanta 2013). Why, then, was the ULFA able to sustain its armed activities at a similar level?

The 1998 floods facilitated the ULFA's recruitment of new followers and fighters in two ways. First, it increased grievances. Improper flood control characterized by corruption and top-down solutions as well as insufficient

15. It is suspected that SULFA members, acting with permission of the government, were behind these killings.

compensation for flood victims (especially if they had no land titles) had fueled sentiments of neglect against the Indian state for quite a while, and the 1998 floods further strengthened this perception (Gohain 2007; Varma and Mishra 2017). The ULFA, by contrast, gained local sympathies by supporting the construction of embankments and dikes (Baruah 2007; U. Dutta 2008). Second, the ULFA recruited mostly poor or unemployed (yet educated) youths, among others, by offering a monthly salary of 1,500–2,000 rupees.<sup>16</sup> The 1998 floods had a remarkable impact on poverty and unemployment rates (Hrishikeshan 2003; Kotwal 2001), hence increasing the pool of potential recruits. In the words of Partha Das and colleagues (2009: 22), there was a “growing frustration and unrest in the youth from flood-affected families. There are instances of unemployment, impoverishment, and grievances against bad governance leading some youths to join insurgent groups: such groups try to recruit young men and women from poor families.”

The ULFA also profited financially from taxing—and in some cases even being involved in—companies building embankments after floods (Mukhim 2014).<sup>17</sup> But while demand for such embankments grew after the 1998 floods, this revenue source remained marginal overall for the ULFA (Bhaumik 2009). That said, the ULFA still benefited considerably from improved recruitment opportunities.

### **Philippines 1990: Earthquake-Related Opportunities for Both Sides**

The Communist Party of the Philippines (CPP) was founded in 1968 in Central Luzon. It split from the Philippine Communist Party, which had carried the armed, pro-land-reform Huk movement during the 1950s (but was defeated militarily by the government). The Maoist CPP formed an armed wing, the New People’s Army (NPA), in 1969.<sup>18</sup> Initially a rather small group, the NPA was successful in recruiting students in urban areas and particularly inhabitants of poor, rural regions characterized by inequality and corruption. The CPP’s demand for land reform was particularly appealing to the latter. When the government of President Ferdinand Marcos declared a state of emergency in 1972, support for the CPP and NPA increased further.

16. Equivalent to US\$35–50 in October 1998.

17. Activist Sanjoy Ghose, who campaigned for community-based solutions rather than embankments constructed by companies, was killed by the ULFA, causing a public outcry in Assam.

18. It also established an umbrella for supporting mass organizations like unions in 1973: the National Democratic Front of the Philippines.

The NPA reached its heyday in the mid-1980s, when its ranks were filled with well-educated students, and it could draw on wide support networks in rural areas for its guerrilla warfare. At the same time, the state had to cope with a deteriorating economy and was fighting on two fronts: against the CPP/NPA insurgents and against separatist groups in Mindanao (Santos and Santos 2010b).

The situation changed when the CPP refused to participate in the snap elections of 1985 and the subsequent protests against election fraud, which resulted in the ousting of Marcos in 1986. New president Corazon Aquino started peace negotiations with the rebels, but when those failed in 1987, she declared a total war against the Communists. The NPA quickly lost ground: between 1987 and 1991, its fighters were decimated from 25,200 to 14,800 (P. Santos 2010). Reasons for the success of the government troops include a series of internal NPA purges to identify government agents, a change to more effective military strategies involving fewer human rights violations by the Philippine army, the possibility to articulate grievances non-violently after the regime change in 1986, and some agrarian reform efforts (Marks 1993; P. Santos 2010; S. Santos 2005; Timberman 1991). The emergence of local militias—called Citizens Armed Forces Geographical Units (CAFGUs)—supported by the army since 1987 further weakened the NPA in rural areas (de Guzman and Craige 1991).

On July 16, 1990, a 7.8-magnitude earthquake struck the island of Luzon, which at the time was still a CPP/NPA stronghold. It caused 2,412 deaths and resulted in total economic costs equivalent to US\$1.5 billion (Booth et al. 1991). While the capital city of Manila suffered some damage, the area north of it around the cities of Baguio, Dagupan, Cabanatuan, and San Jose was most heavily affected. Analysts described the government response to the disaster as “disorganized, uncoordinated, slow, inadequate, unprepared, and ill-equipped” (Tayag and Insauriga 1993: 377). This was partly due to road damage that had cut off routes to many of the heavily hit regions (Casis 2008; Quinn 1991). Local communities, NGOs, and parts of the Philippine military stepped in to fill the void left by the insufficient government response (Bankoff 2004; Cola 2003). Despite coordination problems and with some delay, these relief works proceeded relatively well.

Nevertheless, the poorer inhabitants of Luzon suffered substantial medium- to long-term negative effects (Benson 1997; Cola 2003). Only

6% of the residents whose houses were damaged received repair assistance (Tayag and Insauriga 1993). Furthermore, the earthquake affected agricultural land and irrigation structures, which had a substantial effect on food production. This combined with the destruction of the transportation, mining, and manufacturing infrastructures put an additional toll on the Philippine economy, which already suffered from high foreign debt, price declines of export goods, and a lack of investor confidence (Timberman 1991). At least in Luzon, “people who barely noticed the seismic event have felt their standard of living decline in its aftermath. The earthquake has increased food prices, unemployment and pressure on the national balance of payments” (Booth et al. 1991: 87).

After the earthquake, the NPA declared a unilateral cease-fire to allow for relief and rehabilitation (Lane 1991). However, the government did not declare a cease-fire in response, and eventually the NPA broke the cease-fire (de Guzman and Craige 1991). Both sides escalated the conflict considerably after the earthquake. Countrywide, the numbers of battle-related deaths increased from 991 in the 12 months before the disaster to 1,691 afterward. The increase is even more remarkable in the most heavily affected central and northern parts of Luzon,<sup>19</sup> which witnessed an increase from 84 to 301 deaths. The clear majority of casualties was combatants.

There is evidence that this increase in conflict intensity can be attributed to improved opportunity structures for the NPA and the Philippine army. The Philippine military struggled with providing disaster relief to a large area with crucial transportation infrastructure damage (Hall 2004). Together with the very limited state access to certain (especially remote rural) regions, this allowed the weakened NPA to extend its sphere of influence. Furthermore, the earthquake further deteriorated the already dire economic situation, hence creating additional recruitment opportunities. In particular, the NPA recruited heavily from the rural poor. “For many of them, there [was] no other alternative to survive or get away from economic deprivation” (S. Santos 2005: 21), particularly in the context of the economic hardship caused by the earthquake. Several NGOs and faith-based organizations, many of which were among the first providers of disaster relief, have a history of supporting CPP and NPA recruitment (usually indirectly by promoting pro-rebel discourses) (Eastin 2017).

19. Specifically, the provinces of Cagayan Valley, Central Luzon, Cordillera Administrative Region, and Ilocos Region.



On the side of the Philippine government, the CAFGUs gained military importance since the late 1980s and numbered around 70,000 persons in 1990. Like the NPA, the Philippine army recruited many CAFGU members from poor, rural groups. With few livelihood alternatives available, especially in a post-disaster landscape, benefits like a regular paycheck, educational programs, and health insurance were very attractive (de Guzman and Craige 1991). This is corroborated by a recent study finding that after high-impact disasters and bad harvests, people are more likely to join the CAFGU (Eastin and Zech 2022). Further supporting the recruitment argument, there is statistical evidence that lower rice harvests increase civil war intensity in the Philippines (Eastin 2018), and the earthquake reduced rice production in central and northern Luzon (Booth et al. 1991).

Joshua Eastin (2017, 2018) also finds that disasters provide opportunities for the Philippine military to gather information in the affected areas during relief and reconstruction measures. In the case of the Luzon earthquake, the military was indeed heavily involved in relief operations, and the UCDP-GED records several attacks of government troops on rebel hide-outs in the subsequent year. There is no direct evidence, however, for a relationship between post-disaster assistance, intelligence gathering during the disaster response, and more targeted attacks in the aftermath of the Luzon earthquake.

Communication-based explanations are unlikely in this case because (1) the declining strength of the CPP/NPA was obvious, and (2) both conflict parties only infrequently attacked easy targets like civilians. In addition, (3) a spike in conflict intensity is visible only six months after the disaster, which is very late to use violence to send a message, but sufficiently long to translate information, recruitment, and territorial gains into fighting capability. Grievances may have played a role as well—for example, by boosting the rebels' rank with earthquake survivors frustrated with the government response. The latter was delayed and corruption-ridden (Tayag and Insauriga 1993)—a point the CPP also highlighted prominently in its outreach (Liwanag 1991). However, with disasters partially conceived as acts of God (Bankoff 2004), some external aid flowing to Luzon, and no reports of major protests against the government's disaster response, the opportunity pathway is far more plausible for the government-CPP/NPA conflict after the Luzon earthquake.

### **Sri Lanka 2004: Wave of Violence?**

Sri Lanka gained independence from Great Britain in 1948. The new state was home to a majority Sinhalese, Buddhist population (74%) as well as several minorities, the largest being the Hindu Tamils (18%).<sup>20</sup> From independence onward, Tamils expressed concerns about their marginalization by Sinhalese political elites. The new state indeed prioritized pro-Sinhalese politics, thus also significantly reducing the number of Tamils in professional, administrative, and military jobs as well as in higher education institutions. Neoliberal policies from the 1970s onward increased existing economic inequalities. In 1956, Sinhala became the official language of the state, and in 1972, Buddhism became the quasi-official religion, hence further increasing tensions. In 1976, the Liberation Tigers of Tamil Eelam (LTTE) emerged to pursue an independent state of Tamil Eelam in north-eastern Sri Lanka through military means. Following ethnic riots in 1983, the conflict escalated into a full-blown civil war (Goodhand 2001).

With initial support from India and from (forced or voluntary) diaspora contributions since the 1990s, the LTTE quickly emerged as a highly sophisticated rebel army (Beardsley and McQuinn 2009; van de Voorde 2005). The Sri Lanka military also greatly increased its forces and provided support to paramilitary groups. Grievances in the Tamil areas remained high, owing to issues of economic disparities and ethnic discrimination, among others. Intense fighting continued until 2000, with several interruptions during (ultimately unsuccessful) negotiations.<sup>21</sup> Prospects for a peace process increased in the early 2000s, with both sides showing a willingness to negotiate. A cease-fire agreement was concluded in February 2002, and peace talks started seven months later. However, the process stalled because of internal rifts within the LTTE,<sup>22</sup> the election of hardliner Mahinda Rajapakse as Sri Lankan prime minister in April 2004, and a stockpiling of arms by both sides during the negotiations (Goodhand and Klem 2005; Nieto 2008).

In the middle of this tense situation, a massive tsunami triggered by a 9.3-magnitude earthquake in the Indian Ocean hit Sri Lanka on December

20. There is also a significant and frequently marginalized Muslim population, but I do not discuss this group here.

21. Negotiations took place in 1985, 1987, 1989–1990, and 1994–1995.

22. The Tamil Makkal Viduthalai Perani, led by Colonel Karuna, separated from the LTTE in March 2004, resulting in fights between the groups.

26, 2004. Waves up to 10 meters high devastated two-thirds of the country's coastline, leaving more than 35,000 people dead and producing total economic damage of US\$1.4 billion. The disaster affected the northern and eastern parts of the country—the heartland of the LTTE—most severely. This is to some extent due to the civil war, which increased the vulnerability of communities to the tsunami. Compared with the LTTE, which provided immediate emergency relief in the areas it controlled, the government was initially slow to respond to the disaster. However, Sri Lanka's health system was well prepared for the disaster. Local solidarity networks (across political divides) as well as the arrival of unprecedented amounts of international aid workers and funds quickly eased the situation (Yamada et al. 2006). Overall, the emergency relief phase is “widely considered a remarkable success” (Athukorala 2012: 221).

Despite enormous international financial contributions of more than US\$3.5 billion, the reconstruction phase was not implemented smoothly. Reasons for this include a lack of coordination between government agencies and international donors, the implementation of measures that were insensitive to the local context (Korf et al. 2010; Rajasingham-Senanayake 2009), and the slow delivery of the financial aid commitment by the international community (Athukorala 2012; Haigh et al. 2016). Disputes between the government and the LTTE about who could distribute aid in the LTTE-controlled areas in the northeast further aggravated the situation (Silva 2009). As a result, discontent about the reconstruction process was widespread. This controversy exacerbated the already deeply rooted ethnic divisions and resentment against the government, in particular in north-eastern Sri Lanka (de Silva 2009; Yamada et al. 2006).

The conflict between the government of Sri Lanka and the LTTE escalated significantly in the year after the tsunami. Battle-related deaths increased to 98, up from 24 in the 12 months prior to the disaster, with a particularly sharp spike in December 2005 (64 deaths). “By the time the tsunami struck, the talks in Sri Lanka had already collapsed, and preparations for war were already underway” (Tunçer-Kılavuz 2019: 723). Even before the disaster, tensions were high as neither side was ready for political compromise. But the tsunami facilitated the path toward conflict escalation.

Grievances are an important part of the story here. The LTTE insisted on distributing tsunami aid in the areas it controlled, while the government claimed responsibility for the disaster response in all parts of Sri Lanka

(Uyangoda 2005). After a six-month negotiation process that undermined trust on both sides, the conflict parties agreed on a joint Post-Tsunami Operational Management Structure (P-TOMS) to distribute aid (Goodhand and Klem 2005). Weeks later, the Supreme Court suspended P-TOMS, ruling it unconstitutional; this further intensified grievances and mistrust, particularly among the LTTE (Le Billon and Waizenegger 2007). Likewise, the resulting delay (and in some cases, lack) of reconstruction funds aggravated popular resentment against the government in the northeastern parts of the country. In the Sinhalese-dominated areas, by contrast, perceptions about preferential treatment of the northeastern, conflict-ridden regions also fueled discontent (Enia 2008; Klitzsch 2014). Thus, the tsunami contributed to grievances among political elites and popular constituents on both sides.

The communicative aspect of violence played a role as well. The LTTE suffered from an internal split in March 2004, and the government believed the rebels had been considerably weakened by the tsunami. As a result, the LTTE staged several attacks over the course of 2005 to show its continued military and political relevance (Le Billon and Waizenegger 2007; Uyangoda 2005). Similarly, the government lost a major coalition partner over its agreement to P-TOMS, and important political parties<sup>23</sup> accused the LTTE of re-arming in the post-disaster period (Enia 2008; Tunçer-Kılavuz 2019). This increased the pressure on newly elected hardliner president Mahinda Rajapakse to take a tough, military stand toward the rebels.

The opportunity pathway was less relevant in this case. The tsunami undermined the capacity of both sides to go to war temporarily. This potentially explains the absence of conflict escalation in the first months after the disaster. However, both sides were still strong enough to engage in violent confrontations (Uyangoda 2005). Kyosuke Kikuta (2019) finds that higher housing reconstruction rates after the tsunami are positively related to more violence from 2006 to 2009, suggesting aid appropriation for military purposes as a potential mechanism. But overall, international aid had a limited effect on both sides' fighting capabilities and had a greater influence on determining where rather than when attacks took place (Goodhand and Klem 2005). In sum, the 2004 tsunami facilitated an escalation of the government-LTTE conflict in Sri Lanka, mostly through the grievances pathway, but also through the costly signal pathway.

23. For example, the People's Alliance and the People's Liberation Front.

### Tajikistan 1992: Independence, Civil War, and Floods

When Tajikistan became an independent state in September 1991, three struggles overlapped and erupted into open political (and later armed) conflict. First, a coalition of liberal democratic and Islamist parties<sup>24</sup> that had formed during the Gorbachev period in the Soviet Union opposed the continued political dominance of the old Communist elites in Tajikistan. This opposition movement later became known as the United Tajik Opposition (UTO), the principal opponent of the government in the civil war. Second, and relatedly, the Communist elites rejected emerging claims for more Tajik (ethnic) nationalism voiced by the opposition. These claims were also perceived as a threat by the Uzbek (around 24% of the total population) and Russian (around 7%) minorities (Atkin 1997).

Third, long-standing clan and regional rivalries became salient. Tensions were particularly significant between groups from the Leninabadi<sup>25</sup> and Kulyab regions (from which elites in the Soviet era were recruited and which formed the backbone of the Communist Party) and inhabitants of the Gorno-Badakhshan and Garn regions (which, largely excluded from political power, predominantly supported opposition parties). After the escalation into a civil war, political elites linked regional identities to ethnic identities in their rhetoric, resulting in several massacres along these lines (Gretsky 1995; Rubin 1994).

The election of Rakhmon Nabyev of the Communist Party to the presidency in November 1991 fueled discontent by the opposition parties, which did not accept the results. When Nabyev claimed emergency powers in April 1992 and increased repression of the opposition, the latter staged a series of protests in the capital city Dushanbe. The situation escalated into violent protests and skirmishes not only in Dushanbe but also in other parts of the country in May 1992. Despite various rounds of negotiations and the temporary formation of a coalition government between the Communist Party and the UTO, violence between rebels and pro-government militias (such as the Popular Front) quickly escalated in 1992 and 1993 (Tunçer-Kılavuz 2011). Initially, the UTO was rather successful owing to

24. The most important ones were the Islamic Rebirth Party, the Democratic Party of Tajikistan, the nationalist Rastokhez coalition, and the regionalist Lali Badakhshon party.

25. Also known as Khujant.

its regional support, good organizational basis, and weapon supplies from Afghanistan. However, the tide turned when Uzbekistan and Russia decided to support the Tajik government in late 1992 (Lynch 2001; Rubin 1994).

During the height of political turbulence and contestation in mid-May 1992, constant and heavy rainfall triggered the most severe floods in the history of the country. The floods left more than 1,300 people dead and caused around US\$500 million of direct damage (World Bank and GFDRR 2016). The follow-up economic costs were enormous owing to the destruction of infrastructure, agricultural land, and irrigation systems, with an estimated GDP loss of up to 90%. The disaster affected the areas along the Yakhsu River (especially north of Kulob) as well as along the Kyzylsu and Vakhsh Rivers (especially the Kus-Abad area south of Dushanbe) most heavily (Brilliant et al. 1992: 54; CAREC 2006).

While the groups had previously engaged in minor quarrels,<sup>26</sup> the Tajik civil war erupted in May 1992 (with 75 battle-related deaths) and remained intense in the year after the flood (with an average of 303 deaths per month). The floods were not a contributing factor to the onset of the civil war. The main fighting activities had already started in Dushanbe several days before the floods struck. Further, the factors that fueled the escalation of tensions were not flood-related, such as competition for political power as well as regional and ethnic grievances (Tunçer-Kılavuz 2011). There are also no reports about unfair aid distribution or significant strains on the (already weak) state after the floods (Ghasimi 1994).

