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Cover photo: Supplies being unloaded from a CH-47 Chinook in Khyber, Pakhtunkhwa, Pakistan (November 2010). Flooding affected nearly 20 million people in Pakistan, forcing many from their homes. US Army photo by Pfc. Joshua Kruger/Released.

Corrections and clarifications: this version was updated on 3 July 2018 to clarify that 55% of climate-related disaster deaths in Asia between 1997 and 2016 took place in the region's four most fragile countries.

About this project

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Acronyms

AADMER ASEAN Agreement on Disaster Management and Emergency Response

AMCDRR Asian Ministerial Conference on Disaster Risk Reduction

ASEAN Association of Southeast Asian Nations
DPRK Democratic People's Republic of Korea

DRR Disaster risk reduction

GFDRR Global Facility for Disaster Reduction and Recovery

GNDR Global Network of Civil Society Organisations for Disaster Reduction

IFRC International Federation of Red Cross and Red Crescent Societies

MRC Mekong River CommissionODA Official Development Assistance

OECD Organisation for Economic Cooperation and Development

ROK Republic of Korea

UNDP UN Development Programme

UNESCAP United Nations Economic and Social Commission for Asia and the Pacific

UNISDR UN Office for Disaster Risk Reduction

Executive summary

Asia is commonly considered peaceful relative to other regions of the world. In fact, however, conflict and violence affect every country in some form or other, and contrary to the adage that peace follows development, even in rapidly developing contexts issues of conflict, violence and fragility form part of the wider environment within which disaster risk reduction (DRR) takes place.

Just under half of all global disasters occurred in the Asia-Pacific region between 2000 and 2017. The area accounts for more than half of global disaster mortality and significant disaster displacement, and is expected to move from 'high' to 'severe' vulnerability by 2030 due to additional deaths from extreme weather. The impacts of disasters are especially severe in fragile and conflict-affected contexts: 55% of climate-related disaster deaths in Asia between 1997 and 2016 took place in the region's four most fragile countries , and between 2012 and 2018 Asia's five most fragile countries – Afghanistan, Bangladesh, Myanmar, the Democratic People's Republic of Korea (DPRK) and Pakistan – suffered \$8,088 million-worth of damage from disasters.

These findings are hardly surprising. Disasters are neither natural nor conflict-neutral, but the product of a combination of hazard, exposure, vulnerability and (lack of) capacity, all of which turn a hazard into a disaster. The constituent components of disaster risk are therefore governed by the socio-economic and political conditions in which people live. Conditions of violence, conflict and fragility are part and parcel of the discussion on how, where and when disasters happen – and need to be part of the conversation about how disaster risk can be reduced.

The relationship between vulnerability to disaster and violence, conflict and fragility is complex and multifaceted. There are examples of disasters increasing the incidence of armed conflict and violence in Asia, and conditions of conflict can increase the likelihood and impact of disasters. Fragility and conflict can also limit or constrain the reach and effectiveness of institutional and governance arrangements for risk management.

A nascent body of evidence exists on disaster response in fragile and conflict-affected contexts, but limited attention has been paid to how to effectively and systematically identify, reduce and monitor disaster risk in difficult operating environments. Doing so may help reveal and challenge underlying assumptions in DRR approaches. For example, the prevalence of sexual and genderbased violence in disasters opens up space to challenge conventional wisdom about the opportunities that disasters afford – and the ambition to 'build back better'. Evidence suggests that disasters predominantly reinforce traditional gender roles and/or worsen gender inequalities.

A global framework for DRR exists – the Sendai Framework for Disaster Risk Reduction – but this, along with accompanying national and regional frameworks and action plans, does not explicitly consider violence, conflict and fragility as underlying drivers of vulnerability to disaster risk. Whether, and how, Asia collates experience and evidence on DRR in contexts affected by violence, fragility and conflict, and uses this to advance action, is not universally agreed, in part because of sensitivities over the terms 'conflict' and 'fragility', and a realisation that making progress requires moving away from the relative safety of apolitical and technocentric approaches to risk reduction to an approach where issues of power and politics come to the fore.

Progress towards the objectives of the Sendai Framework requires explicit and concerted attention to DRR in conditions of violence, conflict and fragility. Together with a moral imperative, findings from other sectors show that targeting investment to individual groups and contexts lagging behind most in achieving global targets can accelerate progress and represent better value for money.

Given the total quantum of disaster losses that countries are going to suffer – exacerbated by climate-related hazard trends – governments need to create resources from their own domestic budgets to finance DRR. In the meantime, Official Development Assistance (ODA) also requires a fundamental rethink. For the period 1997–2016, just 4% of ODA was spent on disaster prevention and preparedness, as against 72% on emergency response. Figures at country level mirror this pattern: for every \$100 spent on emergency response, the following was spent on disaster prevention and preparedness: Afghanistan \$2.24, Pakistan \$1.74, Myanmar \$6.61 and the DPRK \$3.23.

In some instances, disasters can reduce the risk or incidence of conflict – which has led to discussions over the potential role of DRR in conflict prevention. Targeted resources – capacity, knowledge and financial – to DRR in fragile and conflict-affected contexts should also be considered part of the collective ambition to make progress on the UN Secretary-General's sustaining peace and prevention agenda: explicitly, by seeking to prevent disasters; and implicitly, by contributing to sustaining peace through effective disaster management.

This is a highly politically charged topic for some Asian governments and stakeholders. Slow sensitisation, based on evidence of what works in delivering DRR in contexts of violence, conflict and fragility, will be required to build a more positive narrative for local and national actors about how disaster impacts can be reduced in challenging operating environments.

1 Introduction

Natural hazard-related disasters ('disasters')¹ have a substantial impact across Asia,² in terms of lives lost, numbers of people affected and economic damage. Without a significant transformation in the region's socio-economic systems, this situation will only get worse with climate change. Warming trends and increasing temperature extremes will make it increasingly difficult for governments to shield their citizens from climate

and disaster impacts, and will undermine people's own efforts to build disaster resilience. Climate change will alter seasons and the frequency and intensity of extreme weather events: shifts in monsoon systems and warming trends are already being observed (IPCC, 2014). While progress was made on some aspects of DRR under the Hyogo Framework for Disaster Risk Reduction 2005–2015 (UNISDR, 2005) by governments, individuals, the

Box 1 Disasters in Asia's fragile states: key figures

- Asia ranks high in global lists of disaster deaths in fragile states. Globally, 58% of deaths from disasters occur in the top 30 countries on the Fragile States Index. Figures for people affected are often un- or vastly under-reported, implying numbers would be much higher with complete data. Almost a third of these countries are in Asia: Afghanistan, Bangladesh, the Democratic People's Republic of Korea (DPRK), Myanmar, Nepal, Pakistan, Sri Lanka and Timor-Leste.
- Within Asia, disaster deaths are most prevalent in fragile countries. Some 55% of climate-related disaster deaths in Asia between 1997 and 2016 occurred in the four most fragile countries (ranked 'alert' on the 2018 Fragile States Index).
- Disasters have significant financial costs. Of the reported \$299,421 million total damage from disasters between 2012 and 2018, \$8,088 million was incurred in Asia's five most fragile countries: Afghanistan, Bangladesh, Myanmar, the DPRK and Pakistan.
- Official Development Assistance (ODA) continues to be spent more on response than on prevention. For the period 1997–2016, ODA tracked by the Organisation for Economic Cooperation and Development (OECD) in Asia's top five fragile states shows that just 4% was spent on disaster prevention and preparedness and 4% on flood prevention and control, against 72% on emergency response and 20% on reconstruction and rehabilitation. Figures at country level mirror this pattern: between 1997 and 2016, for every \$100 spent on emergency response, the following was spent on disaster prevention: Afghanistan \$2.24, Pakistan \$1.74, Myanmar \$6.61 and the DPRK \$3.23.
- Progress by Asia's most fragile states towards Target E of the Sendai Framework is lagging. Of the eight countries in Asia appearing on the OECD list of fragile states, three have self-reported national DRR strategies: Afghanistan, Bangladesh and Cambodia; only Bangladesh and Cambodia have adopted a strategy and only Cambodia has implemented one. Local DRR strategies are largely absent across all fragile states.
- Disasters are defined in the Sendai Framework as 'A serious disruption of the functioning of a community or a society at any scale due to hazardous events interacting with conditions of exposure, vulnerability and capacity, leading to one or more of the following: human, material, economic and environmental losses and impacts' (UNISDR, 2017). A hazard is defined as 'A process, phenomenon or human activity that may cause loss of life, injury or other health impacts, property damage, social and economic disruption or environmental degradation' (ibid.). While a hazard may be natural, anthropogenic or sociocultural in origin, for the purposes of the Sendai Framework 'this term does not include the occurrence or risk of armed conflicts and other situations of social instability or tension which are subject to international humanitarian law and national legislation' (ibid.).
- 2 Many regional groupings are labelled as 'Asia', each with a slightly different constellation of countries. The countries considered as within the 'Asia' region for the quantitative analysis conducted for this report fall under the UN Statistical Commission geographic regions of Eastern Asia, South Eastern Asia and Southern Asia. These are the three sub-regions which most closely align with the Asia grouping attending the UN Office for Disaster Risk Reduction (UNISDR)-convened Asian Ministerial Conference on Disaster Risk Reduction 2018, which this report targets. The 25 countries considered within Asia for the purposes of this research are Afghanistan, Bangladesh, Bhutan, Brunei, Cambodia, China, the Democratic People's Republic of Korea (DPRK), India, Indonesia, Iran, Japan, Laos, Malaysia, the Maldives, Mongolia, Myanmar, Nepal, Pakistan, the Philippines, the Republic of Korea (ROK), Singapore, Sri Lanka, Thailand, Timor-Leste and Vietnam.

private sector and civil society organisations (UNISDR AP, 2013), the impacts of disasters on Asia's societies remain severe.

Under the Sendai Framework for Disaster Risk Reduction 2015–2030 the Asia region will seek to minimise exposure and vulnerabilities created by rapid growth and urbanisation. While these issues are critical, achieving the Sendai Framework's objectives will also involve tackling a neglected issue: how to reduce disaster risk and implement DRR in contexts affected by violence, conflict and fragility.³ Globally, 58% of deaths from disasters occur in the top 30 most fragile states (Peters and Budimir, 2016). Almost a third of these are in Asia: Afghanistan, Bangladesh, the DPRK, Myanmar, Nepal, Pakistan, Sri Lanka and Timor-Leste. In parallel, changing patterns of conflict globally have challenged conventional assumptions that development progress and income growth will produce peace (World Bank and UN, 2016). If violence in low- and middle-income countries continues to increase in line with current trends, by 2030 more than half of the world's people living in poverty will be doing so in countries affected by high levels of violence (World Bank and UN, 2016; OECD, 2016). Progress on DRR is inherently more difficult in fragile and conflict-affected contexts than in more stable conditions (Peters et al., 2013). At the same time, it is precisely in such contexts where resilience capacities may be low, and the need for effective risk management most urgent (UNESCAP, 2018) (see Box 1).

Disaster risk and DRR are not conflict-neutral - and never have been. In academic circles it has long been argued that 'disasters are deeply and inherently political happenings' (Drury and Olson, 1998); 'disasters as politics – politics as disasters' (Guggenheim, 2014: 6). Disasters are the product of a combination of hazard, exposure, vulnerability and (lack of) capacity, all of which turn a hazard into a disaster (Wisner et al., 2003). The constituent components of disaster risk are therefore governed by the socio-economic and political conditions in which people live. Conditions of violence, conflict and fragility are part and parcel of the discussion on how, where and when disasters happen - and need to be part of the conversation about how disaster risk can be reduced (Figure 1). Addressing disaster risk has never been, and will never be, solely about technical experience, knowledge, research and evidence - though these all help: it requires addressing issues of power and politics, and ultimately the question of why and how some people are more vulnerable to disasters than others (Wisner et al., 2003; Twigg, 2015).

