



Query title	Climate resilience and disability inclusion: mapping and rapid evidence review
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Query	 a. What are the links between climate change and disability? b. What is the evidence available on interventions/programmes that strengthen climate resilience of people with disabilities? c. How can climate resilience programmes be more effective in including people with disabilities with a larger impact?
Enquirer	Asia Regional Department, DFID

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Overview

15% of the global population is estimated to have a disability, with 80% of people with disabilities living in low-and middle-income countries (LMICs) (WHO, 2011). LMICs are more likely to be more severely affected by climate change, including through the physical impacts of climate change and the costs associated with adapting (IIED, 2019). The international community is increasingly recognising the links between climate change and disability, with key international frameworks including the UN Convention on Climate Change (UNCCC), the UN Convention on the Rights of Persons with Disabilities (UNCRPD), the Paris Agreement and the Sendai Framework highlighting these links.

Despite limited data and evidence on the links between climate change and disability, the available literature points to the following key links:

- People with disabilities are more likely to be negatively affected as 80% live in LMICs which are disproportionately impacted by climate change.
- Climate change is likely to increase disability prevalence, including through serious injuries as a result of disasters, the psychosocial impacts of the warming climate, malnutrition and air pollution.
- People with pre-existing disabilities are more likely to be negatively affected by adverse weather events such as droughts and flooding than their non-disabled counterparts. For example, they are more likely to be left behind in evacuations during disasters.
- People with disabilities face a number of barriers to strengthening their climate resilience, for example lack of accessible climate resilience programmes.





Disability interacts with other factors such as gender and age to influence climate resilience, however
interventions tend to target specific groups such as people with disabilities or women rather than
considering the intersections between disability and gender, for example.

Box 1: Key definitions

Persons with disabilities are:

"...those who have long-term physical, mental, intellectual or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others." (Article 1, UN Convention on the Rights of Persons with Disabilities)

Climate change:

"...a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods' (Article 1, UN Convention on Climate Change)

Climate resilience:

'Climate resilience is the ability to anticipate, prepare for, and respond to hazardous events, trends, or disturbances related to climate' (Center for Climate and Energy Solutions, 2019).

This query included a rapid evidence review of disability and climate resilience alongside a two-day rapid mapping of climate resilience programmes which seek to include people with disabilities in some way. 45 current and recent programmes were mapped, most of which have a disaster risk reduction/management (DRR/DRM) focus or a multi-component DRR, livelihoods, institutional capacity building and/or social protection focus. 1 Climate finance and weather and climate information system programmes which include people with disabilities are very limited. In addition, this query did not identify any inclusive programmes working on transboundary rivers and shared landscapes; greening investment flows or air pollution, indicating these are areas for innovation.

Most programmes take a mainstreaming approach to disability inclusion rather than including disability-specific components, however programme documentation tended to make only cursory references to disability suggesting inclusion may not be fully embedded. The mapped programmes include the following:

- Thematic focus: mostly disaster risk reduction and risk management programmes (DRR/DRM), or resilience programmes that work on DRR/DRM, livelihoods and social protection or institutional capacity-building.
- Geographic focus: Asia and Pacific Island Countries, with a select few examples from other regions.
- **Types of impairment:** Programme documents rarely defined disability; instead people with disabilities were most often referred to as one group, rather than providing information relating to specific impairments or a diverse range of disabilities. None mentioned seeking to include people with psychosocial disabilities.
- Gaps:

 Programmes rarely highlighted the broad range of barriers that people with disabilities face in strengthening their climate resilience, particularly those related to attitudinal and institutional factors such as stigma, discrimination and lack of attention to disability in policies and frameworks.

 No programmes had a specific focus on women and girls with disabilities or people with disabilities who identify as LGBT, and there was extremely limited data and evidence available relating to their particular experiences of climate resilience or programming.