By contrast, it is very likely that the floods influenced the intensity of the conflict, as the event created opportunities for UTO recruitment. After the collapse of the Soviet Union, Tajikistan was very poor and strongly dependent on agriculture (Foroughi 2002), with subsistence agriculture being an important means to sustain livelihoods (Lynch 2001). The flood had a strong negative impact on agriculture, particularly in the relatively densely populated southwest of the country, making the recruitment of deprived individuals by armed groups easier. Location- and region-specific patronage networks facilitated the recruitment of impoverished people (Tunçer-Kılavuz 2011). In line with this, a substantial part of the fighting in the 12 months after the floods took place in or very close to the disaster-affected regions, in particular along the Vakhsh and Kyzylsu Rivers, in and

26. The UCDP does not record these events, however.

around Dushanbe, and south of Kulob. Major support for the opposition came from the Garn region, which was also strongly affected by the floods along the Kyzylsu River (Ghasimi 1994). The flood facilitated the recruitment of deprived individuals (particularly by the rebels), hence being one (but not the most important) driver of conflict escalation.

### **Uganda 1999–2001: Drought, Food Insecurity, and Raids**

The conflict in Uganda's north emerged from political competition between several southern groups (particularly the Buganda tribe) and the Acholi people in the north. From 1980 onward, the National Resistance Army (NRA) violently contested the ruling government, which enjoyed support from the Acholi. In 1986, the NRA, which represented the interests of groups in southern Uganda, was able to oust President Tito Okello. Yoweri Museveni became the new head of the Ugandan state. Parts of the former national army regrouped as the Uganda People's Democratic Army (UPDA) in the Acholi homelands but signed a peace agreement with the government in 1988. Another Acholi group resisting Museveni's rule out of fears of political-economic marginalization and revenge killings, the Holy Spirit Movement (HSM), was defeated militarily in 1987. Subsequently, Joseph Kony formed the Lord's Resistance Army (LRA) from the remainders of the UPDA and HSM.<sup>27</sup> The LRA integrated various groups keen to defend Christianity, to promote Acholi spiritualism, and to overthrow the Museveni regime (Kisekka-Ntale 2007; van Acker 2004).

Despite very limited local support (which further declined over time owing to the LRA's extensive violence against Acholi civilians), the LRA managed to hold its own against the NRA.<sup>28</sup> During the 1990s, its strength grew considerably because of support from Sudan, mostly in the form of weapons and safe havens beyond the Ugandan borders (Faulkner 2016).<sup>29</sup> The LRA further increased its ranks by large-scale forced recruitment, particularly of children (Haer et al. 2011). Peace negotiations in 1993 and 1994 failed to end the conflict, as did efforts by the NRA to confine the Acholi population in northern Uganda to camps, to set up self-defense militia,

27. The LRA was previously known as the Liberation Army (1987–1988) and the Uganda People's Democratic Christian Army (1988–1992).

28. The NRA became Uganda's national army after the successful 1986 coup. In 1995, it changed its name to the Uganda Peoples' Defence Force.

29. The LRA was mostly active in the Gulu, Kitgum, and Pader districts of Uganda.

and to win the conflict through large-scale offensives in 1991 and 1997 (Branch 2005; van Wyk 2017; Vinci 2007). Corruption, a lack of competence, and vested interests in the NRA prevented military success against the LRA (Espeland and Petersen 2010; Feldman 2008).

With the LRA conflict ongoing, a severe drought shattered Uganda's north in the late 1990s. While the exact start and end dates are hard to delineate, August 1999 through July 2001 is a solid estimate for the period during which drought conditions prevailed on the ground.<sup>30</sup> The drought affected the Karamoja region in northeastern Uganda most severely, but the Acholi regions also experienced considerable impacts, including harvest loss and food price increases of up to 100% (ACT 1999). The drought undermined the livelihoods of at least 300,000 people, rendered more than 200,000 food insecure, and caused 115 fatalities.

Besides the combination of high temperatures and low precipitation, the immense vulnerability of northern Uganda explains these severe impacts: years of armed violence between the NRA and the LRA as well as intense communal conflict destroyed the agricultural systems of the already poor region (WFP 2004).<sup>31</sup> The situation was further aggravated by a large number of internally displaced people (IDP), insufficient infrastructure, and a dependence on an almost completely agricultural economy. International aid was rather low when compared with amounts provided for similar disasters, and the government was both unable and unwilling to conduct large-scale relief operations (ACT 2003; Adams 2002; van Acker 2004). On the national level, the drought had moderate economic impacts because it was mostly confined to the peripheral northern regions (MFPED 2001; MWLE 2002).

In the aftermath of this disaster, Uganda experienced a slight escalation in conflict intensity. The trend is remarkable, yet below the five standard deviations threshold for military fatalities, which increased from 140 during the pre-drought year to 317 in the 12 months after the drought. However,

30. EM-DAT provides a start date (August 1999) but only an end year for the drought (2001). According to the Weighted Anomaly Standardized Precipitation (WASP) index (IRI 2011) used by EM-DAT (Below et al. 2007), May 2001 was the last month that saw drought conditions in some areas of northern Uganda. Precipitation was above average in July 2001 and afterward; no major droughts were reported for the rest of the year.

31. In the Kitgum district, for example, the cattle population declined from 156,667 in 1986 to 3,239 in 1998, while country-wide, cattle stocks grew significantly during the same period (van Acker 2004: 343).



the increase in civilian deaths, which went from 40 to 171, is significant and attacks by the LRA largely account for this rise.<sup>32</sup>

The slight rise in military fatalities can hardly be attributed to the drought. The disaster did not affect the fighting capability of the NRA. To the contrary, the government troops launched Operation Iron Fist in March 2002, confronting the LRA in northern Uganda and (in the context of improved relations between the Sudanese and the Ugandan government) in southern Sudan. LRA groups reacted by retreating from southern Sudan and moving to the Acholi and Karamoja regions in Uganda, hence increasing violent confrontations there (Dunn 2004; Espeland and Petersen 2010).

By contrast, there is ample evidence that from the early 2000s onward, the LRA increased attacks on villages, humanitarian convoys, and IDP camps to loot food (UNSCN 2003). While looting was always an important source of income, the loss of its bases in Sudan as well as the drought (and the associated food scarcity) increased the LRA's dependence on such attacks (Vinci 2007). This is well in line with an increase of international food aid during and in the immediate aftermath of the drought (WFP 2004), and with reports about the LRA's inability to secure proper food supplies for its members during this time period (Bevan 2008; Haer et al. 2011). In other words, the strategic environment the LRA faced in the wake of Operation Iron Fist and the drought required the utilization of additional sources of food. The LRA thus resorted to increased levels of violence against civilians to extract food and other resources from the local population, refugee camps, and (drought-related) humanitarian relief operations.

### **Cases of Conflict De-escalation after Disasters**

#### **Bangladesh 2007: Cyclone Sidr and the Maoist Insurgency**

In 1968, the Purbo Banglar Communist Party (PBCP) split from the Communist Party of Bangladesh because of the former's commitment to Maoism and to illegal/violent methods. The group conducted several attacks throughout the 1970s, 1980s, and 1990s, but overall it remained fairly limited in its activities. Its financial and organizational bases were weak, because Maoism in Bangladesh remained highly fractionalized with a larger

32. In fact, violence against civilians by NRA forces declined, although data availability is very limited in this regard.

number of competing groups (Amin 1985). From the early 2000s onward, the struggle between the Communist rebels and the government intensified for two reasons. First, in 2001, several hundred surrendered PBCP fighters and cadres were released from prison, many of whom were still committed to armed struggle. Second, the Janajuddha Faction (PBCP-J) splintered from the PBCP in 2003 and decided to intensify armed conflict activities, as well as become the dominant Maoist group in the country (South Asia Terrorism Portal 2018). As a result, the number of guerrilla attacks and clashes with the Bangladeshi army increased in various parts of the country.

On November 15, 2007, Cyclone Sidr made landfall in southwestern Bangladesh. While its strength was similar to that of Cyclone Gorky in 1991 (see the case study “Bangladesh 1991: The Chittagong Hill Conflict after Cyclone Gorky” later in this chapter), improved evacuation procedures and shelter availability along with other factors<sup>33</sup> greatly reduced the death toll. Nevertheless, Sidr caused enormous damage and left more than 4,000 people dead,<sup>34</sup> along with economic damage of around US\$1.7 billion (Paul 2009). Poor people were disproportionately affected as the storm struck economically less developed parts of the country. The sub-standard buildings inhabited by poorer families could not withstand the storm. Further, there is documented evidence of unequal distribution of reconstruction funds in favor of wealthier households (Nadiruzzaman and Wrathall 2015). Similarly, Rabiul Islam and Greg Walkerden (2014: 287) find that in the immediate post-disaster period, “60% of households exchanged mutual support with neighbours and friends.” But in the months after the disaster, solidarity vanished and conflicts over access to relief occurred.

When comparing the one-year periods before and after Cyclone Sidr, there is a small yet remarkable decline in both the frequency (11 down from 17 incidents) and the intensity (11 down from 22 deaths) of encounters between the PBCP-J and government forces. Civilians play no role in this dynamic, as not a single death of a non-combatant is reported for the 25 months under study. This de-escalation of the conflict coincided with a general decline in political violence in Bangladesh as a temporary, non-partisan

33. Sidr struck less populated and physically less exposed areas during a period of relatively low tides. It also did not last as long as Gorky.

34. I use the EM-DAT estimate here, whereas government data state a death toll of 3,406.

caretaker government took power to prepare the next elections and banned most political activities. However, this cannot account for a de-escalation of the conflict between the PBCP-J and the government. This is because the caretaker government assumed power more than 11 months prior to the cyclone and its ban mostly affected violence related to elections and competition between political parties, rather than the insurgency-style violence of the PBCP-J (Suykens and Islam 2015).

Explanations based on the solidarity pathway or constraints on rebel groups also cannot account for the reduction of violence after the disaster. As discussed above, initial solidarity among cyclone victims vanished quickly and community relations even turned contentious over relief distribution (Islam and Walkerden 2014). Also, while some core areas of the PBCP-J in southwestern Bangladesh were among the most severely affected districts,<sup>35</sup> violent encounters also took place much farther north (Haque and Jahan 2016). The PBCP-J's connections to the local population were too weak and its operational presence in the region too insignificant for Sidr to affect its fighting motives or capabilities (South Asia Terrorism Portal 2018). Relatedly, the Maoist insurgents could not capitalize on the reinforced socio-economic grievances and class cleavages after the cyclone.

A plausible explanation for the de-escalation of the conflict is strategic constraints on the government forces, and particularly on the police units responsible for fighting the PBCP-J, like the notorious Rapid Action Battalion (RAB). Access to and intelligence gathering in the worst affected regions (several of which hosted PBCP-J cells) were limited after the cyclone. Further, the Bangladesh government deployed more than 40,000 personnel to the affected area, including police and military units (IFRC 2007a). There are no reports of units like the RAB taking part in this operation, but the latter frequently supported or substituted for regular police units. Therefore, the capabilities of the police to hunt down and engage with Maoist rebels certainly declined in the wake of Sidr. This was especially the case as additional capabilities were already required to enforce the ban of political actions introduced by the caretaker government. According to the UCDP dataset, the conflict de-escalation pattern is also mainly driven by a decline in police raids against the PBCP-J. Available evidence therefore

35. In particular Bagerhat, Khulna, Pirojpur, and Satkhira.

indicates that a temporal reduction in government strength and capability caused by the cyclone was a major cause of the conflict de-escalation.

### **Burundi 2005–2006: Drought, Democratization, and the Peace Process**

Following Burundi's independence in 1962, struggles between the Hutu and Tutsi population groups were a key component of Burundian politics.<sup>36</sup> While the majority of the population was Hutu,<sup>37</sup> the Tutsi dominated the government and the military. In 1972, Hutu groups launched an invasion from neighboring Tanzania, leading to a violent backlash by the Tutsi elite and the deaths of between 100,000 and 200,000 Hutu. This consolidated the political and military dominance of the Tutsi. Several pro-Hutu parties emerged in the subsequent years, often having their bases in neighboring countries to which many Tutsi fled after the 1972 massacre. Among these was the Party for the Liberation of Hutu People (PALIPEHUTU), which emerged in 1980 in a refugee camp in Tanzania and established its armed wing, the National Liberation Forces (FNL), in 1985. The return to democracy through elections in 1993, a coup attempt in the same year, and the assassinations of prominent Hutu politicians sparked a civil war between the Burundian military (dominated by Tutsi and opposing a stronger Hutu influence after the elections), Tutsi militia, and several Hutu rebel groups (Boshoff et al. 2010; Lemarchand 2009; Vandeginste 2009).

Negotiations under external pressure and South African mediation resulted in the 2000 Arusha Agreement, which initiated a process of political transition and peace building in Burundi. Initially not a party to the agreement, the largest Hutu rebel group—the National Council for Defense of Democracy—Forces for the Defense of Democracy (CNDD-FDD)—joined it in 2003 and won the first elections under the new constitution in 2005. The PALIPEHUTU-FNL, by contrast, radicalized and continued its violent struggle against the government and, from 2003 onward, also against the CNDD-FDD (Alfieri 2014). Peace negotiations initiated in January 2004 failed only eight months later (Boshoff et al. 2010; Nimubona et al. 2012; Vandeginste 2009).

36. It is important to avoid primordialist and essentialist assumptions, because ethnic differences were frequently manipulated and instrumentalized in power struggles between political elites in Burundi (Wittig 2016).

37. Today approximately 85% of the population is Hutu, while 14% is Tutsi.

Northeastern Burundi experienced low rainfalls from 2000 onward, and in early 2005 the situation worsened and evolved into a severe drought.<sup>38</sup> While the region was formerly considered the breadbasket of the country, years of armed conflict had taken a significant toll on the agricultural capacity of the northeast, as well as on the assets (e.g., cash and seed reserves) of its population. At the same time, agriculture and pastoralism were the main sources of livelihoods. Disaster vulnerability was thus very high (Baram-buriye et al. 2013; IFRC 2007b).

Within months, food security in the region declined sharply, and until mid-2006, around 2.2 million people in Burundi (out of a total population of 7.5 million) required food assistance. The government and international agencies channeled money and food aid to address the drought. But overall, insufficient resources, the ongoing civil war, and the very limited road infrastructure inhibited relief work. As a consequence, at least 120 people died and many more migrated internally or to Tanzania (FAO 2005; IRIN News 2006; *The New Humanitarian* 2006).<sup>39</sup> The economic damage of the drought is hard to assess, but the World Bank (2018: 37) estimates that the drought led to a decline in Burundi's GDP growth from 4.8% (in 2004) to 0.9% (in 2005). The drought ended in January 2005, but famine conditions persisted until May 2006 (USAID 2006).

Toward the end of the drought, and particularly in its aftermath, the conflict de-escalated significantly. Fighting between the government of Burundi and the PALIPEHUTU-FNL resulted in 590 deaths in the 12 months before the drought but only 106 deaths in the year after the drought, with clear downward trends of both combatant and civilian casualties. These trends are largely driven by wider political developments. Joint initiatives by the Burundian military and the CNDD-FDD had already weakened the PALIPEHUTU-FNL in 2004, and the deployment of 5,000 UN peacekeepers from June 2004 onward further limited the insurgents' room for maneuver (Rodt 2012).<sup>40</sup> The new (Hutu-led) government in power since 2005 also prioritized the negotiated resolution of the PALIPEHUTU-FNL conflict,

38. The province of Kirundo was hit the hardest, but a state of emergency or famine was also declared for Muyinga, Cankuzo, Ngozi, and Rutana.

39. The exact numbers of refugees are unknown, but the Red Cross (IFRC 2007b) estimates 15,000 migrants to Tanzania in 2005 alone.

40. The UN peacekeepers replaced a smaller African Union mission active in Burundi since 2003.

resulting in a peace agreement in 2006 (El Abdellaoui 2009). Furthermore, the peace agreements with other armed groups forced the PALIPEHUTU-FNL

to moderate its position and to enter into negotiations from early 2004 onwards. With the agreed ethnic parity in the defence and security forces and the representation of Hutu at all levels of the state, in particular after the 2005 elections, the movement had lost much of its ideological *raison d'être*. (Vandeginste 2009: 80)

From the information that is available, it is very likely that the drought played a contributing role toward the conflict de-escalation. The political developments between 2000 and 2005 discussed above are certainly the main drivers of the decline in conflict intensity (Alfieri 2016; Boshoff et al. 2010). The regions most affected by the drought in northeastern Burundi do not coincide with the stronghold of the PALIPEHUTU-FNL in 2005 and 2006, the Bujumbura Rurale province in the west of the country (Alfieri 2014; Rodt 2012).

However, the PALIPEHUTU-FNL was active in northern Burundi during the drought (Project Ploughshares 2011), while the drought-induced spike in food prices (up to 100%) affected its strongholds in other parts of the country (FAO 2005). The group was highly reliant on local contributions to fund and staff the insurgency (Alfieri 2016; Wittig 2016), while Burundi's rural population was characterized by poverty, land scarcity, and a strong dependence on agriculture (Baramburiye et al. 2013; Lemarchand 2009). Therefore, the drought affected the PALIPEHUTU-FNL's finances (owing to an impoverishment of the supporting population), ability to recruit members (as locals struggled to secure their livelihoods), and supply lines (because higher food prices made it more expensive to feed troops). Taken together, the drought diminished the group's fighting capability. This is well in line with evidence that reflects an increase in forced recruitment and extortion (as compared with voluntary contributions) during and after the drought (Alfieri 2016).<sup>41</sup>

The significant GDP loss associated with the drought and the necessity to redirect resources to drought aid might also have influenced the CNDD-FDD government's decision to negotiate with the PALIPEHUTU-FNL, thus abandoning its initial preference for a crackdown strategy that

41. However, this can also be explained by a reduced ideological attractiveness of the group to its Hutu constituency in the face of the democratization process and the inauguration of a Hutu-led government in 2005.

would have likely resulted in conflict escalation (Wittig 2016). But even if direct evidence of this is missing, the drought still contributed to conflict de-escalation by weakening the PALIPEHUTU-FNL rebels.

### **India (Kashmir) 2005: Cross-Border Constraints in the Face of an Earthquake**

The Kashmir region has been a source of dispute between India and Pakistan from the time both countries partitioned in 1947. Pakistan claims the Indian part of Kashmir (the Jammu and Kashmir state, J&K) as part of its territory, among others, due to the predominantly Muslim population (around 80%). The J&K has remained economically weak, and the special status that was promised by the initial Indian constitution was progressively undermined, leading to local frustration, particularly in the Kashmir valley (a sub-region of the J&K). Local protests against this situation emerged in the 1960s. In the context of rigged state elections in 1987,<sup>42</sup> anti-Indian protests and armed resistance erupted in the J&K. The conflict between the Indian government and various Kashmir insurgent groups quickly escalated into a civil war. With the support of Pakistan and other militant Islamic groups (such as Afghanistan war veterans), the insurgents quickly grew to considerable strength. Religious and pro-Pakistani groups like Hizb-ul-Mujahedeen and Lahkar-e-Toiba gained the upper hand vis-à-vis secular and pro-independence factions.<sup>43</sup> The Indian government's efforts to resolve the conflict through repression were unsuccessful owing to broad Kashmiri and external support for the insurgents (Ganguly 2001; Sharma 2015).