This ODI report constitutes an initial exploration of DRR in fragile and conflict-affected states in Asia. Concerted attention to delivering DRR in these contexts is required to help achieve the Asia Regional Plan for the Implementation of the Sendai Framework 2018–2020, Asia's regional contribution towards the seven global targets of the Sendai Framework itself, and in turn the 2030 Agenda for Sustainable Development. There is thus

Figure 1 The role of violence, conflict and fragility in the construction of disaster risk



Note: definitions of key terms including 'disaster risk', 'hazard', 'exposure', 'vulnerability' and 'coping capacity' are sourced from the UNISDR terminology guidance (www.unisdr.org/we/inform/terminology) accompanying the Sendai Framework (UNISDR, 2015).

³ This paper draws on the Organisation for Economic Cooperation and Development (OECD) definition of fragility: 'Fragility is defined as the combination of exposure to risk and insufficient coping capacity of the state, system and/or communities to manage, absorb or mitigate those risks. Fragility can lead to negative outcomes including violence, the breakdown of institutions, displacement, humanitarian crises or other emergencies' (OECD, 2016: 22).

both a rationale and impetus for accelerating the pace of delivery on DRR in fragile and conflict-affected contexts across Asia.

Whether, and how, Asia collates experiences and evidence on DRR in contexts affected by violence, fragility and conflict, and uses this to advance action, is not universally agreed, in part because of sensitivities over the terms 'conflict' and 'fragility', and a realisation that making progress requires moving away from the relative safety of apolitical and technocentric approaches to risk reduction to one where issues of power and politics come to the fore (Levine et al., 2014). While most governments in the region are increasingly committed to and willing to talk about DRR and engage on a global stage on hazard-related issues, regional and international DRR forums are not considered appropriate spaces for discussion of the relationships between disaster risk and violence, fragility and conflict. These sensitivities, particularly in regard to transboundary or sub-national

conflict, combined with a long-standing regional concern for national sovereignty and non-interference, are part of the reason why conflict, violence and fragility rarely feature in Asian regional declarations on DRR, and why they were negotiated out of the Sendai Framework (see Peters, 2017). The Framework makes no reference to violence, conflict, fragility or peace (the two references to security are in relation to food security), and no definitions are provided of these terms in the Sendai Framework terminology guide (UNISDR, 2018). Securing the commitment of Asian governments to engage on this politically difficult issue will require concerted effort from government peers and regional organisations, which will need to draw attention to the issue in ways that are politically palatable. Showcasing positive examples of progress and demonstrating that advancing DRR across highly exposed and vulnerable locations is in the interests of individual states and the collective regional ambition to make progress on DRR.

2 Conflict and disasters in Asia

2.1 Conflict, violence and fragility in Asia

Despite global attention to conflicts in Afghanistan and Pakistan and past long-running conflicts in Sri Lanka and Nepal (Ghani and Iyer, 2010), Asia is commonly considered peaceful relative to other regions of the world. In fact, however, conflict and violence affect every country in some form or other (Asia Foundation, 2017); contrary to the adage that peace follows development (Ghani and Iyer, 2010), even in rapidly developing contexts issues of conflict, violence and fragility form part of the wider fabric within which DRR takes place. The region faces a range of challenges, from civil war and political conflict to transnational terrorism, separatism, large-scale communal and ideological conflict, electoral violence, conflict over resources and community rights and violent crime (Asia Foundation, 2017). Sexual and gender-based violence is widespread. In Timor-Leste, 14% of women between the ages of 15 and 49 report being raped, and an average of 23 women per day are raped in India (ibid.). Figures for sexual and gender-based violence across Asia are widely believed to underestimate the extent of the problem given the underreporting of violence against women.

The United Nations and World Bank (2016: 11–12, 19) *Pathways for peace* report traces changing patterns of violent conflict across Asia: 1950 to 1990 was characterised by 'anti and postcolonial violent conflicts and superpower proxy wars over influence and control of the state'; 1991 to 2007 saw a decline in violent conflict, a trend that has reversed since 2010. Emerging trends point to ethnic and religious politicisation resulting in violence from identity politics, urban concentrations exacerbating rising inequality – in Thailand, the Philippines, Cambodia and India – and pervasive gender-based violence (Asia Foundation, 2017).

Today, the most common form of conflict in Asia is sub-national, defined as 'armed conflict over control of a subnational territory within a sovereign state, where an opposition movement use violence to contest for local political authority, and ostensibly, greater self-rule for the local population' (Parks et al., 2013: 12). Sub-national conflicts have reportedly affected over 131 million people and killed 1.35 million since 1946 (Parks et al., 2013: 1). The majority of these conflicts have been in 'stable, middle-income countries, with relatively strong governments, regular elections, and capable security forces'; where state legitimacy, rather than capacity, may be the source of contestation (Parks, 2013). In some circumstances, sub-national conflicts may be a consequence of national state-building strategies and tied to national political conflicts, as in Bangladesh, Pakistan and Thailand (Asia Foundation, 2017). In some contexts, local-level violence is pervasive. In Indonesia, 'local issues' accounted for 2,500 deaths between 2005 and 2014, and violent crime is an increasing problem in Ulaanbaatar in Mongolia (ibid.: 2).

Rankings of conflict and fragility such as the Fund for Peace's Fragile States Index⁴ and the OECD's States of Fragility list⁵ show levels of fragility across states and societies. Despite representing a static and often binary view of conditions of fragility, they provide an indication of severity in exposure to risk, coping capacity and strength of institutions, incidence of displacement, humanitarian crises and other emergencies (OECD, 2016). The 12 indicators of the Fragile States Index encompass cohesion (security, grievance, fractionalised elites), economic conditions (uneven economic development, human flight and brain drain), political conditions (state legitimacy, public services, human rights, rule of law) and the social conditions (demographic pressures, refugees, internal displacement). In 2018, the five highest-ranked Asian countries on the index are Afghanistan, Pakistan, Myanmar, the DPRK and Bangladesh. Across the index's four categories ('sustainable', 'stable', 'warning', 'alert'), 15 Asian

⁴ The Fragile States Index is a conflict assessment framework measuring a state's vulnerability in pre-conflict, active conflict and post-conflict situations, using 12 conflict risk indicators (http://fundforpeace.org/fsi/).

⁵ The OECD list of fragile states is a composite index drawing on World Bank, African Development Bank and Asian Development Bank rankings and the Fund for Peace's Fragile States Index (www.oecd.org/dac/conflict-fragility-resilience/listofstateoffragilityreports.htm).

countries are in the 'warning' category, five 'alert' and five 'stable'. Afghanistan, Pakistan, Myanmar, the DPRK and Bangladesh are also ranked on the OECD list, along with Timor-Leste, Cambodia and Laos. While these country rankings should be treated with caution – not least because the most common form of conflict in Asia is sub-national – and used as an indicative guide only, they do nonetheless highlight countries that may benefit from special support to tailor DRR to more complex sociopolitical environments, particularly as risks intersect.

2.2 Disaster impacts across Asia

Just under half of all global disasters occurred in the Asia-Pacific region between 2000 and 2017.⁷ The region is also home to more than half of global disaster mortality, owing in large part to the prevalence of intensive disasters, and accounts for 85% of global disaster-affected people. Between 2000 and 2017, more than half a million people were affected by disasters every day. At the local

level, high-frequency, low-impact, extensive disasters are pervasive, putting renewed emphasis on the value of attaining local and national DRR strategies through Target E of the Sendai Framework.

Statistics of disaster impacts can vary significantly, depending on the data source, geographical scope, date range and definitions employed, but all are similarly alarming. The Asia-Pacific disaster report 2017 (UNESCAP, 2018: vi) presents concerning statistics on the impact of disasters in the region. In 2016, disasters killed almost 5,000 people (with the greatest loss of life coming from floods), affected an estimated 35 million people – including by floods, storms, droughts, earthquakes and tsunamis - and caused \$77 billion-worth of damage. The region is expected to move from 'high' to 'severe' vulnerability by 2030 due to additional deaths from extreme weather (CRED data, in Peters, 2014: 7). Asia experiences severe disaster displacement, with 117.3 million people internally displaced between 2008 and 2012 (Yonetani, 2013). While high-impact, intensive disasters in fragile and conflictaffected contexts have frequently made international

Box 2 The complicating effects of climate change

Asia is experiencing summertime warming trends over higher latitudes, heat extremes over land and an upward trend in annual mean precipitation over land. Increases in the frequency and intensity of rainfall events are also expected over Southeast Asia, increasing the risk of severe flooding (ADB, 2017). Flood risks are also growing as a result of glacier recession, the mass bleaching of coral reefs, increasing tropical cyclone strength and rising global mean temperatures. A changing climate is also likely to affect the availability of water, agricultural production and energy resources, as well as patterns and volumes of displacement and migration (ibid.). As such, 'climate change is expected to adversely affect the sustainable development capabilities of most Asian developing countries by aggravating pressures on natural resources and the environment' (Hijioka et al., 2014: 1,330). As the IPCC warns:

Extreme climate events will have an increasing impact on human health, security, livelihoods, and poverty, with the type and magnitude of impact varying across Asia (high confidence). More frequent and intense heat waves in Asia will increase mortality and morbidity in vulnerable groups. Increases in heavy rain and temperature will increase the risk of diarrheal diseases, dengue fever, and malaria. Increases in floods and droughts will exacerbate rural poverty in parts of Asia as a result of negative impacts on the rice crop and resulting increases in food prices and the cost of living (Hijioka et al., 2014: 1,331).

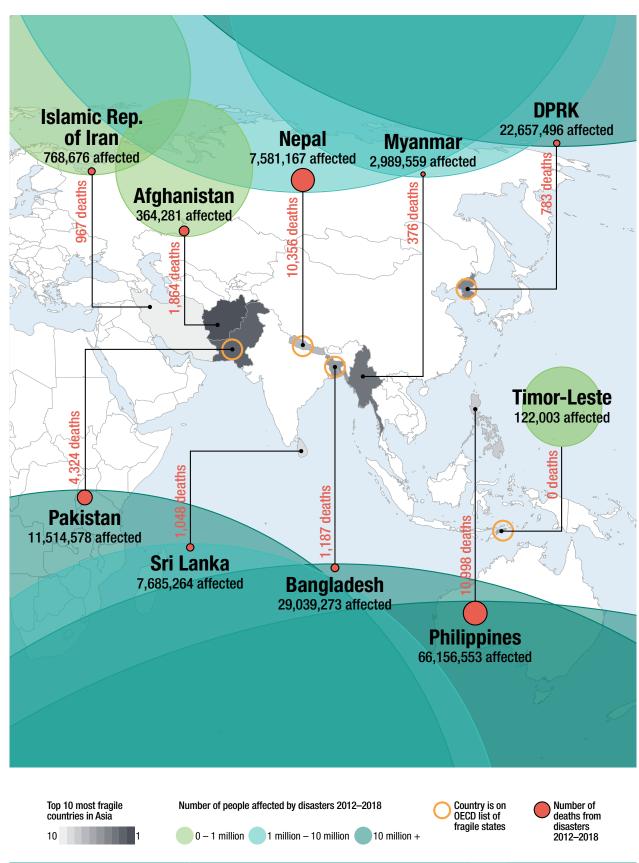
Increasing variability in Asia's monsoon systems is challenging climate-sensitive livelihoods. Any changes – even small ones – in the onset and withdrawal of monsoon rains, shifts in the break periods or deviations in total rainfall and rain intensities can have significant impacts, including on water supplies and agriculture (Webster et al., 1998). Changes in monsoon systems also influence extreme events such as heavy rainfall (contributing to flooding) and drought. However, there is still considerable disagreement and uncertainty among climate models about how monsoons might evolve under climate change (Opitz-Stapleton and Gangopadhyay, 2011; Sabeerali et al., 2015; Gao et al., 2012).