¹ Some programmes were included that did not have a specific focus on climate resilience but were deemed relevant due to their focus on humanitarian response or recovery and disability inclusion. DRR/DRM and humanitarian programmes provide useful evidence on disability inclusion, however they have a narrower focus on anticipating, preparing for and responding to natural disasters, as opposed to a broader 'resilience' focus on changes to processes, practices, and structures to moderate the potential damages from climate change events, trends or disturbances.





There is very limited evidence available on what works to strengthen the climate resilience of people with disabilities. Of the 45 programmes mapped, only six had published evaluations and a further two had published independent research. Findings from these studies highlight the importance of disability expertise, situational analysis and data disaggregation in climate resilience programming and point to the potential for wider social change in supporting people with disabilities to provide leadership on climate resilience.

The available literature suggests that people with disabilities may be falling through the gaps in climate resilience programming. The clear exception here is DRR/DRM programmes which DPOs have increasingly spearheaded in recent years, however broader climate resilience programming has not tended to include people with disabilities. In addition, this review found that many recent climate resilience programme documents and evaluations mention people with disabilities as participants, but do not outline their specific approaches to disability inclusion. Secondly, although disability-focused non-governmental organisations (NGOs) and disabled people's organisations (DPOs) have been working on climate resilience, usually in relation to DRR/DRM, they are often not included in broader climate resilience programmes implemented by other actors, despite the evidence suggesting that disability inclusion is significantly strengthened when they are involved. Programmes with the most evidence of disability inclusion are implemented by disability-focused organisations and DPOs, and have specific strategies and approaches to disability inclusion.

The available literature points to a series of recommendations on how programmes could be made more disability inclusive, including taking a twin-track approach by mainstreaming inclusion whilst also providing targeted support, working with disability-focused NGOs and DPOs to build capacity, as well as collecting and analysing disability-disaggregated data (Kett et al., 2017). This rapid review has highlighted, however, that any developments in this regard need to be fully evaluated and documented so that more informed decisions around what works in inclusive climate resilience programming can be made.

2. Links between climate change and disability

The international community is increasingly recognising the links between climate change and disability, including its capacity to increase disability prevalence (Bell et al, 2019); its disproportionate impact on people with disabilities, especially women and those living alone (Gaskin et al., 2017) and the importance of including people with disabilities in climate action. For example:

- References to the importance of respecting the rights of persons with disabilities and ensuring inclusive practices in the UN Convention on Climate Change and the Paris Agreement (UNCRPD).
- Article 11 of the UNCRPD which calls on state parties to ensure the protection and safety of people with disabilities in humanitarian settings, including natural disasters.
- A 2019 UN Climate Resolution which highlights the disproportionate impact faced by people with disabilities, emphasises that disability rights should be protected and people with disabilities should be included in climate action (UN Human Rights Council, 2019).

There is a significant lack of data and evidence on the relationship between climate change and disability, with studies highlighting largely theoretical and anecdotal evidence (Kett et al., 2017; expert input from Maria Kett). A handful of recent literature reviews highlight the links between the two, however some of these draw on a wider literature on climate change and other vulnerable groups (Kett et al., 2017; Gaskin et al., 2017). A 2017 DFID-funded literature review on climate resilience and disability included 130 studies (50 published papers and 80 pieces of grey literature) and included evidence on other vulnerable groups and learning from inclusive humanitarian response (Kett et al., 2017).

Available evidence highlights both that the impacts of climate change are more severe for people with disabilities compared with the general population and that people with disabilities are reported to have lower resilience capacity (Kett et al., 2017). The relationship between poverty, inequality, disability and climate change are fundamental in understanding the disproportionate impact, meaning people with disabilities are more likely to be adversely affected and face numerous barriers to strengthening their resilience. Direct impacts range from a higher mortality rate during and after disasters, being more likely to be left behind during evacuations, a rising prevalence of disability as a result of food insecurity and malnutrition, injuries and psychosocial impacts (ibid; WHO, 2003; Pollack et al., 2018;). These links are discussed in more detail below.