From 2003 onward, the conflict declined in intensity but remained unresolved. Kashmir's population was war-weary at the turn of the millennium given that the insurgents had achieved very little. Disenchantment with external, Pakistani groups was growing because of human rights violations and because most locals favored independence over unification with Pakistan. State elections in 2002 were considered open and fair (Samii 2006). A cease-fire agreement between India and Pakistan in 2003, followed by peace talks in 2004, reduced conflict between both states, and hence Pakistan's

42. The elections were rigged by the ruling National Conference party to the disadvantage of political groups more critical of India.

43. Such as the Jammu and Kashmir Liberation Front (JKLF), which suffered heavily from the Indian counterinsurgency and played little role after 1995.

support for the insurgency. Improved Indian control over the border further limited external support for the rebels (Bose 2007: 154–203; Snedden 2013; Staniland 2013).

On October 8, 2005, a 7.8-magnitude earthquake shattered the Kashmir region. The epicenter was located on the Pakistani side of the border, and Pakistan also suffered the brunt of the damage with more than 73,000 deaths and direct economic damage of US\$5.2 billion (Halvorson and Hamilton 2010; see also the case study “Pakistan 2005: Escalation after, but Not Related to the Kashmir Earthquake” later in this chapter). Indian Kashmir was heavily affected as well, experiencing 1,309 deaths. Just like the direct economic damage (US\$359 million), the “impact of the earthquake on livelihoods has been moderate” (ADB 2006: 39). Livelihoods in the J&K were largely based on self-sufficient agriculture, and at the time the disaster struck, fields had been harvested and animals were out of their barns. Infrastructure destruction was heavy, especially in the health, transportation, and medical sectors. The remote location of and security situation in Indian Kashmir, along with a lack of preparation and (at least initially) coordination, complicated the relief and reconstruction efforts. But overall, disaster-related operations of the Indian military (in conjunction with international supporters) proceeded smoothly, despite local distrust of the Indian armed forces. There were occasional reports of unfair aid distribution along ethnic and political lines (Nabi 2014; Renner and Chafe 2007).

In the aftermath of the earthquake, hopes were high that pragmatic cooperation could enhance Indian-Pakistani reconciliation, which would have most likely diminished the insurgency in the J&K as well. Despite India delivering aid to Pakistan, the re-establishment of cross-border phone lines, and the opening of the border at five posts in Kashmir, the underlying cleavages between India and Pakistan proved too strong to be addressed by disaster diplomacy (Akcinaroglu et al. 2011; Kelman et al. 2018). There was, however, a notable decline in conflict intensity in the J&K, from 1,388 battle-related deaths in the year before the disaster down to 870 deaths in the post-earthquake period.

Part of this de-escalation can certainly be ascribed to a general downward trend in conflict intensity since 2003 that was driven by improved Indian-Pakistani relations, lower local support for the insurgents, and tighter border controls. However, the de-escalation was particularly pronounced in the first six months after the earthquake. There are two plausible pathways



connecting the disaster to this trend. First, the Kashmir insurgency was strongly driven by groups with bases across the border in Pakistan. This area was the most affected by the earthquake. Lahkar-e-Toiba, for instance, lost at least 70 fighters during the disaster, in addition to its training camps being damaged. Pakistani-based groups were occupied with other tasks: "In many cases the first to arrive on the scene to assist in post-earthquake rescue and relief efforts were members of Islamist groups, including militant jihadi organisations" (Wilder 2010: 416). The Indian military, likewise occupied with relief and reconstruction, could not escalate the conflict in spite of its opponents' weakness, particularly since the rebels could retreat to Pakistani territory (ADB 2006; Nabi 2014). In short, both conflict parties faced strategic constraints in the first months after the earthquake.

Second, pro-Pakistani extremists in Indian Kashmir also restrained from using extensive violence in order to prevent a deterioration of theirs and Pakistan's image in the aftermath of the disaster. Pakistan faced strong international pressure, particularly by the United States, to stop its support of terrorist groups in the aftermath of 9/11. The London bombings three months before the earthquake intensified such pressures, because terrorism was very high on the international agenda again. After the earthquake, the world focused its attention on Kashmir. For example, military contingents from 19 countries participated in the relief and reconstruction operations (Cosgrave and Herson 2008: 194), with the United States being strongly involved (Wilder 2010).

In such a situation, an escalation of violence by Pakistani-backed groups would have sent a devastating message to the international community and Pakistan's allies, which would have interpreted this as a sign of Pakistan supporting international terrorism (Samii 2006; Staniland 2013). Image cultivation hence played a role in the conflict de-escalation as well. This is further supported by a strong decline in civilian casualties in the first five months after the earthquake (27, as compared with 137 in the five months before the disaster) because the international community is particularly sensitive to violence against civilians.

### **Indonesia 2004: Wave of Peace?**

The Aceh region in northwestern Indonesia had a tense relationship with the central government since Indonesia achieved independence in 1949. Reasons for this include a history of Aceh as a strong and independent sultanate,

the Muslim population's opposition to secular policies of the government, the loss of autonomy status in 1950 and again in 1967, and tensions about the distribution of revenues from Aceh's rich natural resources (in particular, oil and gas). An early rebellion in Aceh supporting Darul Islam<sup>44</sup> took place between 1953 and 1959 but was defeated by the government. In 1976, the Free Aceh Movement (GAM) staged another rebellion, this time for an independent Aceh. The Indonesian military quickly quelled the resistance, but the GAM remained active in Aceh (Schulze 2003; Sulistiyanto 2001).

From the late 1980s onward, the GAM again increased its activities.<sup>45</sup> The Indonesian military reacted with heavy repression, including counterinsurgency measures (Aspinall 2007). In the wake of the 1997 financial crisis, and particularly the democratization process (*reformasi*) in 1998, the GAM gained further strength. It was able to take control of substantive areas in Aceh, thus broadening its revenue and recruitment base. Peace negotiations in 2000 and 2002–2003 failed, each time followed by an escalation of the conflict. In May 2003, the government declared martial law in Aceh, closed the province to the outside world, and carried out a heavy military campaign. In October 2004, newly elected Indonesian president Susilo Bambang Yudhoyono and vice president Jusuf Kalla re-started back-channel negotiations with the GAM.

Shortly after the re-start of the negotiations, and with intense counterinsurgency activities ongoing, a 9.3-magnitude earthquake occurred off the west coast of Aceh. Massive damage in coastal Aceh was caused by the ground shaking, but even more damage was caused by the subsequent tsunami with wave heights between 4 and 30 meters. At least 165,000 people died, partially due to a lack of tsunami awareness and the human security implications of the conflict (Gaillard, Clavé, Vibert, et al. 2008).<sup>46</sup> Productive losses and infrastructure destruction amounted to US\$8.2 billion (Mahdi 2006). Roads and bridges collapsed or were washed away, significantly hampering emergency aid. Oil transfer facilities and port infrastructures in Aceh were also damaged, which in turn increased the financial burden for the Indonesian government (Ghobarah et al. 2006). However,

44. A rebel group fighting for the establishment of an Islamic state in Indonesia, mostly during the 1950s.

45. Partially because Libya trained 700–800 GAM fighters.

46. The large majority of Acehnese did not know what a tsunami is. Conflict-related displacement, poverty, insecurity, and injury complicated evacuation efforts.

due to the end of martial law and massive international support, emergency relief and recovery operations have generally been considered successful (Klitzsch 2014; Zeccola 2011).

As indicated by figure 3.2, Aceh experienced a spike in conflict intensity in the first month after the disaster, with a monthly average of 79 battle-related deaths in the year before the earthquake/tsunami and 131 casualties in January 2005. This escalation was mainly due to the Indonesian army extending its presence in the disaster-affected areas. However, as both conflict parties started formal peace negotiations on January 23 and concluded a peace agreement in August, the conflict rapidly de-escalated. Overall, the number of deaths in the post-disaster 12-month period (222) is significantly lower than in the previous year (947).

Two factors were crucial in setting the stage for this conflict de-escalation and the associated peace negotiations. First, political leaders on both sides, and especially Yudhoyono and Kalla, were committed to the peace process and were willing to accept a compromise. Second, the capabilities of both actors were significantly reduced, producing a mutually hurting stalemate that neither side could evade by military means. The Indonesian state was still coping with the impacts of the political changes and the economic turbulence of the late 1990s as well as with international pressures to resolve the conflict peacefully. The GAM had lost up to two-thirds of its members during the period of martial law and received little international support for its independence claims (Aspinall 2005; Schulze 2007).

The tsunami accelerated this de-escalation process in two major ways and one minor way. The first major pathway relates to constraints faced by the government and the GAM. The Indonesian state mainly controlled the coastal areas of Aceh. It experienced significant losses of personnel, infrastructure, and equipment owing to the disaster, including 2,698 security forces and 60% of its civil servants in the provincial capital Banda Aceh (Ghobarah et al. 2006; Le Billon and Waizenegger 2007). But the GAM also lost important support bases along the coast and was unable to provide relief in the territories it controlled without access to external (usually government controlled) aid (Enia 2008; Schulze 2007). In other words, the disaster exhausted the capabilities of both conflict parties even further and contributed to the mutually hurting stalemate (Kingsbury 2007).

The second major pathway from the earthquake/tsunami to conflict de-escalation was image cultivation. There was a general sense that “resorting

to military solutions to resolve the conflict in a concurrent post-disaster emergency and rehabilitation context would be politically incorrect in the eyes of the wider Indonesian population and international community" (Gaillard, Clavé, and Kelman 2008: 517). The Indonesian government and especially the GAM strongly sought international backing for their positions. A GAM negotiator stated quite explicitly, "What we need is international support" (Schulze 2003: 265). At the same time, the international community made clear that reconstruction support was conditional on conflict de-escalation and advances in the peace process (Harrowell and Özerdem 2019). Also, both the Indonesian government (after the recent democratization) and the GAM (fighting guerrilla warfare dependent on local support) could hardly allow themselves to lose popular support. De-escalating the conflict and committing to peace talks was therefore crucial to cultivate a positive image among key audiences for both parties (Le Bilion and Waizenegger 2007; Tunçer-Kılavuz 2019).

Finally, micro-level instances of cooperation between combatants and supporters from both sides increased local support for the peace process (Gaillard, Clavé, and Kelman 2008). Along with a general sense of "there has been enough suffering in Aceh" among the Indonesian public, this allowed leaders on both sides "to assume the high moral ground in seeking peace" (Kingsbury 2007: 104). However, local cooperation was minor and short-lived, while expressions of solidarity would have been unlikely to facilitate the peace process beyond the initial negotiation period (Enia 2008). This reduces the explanatory power of the solidarity pathway as compared with the constraints and image cultivation pathways.

### **Myanmar 2008: The Karen Conflict after Cyclone Nargis**

Tensions between the dominant Burmese (or Bamar) and the minority Karen ethnic groups date back to the colonial area, as the British colonial administration privileged the Karen over other ethnic groups. When Myanmar became an independent country (known as Burma until 1989) after World War II, the Karen demanded a separate state. However, the new government turned down this plea as well as requests for a special status of the Karen ethnic group. As a result, the Karen National Union (KNU) was founded in 1947 to pursue Karen interests. When negotiations failed in the wake of communal conflicts and provocations by both sides, the political conflict escalated into a full-blown civil war in late 1948.

Over the next six decades, the conflict continued with changing fortunes and several splits and alliances on the side of the rebels. The KNU and its military arm, the Karen Nation Liberation Army, frequently formed alliances with organizations representing other ethnic groups as well as with the Burmese democracy movement. At various times, the rebels controlled larger territories in eastern Myanmar. But the KNU also faced significant setbacks when the Democratic Kayin Buddhist Army (DKBA) split away from the group and fought alongside the government in 1994,<sup>47</sup> and when the Karen National Union–Peace Council (KNU-PC) separated in January 2007 to sign a peace agreement with the government. Already with the fall of its headquarters in Manerplaw and a decline of lucrative black-market trade along the Myanmar–Thai border in the 1990s, the KNU had to increasingly rely on guerrilla tactics rather than open confrontations (O’Hara and Sell-ing 2012: 27–33). The process of losing territorial control that had begun in the 1980s accelerated with government and DKBA offensives between 2004 and 2009 (Core 2009).

On February 9, 2008, the military government announced a constitutional referendum in May 2008 that would be followed by general elections in 2010. This decision was contested by a wide range of opposition and civil society groups because of (1) a lack of prior consultation (including with representatives of ethnic minorities), (2) several features of the new constitution that would ensure the continuation of military rule, and (3) doubts about the fairness of the announced elections. While several Karen groups eventually participated in the elections, many Karen remained skeptical and the KNU was hostile to the process (South 2011).

During this politically turbulent period, Cyclone Nargis made landfall in Myanmar on the night of May 2, 2008. Owing to a lack of preparation, unfortunate timing (during high tides and at night), and the topography of the affected region, destruction was enormous: the storm caused 140,000 deaths and destruction of property worth US\$1.75 billion. To make matters worse, the government responded slowly to the disaster and initially refused international aid because of fears of foreign interference. Later, it mobilized more resources and accepted international support, but only from “friendly” countries and only if the foreign helpers obtained the respective visa.

47. The split was mainly caused by frictions between Christian and Buddhist factions in the KNU.

Despite calls to do so, the government did not postpone the constitutional referendum, except in the worst-affected regions. Nargis caused the most destruction in the Irrawaddy region of southern Myanmar, but the Kayin (Karen) state (the core KNU territory) was affected as well, with the Karen group being overall heavily affected (Howe and Bang 2017; South 2008).

In the 12 months after Nargis, the intensity of the government-KNU conflict declined remarkably, with 67 battle-related deaths compared with 321 deaths in the year before the cyclone. This de-escalation is almost exclusively driven by less civilian targeting (down from 256 to 26 victims) by pro-government forces. This is surprising given the restrictions of political freedoms after Nargis as well as during the run-up to the 2008 referendum and 2010 elections.

The solidarity pathway can hardly explain this development as the cyclone rather hardened political front lines. Delayed relief efforts and the rejection of international support fueled discontent with the government. At the same time, relief and reconstruction activities increased government suspicions of political activism and foreign interference (Than 2009). Constraints on armed government activities were also not significant. Conflict data report no drop in armed confrontation directly after Nargis, and the government's military access to the Kayin state was hardly affected, especially given the local DKBA presence. In addition, Ashley South (2011: 40) reports offensives by the military and DKBA, both of which frequently targeted civilians, in 2008 and 2009.

Rather, the conflict de-escalation was driven by the Burmese regime's efforts to cultivate its image toward external constituencies. In the wake of the critique of its disaster response, the upcoming constitutional referendum, and the planned elections, the government was eager to avoid further deterioration of its image. South (2008) argues that the government rejected Western disaster aid to obscure human rights violations from the international public during a politically sensitive time, further demonstrating that concerns about the state's image played a role in government considerations. Regional powers with more friendly relations to Myanmar, particularly China, urged the government to accept international aid. By doing so, they set incentives to limit other practices that may shed an unfavorable light on the Burmese rulers, such as military violence against civilians, at least temporarily (Junk 2016). This was particularly relevant as the government eventually allowed a number of foreign aid workers into

the country. In sum, there is evidence that image cultivation by the government of Myanmar resulted in conflict de-escalation via a reduction in civilian targeting in the wake of Cyclone Nargis.

### **Pakistan 2010: Floods Facilitating Conflict De-escalation**

The Pakistani Taliban, named Tehrik-i-Taliban Pakistan (TTP), emerged in December 2007 as an alliance of smaller and regional Islamist groups. Its various members share three central goals: introduce the *sharia* in Pakistan, resist the influence of the United States and other Western powers in the region (particularly in neighboring Afghanistan), and push back the Pakistani state from their areas of control. The state of Pakistan traditionally supported Islamist militant groups to gain a stake in Afghanistan since the 1980s, but it has curtailed their influence (including through military means) since 2001 under US pressure to support the war on terror. Once established, the TTP quickly expanded existing strongholds in the politically and economically marginalized North-West Frontier Province (NWFP) and Federally Administered Tribal Areas (FATA),<sup>48</sup> but also had an operational presence in the other regions of Pakistan. Owing to the inclusion of existing militant groups, the possession of modern weapons, and an international supply of weapons, fighters, and funding (e.g., from Afghanistan, the Gulf states, and Uzbekistan), as well as local support networks,<sup>49</sup> the TTP posed a significant challenge to the Pakistani state (Biberman and Turnbull 2018; Feyyaz 2016; Sheikh 2016; Siddique 2010).

Initially, the government of Pakistan reacted with a mixture of military repression and accommodation, including support for pro-government factions of the Pakistani Taliban and negotiations with the TTP (Khan and Wei 2016). However, after the TTP increased its territorial influence in northern Pakistan and conducted terrorist attacks in other parts of the country, the military launched several large-scale offensives against the TTP during 2009. Heavy fighting occurred, but the Pakistani armed forces were able to procure and control significant amounts of territory, thereby severely weakening the TTP. However, the rebels remained capable of initiating localized offensives (in northwestern Pakistan) and major terrorist attacks

48. Since 2018, both areas are part of the Khyber Pakhtunkwa province.

49. Taliban-style groups resisting the state-like Tehreek-e-Nafaz-e-Shariat-e-Mohammadi (TNSM) emerged as early as 1992. They gained currency after the US invasion of Afghanistan in 2001, and again with US drone strikes in Pakistan since 2004.

(countrywide). The military offensives also created grievances among the local populations with the potential to further fuel the insurgency (Akhtar 2010; Akhtar 2019; M. Nelson 2010).

A few months after the peak of the Pakistani military's offensive, a devastating flood of the Indus River, triggered by heavy rains, occurred in July and August 2010. Close to 20% of Pakistan's territory became inundated. The total death toll from the flood is estimated at 1,985, with direct economic damage of US\$9.7 billion and around 20 million displaced persons. Agricultural land, infrastructure, and assets were destroyed on a large scale. While all provinces were severely affected, northwestern Pakistan—including TTP strongholds like the FATA—suffered the most from the floods. The heavy rains affected the region directly, giving it little time to prepare for the disaster. The northwest of Pakistan was also highly vulnerable to the disaster owing to its remoteness, the destruction and displacement caused by the conflict, and the predominance of agricultural livelihoods (Arai 2012).

State agencies were ill prepared to respond to the floods, but the military, local NGOs, and international supporters provided rapid and effective relief operations (Deen 2015). Food insecurity was nevertheless high, particularly in rural areas (Doocy et al. 2013). Reconstruction proceeded slowly in the first year after the floods, especially for poor and significantly affected households in Pakistan's northwest (Kurosaki 2017). Consequently, significant anti-government resentments emerged, including among the FATA, owing to a perceived lack of state support after the floods (Arai 2012; K. Khan 2019; Siddiqi 2013).<sup>50</sup>

The flood triggered concerns that the TTP might use anti-state grievances and material deprivation to expand its support base and recruit new followers (Kazim 2010; Küstner 2010). However, the intensity of the conflict was reduced by more than 50% in the year after the disaster, with the number of battle-related deaths declining from 6,297 to 3,006. This decline was mostly driven by fewer battle events and military encounters. The number of terrorist attacks, a tactic widely used by the TTP, only declined from 151 to 143, with a slight increase in deaths from such attacks: 763 in the year before the floods, and 903 in the year after the floods (START 2018).