As ESCAP signals, the Asia region 'has a series of conflict hotspots which are often clustered in areas of high population density, typically along coastal areas which are also subject to high climate change vulnerabilities' (UNESCAP, 2018b: 1). To manage climate uncertainty and conditions of conflict, it is important to address vulnerabilities and exposure to reduce climate and disaster risks, particularly in fragile and conflict-affected contexts.

⁶ The Fragile States Index divides countries into four tiers based on their fragility score: 'alert', 'warning', 'stable' and 'sustainable' (http://fundforpeace.org/fsi/frequently-asked-questions/what-do-the-colors-and-categories-in-the-index-and-on-the-map-signify/).

⁷ UNISDR Asia Pacific Regional Office presentation at ISDR-Asia Partnership (IAP) Meeting, April 2018, Ulaanbaatar, Mongolia.

Figure 2 The impacts of disasters in Asia's most fragile countries



Note: disaster impacts: total number of deaths from disasters and total number of people affected by disasters over the period 2012–18. Guha-Sapir, D. (2018) 'EM-DAT: The Emergency Events Database' (electronic dataset, CRED, Université catholique de Louvain) (www.emdat.be/database); 2018 Fragile States Index: total/composite. The Fund for Peace (2018) 'Fragile States Index 2018' (electronic dataset, The Fund for Peace) (http://fundforpeace.org/fsi/excel/); OECD list of fragile states from OECD (2016) States of fragility 2016: understanding violence (https://stats.oecd.org/Index.aspx?DataSetCode=CRS1#).

headlines – notably Cyclone Nargis in Myanmar 2008 and the Nepal earthquake in 2015 – extensive disasters in the form of low-severity, recurrent shocks and stresses, including those influenced by climate change, have a severe cumulative impact across the region. Extensive disaster risk particularly affects the poorest, with impacts transmitted across generations, including, for example, the intergenerational impact of drought (UNESCAP, 2018).

Disaster impacts are not distributed evenly across the region. Original analysis for this report shows that the top ten most fragile countries in Asia⁸ accounted for 63% of climate-related disaster deaths between 1997 and 2016, and the top four 55%.⁹ The DPRK does not have data on disaster fatalities, suggesting that these figures would be much higher with complete data sets. Myanmar, India and China experienced the highest annual average fatalities from disasters between 1997 and 2016, with 7,097, 3,570 and 1,275 respectively. Myanmar ranks third on the 2018 Fragile States Index for Asia and is on the OECD list of fragile states. While neither India nor China appears on the OECD list of fragile states, both are ranked in the 'warning' category on the 2018 Fragile States Index (Figure 2).

Climate change is complicating this picture, further exacerbating disaster vulnerabilities, particularly for the poorest, and holding back the development ambitions of developing countries (see Box 2).

2.3 The disaster and conflict interface

The relationship between disasters, violence, fragility and conflict is complex and context-specific, and evidence is often contradictory (Peters et al., 2013; Twigg, 2015; Fan et al., 2016) (Figure 3). There is evidence to suggest that disasters can exacerbate conflict, deepening grievances through the unequal distribution of protective, preventive and response measures, exploitation of economic opportunities through criminal activity in the aftermath of a disaster, or 'when disasters create a smokescreen for advancing political or military objectives' (Peters et al., 2013: viii) or private investment: what Klein (2008) has described as 'disaster capitalism'. Different governance systems can affect whether and when an emergency is declared (Pelling and Dill, 2006), enhancing the power of those in control. Access to external resources, such as aid and political support, can strengthen a government (in particular compared to another party to a conflict).

There are examples of disasters increasing the incidence of armed conflict and violence in Asia. UNESCAP (2018b: 3) finds that '[n]atural disasters – drought in particular – is creating fertile ground for conflict in Asia ... 84% of reported localised conflict

incidents occurred in drought affected areas'. There is also evidence of young people joining armed groups following prolonged drought in Afghanistan in 2006–2007 (Heijman et al., 2009; UNESCAP, 2018); militant groups carrying out attacks in the aftermath of the 2010 floods in Pakistan (Abbas, 2010; Waraich, 2010); and military expansion through reconstruction and growing rebel capacity through increased financial independence following the 2004 tsunami in Sri Lanka (Keen, 2009; Mampilly, 2009). Disasters can increase vulnerability to sexual and gender-based violence and exacerbate pre-existing trends (see Box 3), and increase the exposure of vulnerable groups to exploitation. In Nepal, several hundred children were rescued from human traffickers following the 2015 earthquake (IFRC, 2016).

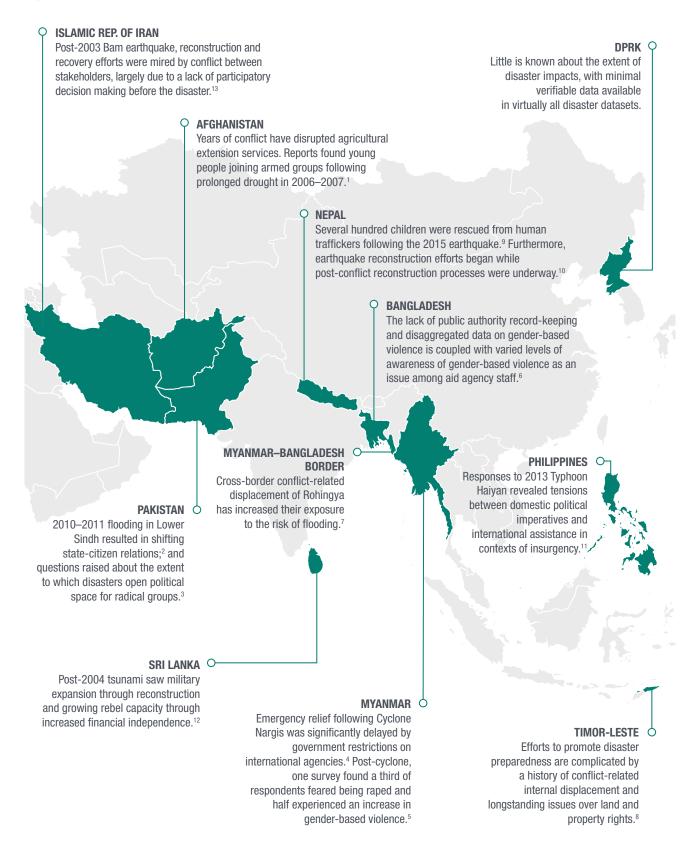
Conversely, conditions of conflict can increase the likelihood and impact of disasters, through increased exposure and vulnerability (Peters et al., 2013: viii; Kelman, 2012). Armed conflict and violence can increase exposure through displacement; in Cox's Bazar, Bangladesh, for example, the cross-border conflict displacement of Rohingya has increased exposure to the risk of flooding on the Myanmar-Bangladesh border (Baldwin and Marshall, 2018). Conflict can reduce coping capacity through the loss or forced sale of assets, reduce the availability and quality of basic services and impair overall resilience (Keen, 1994; Peters et al., 2013: viii). In Afghanistan, years of conflict have had a direct impact on irrigation systems and agricultural extension services, undermining food security. This was exacerbated during the 2007-2008 drought, which resulted in an emergency food appeal by the government and the United Nations (UNESCAP, 2018) and reports that young people were joining armed groups (Heijman et al., 2009). More recently, the effects of La Niña in 2018 affected food production, resulting in a foodinsecure population of over 13 million (OCHA, 2018); the potential impact on recruitment into armed groups is not yet known.

Fragility and conflict can also limit or constrain the reach and effectiveness of institutional and governance arrangements required for risk management and response measures (Kostner and Meutia, 2011; World Bank, 2011). This can, for example, result in reduced investment in DRR in contexts of insurgency, such as Mindanao in the Philippines (Williams, 2011). Where governments are party to a conflict, the politicisation of decisions about how disaster risk is managed and communicated is commonplace (de Waal, 1997). National politics can also complicate disaster response, as was the case with Cyclone Nargis in Myanmar (see Box 4), where in the early phase of the response the government restricted the movements of international agencies (Asia-Pacific

⁸ According to the 2018 Fragile States Index.

^{49 &#}x27;Alert' ranking on the 2018 Fragile States Index. Source for climate-related disaster deaths: Eckstein, D. Künzel, V. and Schäfer, L. (2018) 'Global Climate Risk Index 2018' Briefing Paper. Berlin: Germanwatch.

Figure 3 The disaster-conflict interface in Asia



Note: examples of the complications caused by violence, conflict and fragility in pursuing disaster risk reduction in the top ten Asian countries on the 2018 Fragile States Index. Top 10 Asian countries on The Fund for Peace (2018) Fragile States Index 2018 (electronic dataset, The Fund for Peace) (http://fundforpeace.org/fsi/excel/); (1) Heijman et al., 2009; UNESCAP, 2017; (2) Siddiqui, 2013; (3) Siddiqui, 2014; (4) Asia-Pacific Centre for the Responsibility to Protect, 2008; (5) ICRC, 2016; (6) IFRC, 2016; (7) Baldwin and Marshall, 2018; (8) Gunawn, 2016; Lopes, 2009; (9) IFRC, 2016; (10) Harrowell and Ozerdem, 2018; Jones et al., 2016; (11) Field, forthcoming; (12) Keen, 2009; Mampilly, 2009; (13) Fayazi and Lizarralde, 2018

Box 3 Sexual and gender-based violence and disasters

Levels of sexual and gender-based violence¹ are high in many parts of Asia (Asia Foundation, 2017; Parks et al., 2013, in Peters, 2014: 15), and there is evidence that disasters can exacerbate these trends. IFRC (2016) research found that a third of survey respondents in post-Nargis Myanmar feared being raped, and half experienced an increase in gender-based violence.

Findings from Bangladesh are indicative of more pervasive challenges across the region, with a persistent lack of disaggregated data, lack of public authority record-keeping and varied levels of awareness of sexual and gender-based violence as an issue of concern among aid agency staff. While progress has been made in considering women's and girls' specific needs in preparedness and response (e.g. the provision of sanitary products), other types of assistance (e.g. psychosocial support) are still being neglected (IFRC, 2016). Better understanding of the relationship between interpersonal violence, disaster impacts and DRR is also required.

There is a dearth of studies on low-income developing countries, and few that extend their research beyond the gendered effects of violence on women and girls: 'Consequently, many humanitarian agencies overlook men and boys and minority groups, such as gay men and boys, lesbian women and girls and transgendered individuals in their target groups during data collection and follow-up community-based programming' (IFRC, 2016: 10). Along with a greater focus on intersectionality, different dimensions of violence require further investigation, such as 'verbal and emotional abuse, intimate-partner violence, trafficking, child marriage and female genital mutilation' (LeMasson, 2016).

The question of sexual and gender-based violence and disasters opens up space to challenge conventional assumptions about the opportunities that disasters afford for improving DRR – most recently characterised by the notion of 'build back better'. Evidence finds that disasters predominantly reinforce traditional gender roles and/or worsen gender inequalities (LeMasson et al., 2016). As with deconstructing the concept of 'disaster', it is not the hazard per se that causes increased vulnerability, but the societal conditions (social, cultural, economic and political) in which disaster impacts play out – together with the failure of protective systems (LeMasson et al., 2016).

The prevalence of sexual and gender-based violence has been explicitly recognised through several stakeholder interventions in regional DRR platforms in Asia, specifically in relation to tackling sexual and gender-based violence against women in disaster preparedness and response (UNISDR AP, 2014). While admirable, piecemeal commitments and raised visibility for the issue have yet to translate into commitments to action at the highest levels – including inclusion in the Asian Ministerial Conference on DRR declarations produced every two years. Further action is necessary to address the current situation and future trends where climate change is expected to exacerbate pre-existing vulnerabilities, with differential impacts across societies.