However, it is important to note critiques of the dominant discourse focusing on people with disabilities' vulnerability and overlooking 'their knowledge, skills and resources for dealing with hazards and disasters...their experience of overcoming barriers and negotiating difficult physical environments in daily life may make them better equipped to cope psychologically in a crisis than nondisabled counterparts' (Twigg et al., 2018; pp.4-5). For example, learning from DRR/DRM programmes shows that where people with disabilities and DPOs are included in community structures and government decision-making on DRR/DRM they often become recognised as leaders in their communities (CBM International et al., 2019; CBM International, 2018).

Examining data at the national level highlights the challenges associated with measuring the impact of climate change on persons with disabilities. Table 1 below shows the 10 countries in Asia Pacific ranked as the most vulnerable to climate change in the Notre Dame Global Adaptation Initiative (ND-GAIN) index (Notre Dame Global Adaptation Initiative, 2017) and the available data on disability prevalence from Leonard Cheshire's Disability Data Portal.² Six out of 10 countries do not have any good quality data on what proportion of the population has a disability. Of the four that have reported data, three of these data sets are nine years old or older. Statistics from Bangladesh and Iraq have been questioned, with the World Bank and UN suggesting the figures are likely to be much higher at around 10% (World Bank, 2004; UNOHCHR and UNAMI, 2016). This analysis suggests that most of these countries are likely to struggle to assess the impact of climate change on people with disabilities given the lack of accurate and reliable data. This reinforces disability as a "sticky" development problem, in that policymakers and practitioners underestimate the impact of disability on development outcomes due in large part to the lack of attention to data collection (Twigg et al., 2018; expert input from Lorraine Wapling).

Table 1: Climate vulnerability and disability statistics in Asia Pacific

10 Asia Pacific countries scoring lowest on ND-GAIN climate vulnerability index	Vulnerability to climate change ranking ³ (out of 181 countries)	Availability of disability prevalence data4	Disability prevalence
Papua New Guinea	161	No data available	No data
Bangladesh	158	Data is from the 2011 Population and Housing Census, which used a binary self-declaration "Do you have a disability?" which has been found to lead to underreporting. ⁵ A 2016 World Bank estimate believes the % to be higher at about 10% (World Bank, 2004)	1.4%
Micronesia	144	No data available	No data
Solomon Islands	139	No data available	No data
Pakistan	138	World Health Survey 2002-04	11.6%
Cambodia	135	Demographic Health Survey 2014	5.6%
Vanuatu	135	No data available	No data
Laos	134	No data available	No data
Iraq	133	Data comes from the 1997 Population and Housing Census, however World Health Organization estimates are a lot higher at about 10% (UNOHCHR and UNAMI, 2016)	1.3%
Nepal	131	No data available	No data

² https://www.disabilitydataportal.com/

³ https://gain.nd.edu/our-work/country-index/rankings/

⁴ https://www.disabilitydataportal.com/explore-by-country/

⁵ Lorraine Wapling DFID PSD adviser training pack (available upon request).





The key links between climate change and disability identified through this rapid review are:

- The relationship between climate change, poverty, inequality and disability means that people with disabilities are more likely to be negatively impacted (expert input from Humanity & Inclusion). 80% people with disabilities live in LMICs and one in five of the world's poorest have a disability (WHO, 2011). At the same time, LMICs, and in particular the 47 least developed countries (LDCs) in the world, including Bangladesh, Myanmar and Nepal,⁶ are at greater risk of the negative impacts of climate change (IIED, 2019). The drivers in this situation are complex but those in extreme poverty may be living in remote areas which are poorly connected to services with people having no financial means to remove themselves to safer, more productive areas as climate change degrades their environment. Those in poverty are least likely to be able to respond and recover from climate shocks (Mittal et al, 2016).
- Climate change is likely to increase disability prevalence, including through serious injury, air pollution, food insecurity and malnutrition and the psychosocial impact of disasters. WHO disease burden estimates have found that the impact of climate change on malnutrition and injuries, both associated with disability, will be significant in the years to come and may already be negatively impacting human health (WHO, 2003). UNICEF highlight that a decrease in food security and higher rates of malnutrition can increase the incidence of impairments. Babies with low birthweights born to malnourished mothers may be at increased risk of cognitive impairments and stunted growth (UNICEF, 2015). There is an emerging body of evidence linking climate change, particularly natural disasters, to mental health issues including posttraumatic stress disorder (PTSD), although this rapid review did not find any research which examined the impact on psychosocial disabilities as distinct from mental health conditions (Hayes et al., 2018). For example, recent research in Vietnam found a positive correlation between exposure to traumatic major storms and mental health conditions such as depression, anxiety, PTSD and sleep problems (Pollack et al., 2018).
- People with disabilities may be disproportionately affected by extreme weather events such as floods and droughts. For example, anecdotal evidence suggests they may be more likely to be left behind during evacuations and more likely to die during disasters (Kett et al., 2018; expert input from Maria Kett). For example, a 2014 survey found that only one in five people with disabilities reported being able to evacuate without difficulties in the event of a disaster (UNISDR, 2014). Although disaggregated data is patchy, studies have found people with disabilities are twice as likely to die during disasters (Reinhardt et al., 2011).
- There are indirect reasons why people with disabilities may be more adversely affected, including
 that disabled people are more likely to have never gone to school or left school early and have lower levels
 of education than the general population which may hinder their ability to access information on climate
 resilience (UNESCO, 2014; expert input from Maria Kett, Lorraine Wapling and Humanity & Inclusion;
 Oxfam, 2018).
- People with disabilities are not a homogeneous group and their climate vulnerability and adaptive capacity depend on a variety of individual and contextual factors, for example gender, ethnicity and income, exposing existing inequalities (Gaskin et al., 2017; Kett et al., 2017; Saxton & Ghenis, 2018; expert input from Humanity & Inclusion). Older disabled women may be at risk of abandonment by families that no longer have the capacity to support them leaving them physically unable to reach water or food distribution points or health centres (Reilly, 2010).
- People with disabilities face a number of indirect impacts from disasters and the disproportionate impact is further exacerbated by lack of inclusive response, as people with disabilities may be less able to escape from hazards; may lose essential medications or assistive devices such as spectacles or hearing and mobility aids. People with disabilities may also have greater difficulty accessing basic needs, including food, water, shelter, latrines and healthcare services. Recent baselines conducted by Humanity & Inclusion highlight the lack of inclusive awareness and disaster preparedness initiatives limit their capacity to observe safety instructions, and internalised stigma means many people with disabilities believe their participation in response will not be effective or could negatively affect them (expert input from Humanity &

⁶ The list of the 47 LDCs is hosted on the UNDESA website.





Inclusion).7

- People with disabilities face significant barriers to developing resilience to climate change. For example, people with disabilities are less likely to have access to the financial assets needed to adapt and respond to climate shocks (expert input from Humanity & Inclusion). In addition, a 2017 systematic review including 34 studies identified lack of support from government and non-governmental organisations (NGOs) and limited inclusion of people with disabilities in resilience initiatives as factors affecting people with disabilities' vulnerability and adaptive capacity (Gaskin et al., 2017). Multiple layers of exclusion and vulnerability can make it very difficult for some groups of people, such as young women with disabilities, to participate in socio-economic programmes and decision-making forums (Sagramola et al., n.d.).
- People with disabilities are often excluded from work to address climate change. For example, people with disabilities often do not have a voice in climate debates and climate resilience programmes do not tend to be inclusive, although there is an important recent upsurge in the number of programmes and projects which target people with disabilities (findings from the rapid mapping undertaken for this query see Annex 1). DRR/DRM programmes implemented by disability-focused NGOs and DPOs have reported greater participation of people with disabilities in DRR/DRM policymaking, however there is less attention in the literature to the extent to which people with disabilities are included and their voices heard in policymaking, programming, monitoring and evaluation related to climate resilience more broadly. Some theoretical papers point to the crucial need to include people with disabilities in climate resilience discourse and work (Gorgens & Ziervogel, 2018).