50. According to Siddiqi (2013), several state measures such as the distribution of Watan cards (pre-charged ATM cards) were actually rated very positively by the flood victims, yet not identified as services provided by state agencies.



While the army offensives in 2009 are an important reason for the subsequent decline of the conflict between the Pakistani state and the TTP, the flood also played a role because its impacts constrained both parties. In late 2010 and well into 2011, the Pakistani army could not extend its operations (or maintain their high level of intensity as seen in 2009) because it was “overstretched with flood relief and military operations” in other areas (Fair 2011: 104). The floods in combination with the territorial losses in 2009 also reduced the capabilities of the Taliban rebels. They were busy to some degree with relief work,<sup>51</sup> while their income from local taxes, donations, and ransom kidnapping declined (Feyyaz 2011; Siddique 2010). Given the large flooded areas, including in heavily contested regions like the Swat Valley in Khyber Pakhtunkwa, both conflict parties also faced heavy logistical challenges to wage battles against each other (Fleiss et al. 2011). This is consistent with the available data on violent confrontations: the number of large battles, which demand manpower, finances, and logistics, declined, while the frequency of terrorist attacks by the TTP (which can be conducted by small sub-groups with fewer resources) remained almost constant.

Concerns that the TTP would use the floods to extend their sympathies and boost recruitment did not materialize. The Taliban delivered only a limited amount of disaster-related relief and services, particularly when compared with the extensive support provided by the Pakistani military in many areas (Arai 2012; Deen 2015). Further, relief provision (or the lack thereof) hardly translated into sustained political support for the TTP or the government (Fair et al. 2017; Siddiqi 2014). Likewise, other explanations for the decline in conflict intensity are implausible: there are no reports of instances of solidarity or cooperation between the Pakistani government and the TTP after the floods, and the Taliban were not concerned with image cultivation after the floods (to the contrary, they continued terrorist attacks on civilians and publicly threatened international relief workers) (Feyyaz 2020; Masood 2010). The constraints pathway is the relevant link between the 2010 floods and a de-escalation of the conflict between the Pakistani government and the TTP.

51. The extent is contested, with some authors claiming an important role for Taliban groups in post-disaster charity work (Kazim 2010; Siddique 2010), while others consider them “low key as providers of disaster relief” (Arai 2012: 58) at best (see also Biberman and Turnbull 2018).

### **Somalia 1997: Flood in the Midst of Chaos**

Major General Siad Barre assumed power in Somalia in 1969. Originally, his regime integrated all major clans, but with growing economic stress and critique about the lost war with Ethiopia in the late 1970s, Barre's rule was increasingly based on repression. Several clans<sup>52</sup> and political groups started to engage in violent resistance against the government, leading to Barre's overthrow by the United Somali Congress (USC) in 1991. USC's Ali Mahdi then became president of Somalia, but the new government was heavily contested. A breakaway faction of the USC led by Mohammad Farrah Aid-eed (and supported by the Somali National Alliance as well as the Ethiopian government) became one of the key challengers of the very weak government (supported by the Somali Salvation Alliance).<sup>53</sup> Several other armed groups with political, economic, and religious goals also participated in various armed struggles in Somalia (Vinci 2006). I will focus on the struggle for political power between the Madi and the Aidede factions of the USC.

Despite major peace negotiations in 1993, 1994, 1996 (after Hussein Aidede replaced his deceased father), and 1997, the conflict continued throughout the 1990s. UN and US interventions between 1992 and 1995 also failed to restore peace. However, since 1995, armed conflict, while still persistent, generally became less intense and widespread (Menkhaus 2006). While fronts shifted fast and ambush attacks were common, most fighting took place either in Mogadishu or in the agriculturally (and thus economically) important regions in southern Somalia (Bakonyi and Stuvøy 2005; Pham 2011).

In October and November 1997, an El Niño event triggered heavy rain in southern Somalia. Combined with the lack of maintenance of dikes and flood channels (also due to the ongoing civil war), this caused devastating flooding along the Juba and Shebelle Rivers—that is, in Somalia's breadbasket region. The disaster caused the loss of over 2,000 lives and widespread devastation of agricultural livelihoods owing to the destruction of fields, infrastructure, and assets. Approximately 21,000 livestock, as well as 90% of the maize and 50% of the sorghum production, were lost (FAO 1997; WFP

52. In Somalia, clan identities, while an important source of political mobilization and economic solidarity, are also fluid and changing (Duyvesteyn 2000).

53. Key allies of Aidede were the Somali National Alliance as well as the Ethiopian government, while the Somali Salvation Alliance was a key supporter of the Mahdi government.

1998). This event is considered the worst flood in Somalia's history, especially as it damaged two important export goods: cattle and bananas. The floods facilitated the spread of Rift Valley fever among local cattle, leading to import bans by Kenya and Saudi Arabia (two key importers of Somali cattle). The disaster also undermined banana production by flooding and destroying plantations (Little et al. 2001; Little 2003; Webersik 2005). Cases of malaria and cholera also multiplied (UNCU 1998).

During and after the floods, conflict intensity declined dramatically. According to the UCDP-GED data, 252 battle-related deaths occurred in the year before the disaster, none during the two months of the flood, and only 16 in the year after the disaster. But the validity of these data is questionable given that Somalia was a failed state during this time period, making data gathering difficult, and that the UCDP recognizes no government side for the period 1997–2000, hence recording fewer events.<sup>54</sup> To further validate this information, I use data on all armed conflict events from another widely used conflict dataset—ACLED (Raleigh et al. 2010)—for the nine months before and after the disaster in the most flood-affected areas.<sup>55</sup> Again, we can see a clear decline, from 12 events and 41 fatalities before the disaster to 6 events and 1 fatality during and after the floods. Qualitative accounts further confirm this conflict de-escalation (de Sousa 2014).

While a general decline in violence (particularly by clan-based groups like both USCs) had been recognized in Somalia since 1995 (Menkhaus 2006), the floods accelerated this trend by providing constraints on armed conflict activities. Most fighting between the USC factions during that time took place either in and around Mogadishu or in the agricultural regions of southern Somalia. In the latter, mobility was severely constrained by the floods, hence making troop movement almost impossible.

The prices of maize (+530%) and flour (+110%) in the local markets skyrocketed between October 1997 and January 1998 (Little et al. 2001: 153), making it harder to recruit and feed fighters. This was especially the case

54. That is, no confrontations between the government and the USC are recognized, although events involving their respective sub-groups and allies are on record. In addition, this should bias data only for November and December 1996 and is unlikely to drive the downward trend in battle-related deaths.

55. These areas are Lower Jubba, Middle Jubba, Gedo, and Lower Shebelle. I use a time period of 9 rather than 12 months before and after the disaster because ACLED only goes back as far as 1 January 1997.

because the armed groups could not rely on loyal supporters and hence had to pay freelance gunmen (*mooryaan*) as soldiers in the mid-1990s (Vinci 2006). Strong declines in cattle exports and banana production further reduced the purchasing power of Mahdi's and particularly Aideed's forces (Webersik 2005). The relevance of food production and revenues from the flood-affected areas for war efforts in other parts of Somalia is well established: "Access to power at the state level (whatever its basis) is intimately intertwined with access to—and ultimately use of—productive resources in rural southern Somalia" (Cassanelli and Besteman 1996: 202). Providing logistical and financial constraints on both conflict parties, the 1997 floods facilitated a conflict de-escalation in Somalia.

### **Somalia 2010–2011: Drought and Famine in a Fragile Country**

As discussed in the previous case study, the overthrow of Major General Siad Barre in 1991 marked the start of several rounds of armed conflict between different political groups competing for power in Somalia. External interventions by the African Union, the UN, and the United States, as well as various peace negotiations were unable to end the hostilities. While a relatively stable (but internationally not recognized) state of Somaliland was established in northern Somalia during the 1990s, the central government in Mogadishu remained extremely weak and had little power outside of the capital (Pham 2011).

In 2004, a new government, the Transnational Federal Government (TFG), was formed based on an agreement between several major warring factions. However, several local Islamic courts (especially in the south of Somalia) that had already formed in the 1990s to maintain local order resisted the new government. They joined forces under the Islamic Courts Union (ICU)<sup>56</sup> and were quickly able to control significant parts of the country. The ICU suffered major military defeats by an alliance of government and intervening Ethiopian forces in late 2006 and early 2007, but Islamic resistance remained vibrant. Later in 2007, al-Shabaab (Arabic for "The Youth") emerged as the strongest Islamist rebel group and main competitor of the government and its allies.<sup>57</sup> The goal of the Islamist group was to gain control over Somalia

56. Also known as the Council of Islamic Courts.

57. The main government allies were Ethiopia (which withdrew in 2009) and the African Union Mission to Somalia (AMISOM, established in 2007).

and turn it into an Islamic national state free of secular influences (Solomon 2014). Al-Shabaab was able to conquer vast amounts of territory in south and central Somalia as well as areas of Mogadishu until 2010 (Hansen 2013; Mueller 2018).

In the middle of al-Shabaab's rise to power and struggle with the TFG, a severe drought affected southern and central Somalia in 2010 and 2011. The main *gu* rains in spring 2010 were already below average, and the *deyr* rain season (September–December) saw a 50-year low in precipitation. The 2011 *gu* rainfall record was very low as well. Together with higher global food prices, declining agricultural incomes, weak infrastructure, low government capabilities, and prevalent insecurity and internal displacement, the stage was set for widespread agricultural collapse and food insecurity. International responses to the disaster were slow until the UN declared a famine in June 2011. Al-Shabaab's refusal of food aid and general resistance to international aid further complicated relief efforts (Maxwell and Pitzpatrick 2012).<sup>58</sup> The drought affected around 4 million people and caused at least 20,000 casualties (with some sources stating numbers above 100,000), most of which came from groups with low socio-economic statuses and/or limited ability to wage violence (Lindley 2014; Menkhaus 2012).

At first glance, the enormous negative impacts of the drought on livelihoods and the agricultural economy seem to have increased the intensity of the conflict.<sup>59</sup> The average number of battle-related deaths per month increased from 133 in the year before the drought, to 172 during the drought, to 238 in the year after the drought, making Somalia one of the cases with the largest standard deviations in conflict intensity (+13.5).<sup>60</sup>

However, this impression of a drought-conflict escalation nexus is misleading. The conflict escalation had already started two months prior to the

58. The United States and other Western countries added al-Shabaab to the list of foreign terrorist organizations in 2008, which led to a decline in international food and development support for southern Somalia owing to legal concerns.

59. This would be in line with Jean-François Maystadt and Oliver Ecker (2014), who find that below-average rainfall increases armed conflict risk in Somalia. However, the results are hardly comparable, as their study focuses on conflict incidence (rather than onset), includes low-intensity conflicts (rather than just high-intensity violence), and uses data from 1997 until 2009 (rather than for the 2009–2012 period).

60. Civilian victimization played only a very small role, with more than 98% of the battle-related deaths occurring in fights between armed groups.

end of the drought when Kenya intervened in southern Somalia in October 2011 to combat the growing influence of al-Shabaab along the Kenyan-Somali border (Mueller 2018). Shortly after, Ethiopia staged another offensive in favor of the Somali government (February/March 2012), while the number of TFG forces (due to financial support by the European Union [EU] and the United States) and AMISOM troops (due to a new mandate) grew significantly (Hansen 2013: 118–119). In other words, the end of the drought coincided with significant external action against al-Shabaab and increased support of the Somali government, and the latter two factors were the key drivers of the conflict escalation.

Rather, the drought had a de-escalating impact on the conflict. Given that this drought was a very slow-onset, long-term disaster, conflict dynamics should have already changed during the 23-month period of the drought. Indeed, the five-month moving average of battle-related deaths declined from 238 in June 2010 to 102 in August 2011 (just weeks before the Kenyan intervention). Also, if the drought is roughly divided into two 10-month periods,<sup>61</sup> the conflict intensity is more than five standard deviations lower in the second period.

These trends are well in line with qualitative evidence. Both al-Shabaab and the TFG looted disaster-related aid, but the amount was not significant enough to boost their fighting capabilities. Al-Shabaab actively resisted the operation of relief agencies in its territory, thereby “driving away a lucrative source of funding” (Menkhaus 2012: 31), with other income streams (e.g., taxes, charcoal trade) being much more important. The TFG controlled only around 5% of the drought-affected territory, and the looted aid was often used for political patronage (Menkhaus 2012; Pham 2011). Similarly, the collapse of agricultural livelihoods increased the number of marginalized and destitute people who could be recruited by armed groups. At the same time, the lack of a food supply, loss of income, and discontent about drought responses impeded recruitment efforts (Kfir 2017).

Overall, al-Shabaab was significantly weakened by the drought due to two factors. First, internal rifts increased over the denial of access for many humanitarian relief agencies. Second, al-Shabaab lost considerable popular support because of its disaster mismanagement, including the lack of

61. Ignoring the first months of the drought, when impacts were hardly felt, and the last two months, when the Kenyan intervention was already ongoing.

support in the affected areas, the expulsion of relief agencies, forced restrictions of the drought victims' mobility, and the taxation of the local population in the face of the disaster. The TFC forces were too weak to exploit this situation, leading to a conflict de-escalation that was mostly due to strategic constraints (Hansen 2013; Pham 2011).

### **Turkey 1999: Öcalan's Capture, the Marmara Earthquake, and the PKK's Cease-Fire**

Kurds constitute a significant minority population of around 15 million in Turkey, especially in the southeastern region of Anatolia. Grievances about the lack of an independent Kurdish state as well as economic, political, and cultural marginalization have been significant at least since the foundation of the Republic of Turkey in 1923. Pro-Kurdish activism grew particularly in the 1960s and 1970s. In 1978, the Kurdistan Worker's Party (PKK) was founded to advocate for an independent, socialist state of Kurdistan.<sup>62</sup> It quickly gained influence and popularity in the southeast owing to its uncompromising stand against landlords, its reinforcement of widespread Kurdish grievances, and its support from external actors like the Soviet Union, Iraqi Kurds, and Syria (Tezcür 2015). In 1984, the PKK initiated a violent conflict with the Turkish state by launching guerrilla attacks on army units. Despite its considerable resources, the Turkish military was unable to quell the insurgency, which increased in intensity throughout the 1980s and early 1990s (Roth and Sever 2007).

However, by 1995, the military had gained the upper hand over the insurgents by undertaking a number of controversial yet effective counter-insurgency measures (e.g., training village militias, forced evacuation of villages in the southeast, large offensives in 1992 and 1995). Afterward, the insurgency continued with lower intensity and changed tactics of the PKK, including bombings in western Turkey. The 1998 Ardana Agreement between Turkey and Syria, which resulted in the expulsion of the PKK from its safe retreat and training areas in Syria, dealt the PKK another major blow. In February 1999, PKK founder and leader Abdullah Öcalan was captured by Turkish forces. From prison, Öcalan called on the PKK to abandon armed struggle, enter a cease-fire, and retreat into Iraq. Despite some dissent, the PKK mostly obeyed this call (Gunther 2000; Marcus 2007a; Ünal 2012).

62. The PKK dropped references to socialism in the 1990s.

A few months after Öcalan's capture, a 7.4-magnitude earthquake devastated the Marmara region in northeastern Turkey on August 17, 1999. The region was Turkey's economic center and comprised 23% of its population as well as 33% of its GDP at the time. More than 17,000 people died in the earthquake, and a conservative estimate of the total damage is US\$4–10 billion, or 2%–4.5% percent of Turkey's GDP (World Bank 1999). Important transportation, electricity, and water infrastructure (including in Istanbul) also experienced major damage. While international actors and local civil society organizations were quick to act after the disaster, it took state institutions several days (and in some cases, weeks) to conduct proper relief work (Çetin 2013). In a survey of the earthquake victims, only 10.3% of all respondents stated that they received aid from the state (R. Jalali 2002). The inadequate enforcement of building codes, corruption, and a lack of disaster preparation caused a surge of public criticism of the Turkish government. The latter reacted by repressing media and NGO operations in the affected area and by scaling up its earthquake response (Jacoby and Özerdem 2008; Pelling and Dill 2010).

After the earthquake, grievances and protests against the government and the army were widespread but did not turn violent (Arlidge 1999). The rebels could not capitalize on them, as the earthquake occurred far from the Kurdish regions in southeastern Turkey where the PKK had its social basis (R. Jalali 2002; Marcus 2007b). Rather, the conflict between the Turkish state and the PKK de-escalated significantly after the disaster. The UCDP-GED registered 1,777 battle-related deaths in the year before the Marmara earthquake, and only 206 in the subsequent 12 months.<sup>63</sup> The main drivers of this de-escalation were certainly the general weakening of the PKK since the mid-1990s, the Ardana Agreement, and the capture of Öcalan. In line with this, two strong declines in battle-related deaths had already occurred before the earthquake: in December 1998, when Syria started to implement the Ardana Agreement, and in June 1999, after Öcalan called for the cessation of violence (Gunther 2000; Ünal 2012).

By contrast, the earthquake played a minor role in the third major decline in conflict intensity between September (85 deaths) and October (10 deaths) 1999. In September, the PKK declared a unilateral cease-fire and

63. Civilian deaths account for less than 2% of the total numbers and show a similar declining trend.



largely retreated into Iraq (Ünal 2012). While Öcalan had ordered these moves, his call was not uncontested. But the “earthquake gave his PKK a political opportunity to endorse this appeal” (Walker 2000: 73) by portraying the cease-fire and retreat as a gesture of goodwill. This was particularly important during a time when both Turkey and the PKK struggled to gain international support for their respective positions.<sup>64</sup> According to a statement by the PKK, “To unilaterally stop the war at this time of heavy disaster is the greatest support to the state and people of Turkey” (Associated Press 1999).<sup>65</sup> Similar to Greek-Turkish reconciliation after the same disaster (Akcinaroglu et al. 2011; Ganapati et al. 2010), the Marmara earthquake provided the PKK leadership with a justification and a strategic rationale to claim solidarity toward the Turkish state, even though the decline in attacks was driven by other political and military concerns (Gunther 2000). While of limited relevance to the conflict dynamics overall, the Marmara earthquake provided some incentives for the PKK to engage in image cultivation, hence playing a minor role in the decline in battle-related deaths.