Gender-based violence is defined by the International Federation of Red Cross and Red Crescent Societies (IFRC) (2016: 11) as 'an umbrella term for any harmful act that results in, or is likely to result in, physical, sexual or psychological harm or suffering to a woman, man, girl or boy on the basis of their gender. Gender-based violence is a result of gender inequality and abuse of power. Gender-based violence includes but is not limited to sexual violence, domestic violence, trafficking, forced or early marriage, forced prostitution and sexual exploitation and abuse'.

Centre for the Responsibility to Protect, 2008) (later brokered through the support of ASEAN (Carreon, 2011)). This can be attributed in part to a 'self-reliance doctrine' related to the preservation of national pride, a lack of familiarity with international disaster responses and suspicions around external actors' intentions and motivations (Belanger and Horsey, 2008). Restrictions on access can also limit ex-ante DRR: in Rakhine state in Myanmar, restricted access for NGOs has prevented the delivery of DRR by some international agencies (MSF, 2017), and in Kandahar in Afghanistan, armed conflict disrupted the delivery of DRR projects by the NGO Tearfund (Tearfund, 2012, in Peters et al., 2013: 30).

In contrast, there is evidence to suggest that disasters can play a positive role in supporting social cohesion, strengthened networks and social capital – as was the case in community-level recovery programmes supporting social cohesion in India following the 2004

tsunami (Joshi and Aoki, 2014), individuals as first responders and evidence of spontaneous volunteerism, as witnessed following the Kathmandu earthquake in 2015 (Twigg and Mosel, 2017), and even corporate philanthropy in China (Gao, 2011).

There is also evidence to suggest that disasters can in some instances decrease the risk or incidence of conflict – which has led to discussions over the potential role of DRR in conflict prevention (see Box 5), and of the opportunities and limitations of diplomacy efforts in the post-disaster space (so-called 'disaster diplomacy') (Kelman, 2012). One commonly cited example is the 2004 Indian Ocean tsunami, which is regarded as contributing to conditions resulting in a peace process between the Indonesian government and separatists in Aceh following 29 years of conflict (Waizenegger and Hyndman, 2010; UNESCAP, 2018; Fan, 2013). However, the Aceh case also demonstrates what Peters et al. (2013: vii) describe as

Box 4 Conflict and disaster response in Asia

Across Asia, challenges associated with violence, conflict and fragility in post-disaster response present difficulties for humanitarian responders, policy-makers and DRR practitioners alike. Challenges include high rates of poverty and displacement, weakened coping capacity, institutional fragility, poor governance and limited capacity, contested leadership and potential mistrust of leaders and insecurity (Kostner and Meutia, 2011).

Much data, experience and evidence exist on how to respond to disasters in fragile and conflict-affected settings, collated with the aim of documenting best practice and improving the effectiveness and efficiency of humanitarian aid (Hilhorst, 2013). Examples of the challenges in delivering post-disaster response in situations of fragility and conflict include:

- In Nepal following the 2015 earthquake, post-earthquake reconstruction processes were initiated in parallel with post-conflict reconstruction processes, raising questions about whether lessons could have been shared between the two tracks (Harrowell and Ozerdem, 2018; Jones et al., 2016).
- In Mindanao, responses to Typhoon Haiyan in 2013 raised questions about the complexity of post-disaster response in contexts where domestic political priorities contrasted with the international humanitarian imperative to provide assistance (Field, forthcoming).
- In Pakistan, the impact of floods in 2010 and 2011 in Lower Sindh raised questions about the role of state post-disaster policies and interventions, and of the government response in affecting state–citizen relations (Siddiqui, 2013), but also of the extent to which disasters open political space for radical groups (Siddiqui, 2014).

While evidence across the board stresses the importance of context specificity, there is value in identifying commonalities across contexts, to help understand how to learn and apply lessons from practice. Van Voorst and Hilhorst (2017) use three categories of conflict to describe the additional operational challenges for humanitarian response:

- High-intensity conflict characterised by large-scale violence, the involvement of authorities in the conflict
 or little government control over parts of the country, impoverishment and vulnerability, state neglect and
 stagnant development. Examples in Asia include Afghanistan.
- Low-intensity conflict characterised by a functional government in large parts of the country, but with sporadic violence and competing political factions. Examples in Asia include the Pakistan–India borderlands, Myanmar and Mindanao.
- Post-conflict settings, including those where a political settlement may be in place and reconstruction is under way, but the risk of conflict remains. Examples in Asia include Nepal and Sri Lanka.

Categories such as these could provide a useful organising structure in which to begin collating and organising lessons on response and DRR from across government and non-government actors.

'studies highlighting directly opposing lines of argument', as alternative interpretations downplay the role of the disaster by pointing to the fact that dialogue between the conflict parties predated the tsunami, as did the drafting of a peace agreement (Fan, 2013).

Overall, we do not yet know enough about the complex interplay between drivers of disasters and conditions of peace and conflict. Evidence from across Asia appears to support previous findings that violence, conflict and fragility increase the vulnerability and exposure of some populations to disaster risks, and on balance disasters exacerbate prior conflict dynamics. Deepening our understanding of these links is necessary foundational work from which to consider what types of DRR actions are viable and appropriate in contexts affected by violence, conflict and fragility; how to

avoid doing more harm than good; and how to support conditions for peace through disaster risk reduction.

A nascent body of evidence exists on disaster response in fragile and conflict-affected contexts (see Box 4), but limited attention has been paid to how to effectively and systematically identify, reduce and monitor disaster risk in difficult operating contexts (Peters et al., 2013; Peters, 2017). Doing so may help reveal and challenge underlying assumptions in normative DRR approaches. For example, in contexts of insurgency there can be vast differences between domestic political positions on what response to take and the international moral imperative to respond following a disaster (Field, forthcoming). In Mindanao, concepts such as the 'social contract' – often used by social scientists to explore the relationship between citizens and the state – may not be sufficient to

explain the complexity of responses to disasters amid insecurity and conflict (Siddiqi, forthcoming).

According to the Global Network of Civil Society Organisations for Disaster Reduction (GNDR),¹⁰ key elements for building effective community-based disaster risk management include ensuring risk management approaches are institutionalised and embedded in government structures

at local and national level. While local and community-level action is often advanced as an alternative entry-point when formal disaster risk governance arrangements are absent, there is still an assumption that government structures need to be present for effective community-based DRR.¹¹ Alternative entry-points for advancing DRR actions may be required and are yet to be realised.

Box 5 Disaster risk reduction and conflict prevention: optimism or falsehood?

The absence of peace, changing conflict dynamics and heightened geopolitical tensions, and the impact this is having on the international system, were all identified as factors prompting UN Secretary-General Antonio Guterres (2018) to make 'sustaining peace' and 'prevention' core to his tenure. In turn, these issues have received renewed focus in the international development and humanitarian system, including in Asia (UNESCAP, 2018b). The prevention agenda aims to mobilise commitments – political, financial and institutional – and action on conflict and disaster prevention, although to date the two are rarely considered in combination or in terms of a co-location of risk. Arguably, this is missing an opportunity to advance understanding of, and action on, the disaster–conflict interface (Walch, 2010; Peters et al., 2013).

Does building disaster resilience in Asia help reduce conflict? The assertion has been made that, in the Asia-Pacific, 'reducing disaster risks can sometimes open paths for conflict prevention and more peaceful societies' (UNESCAP, 2018b: 1). This warrants further exploration. Evidence suggests that disasters 'can create unstable economic conditions, exacerbate social fault-lines and heighten social exclusion – creating fertile ground for disputes' (UNESCAP, 2018: 90). By extension, therefore, '[r]educing disaster-related risks can sometimes open paths for conflict prevention and more peaceful societies' (UNESCAP, 2018: 90). It may be, for example, that where conflicts stem from competition for natural resources, natural resource management coupled with DRR could create space for non-violent resolutions (Detges, 2017, in UNESCAP, 2018: 97). Similarly, IPCC evidence points to transboundary water cooperation as an area where long-term cooperation between countries can be fostered, including to manage flood risk (Adger et al., 2014).

It has also been suggested that the Sendai Framework (UNISDR, 2015) could be a tool for conflict prevention by tackling environmental, socioeconomic and political/institutional factors which each play a role in disaster and conflict risk (see Stein and Walch, 2017; UNISDR AP, 2011). Examples from Asia include research by the Asia Foundation, which found higher government approval ratings among communities that received emergency aid following Typhoon Haiyan in 2013, compared to populations unaffected by the typhoon, and which therefore did not receive assistance, suggesting that effective disaster response can help strengthen the social contract (Asia Foundation and Social Weather Stations, 2014). On a regional level, UNESCAP's support for 'Countries with Special Needs' includes efforts towards 'conflict prevention to effectively address disaster resilience' (UNESCAP, 2018b: 90), implying that supporting conditions necessary for peace could also support the management of disaster risk.

Anecdotal evidence suggests that some DRR practitioners believe that principles of DRR support conditions of peace. This has not been tested, is by no means systematic and requires further real-time testing and research to understand what role DRR practices may play in promoting good governance, and whether joint approaches hold potential for joint outcomes to reduce disaster risk and promote peace.

1 UNESCAP (2018: xxvi-xxvii) defines countries with special needs as least developed countries, landlocked countries and small island developing states.

¹⁰ GNDR is a global network of over 850 organisations working on disaster reduction, with representation including across Asia.

¹¹ Email exchange, Jonathan Potter, Executive Director, GNDR, 2 June 2018.

3 Reducing disaster risk across Asia: a work in progress

Well-established regional and international policy frameworks, convening cycles and monitoring processes exist for DRR. Asia has a committed and active enabling environment for DRR, demonstrated through government, civil society and private sector commitments and action in delivering progress against the Hyogo Framework (UNISDR, 2005), and over the past three years under the Sendai Framework (ibid.). Strong regional disaster management platforms 'promot[e] regional cooperation, coordination, technical assistance, and resource mobilisation' (ADPC, 2013: 2). In complement, the Association of Southeast Asian Nations (ASEAN) Agreement on Disaster Management and Emergency Response (AADMER)¹² (ADPC, 2013), introduced following the 2004 Indian Ocean tsunami, aims to achieve substantial reductions in disaster losses and promote greater coordination of response efforts and collaboration between countries in preparedness and DRR (Twigg, 2015). Regional efforts, though not without challenges, have proved useful in both disaster management and mitigation, as in the case of the Mekong River Commission (MRC, 2018), and disaster response, where ASEAN played an important brokering role between national and international actors following Cyclone Nargis in Myanmar (Carreon, 2011). A recent example of regional collaboration is the ASEAN Vision 2025 on Disaster Management (ASEAN, 2018), which sets out the strategic direction for the implementation of the AADMER.

Asia-wide arrangements have also been convened around the delivery of the Sendai Framework (see Box 6). As signatories to the framework, Asian governments developed a Regional Plan to identify priorities for action and track progress at a regional level, in complement to national and local plans of action. The Asia Regional Plan was formally adopted at the 2016 Asian Ministerial Conference

on Disaster Risk Reduction in New Delhi, India, and undergoes biennial review. The 2018–2020 iteration was released at the 2018 Asian Ministerial Conference on Disaster Risk Reduction in Ulaanbaatar, Mongolia.

A review of progress at the April 2018 ISDR-Asia Partnership Meeting identified a number of achievements since the Sendai Framework came into force in 2015, including the appointment of National DRR Focal Points; progress in understanding risk, early warning and the compilation of good practice and training resources; development and adoption of numerous DRR action plans, some of which are integrated into broader development plans; improved preparedness mechanisms and contingency planning; and enhanced advocacy through dedicated DRR days. However, as a region, progress is lacking in a number of areas, including integration of DRR in sectoral plans and at the interministerial level. Progress has also been slow in enabling budgetary allocations, especially at the local level, risk insurance penetration and public-private investment; addressing technical challenges, such as gaps in data and data alignment and disaggregation across national to global scales; translating early warning into action; and tackling governance challenges and promoting local and community-based DRR.¹³

Reducing disaster risk in Asia remains a work in progress. In order to achieve the Sendai Framework and deliver on national commitments including local and national DRR strategies (to deliver Target E by 2020), political commitment to DRR across a diverse range of stakeholder groups is required. In particular, significant action is required on local and community-based risk reduction. This will be particularly important for building capacity in contexts where formal disaster risk governance mechanisms may not be providing the protection required.

¹² AADMER has been described as the 'first ever legally binding Hyogo Framework related instrument in the world' (ADPC, 2013: 2).

 $^{13 \} www.dropbox.com/sh/3fym3nchf2gk0k7/AAD8wv-XW3AwMMnsaBnsxF_8a?dl=0\&preview=1.+Animesh-0930-Asia+Regional+Plan++Status+PPT+22+Apr+2018_Rev.pdf$

Box 6 Disaster risk reduction in the inter-governmental system

Internationally, action on DRR is convened by the UN Office for Disaster Risk Reduction (UNISDR), established with the adoption of the International Strategy for Disaster Reduction in 1999 by the UN General Assembly. As a coordinating mechanism across the UN system at the international and regional level, UNISDR is responsible for convening Member States to deliver international disaster frameworks – initially the Hyogo Framework, and subsequently the Sendai Framework. While under Hyogo the focus was on managing *disasters*, Sendai focuses more broadly on managing disaster *risk* (Staal, 2015), with a greater emphasis on resilience and reducing underlying vulnerabilities.

A two-year DRR convening cycle tracks progress against the frameworks, consisting of regional platforms and ministerial conferences one year, with a Global Platform on Disaster Risk Reduction in the subsequent year (the next Global Platform will be convened in Switzerland in May 2019). This is supported by a biennial Global Assessment Report analysing current and future disaster trends, progress against the Sendai Framework and innovations in DRR. The next report will be released in 2019. Progress against the frameworks at the national level is assessed through the official reporting system, the Sendai Framework Monitor, regionally through Regional Progress Reports and globally through the collective contribution to delivering the Sendai Framework targets, and in turn against SDG Targets to build resilience and reduce vulnerability to climate extremes and disasters (Target 1.5²), including reducing disaster deaths, number of people affected and economic losses (Target 11.5³), adopting integrated policies to disaster risk management (Target 11b⁴) and strengthening adaptive capacity to disasters (Target 13.1⁵). At the regional level in Asia, the ISDR-Asia Partnership Forum convenes an informal multi-stakeholder forum every six months to support delivery of the Asia Regional Plan, and a biennial Ministerial Conference on Disaster Risk Reduction.

- 1 The official tool for collecting data against 38 indicators, which together track progress against the Sendai Framework's seven global goals and related SDGs (https://sendaimonitor.unisdr.org/).
- 2 SDG Target 1.5: By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters.
- 3 SDG Target 11.5: By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations.
- 4 SDG Target 11b: By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015–2030, holistic disaster risk management at all levels.
- 5 SDG Target 13.1: Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries.
- 6 Presentation by Marc Gordon, UNISDR, on the links between the SFDRR and SDGs, at the 'Understanding risk' conference in Mexico City, May 2018.

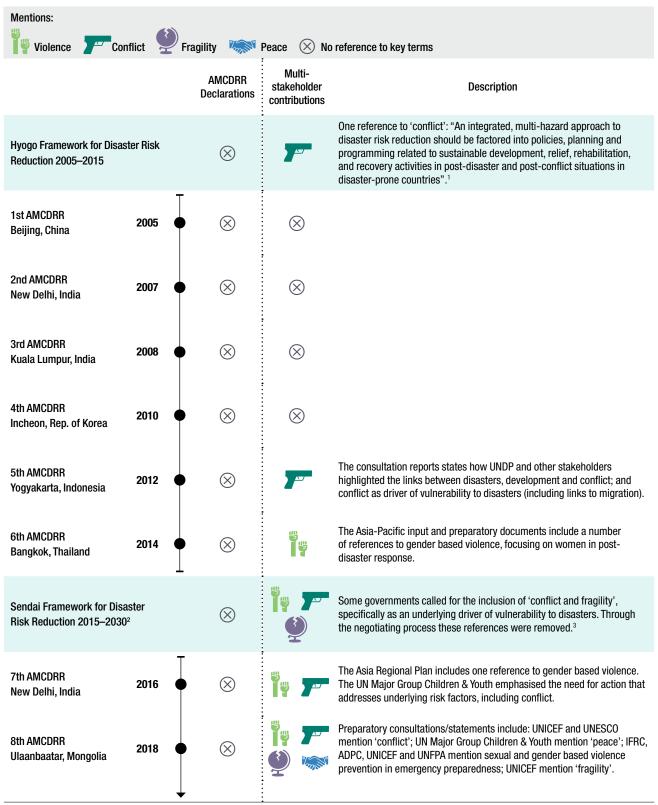
3.1 Disaster risk reduction in contexts affected by violence, fragility and conflict

The slow pace of progress on DRR during the implementation period of the Hyogo Framework in fragile and conflict-affected contexts prompted criticism that '[t]he current DRR approach ... is inadequate to deal with the challenges of implementing DRR in conflict and complex emergency settings' (UNISDR AP, 2011: 32). Evidence from primary interviews with senior technical and policy advisors from a range of UN entities,

non-governmental organisations and donor governments strongly suggests that the challenges associated with conflict and fragility had a negative impact on the delivery of DRR measures under the Hyogo Framework (Peters, 2017), though regional progress reports rarely, if ever, explicitly acknowledged this. ¹⁴ It was certainly the case in Nepal, for example, where the dissolution of the Constituent Assembly in May 2012 prevented parliamentary approval of an update to the 1982 Natural Calamity (Relief) Act. The 2015 earthquake led to further delays, but also renewed impetus, and the Disaster

¹⁴ For example, issues of access and armed conflict do not feature under the section 'Context and constraints' in the ASEAN regional progress report 2011–2013 (www.preventionweb.net/english/hyogo/progress/reports/v.php?id=39137&pid:223).

Figure 4 'Violence', 'conflict', 'fragility' and 'peace' in the Hyogo Framework, the Sendai Framework and declarations from the Asian Ministerial Conferences on Disaster Risk Reduction



⁽¹⁾ Inputs included: '... the importance of considering conflict as potential source of disasters, and including emerging risks and issues such as hunger and food security, climate and disaster related migration is highlighted.'; (2) The Sendai Framework includes two references to security in relation to food security. No definitions are provided of these terms in the Sendai Framework terminology guide.; (3) Drawing on recent experiences of major humanitarian responses to disasters in post/conflict countries, emerging evidence, civil society advocacy and the inclusion of conflict in regional inputs to the drafting process – including from the Africa region – and a selected group of Member States called for the inclusion of conflict, specifically as an underlying driver of vulnerability to disaster in the framework. Through the negotiating process, these references were removed (Peters, 2017).

Management Act was approved by parliament in 2017 (Wilkinson et al., 2017: 33). 15

Recognition of the special circumstances presented by violence, conflict and fragility has been largely absent from Asian regional DRR convening processes. A review by this author of references to the terms 'conflict', 'fragility', 'violence' and 'peace' in regional convening spaces since the inception of the Hyogo Framework provides a snapshot of the extent to which these issues are explicitly recognised as warranting special attention (see Figure 4).16 While inclusion (or lack thereof) of specific terms does not necessarily reflect (lack of) awareness of or (in)action on DRR in contexts of violence, conflict and fragility, it does provide a sense of the extent to which themes of fragility and conflict are explicitly recognised as warranting special attention in formal convening spaces. The review finds that the terms conflict, fragility, violence and peace do not appear at all in AMCDRR declarations over the past decade. Several official stakeholder statements refer to conflict as an underlying risk driver (by the UN Development Programme (UNDP) in 2012 and by the UN Children and Youth Major Group in 2016 and 2018), but these are rare exceptions. Most common are references to 'violence', specifically in relation to women and in post-disaster response. Greater investment, awareness and action is required on the differentiated impacts of sexual and gender-based violence in relation to hazards from an intersectional viewpoint (meaning where inequalities intersect). Such nuance requires embedding more advanced targeting and monitoring processes into local and national monitoring systems, which can be encouraged through specific reporting markers as part of the Sendai Framework Monitor. Alongside government reporting, local and non-governmental organisations will have a critical role to play in ensuring accurate reporting and action in response to sexual and gender-based violence and other forms of interpersonal violence.

Recognition of the links between sexual and genderbased violence and disasters could be used as an entrypoint through which to build a broader agenda around this theme, expanding the focus to include different forms of violence and conflict in relation to different types of DRR actions (see Recommendations, below).

3.2 At what cost? Disaster losses and Official Development Assistance for DRR in fragile and conflict-affected contexts

Disasters in fragile and conflict-affected contexts have financial as well as human costs.

Of the \$299,421 million in total damage from disasters in Asia between 2012 and 2018, \$8,088 million was incurred in the region's five most fragile countries (ranked 'alert' on the 2018 Fragile States Index): Afghanistan, Pakistan, Myanmar, the DPRK and Bangladesh. Data on insured losses is patchy, though it is known that, in Asia, under 5% of losses are insured, compared to approximately 40% in developed countries (Lohani, 2014). Average annual losses from disasters in dollar millions (PPP) between 1997 and 2016 are significantly higher for countries ranked 'warning' on the 2018 Fragile States Index, at \$4,343.38, on average, compared to \$1,876.51 for 'alert' and \$741.18 for 'stable' countries respectively. When comparing annual losses from climaterelated disasters as a percentage of GDP over the period 1997–2016, the vulnerability of fragile countries is even more pronounced. On average, 'alert' countries lost 0.55% of their GDP each year between 1997 and 2016, compared to 0.31% for 'warning' and 0.09% for 'stable' countries.¹⁷ With lower resilience capacities for disasters, it is hardly surprising that international assistance for emergency response is higher for the group of countries ranked higher on the 2018 Fragile States Index (Figure 5). What is surprising is the lack of investment to help reduce or reverse this trend.

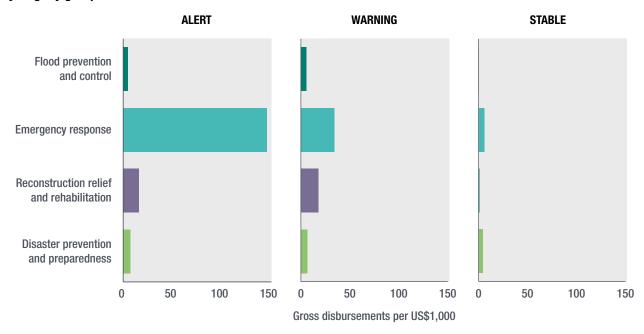
According to the OECD Creditor Reporting System (2018), ODA for the period 1997–2016 across the four disaster risk management categories (flood prevention and control, emergency response, reconstruction and rehabilitation, disaster prevention and preparedness) for Asia, 61% was spent on emergency response, 23% on reconstruction and rehabilitation, 8% on flood prevention and control and 8% on disaster prevention and preparedness. In the top five fragile states, the figures were 72%, 20%, 4% and 4% respectively. This reflects a region-wide trend to spend on response and reconstruction and rehabilitation, over and above flood prevention and control, and disaster prevention and preparedness (Figure 6).

¹⁵ It remains to be seen what impact Nepal's new federal and provincial governments will have on local and sub-national DRR efforts, and whether this will advance disaster resilience outcomes for marginalised communities.

¹⁶ Methodology: collation of online materials available through PreventionWeb, the UNISDR website and individual AMCDRR websites (where they exist). The literature scan does not claim to be exhaustive, nor does it represent the full suite of DRR plans, progress reviews or policy commitments in the region. A key word search used the terms (and variations thereof) including 'conflict', 'fragility', 'violence' and 'peace'. In the interests of time it has not been possible to review all key stakeholder statements, but references to key terms are provided where they have been found.