### Cases with No Disaster Impact on Conflict Dynamics

#### **Afghanistan 1998: Remote Earthquakes Did Not Shape Conflict Dynamics**

The decades-long period of war in Afghanistan started with a military coup in 1978, bringing the Communist Popular Democratic Party (CPDP) of Afghanistan to power. In the subsequent year, the Soviet Union intervened militarily in Afghanistan to support the Communist regime and quell resistance against it. This set the stage for a civil war between the Afghan government and Soviet troops, on the one side, and several rebel groups commonly known as the *mujahedin*, supported by Pakistan, the United States, Iran, and Saudi Arabia, on the other side. When the Soviet army left Afghanistan in 1989, the CPDP government of Mohammed Najibullah was able to remain in power, owing to, among other reasons, an increasing fragmentation of the rebels. After the final defeat of Najibullah’s forces in 1992, this fragmentation increased. Several armed groups established strongholds

64. The PKK aimed to prevent being labeled as a terrorist organization by European states and the United States, while Turkey sought to strengthen its bid for EU membership.

65. Öcalan also announced from prison that the PKK would start the retreat earlier—in mid-August rather than early September—due to the earthquake.

in different parts of the country and fought for control over the capital city of Kabul.

In 1994, another armed faction emerged in southern Afghanistan: the radical Islamist Taliban, led by Mullah Mohammad Omar. The group received considerable financial and military support from Pakistan,<sup>66</sup> gained the backing of the Pashtun population<sup>67</sup> seeking to re-establish its pre-1978 dominance, and resonated well with indigenous calls to end the widespread insecurity and fragmentation of the country. Therefore, the Taliban were able to gain ground quickly. They conquered Kabul in 1996, pushed farther north in 1997 (Magnus 1998), and by 1998 controlled 90% of Afghanistan's territory (Rubin 2000). The other main rebel groups<sup>68</sup> joined their forces under the label United Islamic Front for the Salvation of Afghanistan (UIFSA), otherwise known as the Northern Alliance. Supported by Iran, Russia, Uzbekistan, Tajikistan, and India, UIFSA was able to consolidate strongholds in northern Afghanistan (Gossman 2001; A. Jalali 2001; Khalilzad 1997).

In the first half of 1998, two strong earthquakes shook the Rustaq region in the northeastern borderlands of Afghanistan, which at the time were controlled by the UIFSA. During the night of February 4, a 6.1-magnitude earthquake hit the area, followed by a 6.9-magnitude earthquake on May 30. The disasters killed 2,323 and 4,700 people, respectively. No comprehensive damage assessment was possible,<sup>69</sup> but several villages were completely destroyed by landslides and there was extensive damage to the fragile, mud brick houses. The May earthquake also did considerable damage to harvests and water-related infrastructure in a region that was already characterized by poverty (Strand et al. 2000). There are reports of the UIFSA providing help to disaster victims, but its capacities were insufficient, and the group therefore called for international assistance (McFadden 1998).

66. As well as from transnational Islamist networks, many of which were linked to Saudi Arabia.

67. The Pashtun are the largest and traditionally politically dominant ethnic group in Afghanistan. The armed groups controlling Kabul in the mid-1990s were predominantly of Tajik and Uzbek ethnic origin.

68. Most important are the armed groups led by Rashid Dostam, Ahmad Shah Masoud, and Burhanuddin Rabbani, who previously fought each other over control of Kabul.

69. This was due to the remoteness of the region, a lack of infrastructure, and the absence of government institutions.

Remoteness of the affected region, bad weather, and a lack of infrastructure seriously complicated external relief after both disasters. It took two days for news about the February earthquake to reach the outside world, and several weeks for larger amounts of relief goods to arrive. Combined with the cold weather and the shortage of food, this led to local despair and grievances, including threats to aid agencies (Bird 1998; Emerald Insight 1999). However, once the relief operations reached the areas, aid delivery was well coordinated and perceived to be fair (Hardcastle and Chua 1998; UN OCHA 1998). The networks and knowledge built during the disaster in February accelerated the response to the May earthquake. For both disasters, the overall amount of international aid was moderate but not insufficient, owing to the rather small number of affected people in the sparsely populated area (Barr 1998; Benini 1999; CNN 1998).

In the 12 months after the May earthquake, 12,158 casualties were recorded for the conflict between the Taliban and the UIFSA. This reflects an increase in both civilian and military casualties when compared with the year before the first earthquake (7,284 deaths), but the increase falls short of reaching the significance threshold introduced in chapter 3 (five standard deviations). More importantly, the increase was caused by a massive summer offensive by the Taliban in July, August, and September 1999, which was unrelated to the earthquake. The offensive had the strategic goal of capturing UIFSA strongholds in the northwestern provinces of Bamian, Balkh, Faryab, and Jowzan, all of which were far away from the earthquake-affected area. The offensive took place in the context of Kyrgyzstan and Uzbekistan withdrawing support for the UIFSA, while Pakistan provided strong backing to the Taliban (Akimbekov 2002; Christia 2012: 57–83; Khalilzad and Byman 2000).

Neither earthquake had any impact on the capabilities or strategic objectives of the UIFSA. They took place in a remote area with a small population living off subsistence agriculture. These areas hardly contributed to the war economy (Benini 1999; Rubin 2000). There was no fighting in Rustaq in the late 1990s. Furthermore, neither the UIFSA nor the Taliban had the resources or territorial control to provide significant relief to the earthquake-affected population (Popham 1998). In order to support rescue efforts after the February earthquake, “Mullah Mohammad Omar . . . was reported to have ordered his forces to halt all military operations against the alliance on the Takhar Province front” (McFadden 1998). However,

UCDP data show no decline in conflict intensity in this province after the disasters, but rather an increase related to the 1998 summer offensive. In sum, the two earthquakes had no impact on the dynamics of the Taliban-UIFSA conflict.

### **Afghanistan 2008: Freezing the Conflict?**

The previous case study provides a brief overview of the history of the conflict until the late 1990s. In 1999 and 2000, the Taliban consolidated their power over Afghanistan and made further military progress, confining the UIFSA to a small territory in the northeastern corner of the country. Following the terrorist attacks of September 11, 2001, a multi-national coalition led by the United States joined forces with UIFSA. Within three months, the Taliban lost all their strongholds and an interim government led by Hamid Karzai was established. The new administration included many former prominent UIFSA members and was backed by the strong international coalition on the ground. This coalition included the US-led Operation Enduring Freedom and the UN-sanctioned, multi-national International Security Assistance Force (ISAF). The remaining Taliban suffered major defeats during the rest of the year and in 2002 (Giustozzi 2007).

The situation changed from 2003 onward, however, with the Taliban re-grouping and conducting attacks against Afghan security forces and international coalition troops, particularly in southern Afghanistan.<sup>70</sup> Profits from the opium trade, support from international jihadi networks and local religious authorities, and safe recruitment and training areas in the Pakistani borderland supported this resurgence. The Taliban also regained control in certain areas in the south of the country and procured their public support in these areas. This was possible due to grievances about corruption, political exclusion (particularly of Pashtuns), and civilian casualties caused by the international coalition and Afghan security forces (Qazi 2010; Weigand 2017). By 2006, the Taliban started to selectively engage foreign troops in open battles (even though guerrilla-style attacks remained their predominant mode of operation). As a reaction, international forces increased from 15,400 in 2003 to 58,100 in 2008, but they were unable

70. Giustozzi (2007) labels the post-2002 movement “neo-Taliban” as it overlaps only partially with the old Taliban movement of the 1990s and represents a much more heterogeneous coalition of Pashtun warriors, Pakistani extremists, international jihadists, local warlords, and criminal groups.

to defeat the Taliban (Zyck 2012). Consequently, violent confrontations steadily increased from 2003 to 2007 (Giustozzi 2019; Sperling and Webber 2012; Thruelsen 2010).

From early January to mid-February 2008, northern, western, and central Afghanistan (and especially the province of Herat) experienced an extreme cold spell, with temperatures below  $-30^{\circ}\text{C}$  ( $-22^{\circ}\text{F}$ ) and more than 250 centimeters of snow (Leithead 2008). The cold spell caused 1,317 deaths due to pneumonia, frostbite, and avalanches. No reliable estimate of the economic impact is available, but the deaths of 316,000 cattle dealt a heavy blow to the agricultural economy of the region (Peikar 2008). Existing shelter was often inadequate to protect people, and several hundred houses were destroyed during the disaster. The snowfall made many roads impassable, preventing aid from reaching several remote areas. This resulted in a doubling of prices for heating fuel (mostly wood and coal) and food in the affected areas (Welthungerhilfe 2008). Locals as well as members of parliament voiced discontent about the weak response of the Afghani state, but the latter had too few resources to arrange for a rapid, large-scale response (The New Humanitarian 2008). International actors as well as ISAF troops provided relief, but this was perceived to be too little and too slow, hence preventing any chance of a popularity boost for the government or the international coalition (Associated Press 2008; Deutsche Welle 2008).

In the aftermath of the cold spell, the conflict between the government (supported by the international coalition) and the Taliban continued unimpaired. One can observe only a small, insignificant reduction of battle-related deaths from 6,951 to 5,885 when comparing the 12-month periods before and after the disaster. This is well in line with other accounts stating that after escalating between 2003 and 2007, conflict intensity plateaued between 2007 and 2009. Neither side was able to make a major breakthrough or was forced or willing to back down (Giustozzi 2019; Zyck 2012). The disaster had little effect on the recruitment or financing sources of the insurgents (located in southern Afghanistan and the Pakistani borderland rather than in the areas affected by the cold spell) and the Afghani government (which received strong international support) (Giustozzi 2019; Rynning 2012). The conflict intensity was very low during the cold spell, but this is in line with a general seasonal pattern of violence in Afghanistan characterized by limited fighting during harsh winter conditions followed

by spring and summer offensives (Eriksen and Heier 2009; Leithead 2008; O'Loughlin et al. 2010). The 2008 cold spell hence had no impact on conflict intensity in Afghanistan.

### **Algeria 2003: Grievances and Opportunities after the Boumerdès Earthquake**

Algeria remained an economically weak and politically repressive country for most of the time since gaining independence in 1962. As a consequence of popular protests and opposition, multi-party elections were held for the first time in 1990. However, after Islamic parties won the first round of the election, the military canceled round two, seized power, and banned the most successful opposition party (the Islamic Salvation Front). In the light of this, more radical groups like the Armed Islamic Group (GIA) formed to violently overthrow the government and establish an Islamic state. From the mid-1990s onward, several groups split from the GIA, owing to its frequent use of violence against civilians. The GIA quickly became irrelevant politically and militarily (Martinez 2004).

The most prominent of these splinter groups is the Salafist Group for Preaching and Combat (GSPC), which formed in 1998 and quickly emerged as the strongest rebel group. In general, however, violence declined in Algeria during the late 1990s and the GSPC was not an existential threat to the survival of the government. It conducted guerrilla-style attacks in northern Algeria but also had a stronghold in the southern, Sahel region of the country. Due to its weak social base, an amnesty offer by the government in late 1999, and a government offensive in 2002, the GSPC largely retreated from northern Algeria between 2000 and 2004 (Cronin et al. 2004: 100–101; Gyves and Wyckoff 2006). During the same time, it also grew more committed to global jihad than to the struggle in Algeria (Gray and Stockham 2008; S. Harmon 2010).

On May 21, 2003, a 6.8-magnitude earthquake hit northern Algeria. Massive building destruction resulted in more than 2,200 casualties and a total economic loss of around US\$65 billion. The towns of Zemmouri and Boumerdès in the Boumerdès province were most strongly affected (Meslem et al. 2012). It quickly became apparent that insufficient implementation of building codes and a low quality of state-built housing blocks (especially if designed for working- and middle-class households) were the main reasons for the excessive destruction (Lekkas and Kranis 2004).

Despite international support, the affected people considered the relief operations delayed and inadequate, resulting in significant anti-regime protests (Housego 2003; C. Smith 2003). When President “Bouteflika travelled to Boumerdès to survey the damage an angry crowd kicked and stoned his car” (Evans and Phillips 2007: 273). Islamic groups reportedly tried to provide aid to the survivors, but the government prohibited such efforts, and it remains unclear whether the GSPC tried to or was able to provide some relief (Reppert-Bismarck 2003).

The province most affected by the earthquake—Boumerdès—was also an operational focus of the GSPC and saw most attacks of the group between 2003 and 2006. Therefore, the stage was set for various pathways of conflict escalation: the GSPC could have drawn on the grievances of the disaster victims to gain new supporters and recruits, and both government and the rebels could have used violence to signal their continued presence/strength in the area after the earthquake. Similarly, state control was limited by the destruction, and up to “10,000 members of the army and police were helping rescue workers” (Reppert-Bismarck 2003). The police station of the city of Boumerdès was destroyed, presenting the GSPC with ample opportunities to intensify its violent campaign. It indeed used a period of chaos during an aftershock a few days later to kill a police officer (Gyves and Wyckoff 2006).

However, the UCDP data indicate that neither grievances nor opportunities nor signaling logics were important enough to change the dynamics of the GSPC-government conflict significantly. The year before the earthquake saw 593 battle-related deaths, compared with 534 in the subsequent 12 months. This picture does not change when only the Boumerdès province or an alternative conflict dataset (ACLED; see Raleigh et al. 2010) is considered. Three factors can explain this: First, the GSPC had little popular support in the disaster-affected region. Second, its military capabilities were rather weak, with a total of 300–500 fighters, while the government received increasing international support in the context of the war on terror (Cronin et al. 2004: 101; Gray and Stockham 2008: 94). Third, the GSPC was in the process of shifting its operational bases to southern Algeria, and international attacks (e.g., in Iraq or Mali) were becoming more relevant than the struggle at home (Filiu 2009; S. Harmon 2010). Overall, the Boumerdès earthquake caused significant grievances but had no impact on the conflict dynamics.

### **India (Assam) 2007: The ULFA's Inability to Exploit Flood-Related Opportunities**

I discuss the emergence and development of the struggle between the ULFA and the Indian government from the late 1970s to the late 1990s in the case study "Assam (India) 1998: Flood, Recruitment Opportunities, and Conflict Persistence" earlier in this chapter. Waves of targeted assassinations and army offensives against the ULFA as well as counter-attacks by the rebels continued until the early 2000s. After 2001, however, the ULFA faced various problems. Popular support vanished further, and the government of Bhutan took a stronger stance against the group. After losing its hideouts in Bhutan and having several of its cadres captured by joint operations of the Bhutanese and Indian armies in 2003 (Kotwal 2001), the ULFA agreed to peace negotiations. Facilitated by the People's Consultative Group (PCG),<sup>71</sup> several rounds of talks took place in 2005 and 2006 but yielded no substantive results. This sparked another round of violence from September 2006 onward (Baruah 2007; Mahanta 2013; Saikia 2015).

Shortly afterward, a major disaster occurred in Assam. Extreme rainfall and the failure of multiple embankments caused the Brahmaputra River to flood more than 2,000 villages and large areas of agricultural land in July 2007, causing 1,103 deaths. Thirteen percent of the state's population was directly affected by the disaster, with no early warning issued by authorities. Relief efforts proceeded slowly because many streets were flooded and inaccessible (Hill 2007). During "the flood in 2007 a complete breakdown in the agricultural system occurred when a large area of agricultural land was affected by sand deposits" (Das et al. 2009: 13). As a consequence, food insecurity and poverty increased in the affected areas along the Brahmaputra, and the relocation of several villages was necessary (Kipgen and Pegu 2018). As in 1998, government reactions to the flood were considered slow and inadequate, and the flow of aid from international actors into the region was limited as well (Mukhim 2014). However, strong social networks at the local level and adaptation strategies like labor migration of youths mitigated the impact of the floods to some degree (Das et al. 2009).

The 12-month period after the floods experienced a significant de-escalation of the conflict between the Indian government and the ULFA.

71. A group of prominent Assam civilians sympathetic to the ULFA tasked by the rebels to set the ground for direct talks with the government.



The UCDP-GED records only 143 battle-related deaths for this period, which represents a clear decline compared with the previous year (273 deaths). However, factors not related to the flood were the main drivers of this de-escalation trend. The significant decline of public support the ULFA experienced between 2001 and 2007 reduced its ability to recruit or draw support from the local population. Hideouts in Bhutan (and, from late 2008 onward, in Bangladesh) were no longer easily available. Finally, surrenders continued, with the capitulation of two powerful companies of its 28th battalion in mid-2007 hitting the ULFA particularly hard. Under these circumstances, the capability of the rebels to initiate further attacks diminished considerably (A. Dutta 2014; Misra 2009).

Without a doubt, the 2007 floods caused significant hardship, poverty, and grievances among the population of Assam (Das et al. 2009; Singh 2008). But unlike in 1998, the ULFA was in no position to exploit them. The group had lost the support of large parts of the Assamese people. It had also largely stopped addressing flood-related (and other development) problems in local communities by the mid-2000s,<sup>72</sup> reducing its ability to present itself as a better alternative to the government (Mahanta 2005; Misra 2009). Finally, the ULFA was accused of prioritizing economic motives and foreign interests over the grievances of the people in Assam (Mahanta 2013)<sup>73</sup> and was severely weakened by the increasing number of surrenders.

### **Indonesia 1992: No Link between the Flores Earthquake and the East Timor Conflict**

When Portugal instigated the decolonization process in East Timor in 1974, the Revolutionary Front for an Independent East Timor (FRETILIN)<sup>74</sup> quickly emerged as the strongest political party. FRETILIN started as a movement of urban elites but quickly gained wide support owing to its support for rural communities. After successfully resolving a coup by competing parties, FRETILIN declared East Timor's independence on November 28, 1975. Ten

72. Including through the welfare organizations associated with the ULFA, such as the Jatiya Unnayan Parishad.

73. The support of Pakistan during the Kargil War in 1999 and its cooperation with Bangladesh drove this impression.

74. Armed combat operations were performed by its armed wing, the Armed Forces of National Liberation of East Timor (FALINTIL). In 1987, FALINTIL became the armed force of the National Council of the Maubere Resistance.

days later, Indonesian forces invaded and occupied the country. FRETILIN continued to control significant territory and to fight the Indonesian military but suffered tremendous losses until late 1978 because of the power of the (US-supplied) Indonesian military and the brutal occupation regime. Afterward, it had to resort to low-intensity guerrilla warfare with no territorial control (Niner 2000).

Resistance against the Indonesian occupation grew again in the late 1980s and early 1990s owing to various developments. In 1988, several rebel groups joined forces under the National Council of the Maubere Resistance (CNRM) (Myrtinnen 2009). FRETILIN remained as the dominant group in the council. At the same time, increasing international attention as well as non-violent protests in East Timor and Indonesia increased pressure on the Indonesian government. Despite this, the Indonesian military continued its firm control of East Timor (Fernandes 2010; Salla 1997). A series of violent crackdowns as well as the capture of important rebel leaders between November 1991 and November 1992 further strengthened its position (Niner 2019; Pinto and Jardine 1997).