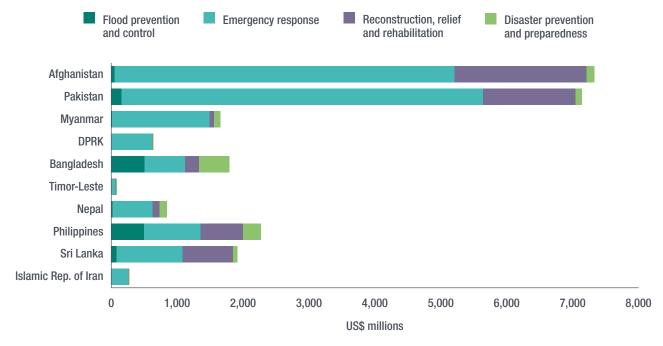
¹⁷ Original analysis conducted for this report, using Germanwatch Climate Risk Index data. This only covers direct impacts (direct losses and fatalities) of weather events – storms, floods, as well as temperature extremes (heat and cold waves etc.) and mass movements. Geological events, such as earthquakes, volcanic eruptions or tsunamis, are not included.

Figure 5 Average Official Development Assistance spending across disaster risk management categories, by fragility group for Asia



Note: overall ODA spending over the period 1995–2016 for the average country in each 2018 Fragility State Index group. Spending per \$1,000 total ODA across four disaster management categories of the OECD: emergency response, reconstruction and rehabilitation, flood prevention and control, disaster prevention and preparedness, over the period 2002–2016 for the average country in each Fragile States Index group. OECD 'Creditor Reporting System (CRS)' (electronic dataset, OECD. Stat, OECD) (https://stats.oecd.org/Index.aspx?Data-SetCode=CRS1#); Asian countries on the 2018 Fragile States Index, by grouping (alert/warning/stable). The Fund for Peace (2018) 'Fragile States Index 2018' (electronic dataset, The Fund for Peace) (http://fundforpeace.org/fsi/excel/).

Figure 6 Official Development Assistance spending across four disaster risk management categories for Asia's top ten fragile countries



Note: total spending (gross disbursements) across four disaster management categories of the OECD: emergency response, reconstruction and rehabilitation, flood prevention and control, disaster prevention and preparedness, over the period 1997–2016. OECD (2018) 'Creditor Reporting System (CRS)' (electronic dataset, OECD. Stat, OECD) (https://stats.oecd.org/Index.aspx?DataSetCode=CRS1#); Top 10 Asian countries according to the 2018 Fragile States Index: total/composite. The Fund for Peace (2018) 'Fragile States Index 2018' (electronic dataset, The Fund for Peace) (http://fundforpeace.org/fsi/excel/).

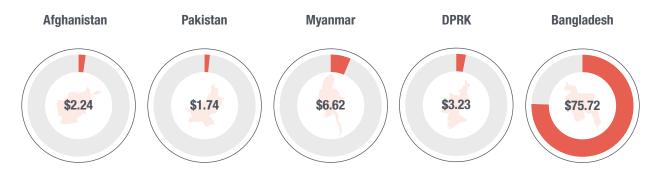
Globally, international assistance in the form of multilateral and bilateral investments in DRR in fragile and conflict-affected contexts has been slow to materialise; for every \$100 spent on response in fragile states, only \$1.30 was spent on DRR between 2005 and 2010 (Peters and Budimir, 2016). Original analysis conducted for this report shows that, between 1997 and 2016, for every \$100 spent on emergency response, the following was spent on disaster prevention (ranked in order of fragility): Afghanistan \$2.24, Pakistan \$1.74, Myanmar \$6.61 and the DPRK \$3.23 (Figure 7).

Of course, the implication here is that, by spending more on DRR, we would automatically have better results. Under climate scenarios this may not be the case, as the challenge at hand becomes more difficult. Moreover, more funds do not necessarily mean higher impact, since fragile and conflict-affected states rarely have the capacity to absorb large amounts of money and use them efficiently (a challenge currently facing a number of climate fund investments).

Given the total quantum of disaster losses that countries are going to suffer - exacerbated through climate-related hazard trends - it could be argued that no amount of ODA for preparedness or response will suffice for helping countries deal with this risk. Countries need to create resources from their own domestic budgets to finance DRR. If governments reprioritise budgets to focus domestic spending on more 'DRR-relevant' activities, then national resources can automatically support risk reduction - as work by ActionAid Bangladesh has shown through a review of national budget expenditure in Bangladesh (Kamal et al., 2016). This argument, advanced in mainstream DRR discourse, is equally applicable to fragile and conflict-affected contexts. Mainstreaming DRR within domestic budgets is critical to creating sustainable funding for risk reduction, and could help promote principles of good governance when accompanied by, for example, representative participation in decision-making over priorities for investment, transparency in budgetary allocations and civic engagement in monitoring processes.

Figure 7 Proportion of funds spent on disaster risk reduction and preparedness for every \$100 spent on emergency response for Asia's top ten fragile countries

TOP 5 ALERT COUNTRIES



TOP 5 WARNING COUNTRIES



Country appears on the 2016 OECD fragility list

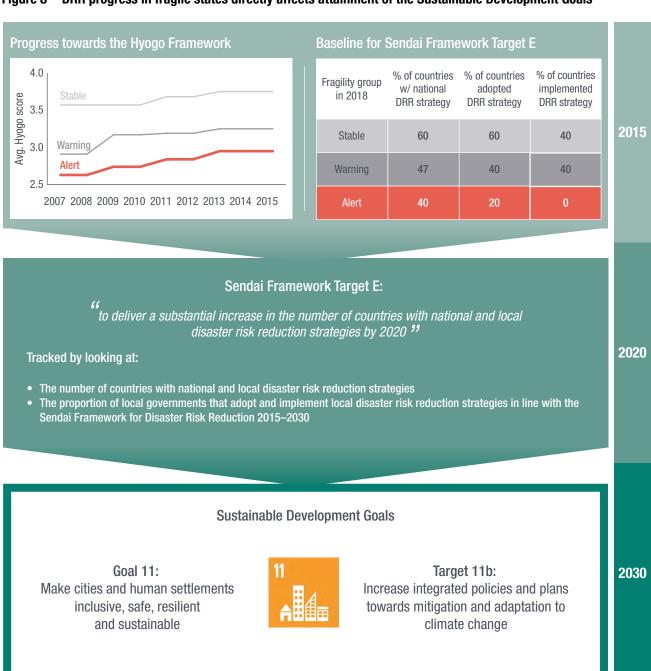
Note: calculated using: total spending (gross disbursements) on emergency response (Tag 720) and total spending (gross disbursements) on disaster prevention and preparedness (tag 740) from the OECD (2018) 'Creditor Reporting System (CRS)' (electronic dataset, OECD. Stat, OECD) (https://stats.oecd.org/Index.aspx?DataSetCode=CRS1#), for the period 1997–2016; Top 10 Asian countries on the 2018 Fragile States Index, by grouping (alert / warning). The Fund for Peace (2018) 'Fragile States Index 2018' (electronic dataset, The Fund for Peace) (http://fundforpeace.org/fsi/excel/).

3.3 Attaining Target E of the Sendai Framework: a closer look

Across the region, attention is turning to delivering progress on the Asia Regional Plan and the region's contribution to Target E of the Sendai Framework (McElroy, 2015): 'to deliver a substantial increase in the number of countries with national and local disaster risk reduction strategies by 2020'. The 2018 ISDR-Asia

Partnership Forum warned that, with just two years left until the target date, there is still some way to go (Weeks, 2018). The Sendai Framework Readiness Review revealed that the baseline for attainment of Target E in Asia was very low, especially for fragile and conflict-affected contexts (Figure 8). Put simply: the more fragile a country, the less likely it is to have a national DRR strategy that has been adopted and implemented. It is also less likely that local DRR strategies will be in place:

Figure 8 DRR progress in fragile states directly affects attainment of the Sustainable Development Goals



Note: countries ranking high on the 2018 Fragile States Index (ranked in the 'alert' grouping) lag behind against the Hyogo Framework and according to the Sendai Framework Readiness Review, and have a lower baseline (relative to countries ranking 'warning' or 'stable') for achieving Target E of the Sendai Framework (UNISDR, 2015). Accelerating progress on Target E of the Sendai Framework by 2020 is critical to achieving the Sendai Framework and Target 11b of the Sustainable Development Goals; 2018 Fragile States Index: total/composite. The Fund for Peace (2018) 'Fragile States Index 2018' (electronic dataset, The Fund for Peace) (http://fundforpeace.org/fsi/excel/).

a GNDR review for 13 countries in Asia revealed that the existence of local strategies is highly variable, with a predominance of disaster management plans rather than comprehensive DRR strategies, but overall a lack of comprehensive coverage.¹⁸

Data on national strategies presents a confusing picture. Just 14 countries reported in the Sendai Framework Readiness Review. Of those, 12 reported having national DRR strategies. Of the ten most fragile countries in Asia (according to the 2018 Fragile States Index), just three self-reported having a national DRR strategy: Afghanistan, Bangladesh and the Philippines. Bangladesh and the Philippines reported having adopted the strategy, and only the Philippines reported having implemented one.19 This raises obvious concerns about the level of government engagement in readiness and self-reporting processes, suggesting a need for greater consideration of the capacity, resources (financial and technical) and political backing available to engage with international DRR data collection processes. While the self-reporting process has obvious risks of bias, the Sendai Framework is not binding and there are no formal financing packages to support implementation. Few resources are made available to build capacities, particularly in contexts where a national disaster management agency or authority may be politically junior – something to be considered further in the roll-out of the Sendai Framework Monitor.

3.4 Tracking progress: opportunities and limitations of the Sendai Framework Monitor

Could the Sendai Framework targets be achieved without action on DRR in fragile and conflict-affected contexts? This is a difficult question to answer as it depends on many variables, including changing trends in conflict and disaster risk and the pace of change towards achieving the Sendai Framework. What is clear is that there are data gaps which hide the true picture of disaster impacts in fragile and conflict-affected contexts in Asia, and until these are addressed an accurate assessment of the progress required to deliver on the Sendai Framework cannot be made.

Expert views on the feasibility of 'leaving no one behind' in delivering the SDGs have flagged concerns that monitoring processes can hide significant differences when assessing progress in terms of global averages: for example, masking where progress has lagged behind for specific countries (including those with a history of conflict and fragility) or specific segments of the population (especially where intersecting inequalities

exist) (Samman, 2017). To avoid these pitfalls and provide a more nuanced picture of progress, DRR monitoring processes should lead the way in advancing data collection and analysis in fragile and conflict-affected contexts. For example, through progress reviews of local and national DRR strategies, monitoring of the Asia Regional Plan and the Sendai Framework Monitor, it may be possible to subsequently improve targeting and delivery of DRR in the most difficult contexts.

This is easier said than done, and raises a number of questions which warrant further consideration. To what extent can data collection and reporting against the Sendai Monitor contribute to addressing longstanding data gaps (through close attention to intersectionality and the geographical coverage of reporting and progress)? To what extent can the selfassessed progress reports by governments be considered a complete representation of progress on DRR, and what should other actors be doing to complement or challenge them? What role should non-state actors play in tracking progress, especially in contexts with sub-national conflict? Is there a role for independent bodies in assessing progress? These questions, among others, require more attention on the part of both official monitoring processes - through the Sendai Framework Monitor – and by civil society organisations, which play an important accountability role in ensuring reporting that is accurate and comprehensive.

It may also be that advances in technologies offer new opportunities to better track disaster impacts and engage communities in preparedness measures. Recent innovations signal that technologies are available which could be used to support communities living in contexts affected by violence, conflict and fragility in both disaster management and DRR. Recent practice in Asia includes using mobile applications in flood hazard preparedness (ReliefWeb, 2015), and the use of mobile technologies in assessing the impacts of flooding on community resilience in Myanmar (Jones, 2018). Could innovative use of technologies provide a means to overcome significant gaps in disaster datasets in contexts affected by fragility and conflict?

3.5 Discussion: advancing DRR in contexts affected by violence, conflict and fragility

A review of progress towards the Hyogo Framework for Action 2000–2015 revealed that underlying risk factors were the most neglected (and arguably most challenging) of the four areas of action described in the Framework

¹⁸ Source material from GNDR personal emails, Target E survey among GNDR members, results for Asia, 13 June 2018. The 13 countries are: Nepal, the Philippines, India, Pakistan, Afghanistan, the Republic of Korea, Cambodia, Bangladesh, China, Myanmar, Vietnam, Japan and Indonesia.

¹⁹ Put another way, of the eight countries in Asia appearing on the OECD list of fragile states, Afghanistan, Bangladesh and Cambodia reported having national DRR strategies, Bangladesh and Cambodia reporting having adopted one and only Cambodia reported having implemented one.

(Wilkinson et al., 2017). This report has argued that it is time to consider violence, conflict and fragility as part of that suite of underlying sources of vulnerability and risk, and to advance progress under the Sendai Framework, these risk drivers require explicit attention. To deliver on the Asia Regional Plan and the Sendai Framework, accelerated action is thus required on DRR in contexts affected by violence, conflict and fragility.

Internationally, it has been recognised that fragile and conflict-affected contexts require special support. The World Bank, the UN and other major players have put renewed emphasis on supporting fragile and conflict-affected contexts to accelerate the pace of change to achieve the Sustainable Development Goals (World Bank and UN, 2018; OECD, 2015). In the field of DRR, one example of special support is the Global Facility for Disaster Reduction and Recovery (GFDRR)'s proposed fund for DRR in conflict contexts, though in general tailored DRR support has been slow in coming within international climate and disaster funding mechanisms.

Together with a moral imperative, findings from other sectors show that targeting investment to individual groups and contexts lagging behind most in achieving global targets can accelerate progress and represent better value for money (Samman, 2017: 9). This points towards financing DRR in contexts affected by violence, conflict and fragility, through domestic resource

allocation and ODA. Channelling funds to these contexts may require different modes of operating and different expectations about the progress that can be achieved under certain timeframes (something we do not yet know enough about). For example, it may be that, in contexts described by van Voorst and Hilhorst (2017) as 'high-intensity conflict', where the authorities are a party to the conflict and where there have been years of state neglect and stagnant development, funds may be best channelled to supporting local DRR (the specific nature of such interventions would require strong tailoring to contexts: again, something we do not yet know enough about for DRR in contexts of violence, conflict and fragility).

Targeted resources – capacity, knowledge and financial – to DRR in fragile and conflict-affected contexts could also usefully be considered as part of the collective ambition to make progress on the UN Secretary-General's sustaining peace and prevention agenda; explicitly, by seeking to prevent disasters, and implicitly by contributing to sustaining peace through effective disaster management. This is echoed in the UNESCAP report (2018b: 3) A prevention agenda for resilience in Asia and the Pacific, which articulates how conflicts in Asia 'undermine the capacity and commitment of states to prevent and respond to disasters', and how ambitions to deliver on the SDGs alongside actions to strengthen disaster risk governance aim to prevent conflict and promote peace.

Box 7 UNESCAP's contribution to DRR and conflict resolution

The United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) has committed to delivering a progressive agenda on DRR and conflict resolution (UNESCAP, 2018; UNESCAP, 2018b). In cooperation with Member States, it aims to pursue DRR in ways that contribute to conflict resolution. These include:

- Risk scenarios ESCAP's analytical work on the 2015–2016 El Niño helped craft a methodology to understand the complex risk scenarios of slow-onset disasters in countries with disaster–conflict interfaces.
- Monsoon forums Monsoon forum risk communication platforms have been established in Myanmar, Pakistan, Papua New Guinea and Timor-Leste to coordinate actions which reduce vulnerability and strengthen disaster preparedness. UNESCAP plans to expand these forums with context-specific risk assessment and early warning products.
- Regional Drought Mechanism This shares data from the region's spacefaring countries China, India, Japan, the Republic of Korea (ROK), Russia and Thailand with other countries, especially those prone to drought.
- Analytical work on the disaster—conflict nexus to bolster research into the relationship between disaster prevention and peace-building. The INFORM Index for Risk Management for natural and man-made disasters will be used to monitor progress in disaster prevention and peace-building in the region.
- Capacity development UNESCAP plans to scale up its work on building resilience to drought and
 improving the capacity of countries to produce early warning on major weather events such as El Niño and
 related slow-onset disasters. This will contribute to building the overall resilience of fragile countries and
 conflict-impacted communities.
- Regional cooperation The Regional Economic Cooperation and Integration high-level meeting has recommended establishing a specific platform for least developed countries and fragile states on shared vulnerabilities and risks. The UNESCAP Committee on Disaster Risk Reduction has committed to initiate discussions on this.

Source: UNESCAP, 2017: 100-101.

For some agencies and in some contexts, risk management extends beyond dealing with singular sources of risk to encompass tackling multi-layered or complex risks, including the inter-relationship between disasters and conflict. The *Asia-Pacific disaster report* 2017 points to what a more ambitious approach to dealing with multiple sources of risk could entail:

Environmental management, conflict prevention, disaster risk reduction and peace-building thus should not be seen as separate activities but as linked to each other, as well as to programmes for poverty reduction and improving livelihoods. Interventions to reduce disaster risk cannot prevent conflict, but they can be part of a larger, more integrated approach to conflict prevention and peace building (UNESCAP, 2018: 100).

As Peters (2017: 7) observes, 'Some will see this as a step too far, as endangering the positive progress that is being made on DRR (particularly when the "natural" in natural hazards is employed to pursue action in an apolitical manner)'. Whatever position governments and agencies choose to take on the continuum of action on/ for DRR in relation to reducing the negative effects of

conflict (what Peters et al. (2013: 38) describe as 'the continuum of intent'²⁰), experience tells us that DRR interventions in contexts affected by violence, conflict and fragility will require markedly different ways of thinking, investing, acting and monitoring progress.

This is a highly politically charged topic for some Asian governments and stakeholders. It raises issues of foreign interference – as was the case in the response to Cyclone Nargis in Myanmar, where international humanitarian assistance was initially refused (Thomsen, 2015) - and sovereignty, alongside numerous other political facets of disasters: the politics of declaring an emergency, historical border disputes, governance challenges in areas of conflict or insurgency and unequal vulnerabilities within a society. Disasters also 'open political systems up to scrutiny' in terms of how response is managed (Pelling and Dill, 2006: 6). Slow sensitisation, based on evidence of what works in delivering DRR in contexts of violence, conflict and fragility, will be required to build a more positive narrative for local and national actors about how disaster impacts can be reduced in challenging operating environments. This requires gradually exposing governments to robust evidence which helps demonstrate how reducing disaster impacts in fragile and conflict-affected contexts serves the collective interest.

²⁰ The 'continuum of intent' is a conceptual tool to help articulate the extent to which DRR actions engage with issues of conflict; on one end, DRR is a vehicle for enacting conflict prevention objectives, and at the other, agencies work around conflict but do not actively seek to affect it (Peters et al., 2013: 28).

4 Recommendations for action

The global ambition to 'leave no one behind' stems from a realisation that global progress has not benefited everyone equally (Samman, 2017); this is also true for progress on DRR. This report finds that violence, conflict and fragility are part and parcel of how, where and when disasters happen – and need to be part of the conversation about how disaster risk can be reduced across Asia. The dominance of technocentric approaches to DRR neglects the social construction of disasters (Wisner et al., 2003; Levine et al., 2014); a greater focus on the dynamics of peace and conflict has the potential to advance the way we think about and act on disaster risk, and enhance DRR in fragile and conflict-affected contexts.

Past experience during the Hyogo Framework implementation period and the Sendai Framework Readiness Review both strongly suggest that achieving Target E of the Sendai Framework, especially the attainment of local DRR strategies, will require targeted action on DRR in fragile and conflict-affected contexts. This includes support for the design, delivery and monitoring of local DRR strategies. More broadly, prioritising and accelerating disaster resilience outcomes for poor and marginalised groups across Asia – especially those experiencing intersecting inequalities – requires deliberate laws and policies. Strong national leadership is thus needed, alongside a concerted effort by local and national actors to prioritise action on DRR in contexts affected by violence, conflict and fragility.

Many of the recommendations put forward for advancing action on DRR generally are equally relevant in fragile and conflict-affected contexts, including encouraging greater domestic allocation of spending on DRR-relevant activities and the adoption of principles of good governance such as inclusion, transparency, democratisation and accountability. DRR actors often do adopt approaches which support enabling conditions for good governance and, some would argue, in turn the conditions for peace - though adopting these principles is rarely systematised and the contribution to peace is yet to be verified. Too often, DRR actions are portrayed as addressing a developmental challenge to an inevitable and/ or natural phenomenon. This needs to change. Disasters are neither natural nor conflict-neutral. Asia could pave the way and set an example of how this topic could be tackled, from which other regions could learn. Below are initial suggestions for how we can advance the agenda.

4.1 Use Target E and Guiding Principle (i) as entry points

Delivering the Asia Regional Plan and the Sendai Framework, and ultimately achieving disaster resilience, requires accelerated action on DRR in contexts affected by violence, conflict and fragility. This agenda can be advanced using Target E and Guiding Principle (i) as an entry-point to accelerate the pace of change on DRR in contexts affected by violence, conflict and fragility.

- Achieving Target E of the Sendai Framework 'to deliver a substantial increase in the number of countries with national and local disaster risk reduction strategies by 2020' – should include specific consideration of how to devise and deliver local strategies in contexts affected by violence, conflict and fragility. As a starting point, the UNISDR Asia-Pacific Regional Office should build on the Sendai Framework Readiness Review and conduct an independent analysis to determine the presence and absence of national and local DRR strategies across Asia.
- Tailored technical support should be provided to accelerate progress on designing DRR strategies at the local level in contexts affected by violence, conflict and fragility. This could take the form of generic guidance which can be adapted to suit the context at hand, or through learning from contexts facing similar challenges of fragility and conflict (see the recommendation below on cross-learning and exchange).
- Devising local DRR strategies in conflict contexts
 (particularly sub-national conflict contexts the most
 common form in Asia) will require specialist convenors,
 with inputs from external technical advisors. The specific
 stakeholders involved will vary depending on the context,
 but may include relevant sub-national government
 agencies and non-state actors, Red Cross/Red Crescent
 National Societies, UN agencies (UNESCAP, UNDP),
 GNDR, religious groups and local organisations.
- Advancing understanding and action on Guiding Principle (i) of the Sendai Framework – 'While the drivers of disaster risk may be local, national, regional or global in scope, disaster risks have local and specific characteristics that must be understood for the determination of measures to reduce disaster risk' (UNISDR, 2015: 13) – should be understood as an entry-point for advancing this theme. Genuine

- consideration of the 'local and specific characteristics' denotes consideration of the role of violence, conflict and fragility in the construction of disaster risk.
- Specific attention should be given to individuals or groups who experience intersecting inequalities and are vulnerable to the intersection of disaster and conflict risk. The UN Children and Youth Major Group have championed this in previous intergovernmental processes. Their call to better understand and reduce sexual and gender-based violence in post-disaster situations provides a useful starting point from which to explore different types of violence and conflict in different stages of the disaster management cycle.
- Using attainment of Target E and Guiding Principle (i) as leverage, governments should explicitly recognise the need for greater understanding and action on DRR in contexts affected by violence, conflict and fragility in the outcome documents of the 2018 Asian Ministerial Conference on Disaster Risk Reduction, and subsequently task the ISDR-Asia Partnership to take this forward in its biennial meetings.
- The Asian Ministerial Conference on Disaster Risk Reduction outcome documents and ISDR-Asia Partnership should press for the inclusion of DRR in contexts of violence, conflict and fragility in the formal agenda of the 2019 Global Platform on Disaster Risk Reduction in Geneva. This would open up space to include the topic in subsequent revisions to the 2020 Asia Regional Plan, and as an amendment to the ASEAN Vision 2025.
- Lessons from across Asia in delivering DRR in contexts of violence, conflict and fragility should be developed as a theme in successive convening spaces including the 2020 Asian Ministerial Conference on Disaster Risk Reduction and the 2021 Global Platform on Disaster Risk Reduction. The Science and Technology Advisory Group should champion this call based on robust evidence from the social sciences.
- Within the context of the UN's prevention agenda, UNESCAP should continue to act as a regional knowledge hub, providing integrated policy analysis and advice, including on intersecting inequalities in disasters in contexts affected by violence, conflict and fragility. Continued support from governments and donor partners will be needed to deliver on this ambition. Where feasible, this should include testing assumptions and scoping out opportunities for DRR to contribute to an enabling environment for peace.
- Civil society organisations and related networks such as GNDR should draw on their extensive operational experience of delivering DRR interventions to systematically collate evidence, data and knowledge in ways that allow for sharing, replication and adjustment where required. The UNISDR Asia-Pacific Regional Office and the ISDR-Asia Partnership meetings can be used to monitor progress on this front, bringing to the fore the voices of local, nongovernmental and civil society representatives.