On December 12, 1992, a 7.5-magnitude earthquake occurred on the northern coast of Flores Island, located in Indonesia's southernmost province, East Nusa Tenggara, the poorest region of Indonesia. The earthquake was followed by several tsunamis (with wave heights up to 4 meters) and a series of aftershocks (with magnitudes up to 6.0) (Kawata et al. 1995). Because many inhabitants lived close to the coast and many buildings had weak structures, around 2,500 people were killed during the disaster. "The damage to homes and public infrastructure . . . is estimated at US\$273.5 million," and the predominantly agricultural livelihoods were devastated by a loss of livestock, farming equipment, boats, and fishing gear (Pribadi and Soemardi 1996: 2). Despite rapid interventions by the government, the destruction of roads and communication infrastructure delayed the response (JICA 1992). However, the general reception of the Indonesian government's three-stage coping plan, involving significant domestic and international financial resources, was positive (World Bank 1993). There are reports of an insufficient consideration of local authorities and cultural norms, but this did not cause protests or widespread grievances (Boen and Jigyasu 2005).

Conflict intensity in East Timor saw very moderate changes after the earthquake/tsunami disaster, with 13 battle-related deaths in the year before

and 25 deaths in the subsequent 12 months. The disaster is not linked to the conflict dynamics in any way. East Timor was not affected by the earthquake. Flores Island is separated from East Timor by hundreds of kilometers of land and sea, and even on the island, disaster-related grievances were not a major political factor. The Indonesian government did not send additional troops to Flores Island, and external funders covered around 79% of the direct post-disaster reconstruction costs (US\$148.7 million in total) (World Bank 1993: 2). Especially given the highly unequal military balance between the Indonesian military and FRETILIN (Fernandes 2010), the disaster provided no incentives, opportunities, or constraints for the armed groups. The minor escalation of the conflict<sup>75</sup> can rather be explained by an increase in crackdowns of pro-independence demonstrations and operations by the Indonesian military to capture FRETILIN leaders (Niner 2019; Pinto and Jardine 1997).

#### **Indonesia 2006: Disaster in Yogyakarta, De-escalation in Aceh?**

Please consult the case study “Indonesia 2004: Wave of Peace?” (earlier in this chapter) for a general introduction to the conflict. In August 2005, the government of Indonesia and the GAM signed a comprehensive peace agreement. Provisions included, among others, a far-reaching autonomy of Aceh, the withdrawal of all “non-organic” Indonesian military and security forces,<sup>76</sup> an amnesty and reintegration fund for GAM members, the demobilization and disarmament of GAM troops, and the deployment of an external monitoring mission (Aspinall 2005; Schulze 2009).

Sporadic violent clashes between the Indonesian military and small, pro-government militias on the one hand and the GAM on the other still occurred after the agreement, including some violence against civilians. However, the overall level of violence was significantly lower.<sup>77</sup> Tensions between the conflict parties remained, regarding, for example, the exact distribution of revenues from Aceh’s natural resources, the ability of the central government to overrule local regulations, and reintegration funds for GAM members (Aspinall 2009). But overall, popular and elite support

75. Which is below the five standard deviations threshold introduced in chapter 3.

76. That is, generally speaking, all forces that were stationed in Aceh in excess of normal (peacetime) contingents, as indicated by the presence of security forces in other Indonesian provinces.

77. The UCDP registers 5 battle-related deaths in the six months after the peace agreement, compared with, for instance, 133 fatalities in January 2004 alone.

for non-violent, democratic politics remained high (Törnquist 2010), and “GAM commanders expressed satisfaction with what they had gained along with the peace” (Sindre 2010: 246).

While the post-civil war peace-building process in Aceh was still ongoing, a 6.3-magnitude earthquake struck the southern central region of the Indonesian island of Java on May 27, 2006. The Bantul district and the city of Yogyakarta, both characterized by high poverty rates, were the most affected. The earthquake caused 5,778 deaths (Matsuoka and Yamazaki 2006), and the economic damage was estimated at US\$3.1 billion, resulting in a 23% decline of the local economy. Damage to buildings was extensive, owing to poor construction, while public infrastructure suffered less damage and was quickly restored (Consultative Group on Indonesia 2006).<sup>78</sup> Experts and the local population generally considered relief and reconstruction efforts to be successful, not at least because of significant national and international support. Except for occasional delays resulting in some public protests (*Jakarta Post* 2006), business and house recovery support were widely available and unbureaucratic (Leitmann 2007; Resosudarmo et al. 2012). The government promoted an inclusive and participatory approach. Solidarity and mutual support were generally high in Bantul and Yogyakarta despite the poor being more heavily affected. “The high level of public participation in the recovery phase minimised potential conflict . . . and hastened recovery” (Kusumasari and Alam 2012: 361).

The conflict in Aceh de-escalated significantly after the Yogyakarta earthquake. Battle-related deaths decreased by more than 12 standard deviations from the pre-disaster period (30 deaths) to the post-disaster 12-month period (0 deaths). However, for three reasons, this de-escalation cannot be attributed to the earthquake. First, the disaster and the conflict locations are roughly 2,000 kilometers apart. The earthquake did not affect the relative capabilities of the Indonesian state, particularly given the local solidarity around Yogyakarta, the international disaster support, and the weakened GAM (Leitmann 2007; Schulze 2007). Second, the conflict had already started to de-escalate with the signature of the peace agreement eight months before the earthquake, and violent clashes had ceased completely three months before the disaster.

78. With the partial exception of the education sector, which the earthquake affected heavily.

Third, several other factors can explain the conflict de-escalation very well. After the peace agreement, there was considerable “commitment by both GAM and the Indonesian government to make the peace process work” (Schulze 2009: 30). The majority of the local population in Aceh supported the peace process as well (Törnquist 2010). Many former GAM commanders earned significant amounts of money, particularly in the natural resources and construction sectors,<sup>79</sup> boosted by large peace-building and post-tsunami reconstruction funds flowing into Aceh (Aspinall 2009). The Aceh Monitoring Mission (September 15, 2005–December 15, 2006), sponsored by the EU and some members of the Association of Southeast Asian Nations overseeing the implementation of the peace agreement, was very effective in supporting the cessation of armed hostilities (Schulze 2009). Finally, GAM candidates won the post of governor and 7 out of 19 district head positions in the December 2006 elections, marking a transformation from an armed conflict to a democratic struggle (Aguswandi and Large 2008; Palmer 2010).

### **Iran 1990: The Kurdish Struggle after the Manjil-Rudbar Earthquake**

The Kurdish Democratic Party of Iran (KDPI) was formed in 1945 with the goal of creating an autonomous Kurdish region in western Iran. In January 1946, it declared the Republic of Kurdistan (also known as the Republic of Mahabad), which was not recognized internationally and was recaptured by Iranian military forces in the following 12 months. The conflict continued at a low level in the following decades, with the KDPI recruiting mostly from urban middle classes and tribal areas. Despite popular support, the Kurdish rebels remained weak and were unable to re-establish territorial control.

While the KDPI initially supported the 1979 revolution in Iran, relations with the new, autocratic, and Islamist regime quickly deteriorated. During this time, the KDPI also adopted a secondary goal of turning Iran into a democratic state. The rebel group was able to establish significant territorial control in late 1979 and again during the early phase of the Iran-Iraq War in 1980 and 1981. This control quickly vanished once the Iranian army was able to mobilize troops into the region (especially between 1981

79. GAM commanders often increased their business positions through neo-patrimonial or predatory means.

and 1983) (Entessar 1984; B. Smith 2009). In the following years, and in particular after the end of the war with Iraq in 1988, the Iranian government established firm military control over the Kurdish region. The KDPI was significantly weakened as a result of struggles between various factions and with other rebel groups, as well as the assassination of its leader Abd al-Rahman Qasimlu in 1989 (Ahmadzadeh and Stansfield 2010; McDowall 2004: 272–283).

The Manjil-Rudbar earthquake struck the area northeast of the capital Tehran, close to the coast of the Caspian Sea, on June 21, 1990, with a magnitude of 7.3. The disaster affected the cities of Manjil, Rudbar, and Lowshan along with around 1,000 villages in the Zanjan and Gilan provinces. Particularly due to its occurrence late at night (12:30 a.m.) and the extensive damage to health and transportation infrastructure, the number of fatalities (40,000) and injured (60,000) was very high (Ibrion et al. 2015). Over 100 landslides triggered by the earthquake further amplified the scale of the disaster. Direct economic losses amounted to US\$7.2 billion (Berberian 2005). Unemployment rates increased to 36% after the earthquake, resulting in an increase of poverty and crime. Although Iran has frequently been struck by seismic activities, its preparation and responses were insufficient. The country also had improper building and infrastructure construction, poor shelter policies, reconstruction teams unfamiliar with the local culture and language, and insufficient reconstruction financing. Hosseini et al. (2013) thus reported a drop of confidence in the Iranian government after the disaster.

Despite this public discontent, the earthquake had no discernible impact on conflict dynamics in Iran. The intensity of the government-KDPI conflict was already very low (1 death before the disaster), and it increased only moderately during the earthquake month (23 deaths)<sup>80</sup> and in the year after (7 deaths). This is hardly surprising as anti-regime sentiments in the affected provinces were very low, with no rebel groups operating in the area. The earthquake did not affect the Kurdish areas in western Iran, because the major Kurdish cities of Kirmanshan, Mahabad, and Sanandaj were hundreds of kilometers from the epicenter. Consequently, the ability of the military to access the areas in which the KDPI operated was not restricted, despite the vast destruction of the infrastructure caused by the

80. The majority of the 23 deaths occurred during a KDPI guerrilla campaign that started three weeks before the earthquake (MAR 2010).

earthquake. While the Iranian military participated in the rescue and relief operation around Manjil and Rudbar, it remained present and far stronger than the weakened and divided insurgents in the western part of the country (Entessar 2010: 15–66; McDowall 2004: 272–283).

### **Iran 1997: The MEK Insurgency and the Qayen Earthquake**

The People's Mujahideen Organisation (MEK) is an offshoot of the Liberal Movement (LM), a party that aimed to overthrow the shah and establish a national and democratic regime in Iran. After a failed uprising in 1963, the LM collapsed and the MEK emerged, advocating more religious, leftist, and anti-American sentiments as well as more violent strategies than its predecessor organization. Backed mostly by members of the middle class, the MEK remained weak throughout the 1960s and 1970s and was able to stage only a few guerrilla attacks, also due to internal struggles. In 1979, Ayatollah Khomeini assumed power in Iran during an Islamic revolution and started violently repressing all opposition parties, including the pro-democratic MEK. The resulting struggle was characterized by armed confrontations between the government's Revolutionary Guards and the MEK as well as a number of targeted assassinations. The MEK quickly lost ground. However, it was able to survive with the help of Iraq and, from 1986 onward, staged attacks from Iraqi territory. Due to its support of Iraq in the Iran-Iraq War (1980–1988), the MEK lost popularity in Iran (Ostovar 2016: 73). Despite this, it remained able to engage in minor clashes with the Iranian government as well as to conduct targeted assassinations and bombings during the 1990s (Cafarella 2005; Duncombe 2019; Norris 2008).<sup>81</sup>

On May 10, 1997, a major earthquake struck the Khorasan Province in northeastern Iran, close to the border with Afghanistan. Given the high magnitude (7.1) of the earthquake, the death toll of 1,500–2,000 was rather moderate. This is mostly because the earthquake took place at noon, when few people were inside their houses. Damage to residential and commercial buildings, by contrast, was extensive because standard buildings in the affected region (adobe houses with lightweight walls and heavy roofs) were very vulnerable to ground movements. The loss of many sheep as well as the destruction of road and irrigation infrastructure negatively affected the rural economy.

81. Mostly through its 1987 funded military arm, the National Liberation Army (NLA).

The negative impacts of the Qayen earthquake (named after a heavily affected town) were significantly stronger in the southern part of the Khorasan than in northern Khorasan. A previous earthquake in 1979 in the latter had led to higher building standards and improved settlement zoning. The response of the Iranian government was generally considered adequate, with rapid repair of electricity, water, and telephone lines, support for international aid providers, and extensive emergency and reconstruction operations (Hakuno et al. 1997; Valinejad 1997).

Around the time the disaster struck, the Iranian government and the MEK rarely engaged in armed encounters. Conflict intensity barely changed between the pre-disaster period (25 battle-related deaths) and the post-disaster period (18 deaths), with no civilian casualties reported. This is not surprising, as the Qayen earthquake affected a poor and rural region in the east of Iran, while the MEK had its operational bases in Iraq and most battles during this time occurred along the western border of Iran. No relevant constituencies of either conflict party were affected. And while the Iranian state devoted significant efforts to post-disaster rescue and reconstruction (Associated Press 1997), this could not alter the highly unequal balance of power between the Iranian military (around 650,000 active front-line personnel) and the MEK (no more than 10,000 fighters in 1997) (Andrews 2015: 32; Razoux 2015: 544).<sup>82</sup> Therefore, the earthquake had no impact on the conflict dynamics in this case.

### **Nepal 1996: Correlation but No Causation between Floods and Armed Conflict Escalation**

In 1960, King Mahendra Bir Bikram Shah Dev imposed the Panchayat system on Nepal, essentially abolishing democracy and making the monarch the center of the political system. Several democracy movements challenged this move over time, and in 1990 the Jana Andolan movement eventually restored democracy in Nepal. However, the new political system did not meet the expectations of a significant portion of Nepalis. Frequent government changes and continuing political repression alienated many people from the ruling parties despite a decent macro-economic

82. The decision by the United States to include the MEK on its list of terrorist organizations in July 1997 had a more severe impact on the MEK than did the disaster, as it limited its overseas funding opportunities (Cafarella 2005).



performance (Srivastava and Sharma 2010). At the same time, widespread poverty and livelihood insecurity produced significant grievances among Nepal's rural peasants and laborers. Caste, cultural,<sup>83</sup> and gender hierarchies added a large number of frustrated lower-caste members (*Dalits*), ethnic minorities, and women to the picture (Bownas 2015; Upreti 2004).

The Communist movement, which has traditionally been strong in Nepal and attempted an uprising in 1971, mobilized in response to these grievances. In 1990, the Maoist Communist Party of Nepal–Unity Center (CPN-UC) emerged. It participated in the 1991 elections but renamed itself as CPN-Maoist (CPN-M) in 1995 and decided to challenge the government by violent means. After a list of 40 demands was ignored by the government, the Maoists initiated a guerrilla war with attacks on police stations in February 1996. In the first years of the insurgency, only the police (and not the military) responded to these attacks. Due to years of ideological work and strong grievances among disadvantaged groups, the CPN-M could build on a considerable base of support, particularly in remote rural areas where state presence was weak (Lawoti 2009; Subedi 2013).

In June 1996, a few months after the onset of the civil war, a massive monsoon rainfall triggered a serious flood event that resulted in the loss of 768 lives. The disaster had a major effect on the agricultural sector, which provided livelihoods to the vast majority of Nepal's rural population, with at least 6,000 hectares of cropland devastated (IFRC 1996b). While the flood hit several parts of the country, eastern Nepal (and particularly the districts of Jhapa, Morang, and Sunsari) suffered the most damage (UPI 1996). The government partnered with international organizations like the World Food Programme and the Red Cross to deliver relief, but did not consider the disaster serious enough to launch an appeal for international assistance (UN DHA 1996). A limited number of soldiers and police officers from the affected regions also assisted in the disaster relief, but overall, the flood had a limited impact on state capabilities (IFRC 1996a). There are no reports of large-scale local protests related to the flood.

The Maoist conflict intensified significantly after the flood, with 39 battle-related deaths in the year before and 73 in the subsequent 12-month period. This escalation was driven mostly by long-standing poverty and

83. This refers to the exclusion of ethnic languages from the education sector and the dominance of the Hindu religion, among others.

inequality, frustration about the outcomes of the democratic transition, and the CPN-M's strategic decision to respond to these grievances with violence. Further relevant factors included the split between moderate and radical Communist groups as well as neoliberal reforms during the 1990s (Hachhethu 1997; Subedi 2013). In addition, rural poverty was an important driver of the conflict escalation (Deraniyagala 2005; Do and Iyer 2010), and the flood certainly increased such poverty. Providing people in flood-affected areas with adequate relief was also on the list of the 40 demands that the CPN-M sent to the government before launching the insurgency (Bhattarai 1996).

However, especially in the first years of the civil war, the conflict was highly localized, with the Maoists running recruitment campaigns and attacking state agents solely in their strongholds (Adhikari and Samford 2013; Joshi 2013). The most conflict-affected districts in 1996 were in the midwestern hills<sup>84</sup> and thus far from the areas in eastern Nepal where the flood caused major havoc (IFRC 1996a). Hence, the insurgents could not benefit from disaster-related grievances or poverty (e.g., for recruitment purposes). Because the flood had a limited impact on the capabilities of both conflict parties, the opportunity and costly signal perspectives are implausible as well. The 1996 flood did not affect the conflict dynamics in Nepal.

### **Pakistan 2005: Escalation after, but Not Related to the Kashmir Earthquake**

Balochistan only reluctantly and under force joined newly independent Pakistan in 1947. The southernmost province remained the economically most under-developed part of Pakistan in the subsequent decades. Centralized decision making and the dominance of non-locals in Balochistan's bureaucracy (as well as in the military) further added to popular grievances. Revolts against Pakistani rule were suppressed by the military in 1948, 1958, and 1962. In the mid-1970s, another, larger-scale armed uprising erupted when the central government disbanded a Baluchi ethno-nationalist government. The guerrilla warfare ended with a cease-fire in 1977 (Aslam 2011; Grare 2013).

In the early 2000s, grievances again intensified in Balochistan. The province continued to experience high levels of poverty, and the rigged regional

84. Namely, Rolpa, Rukum, and to a lesser degree Jajarkot.

elections in 2002 demonstrated the continued political marginalization of the region by the center. Revenues from its rich natural resources, like gas, coal, copper, and gold, largely benefited other parts of Pakistan. Large-scale infrastructure projects, including the Gwadar port, accelerated this unequal distribution of benefits and triggered concerns about shifts in the demographic balance (disfavoring ethnic Balochis) caused by immigration (Bansal 2008). The military government of Pervez Musharraf chose repression over negotiation to address these grievances. In response, the Baluchistan Liberation Army (BLA) was formed around 2000 and started to attack army posts and infrastructure (Tariq 2013). The group acquired advanced weapons and sufficient ammunition through links to the Afghan arms and drug markets. Despite this, the conflict remained at a low level until the eruption of large-scale protests in early 2005 further boosted the Baluchi autonomy/independence movement (A. Khan 2009; Samad 2014).<sup>85</sup>

Only months after these protests, Pakistan experienced one of the worst disasters in its history. A 7.8-magnitude earthquake hit the northern regions of the country,<sup>86</sup> leaving more than 73,000 people dead. Infrastructure losses amounted to US\$5–6 billion, with the water, power, and transportation sectors most severely affected. The lack of preparation and disaster-related knowledge as well as the inaccessible terrain complicated relief operations. Public opinion about the disaster response varied, ranging from severe criticism of the slow, top-down, and inadequate state reaction to beliefs that the earthquake was an act of God, to satisfaction with the efforts by the Pakistani military and foreign NGOs (Benini et al. 2009; Cosgrave and Herson 2008; Halvorson and Hamilton 2010). The military clearly led the disaster response, particularly during the relief period (Özerdem 2006).