4.2 Adapt the Sendai Framework monitoring processes

The Sendai Framework monitoring processes can be used to track progress, overcome data gaps and redirect attention to DRR in contexts affected by violence, conflict and fragility.

- Governments should be encouraged to track progress on DRR in contexts affected by violence, conflict and fragility through the Sendai Framework Monitor, complemented by independent monitoring initiatives. The Sendai Framework Monitor team in collaboration with the UNISDR Asia-Pacific Regional Office should work with governments and technical experts to develop detailed guidance on how to adapt, trial and deliver DRR monitoring and evaluation (M&E) frameworks in contexts affected by violence, conflict and fragility. This could entail bringing together M&E tools and approaches used by other sectors working in difficult operating environments, together with well-established DRR M&E approaches. The aim should be to better collate and use monitoring data to inform the design and delivery of laws, policies and interventions to accelerate disaster resilience outcomes for poor and marginalised groups.
- Data collection and reporting against the Sendai
 Framework Monitor should actively seek to address
 the data gaps hiding the true picture of disaster
 impacts in fragile and conflict-affected contexts
 through close attention to intersectionality and the
 geographical coverage of reporting. Where viable and
 appropriate, new technologies should be employed.
- Governments should be encouraged to adopt and report against indicators that capture the pace of progress in contexts affected by violence, conflict and fragility. Governments willing to engage with this difficult issue should be supported through additional technical assistance and financing to bolster monitoring capacity, where required.
- Independent reviews should be commissioned in selected contexts to verify progress and harness lessons about the specific challenges of DRR delivery in contexts of violence, fragility and conflict. In complement, donors should support independent monitoring initiatives to track progress to allow for adjustments in their own spending policies, targeting, implementation and investment. Needless to say, greater ex-ante investment is required to help build the disaster resilience capacities of the most vulnerable.
- New indices or themes on DRR in contexts of violence, conflict and fragility should be incorporated into the next iteration of GNDR's *Views from the frontline* report. Tailored analysis for the Asia region should feed into the design of the 2020 and 2022 Asian Ministerial Conference on Disaster Risk Reduction.

4.3 Bolster evidence, tools and learning

Improving knowledge, capacity and skills to manage the intersection of disaster and conflict risk will require a broad suite of actions, including:

- UNESCAP and other relevant agencies should convene a technical workshop to deliver training, and promote knowledge and skills exchange. This could include training on conflict sensitivity (Conflict Sensitivity Consortium, 2004) for disaster managers, and DRM training for conflict analysts and peace-building advisors. Ideally, this would take place in 2018, with lessons shared at the 2019 Global Platform for Disaster Risk Reduction.
- Bilateral and multilateral donors should review, trial and test new approaches to the cross-fertilisation of disaster and conflict tools and approaches, including the systematic integration of conflict analysis into post-disaster needs assessments and disaster recovery frameworks, and natural hazards into peacebuilding and recovery frameworks. This should include the Asian Development Bank, GFDRR and the World Bank, given their portfolio in the region. Conflict analysis is a key starting-point for any consideration of conflict sensitivity and 'do no harm' approaches, and so real-time review through action research may be required. This could lead to the publication of a substantive report on findings and opportunities for progress. In some instances, agencies may feel that adapting existing tools or using them more effectively may be sufficient, and in others underlying assumptions may be challenged and substantial revisions required.
- Governments should encourage donors and investors to discuss the integration of conflict analysis into disaster assessments and frameworks, and the application of conflict-sensitive approaches to operational delivery. While this currently happens on an ad hoc basis, government support will be required to ensure systematic integration of conflict analysis, and deeper consideration of issues of violence, conflict and fragility in delivering disaster resilience.
- The importance of peer learning was demonstrated through the Hyogo Framework implementation period, with processes supporting cross-government learning and peer review. This could be extended under the Sendai Framework Monitor, with a specific focus on government and non-state actors in conflict and post-conflict contexts. International agencies with a remit for convening multi-stakeholder groups, including UNESCAP and UNDP, will have a role to play in identifying opportunities for peer-to-peer learning and providing an enabling environment for it. They may also have a technical or advisory role, but the emphasis should be on supporting cross-fertilisation between local and national levels of government, and across countries (depending on the context).

- The Science and Technology Advisory Group in Asia should strive to provide significant scientific contributions to the Global assessment report 2019, specifically Section 3.4 on disaster risk reduction strategies in fragile contexts (and, if effective and useful, to the subsequent Global assessment report 2021). This should be spearheaded by the UN Major Group on Science and Technology, with a focus on social science contributions. Subsequent Science and Technology Advisory Group for Asia meetings should include specific sessions to share data, evidence and knowledge on DRR in contexts affected by violence, conflict and fragility, to inform a review of the knowledge and evidence gaps in this area, tailored to Asia. The findings would represent a useful contribution to the next iteration of the Science and Technology Group's action plan, which describes the scientific community's contribution to the delivery of the Sendai Framework.
- In complement, the UNISDR Asia-Pacific Regional Office should prepare a regional report for release at the Global Platform 2019 which tailors scientific findings to the needs of policy-makers, and provides shared insights for other regions to consider in replicating the process in their own context.
- The links between risk reduction efforts and conflict management (UNISDR AP, 2011: 32) have yet to be addressed in any manner, let alone systematically. Building on the recommendations from the Hyogo Framework regional progress reports, investigation and documentation of examples where reducing disaster risk has had positive impacts on dynamics of peace and conflict are required, alongside analysis of where DRR can be used as a positive entry-point for conflict prevention (UNESCAP, 2018b). Independent research organisations and think tanks can provide non-partisan assessments of the possibilities and limitations of joint programming on disasters and conflict.

4.4 Bring together champions to drive the agenda forward

This topic is highly sensitive, and as such will not be politically palatable for some governments in Asia. Respected political champions, a clear plan of action and a robust evidence base will be required to drive the agenda forward over the coming two years.

A group of political champions is needed.
 Representatives of governments of countries high on the Fragile States Index and OECD fragility list should emphasise the additional complexities, challenges and opportunities of implementing DRR actions in contexts affected by violence, conflict and fragility.
 Additional support – financial and technical – should come from regional bodies and donors. Individual champions should seek to raise the profile of this

- theme among governments and civil society actors through convening sessions at the biannual ISDR-Asia Partnership Meetings and biennial Asian Ministerial Conferences on Disaster Risk Reduction.
- An informal group of champions of the theme –
 including key players such as GFDRR, UNESCAP,
 UNDP, Red Cross/Red Crescent National Societies
 and influential networks such as GNDR Asia should
 convene regular meetings adjoining the ISDR-Asia
 Partnership Meetings; organise events at major
 conferences such as the High-Level Political Forum,
 the World Bank Fragility Forum and the major climate
 change conferences (COP24 and COP25); and embed
 the theme as a standing agenda item in existing
 discussion forums aligned with ASEAN and other
 regional groupings.

4.5 Areas for future research

There is extensive research on the drivers of conflict, and on drivers of vulnerability and exposure to disasters. One area of future work will be to compare and contrast drivers of disasters and conflict vulnerabilities (extending the work of Stein and Walch (2017) and Nel and Righarts (2008)), with a view to better understanding what conditions are necessary pre-requisites for effective disaster resilience, and what types of DRR actions or approaches may help support good governance, and possibly even peace (see for example Mitchell and Smith, 2011; Stein and Walch, 2017). The principles of effective DRR, such as participatory decision-making, transparency in resource distribution and accountability to affected populations, are considered foundational to supporting conditions for good governance. This begs the question whether, in time, it could be viable to deliver DRR interventions in ways that enhance the conditions for effective disaster resilience and good governance (and, in turn, peace), and whether impacts could be tracked in order to assess the feasibility and viability of using DRR to contribute to conflict prevention.

Building on recognition of the links between sexual and gender-based violence and disasters (UNISDR AP, 2014) – emphasised at successive Asian Ministerial Conferences on Disaster Risk Reduction – it will be necessary to expand and develop collective understanding of the relationship between different types of violence, conflict and fragility, different hazards and different DRR actions. This will require substantive collection and analysis of existing evidence, but doing so could provide better guidance for policy-makers and practitioners as to what types of DRR actions are viable in different contexts, and how we can ensure that 'build back better' is not a disguise for reinforcing pre-existing inequalities.

A third area to consider is the role of technology in DRR, drawing on experiences and lessons from disaster

response and democratisation. What, for example, is the potential transformative impact of new tools and technologies in promoting good governance of risk, including inclusion, participatory governance, transparency, accountability, citizen participation and democratisation of DRR processes? Can technologies help to build trust and social capital? Or do new tools and technologies risk making DRR more technocratic, drawing attention away from efforts to promote participation, transparency and democratisation? There is a debate to be had here about the power of new technologies for promoting DRR in contexts of violence, conflict and fragility in Asia.

Over the course of the delivery of the Sendai Framework and Asia Regional Plan, collective efforts should aim to get to a point where recommendations for advancing DRR can be differentiated by levels of violence, fragility and conflict (for example, tailored recommendations for delivering effective DRR in contexts at different points along common conflict and fragility indexes (the Fragile States Index, OECD and INFORM)), and nuanced to encompass intersecting inequalities. Only by making headway on some of these questions will it be possible to begin to really understand the extent of the task ahead to deliver DRR across Asia by 2030.

The UN's sustaining peace agenda, introduced in 2015, aims to mobilise commitments – political, financial and institutional – and action on conflict and disaster prevention, although the two are rarely considered in combination or in terms of a co-location of risk. This is missing an opportunity to advance understanding of, and action on, the disaster-conflict interface (Walch, 2010; Peters et al., 2013). Evidence presented here shows that violence, conflict and fragility impede effective disaster response, but less is known about the specific conditions in which violence, conflict and fragility impede DRR efforts, and what we can do about it. Little is also known about how action on DRR could support conditions for peace, or at a minimum demonstrate principles of good governance and provide a means to deliver progress which contributes to goals and targets across the international global frameworks - beyond specific disaster-related goals.

With just two years left until Target E should be achieved, there is still some way to go to ensure that effective, context-specific local DRR strategies are delivered across Asia. With 12 years until the Sendai Framework should be delivered in full, there is still time, but accelerating progress will mean getting to grips with how disaster resilience can be achieved in contexts affected by violence, conflict and fragility. Disasters are neither natural nor conflict-neutral, and violence, conflict and fragility must be part of the discussion on how, where and when disasters happen – and need to be part of the conversation about how disaster risk can be reduced across Asia.

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