In the aftermath of the earthquake, the conflict in Baluchistan escalated significantly. When comparing the pre- with the post-disaster 12-month period, battle-related deaths increase more than fivefold, from 40 to 216. However, while the conflict was heavily localized in Baluchistan, the earthquake occurred in a different part of the country, which renders grievance- and recruitment-based explanations implausible. The Pakistani military sent an additional 60,000 troops to the earthquake-affected areas, but not

85. This movement contained various groups with heterogeneous goals and structures, including Baluch Ittehad and the Baluch Republican Party.

86. The Northwest Frontier Province and particularly Azad Jammu and Kashmir.

from Baluchistan, where its presence remained strong (Aslam 2011; Cosgrave and Herson 2008). The grievance, opportunity and costly signal pathways are hence implausible.

Rather, the escalation trend was driven by two spikes of violence (visible in figure 3.2) unrelated to the earthquake. In December 2005, the military started a fully fledged offensive against the BLA. “The operation, which had long been coming, was delayed due to the earthquake that hit Pakistan on October 8, 2005” (Bansal 2006: 52). In August 2006, the army killed Baluch leader Akbar Bugti, triggering a new (and more intense) wave of guerrilla warfare by the BLA and its allies (Samad 2014). The 2005 earthquake, by contrast, did not impact conflict intensity.

### **Pakistan 2015: Turning On the Heat, Turning Off the Conflict?**

The analysis in the case study “Pakistan 2010: Floods Facilitating Conflict De-escalation” (earlier in this chapter) describes the struggle between the TTP and the Pakistani state until 2011. The conflict between the Pakistani government and the TTP remained active throughout the early 2010s. After the TTP leader Hakimullah Mehsud was killed in a drone strike in November 2013, the group increasingly broke into smaller factions (Mahmood 2015). Peace negotiations re-started in the same year. However, large-scale TTP attacks on the Karachi airport in June 2014 and the Peshawar Army Public School in December 2014 changed the mood of the government and the general public. The Pakistani army conducted several large-scale military offensives<sup>87</sup> in the second half of 2014 and early 2015, killing over 1,100 Taliban fighters and gaining control over TTP strongholds like North Waziristan (Shah and Asif 2015). As a result, the security situation improved considerably in early 2015, although the TTP still carried out attacks (Akhtar 2019; Khan and Wei 2016; Kugelman 2017).

Between June 18 and June 24, 2015, an unusual combination of warm air (up to 45°C or 113°F), high humidity, and weak winds led to an intense heat wave in Sindh, southern Punjab, and parts of Baluchistan in southern Pakistan. The felt air temperature peaked at 66°C (151°F) and averaged more than 50°C (122°F) during this period, leading to intense heat stress. These meteorological conditions affected the power and water supply, fasting during the holy month of Ramadan, and laborers continuing to work outdoors

87. Most notably Operation Zarb-e-Azb, which started in June 2014.

(Salim et al. 2015).<sup>88</sup> The heat wave resulted in 1,229 deaths, with the mega-city of Karachi suffering the brunt of the impact (Clark 2015; Hanif 2017).

In a comparison of the year before and after the heat wave, the government-TTP conflict de-escalated remarkably. Battle-related deaths declined from 3,422 to 1,274 in Pakistan as a whole, and from 231 to 72 in Sindh, the province most affected by the disaster.<sup>89</sup> The heat wave indeed triggered several developments relevant to the political conflicts. State, provincial, and city officials as well as parts of the private sector (e.g., energy companies) blamed each other for insufficient responses to the disaster, such as a lack of early warnings and power cuts. Public protests against the mismanagement of the crisis emerged in and around Karachi (Iyengar 2015b; Pakistan Today 2015). Furthermore, the TTP threatened the company responsible for the power supply (and cuts) in Karachi. The TTP stated that it “considers K-Electric fully responsible because of undue load shedding and greed for profits. . . . Tehreek-e-Taliban Pakistan will not hesitate to take proper steps against K-Electric” if the situation does not improve (Nauman 2015).

However, none of these developments were severe enough to trigger a major change in conflict dynamics between the government and the TTP (and if so, grievances, protests, and threats would have more likely facilitated an escalation rather than the observed de-escalation of the conflict). The Pakistani military deployed troops for disaster response purposes to Karachi, but the operation was too small and short-lived to affect its capabilities (Iyengar 2015a). The economic consequences of the heat wave were also mild and offset by a strong performance of the Pakistani economy in 2015 and 2016. And while local cooperation occurred, its small scale and the non-participation of the TTP render solidarity-based explanations for conflict de-escalation implausible (Salim et al. 2015). The military offensives in 2014, by contrast, significantly reduced the capacity of the TTP to launch further attacks. After the end of the offensives in early 2015, the activities of the Pakistani army returned to a “normal” level (Kugelman 2017; Shah 2016). These two factors—rather than the impacts of the 2015 heat wave—convincingly account for the conflict de-escalation.

88. Many Muslims do not eat or drink during the daylight hours of Ramandan, making their bodies particularly vulnerable to heat stress and dehydration during periods of high temperatures.

89. The numbers are almost exclusively driven by conflict events in Karachi (231 and 71 deaths, respectively).

### Peru 2007: High-Intensity Earthquake, Low-Intensity Conflict

In 1968, Abimael Guzmán founded the Maoist Communist Party of Peru—commonly known as Sendero Luminoso (Shining Path)—in the southern Peruvian region of Ayacucho. Appealing to Marxist university students and staff members as well as indigenous peasants, he slowly built a strong political (and armed) organization. Local grievances about decades of marginalization by the state, endemic poverty, and ethnic discrimination of indigenous groups facilitated these efforts.<sup>90</sup> In 1980, Sendero Luminoso started to challenge the Peruvian state with guerrilla attacks. Despite active counterinsurgency measures from 1983 onward, the civil war escalated quickly, and by 1991, fighting was present in 88% of all departments (McClintock 1984; Taylor 2017).<sup>91</sup>

Various developments in the early 1990s caused the tide to turn against Sendero Luminoso. The rebels lost support among their peasant base owing to excessive violence against civilians and forced recruitment. Consequently, local self-defense groups (so-called *rondas campesinas*) formed and were armed by the Peruvian state. At the same time, the latter improved its counterinsurgency efforts by, among other things, focusing less on human rights concerns and by improving its intelligence capabilities.<sup>92</sup> In 1992, Guzmán and other senior leaders of the rebels were captured. After Guzmán called for peace negotiations in 1993, the rebels split into rival factions: one remaining loyal to him and one ruling out any possibility of a peaceful solution. By the late 1990s, Sendero Luminoso was confined to the small areas of the Upper Huallaga Valley and the Apurímac–Ene River Valleys (VRAE), and observers considered the group virtually defeated (Masterson 2010; Mealy and Austad 2012; Taylor 2017).

However, with the newly elected president Alejandro Toledo turning his attention to other problems and a few hundred hard-to-trace rebels still active in vast jungles, Sendero Luminoso was able to survive and regroup. The group improved its relationship with the (still marginalized) peasants in the areas it operated, intensified its involvement in the coca business

90. Interestingly, the southern highland of Peru experienced a severe drought in 1983, which deprived peasants of their livelihoods and increased the willingness to support Sendero Luminoso.

91. From the mid-1980s onward, Sendero Luminoso was able to extract considerable benefits from coca production and trade to sustain its armed struggle.

92. For instance, by founding a special intelligence unit (GEIN).

to raise funds, and started to forge connections with the FARC rebels in Colombia. From 2006 onward, it increased its guerrilla activities in the Upper Huallaga Valley and VRAE, resulting in backlashes from the Peruvian military (Hyland 2008; Koven and McClintock 2015; Mealy and Austad 2012; Palmer and Bolívar 2012; Sanchez 2003).

On August 15, 2007, a 7.9-magnitude earthquake occurred, its epicenter located off the Peruvian coast. The earthquake resulted in 600 deaths and massive destruction (US\$450 million, associated with a GDP loss of at least 0.3%), mostly in the western provinces of Ica, Pincho, Canete, and Chincha (IFRC 2007c). The destruction of houses and civilian infrastructure was massive, but major transport routes suffered only minor damage. A large amount of international aid was released in the immediate aftermath of the earthquake facilitating relief and reconstruction efforts. However, local response capabilities were insufficient, and rather than supporting those efforts, President Alan Garcia created a centralized parallel system. This resulted in a lack of coordination, corruption, and delays related to bureaucratic hurdles. A month after the earthquake, several remote areas still had not received any government support, and reconstruction efforts (particularly for poorer households) were slow (Milch et al. 2010). As a consequence, several large demonstrations by disaster victims took place (BBC News 2007; Elhawary and Castillo 2008), while support for Garcia (–20 to –40%) and the democratic political system (–30%) dropped considerably in the affected areas (Katz and Levin 2015; Taucer et al. 2007).

In the two-year period around the earthquake, the conflict between the Peruvian government and Sendero Luminoso essentially remained at the same (low) intensity, with 23 battle-related deaths in the 12 months before the disaster and 24 deaths in the subsequent year. The earthquake did not affect the conflict dynamics in any meaningful way. The Upper Huallaga Valley and VRAE area were not affected by the disaster, meaning that the rebels could not capitalize on increased grievances or aid inflows, and their activities were not impeded by the earthquake. Further, while the Peruvian military supported the disaster relief efforts to a considerable degree (Elhawary and Castillo 2008), the overall military balance was too uneven for this to have an impact: approximately 200,000 Peruvian military and security forces faced around 900 Sendero Luminoso cadres (Mealy and Austad 2012; Sanchez 2003).

### **Philippines 1991: Storm, Flood, and Conflict De-escalation**

The case study “Philippines 1990: Earthquake-Related Opportunities for Both Sides” (earlier in this chapter) provides a general introduction to the CPP/NPA conflict. While fighting activities increased after the Luzon earthquake, this effect was temporary and started to vanish around April 1991, reversing back to the long-term downward trend in conflict intensity between the Philippine government and the NPA. One reason for this was the general decline of the CPP/NPA due to internal purges, changed government strategies, and the post-1986 democratization (Marks 1993). At the same time, the government was still struggling with significant challenges, including the ongoing economic crisis, insurgencies by the NPA, Mindanao separatists and right-wing extremists, high levels of corruption and patronage, and disasters like the eruption of Mount Pinatubo (Brillantes 1992).

Between November 5 and November 8, 1991, Tropical Storm Thelma (locally often referred to as Typhoon Uring) moved over the Visayas, a group of large islands in the central Philippines. The storm killed at least 6,000 people and caused direct economic damage of US\$28 million. The provinces of Leyte and Negros Occidentale were severely affected, but the disaster caused the majority of damage in the riverine parts of the city of Ormoc (Leyte province). Many people died in floods caused by sudden, intense rainfall, with the poorer populations who had settled on vulnerable islands and riverbeds being disproportionately affected (Brillantes 1992; Mahmud 2000). Consequently, Thelma caused considerable losses in assets, employment, and income, especially among the poor (Predo 2010). A major reason for the severity of the floods was extensive deforestation in the surrounding hills; after the storm, many locals demanded a logging ban (Benson 1997; EESC 1992). The government response to the disaster was delayed by a lack of preparation and the interruption of communication lines. But once the response started, it was rather comprehensive owing to much media attention and the local concentration of damage (De Leon and Laigo 1993).

In the year after Tropical Storm Thelma, the conflict between the Philippine government and the CPP/NPA de-escalated significantly. Battle-related deaths dropped to 465 (down from 1,570 in the previous year). However, for a number of reasons, the de-escalation was not related to the disaster. The impacts of Thelma and particularly the associated floods



were strongly concentrated in the city of Ormoc. As a consequence, there were no vast, heavily affected rural areas that the rebels could use for recruitment or that the government could access for intelligence gathering. Relief and reconstruction efforts were handled relatively well, owing to high NGO support, the relatively low economic damage, and the geographical concentration of heavy destruction. There was no articulation of major grievances related to the disaster (Alders 2017; Bankoff 2004). It is also worth noting that the disaster-stricken region was not a CPP stronghold in the early 1990s. The decrease in violence intensity was far less significant in the provinces of Leyte and Negros Occidentale (47 deaths in the year before and 28 deaths in the 12 months after the storm<sup>93</sup>) than in the country overall.

In line with this, a range of other factors can account for the conflict de-escalation very well. To start with, the CPP and NPA had been in decline since 1987, reducing their ability to engage in armed confrontations with the Philippine army (see the case study “Philippines 1990: Earthquake-Related Opportunities for Both Sides” earlier in this chapter for further details) (Marks 1993). Two additional external developments reduced the appeal of and support for the CPP. First, shortly before *Thelma*, the Philippine Senate decided in September 1991 that US military bases would have to be removed from the country—an issue around which the CPP had mobilized for decades (Brillantes 1992). Second, six months after the storm, Fidel V. Ramos was elected president of the Philippines. Among his first actions in office were the legalization of the CPP and preparations to re-start peace negotiations (Brillantes 1993). Perhaps more important, however, was the emergence of a split within the CPP in late 1991 and 1992 over its future strategic orientation. The “reaffirmists” preferred to re-expand control of the countryside and continue the armed struggle, while the “rejectionists” envisioned a greater role for elections and negotiations. Distracted by internal issues and facing a loss of members as many rejectionists left the party after the reaffirmist faction prevailed, the CPP/NPA further reduced its armed activities (P. Santos 2010; S. Santos 2005). Tropical Storm *Thelma*, by contrast, played no role in the conflict de-escalation.

93. This equals a reduction of 3.7 standard deviations, which is below the threshold of 5.0 usually applied in this analysis.

### Philippines 2013: Super Typhoon, but Few Conflict Implications

I describe the development of the CPP/NPA conflict until the early 1990s when discussing the case studies “Philippines 1990: Earthquake-Related Opportunities for Both Sides” and “Philippines 1991: Storm, Flood, and Conflict De-escalation” (earlier in this chapter). From the mid-1990s onward, the CPP/NPA re-gained ground. It was able to recover part of its organizational strength and support base, particularly in remote regions. The population had become increasingly disappointed with the persistent inequality and corruption after democratization in 1986, while the CPP increased its efforts to build a base in rural areas. The campaign to ouster President Joseph Estrada in 2001 also strengthened the connections of the CPP to the broader left-wing and pro-democratic movement. Peace negotiations started again in the early 2000s but were suspended after a number of Western countries blacklisted the CPP and NPA as terrorist organizations. President Gloria Macapagal-Arroyo then declared an all-out war against the Communists in 2006 (P. Santos 2010). The CPP/NPA proved resilient, however, and increased its strength in the late 2000s (even though it did not come close to its peak strength during the mid-1980s).<sup>94</sup> Revolutionary taxes levied from the Philippines’ booming mining sector boosted the group’s finances (Holden and Jacobson 2007). Another round of peace negotiations started in 2011 but collapsed in early 2013 (Heydarian 2015; Quimpo 2014, 2016).

Less than a year after the peace process eventually failed, Typhoon Haiyan (locally referred to as Yolanda) hit the country. With wind speeds of more than 300 km/h and storm surges up to 6 meters high, it was the strongest typhoon ever recorded. Haiyan left 7,354 people dead, affected around 15 million others, and caused an economic impact of US\$10 billion (around 4% of the Philippines’ GDP at this time). Tacloban city and the provinces of Cebu, Eastern Samar, Iloilo, Leyte, and Samar were the most heavily affected. Several of these provinces—Leyte and Samar in particular—were NPA strongholds in 2013 (Wasiak 2014).

While considerable international aid flew into the country, “the Philippine government’s handling of the post-typhoon crisis was widely derided as lackluster and ineffectual, in terms of logistical response, crisis management,

94. The number of NPA fighters was only around 4,000 to 5,000 in 2010, compared with around 25,000 in 1987.

and public relations” (Sidel 2014: 70). Political feuds between the central government and the mayor of the most-affected area (Tacloban) complicated relief efforts. The delivery of emergency aid and the reconstruction of infrastructure were slow owing to a lack of preparation, top-down management, and the precarious security situation (Sidel 2014). It took more than 10 months for a recovery plan (and the associated money) to pass legislation. As a consequence, a movement called People Surge formed around Tacloban to protest the government’s handling of Haiyan, along with a lack of compensation and the establishment of a no-build zone along the coast. Two months after the disaster, People Surge mobilized 12,000 people in Tacloban (Salazar 2015; Yamada and Galat 2014; Yee 2018). There were various reports of people looting food, water, and medicine out of desperation and poor post-disaster living conditions (Marshall and Grudgings 2013).

The intensity of the conflict between the Philippine government and the CPP/NPA hardly changed after Haiyan. In the year before the typhoon, there were 175 battle-related deaths, compared with 190 in the 12 months after the typhoon. The NPA attacked military convoys on the Visayas to loot relief goods (government perspective) or prevent counterinsurgency measures, including information gathering (rebel perspective), but this hardly changed the overall dynamics of the conflict (Wasiak 2014).

While grievances against the government developed during the disaster, they were articulated by the non-violent and non-Communist People Surge movement, giving the CPP limited room to mobilize around this issue (Yee 2018). Colin Walch (2018b) finds that the typhoon hampered local NPA recruitment efforts, as it destroyed rebel camps, caused a military presence in the region (in order to distribute aid), heavily affected supportive communities, and interrupted communication lines (hence complicating rebel coordination). Many NPA fighters were locals and had to cope with the impact of the storm on their family’s livelihood themselves, leaving them with less time to engage in political/armed activities.<sup>95</sup> At the same time, the impacts of Haiyan were not strong enough to trigger a local de-escalation of violence, particularly as the conflict was already at a very low intensity: the most disaster-affected provinces<sup>96</sup> experienced only two battles (three

95. According to Joshua Eastin (2017), disasters in poor regions provided recruitment opportunities for the CPP/NPA in other instances.

96. Cebu, Eastern Samar, Iloilo, Leyte, Samar, and Tacloban.

deaths) before and two battles (two deaths) after Haiyan (in the respective 12-month time frames).

The NPA declared a two-month cease-fire after the disaster, but this move was strategically motivated (given its own weakening by Haiyan) and not reciprocated by the government (Walch 2018b; Wasiak 2014). Opportunities to build solidarity in the wake of the disaster were thus slim. The typhoon was also not significant enough to affect conflict dynamics beyond the region it struck. The CPP/NPA had other strongholds and was particularly active farther south in Mindanao. The government remained stronger than the NPA, particularly in the areas of solid economic growth, international support, and an ongoing peace process with other rebel groups (Sidel 2015). There is also no evidence of signaling dynamics between the conflict parties related to Haiyan. In other words, despite its heavy impact and the insufficient disaster relief and recovery process, the typhoon had no impact on armed conflict intensity.

### **Philippines 2012: No Link between Typhoon and Conflict Escalation**

Mindanao is the large, southern island of the Philippines. Characterized by Islamic culture and religion, it was never properly controlled by the Spanish colonizers or the US protectorate. When the Philippines became independent in 1946, Mindanao remained politically and economically marginal to the Christian-dominated state. This marginalization, combined with cultural differences and resistance to state-induced migration from northern islands, facilitated calls for an independent Moro<sup>97</sup> nation-state. Between 1968 and 1972, the Moro National Liberation Front (MNLF) emerged to fight for independence through diplomacy and armed struggle. In 1984, the Moro Islamic Liberation Front (MILF) split from the MNLF.<sup>98</sup> The MNLF concluded a peace agreement with the government in 1996, while peace negotiations with the MILF were successful in 2014 (S. Santos 2010).

The Abu Sayyaf Group (ASG),<sup>99</sup> another MNLF breakaway faction, emerged in 1989. Influenced by Afghanistan veterans and (until 1995) al-Qaeda funding, it promoted a radical version of Islam. Unlike the MNLF at

97. Moro is the name of the local Muslim population, coined by the Spaniards and referring to the Moor Muslims in the Mediterranean region.

98. The MILF opposed the peace negotiations and secular politics of the MNLF. Power struggles between different ethnic allegiances also played a role for the division.

99. Also known as Al-Harakatul Al-Islamiyya.

this time, the ASG rejected peace negotiations and proposals for an autonomous (rather than independent) Mindanao. Its extremist ideology and violence against civilians prevented the group from gaining island-wide popular support or the strength of the MNLF or MILF. Yet, it remained able to recruit from poor or ideologically committed youths in rural western Mindanao and was able to carry out significant attacks during the 1990s and 2000s (Banlaoi 2010; Santos and Santos 2010a).

The development of the ASG can be described in three phases (Schuck 2021). It emerged as a rebel group formed by religious extremists and disgruntled MNLF cadres. From the late 1990s onward, the group lost its ideological commitment and frequently engaged in for-ransom kidnappings. This was partially due to financial difficulties and partially because of criminals joining the ASG. However, bombings in major cities remained part of the group's strategy (Santos and Dinampo 2010). The third phase started around 2006 and saw an increasing fragmentation of the ASG into various criminal and Islamist branches (Abuza 2010; East 2013; Katagiri 2019; O'Brien 2012).

On December 4, 2012, Typhoon Bopha (locally termed Pablo) made landfall on the east coast of Mindanao. Torrential rain triggered excessive landslides, while high wind speeds destroyed infrastructure and agricultural systems. The total death toll was 1,901, while economic damage amounted to more than US\$1 billion (Rodolfo et al. 2016). The storm caught large parts of the population unprepared, as the typical cyclone route runs farther north and early warnings were frequently not heard or were ignored. The affected area already suffered from poverty and a population that, owing to the legacy of armed conflict, was vulnerable to the disaster. International aid was slow to come in, and only 35% of a UN appeal was funded. Combined with heavy losses in the agricultural sector<sup>100</sup> and transport routes to remote regions rendered inaccessible, Bopha led to worsened poverty and food insecurity in Mindanao (Bamforth 2015). The lack of adequate shelter was also an issue, particularly as reconstruction funds were only available to those with land titles—a relatively well-off minority in the region (Barber 2014; UN OCHA 2013).

Looking at the UCDP data, one can conclude that the conflict dynamics remained relatively stable after Typhoon Bopha. Confrontations involving

100. Tom Bamforth (2015: 202–203) reports a production decline of 33%–50% after the typhoon, with staples such as maize (80% of all crops affected) and cash crops like coconut (73%) or banana (72%) being hit hardest.

the ASG accounted for 79 deaths in the year before and 55 in the year after the storm. But according to Bob East (2013: 98), ASG-reported conflict events suffer from significant gaps and biases. The Global Terrorism Database (START 2018), for instance, recognizes a strong rise in ASG activities in the 12-month period after Bopha (32 attacks, up from 20 attacks in the year before<sup>101</sup>), which is confirmed by qualitative accounts (O'Brien 2012). This increase can largely be attributed to an increasing fragmentation of the group, giving individual factions a free hand in using violence, combined with the radicalization of parts of the movement and support from new allies like the Bangsamoro Islamic Freedom Movement (Katagiri 2019).

In theory, Bopha could have boosted ASG membership, as the group recruited predominantly from the rural poor (Loesch 2017). However, in 2013, the group was active only on the islands of Basilan and Sulu. Both are located west of Mindanao and were not affected by the disaster (Eugenio et al. 2016; Rodolfo et al. 2016). With only 400–500 ASG members at that time, the involvement of the Philippine army in the post-disaster relief operation was unlikely to have shifted the military balance in favor of the rebels (Banlaoi 2010). When the armed forces of the Philippines declared a unilateral cease-fire after the typhoon, it explicitly excluded the ASG, leaving little room for diplomacy (*Bangkok Post* 2012). Therefore, Typhoon Bopha had no impact on the government-ASG conflict in the Philippines.

### **Russia 1995: The Sakhalin Earthquake and the Conflict in Chechnya—Too Far Apart**

Russia started to conquer Chechnya and incorporate it into its empire in the early eighteenth century. Local struggles against Russian dominance remained active on a low level during the Tsarist and Soviet times. This resistance was met with fierce repression, including large-scale deportations in the 1820s and particularly in 1944.<sup>102</sup> The experience of collective suffering facilitated notions of Chechen solidarity and identity while also fueling resistance against the central state. After its restoration in 1957,<sup>103</sup> the Chechen-Ingush Autonomous Soviet Socialist Republic (CI-ASSR) received little financial

101. This equals more than seven standard deviations.

102. Under the Stalin regime, around 400,000 Chechens were deported to Central Asia, and almost a quarter of them died during or after the deportation.

103. The CI-ASSR already existed between 1934 and 1944.

support from the political center. Despite the presence of oil reserves, it was among the poorest of the Soviet republics. Consequently, the unemployment rate in the early 1990s was around 40% (Bakke 2015; Evangelista 2002).

The combination of economic and political grievances (Fayutkin 2006) and the local elites' hunger for power culminated in strong demands for an autonomous Chechnya during the glasnost<sup>104</sup> period in the late 1980s and the dissolution of the Soviet Union in the early 1990s. Radical nationalist forces led by Dzhokhar Dudayev demanded secession, quickly started dominating Chechen politics, and armed themselves (Tishkov 1997). Dudayev's forces ousted the interim governing council of the CI-ASSR on October 1, 1991, won the election that they organized only 27 days later, and declared Chechnya an independent state in November. The Russian Parliament declared these moves illegal. Between 1991 and 1994, the Russian government pursued a combined strategy of negotiations, a blockade on external aid and financial flows to Chechnya, and support for intra-Chechen opposition to oust Dudayev. None of these measures proved successful. During the early 1990s, several violent quarrels between Russian-supported and pro-Dudayev forces occurred (Bakke 2015; Evangelista 2002; Hughes 2001).

On May 28, 1994, a 7.5-magnitude earthquake shook Sakhalin Island in the far east of Russia, resulting in 1,989 deaths and total economic damage of around US\$1 billion. In the most affected town of Neftegorsk, 1,995 of the 3,139 inhabitants perished due to the unfortunate timing of the earthquake (in the middle of the night), a lack of early warning or disaster preparation, and the collapse of weakly constructed buildings. Relief measures by the Russian state (with some international support) were generally adequate (Thomas 1995) but severely delayed owing to the remoteness of Sakhalin Island and the destruction of infrastructure (Reuters 1995). The military involvement in these efforts was minimal. Local inhabitants conducted a few small-scale protests about insufficient rescue operations and a lack of resettlement or reconstruction schemes (Mark Johnson 1998; Porfiriev 1996, 2012).

The conflict in Chechnya saw a remarkable escalation after the earthquake, with 1,242 battle-related deaths in the 12 months before and 2,822 deaths in the subsequent year. The escalation occurred almost exclusively from December 1994 onward (that is, seven months after the earthquake).

104. Glasnost refers to Mikhail Gorbachev's policies to increase openness and transparency in the Soviet Union from 1985 onward.

This was the very same month that the government of President Boris Yeltsin launched a large-scale military operation in Chechnya. The Russian military was quickly able to capture the capital Grozny but subsequently was stuck in a persistent and rather intense struggle with Chechen guerrilla fighters.

The Russian military intervention was completely unrelated to the earthquake, which occurred far from Chechnya (more than 6,700 kilometers of direct distance) and hardly affected the Russian state, economy, or military. Rather, the major drivers behind the military offensive include concerns about Yeltsin's popularity in the face of neoliberal reforms, presidential advisers with a clear preference for military intervention, Chechnya's neighboring republics pressuring the Russian government to limit anarchy, and the growing political division in Chechnya<sup>105</sup> (Bakke 2015; Evangelista 2002; Hughes 2001; Rigi 2004). The Sakhalin Island earthquake had no effect on the conflict dynamics.

### **Russia 2010: Triple Disaster Not Linked to Conflict De-escalation**

The war between Russia and Chechnya<sup>106</sup> ended with a cease-fire in 1996, paving the way for further negotiations but de facto leaving Chechnya an independent state. In 1999, Russia started another military offensive (the second Chechen War). This time, it was more successful, taking over Chechnya's capital Grozny and inflicting serious losses on the rebels between 1999 and 2002. Afterward, low-intensity violence persisted between the Russian-installed regime in Grozny and the Chechen rebels, with little peace building and reconstruction taking place. During the same period, the rebellion transformed. While clearly driven by nationalist goals in the early and mid-1990s (Bakke 2015), repression targeted against religious groups, support from transnational jihadist networks, and generational change among its cadres facilitated a gradual Islamization of the separatist movement (Sagramoso 2012; Wilhelmsen 2005).<sup>107</sup>

105. These divisions occurred between radical pro-independence elements, which also carried out attacks on Russian territory, and a more moderate movement criticizing Dudayev's lack of concessions to Russia. Both factions also undermined the Chechen-Russian negotiation process.

106. See case study "Russia 1995: The Sakhalin Earthquake and the Conflict in Chechnya—Too Far Apart" earlier in this chapter.

107. Whether this development was driven mostly by instrumental reasons and local grievances or was part of a global jihadist movement remains contested among experts; yet, the majority supports the former position (Hahn 2014; Ratelle 2014).



During the early 2000s, violent resistance against the Russian state also emerged in other parts of the North Caucasus, such as Dagestan, Kabardino-Balkaria, and Ingushetia. Political and religious repression, unemployment, poverty, and corruption were key drivers of this resistance. In October 2007, the then leader of the Chechen rebellion, Doku Umarov, established the Caucasus Emirate. This group united the various regional insurgent groups in a loose fashion and strived to establish an independent Islamic state in the North Caucasus. Bolstered by the support of international jihadist networks<sup>108</sup> and experienced veterans from previous wars in Chechnya, local armed units (*jamaats*) of the Caucasus Emirate quickly escalated violence in the North Caucasus, mostly through guerrilla attacks. The group was also able to conduct large-scale attacks in other parts of Russia, including the bombing of Moscow subway stations in early 2010 (al-Shishani 2014; Ratelle 2014; Souleimanov 2011).

From June to August 2010, Russia experienced a combined heat wave and drought, which also resulted in a series of forest fires. The country's main agricultural areas south of Moscow were the hardest hit. This triple disaster resulted in over 55,000 deaths and economic losses worth US\$15 billion. Drought devastated over 13 million hectares of grain crops and reduced grain production by 30% (Vasquez 2011). Consequently, food prices increased countrywide even though the government implemented a grain export ban and released grain reserves. Fires burned 0.5 million hectares and caused haze hazards in Moscow and other areas. Despite severe omissions like the dismantling of forest protection services or the inability to prevent food hoarding and speculation, the national government's popularity grew during the disaster (Lazarev et al. 2014).<sup>109</sup> This was the case because state agencies provided considerable financial support to the drought-affected farmers (Wegren 2011; Welton 2011) and fire-affected households (Bobylev 2011). Prime Minister Vladimir Putin also displayed excellent crisis communication skills (Busygina 2012).

Conflict intensity in the North Caucasus decreased significantly after the heatwave, drought, and forest fires, with 673 deaths in the year before

108. The financial viability of the group was also secured through links to organized crime.

109. There were significant grievances, however, among some environmental activist groups. Local government officials in the affected areas also faced public backlash because they were blamed for the dire situation by the national government (Brooke 2010; Szakonyi 2011).

and 517 deaths in the 12 months after the triple disaster. However, this conflict de-escalation was unrelated to the triple disaster. The capability of the Caucasus Emirate to engage in violence declined from 2010 onward owing to several other factors. Russian security forces killed important leaders<sup>110</sup> (al-Shishani 2014). In addition, the resignation of Umarov on August 1, 2010, followed by the revocation of this decision only three days later, triggered intense struggles between regional commands as well as between Islamist and nationalist forces. The Caucasus Emirate was only able to resolve them in mid-2011 (Souleimanov 2011; West and Goodrich 2010). By then, however, support of the group from transnational jihadist networks had declined, as they redirected funds and fighters (including Caucasian militants) to the Syrian civil war (Youngman 2019). In line with this, the decline in conflict intensity was almost exclusively driven by fewer rebel attacks (Radio Free Europe / Radio Liberty 2010).

Furthermore, media reporting of the disaster did not focus on the North Caucasus, and the Russian military did not relocate troops from the region to fight the forest fires (Kirilenko 2010). The North Caucasus was only moderately affected by the drought. In fact, it was the only Russian region that experienced higher grain harvests in 2010 compared with previous years, although food prices still increased (SPA 2010; Wegren 2011; Welton 2011). Therefore, neither the Russian state nor the Caucasus Emirate faced logistical constraints or incentives for image cultivation during the disaster.

#### **Thailand 2004: Tsunami and Conflict Escalation—Correlation but No Causation**

The Patani are an ethnic group living in southern Thailand. The region they inhabit has been under the control of the Siam and later Thai state since the early twentieth century. Particularly in the provinces of Narathiwat, Pattani, and Yala (the core Patani region), the vast majority of people are Muslim and speak Malay, while in all other parts of Thailand, Thai is the dominant language and Buddhism the dominant religion. After becoming independent, the Thai state initiated efforts to promote the Thai culture and language in the Patani region, but these efforts had limited success and were met with resistance. The latter included various waves of popular uprising and armed resistance, most notably in 1948 and between 1959 and 1981. These conflicts remained on a low intensity level. From the early

110. Such as Anzor Astemirov and Said Buryatsky.

1980s onward, a more accommodative policy by the Thai state—including an amnesty program and an increase of development projects—caused a sharp drop in violence. However, the Patani region remained one of the poorest in Thailand.

In the early 2000s, several groups joined forces and established a coordinated military structure in order to pursue an independent Patani state.<sup>111</sup> These groups (called Patani insurgents here) started to initiate guerrilla attacks against the Thai military and government representatives (e.g., teachers, police officers) in 2003 and particularly in 2004. The main reasons for this upsurge of violence included efforts by Prime Minister Thaksin Shinawatra to rearrange political and security institutions in the south for his own political purposes (McCargo 2006), the growing influence of more radical interpretations of Islam (Albritton 2005), and grievances about the historical marginalization of Malay Muslims (ICG 2005). The Thai state reacted by deploying more military personnel to the Patani region and by conducting harsh counterinsurgency operations (Croissant 2007; Harish 2006).

In the middle of this tumultuous situation, a 9.3-magnitude earthquake in the Indian Ocean caused an enormous tsunami that hit the southern coastal areas of Thailand on December 26, 2004, with wave heights up to 11 meters. In the six affected provinces,<sup>112</sup> the tsunami killed 8,345 people and destroyed the tourism, fishing, and agricultural economies near the coast. While damage to health, transportation, water, and electricity infrastructures was minimal, economic loss is estimated to have been well above US\$1 billion (Rossetto et al. 2007). Despite significant international assistance, discontent about the government's preparation and response efforts quickly surfaced in the affected areas. "Locals continued to complain that they lacked adequate shelter and relief" (CFE-DM 2006: 16), that distribution of relief was delayed, bureaucratic, and biased, and that the government had not promoted disaster preparedness. Disputes about land ownership and permission to rebuild communities close to the coast also emerged (Sato 2010). Poor inhabitants and, at least in some areas, Muslims were the most vulnerable to the tsunami (Steckley and Doberstein 2011). On the national level, however, perceptions of a successful response to the

111. These groups included the National Revolutionary Front-Coordinate, the New Patani United Liberation Organisation, and the Islamic Mujahideen Movement of Pattani, among others.

112. These provinces are Krabi, Phang Na, Phuket, Ranong, Satun, and Trang.

tsunami increased the popularity of Prime Minister Thaksin Shinawatra prior to the elections in February 2005 (Albritton 2006).

The conflict in southern Thailand has always been characterized by military encounters and civilian victimization, and both dynamics increased after the tsunami. The total number of casualties jumped from 303 (160 military, 143 civilians) in the pre-tsunami year to 491 (215 military, 276 civilians) in the subsequent 12 months. However, this upsurge is part of a general conflict escalation that started in 2003 and continued until 2007, mostly driven by better organization and more radical attitudes of the Patani insurgents as well as heavy-handed military responses of the Thai government (Albritton 2006; Croissant 2007; LaFree et al. 2013).

The tsunami, by contrast, played no role in the conflict escalation in Thailand for several reasons. First, the provinces belonging to the Patani region—where 79% of all violent incidents occurred (LaFree et al. 2013: 85)—were not affected by the tsunami at all (the disaster hit only neighboring provinces). Although a minority Muslim population lived in the tsunami-affected area and was particularly vulnerable to the disaster, they had little connection to the rebel groups. Furthermore, pro-social behavior and risk aversion increased among tsunami survivors, making a contribution to armed struggle less likely (Cassar et al. 2017). Second, there are no hints that either the government or the Patani insurgents aimed to convey any message related to the tsunami. Military considerations as well as urges to react to attacks or public threats by the other side shaped each conflict party's activity patterns (ICG 2005). Third, while the government moved around 5,000 military personnel to the tsunami-affected area, it did not relocate the 15,000 troops deployed to Narathiwat, Pattani, and Yala (CFE-DM 2006). In the aftermath of the 2004 tsunami, none of the grievances, costly signal, and opportunity impacts manifested themselves in Thailand.

## Summary

This chapter presented a wealth of qualitative evidence on how disasters do and do not shape armed conflict dynamics. Following long-standing calls in environmental security research (Adams et al. 2018; Gleditsch 1998), I studied a broad range of geographical locations, armed conflict types, political-economic contexts, and conflict outcomes, including cases where disasters had no impact on conflict dynamics. From the qualitative descriptions, one

can conclude that disasters have a discernible impact on both armed conflict escalation and de-escalation in some cases, while disaster-conflict linkages are absent in the majority of cases.

The answer to the first guiding question of my study (Do disasters influence the intensity of armed conflicts between governments and rebels?) is hence a qualified yes. The fifth chapter will synthesize the insights from chapter 4 in order to provide further nuance and to answer the second (Are disasters more likely to facilitate an escalation or de-escalation of armed conflicts?) and third (Which pathways and context factors can account for intrastate armed conflict (de-)escalation after a disaster has struck?) key questions of this book.

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