Box 2: Case study on Bangladesh

Bangladesh is one of the most at-risk countries in the world to climate shocks (Kett et al., 2018). Evidence suggests a lack of attention to disability during and after Cyclone Sidr, there were people with disabilities who were left behind during evacuations and that 11% of those injured were left with permanent disabilities (Kett et al., 2018; Rahman et al., 2007). In 2015 the Government of Bangladesh hosted the Dhaka Conference on Disability and Disaster Risk Management. Attendees at the conference adopted the Dhaka Declaration which calls on governments, regional bodies, the private sector and others to adopt a people-centred approach, collect disaggregated data, strengthen governance, partnership and cooperation amongst other approaches, remove barriers to reduce impact on people with disabilities and promote empowerment and protection (Dhaka Conference & UNDISR, 2015). The government has invested significant funds in resilience initiatives such as early warning systems and community-based programmes (Kett et al., 2018). Although the Government of Bangladesh passed the progressive Rights and Protection of Persons with Disabilities Act in 2013, implementation has been slow and policies related to climate resilience do not address the specific risks faced by people with disabilities. Recent qualitative research with government and community members in Bangladesh found that people with disabilities reported that relief programmes are inaccessible and they are often excluded and focused on the need for a twin-track approach to mainstream inclusion and address the specific barriers that people with disabilities face in fleeing climate disasters. In addition, despite progressive legislation, disability is seen as a standalone and specialist issue rather than relating to rights (ibid).

3. Evidence on disability inclusive climate resilience programming

A rapid (two day) mapping of programmes that seek to include persons with disabilities in some way is attached

⁷ It was not within the scope of this query to examine the literature on disability inclusion in humanitarian response. Please see Disability Inclusion Helpdesk Query No. 8 on humanitarian response.





as Annex 1. Key findings are summarised below.8

i. Programmes that seek to strengthen the climate resilience of persons with disabilities

The mapping process found 45 programmes that aim to strengthen climate resilience and have sought to include people with disabilities. Importantly, many of these programmes only mentioned people with disabilities as participants anecdotally. The 19 programmes that had a specific focus on disability inclusion or people with disabilities clearly took a rights-based approach and provided much more evidence of disability inclusion.

Thematic focus	Number of programmes and % of the total programmes reviewed
Disaster Risk Reduction (DRR) / Disaster Risk Management (DRM)	15 (33%)
Multi-thematic programmes: combining DRR/DRM, livelihoods, social protection and/or institutional capacity-building	9 (20%)
Food security, agriculture, livelihoods and water management	8 (17%)
Humanitarian response, post-disaster reconstruction and/or infrastructure management	7 (15%)
Cash transfer programmes based on weather patterns	3 (6%)
Institutional capacity-building	3 (6%)
Total	45 (100%)

- Funders: The Australian Department of Foreign Affairs and Trade (DFAT) is funding the greatest number of disability-inclusive programmes focused on climate resilience in the Asia-Pacific region (7 programmes). Other funders include: Green Climate Fund (5); DIPECHO/ECHO (4); DFID (3); SIDA (2); Government of New Zealand (2); USAID (2).
- Implementers: All of the programmes with publicly available evidence on disability inclusive programming were implemented by Non-Governmental Organisations (NGOs, predominantly CBM International, previously known as Christian Blind Mission; and Humanity and Inclusion, previously known as Handicap International).9
- **Geographical focus:** The countries with the greatest number of disability inclusive climate resilience programmes are Philippines (9), Bangladesh (8 programmes), and Nepal (5). The review found no programmes with evidence of disability inclusion in Pakistan, and very few programmes in Central Asia. Programming in Bangladesh has been running for the longest with programmes implemented since 2009.
- Barriers: None of the 45 programmes mapped explicitly mentioned aims to reduce attitudinal barriers to the inclusion of persons with disabilities, such as stigma and discrimination, in climate resilience programming. The majority of programme documentation focused on environmental barriers (for example, inaccessible early warning systems or infrastructure) and to a lesser extent, institutional barriers (for example, lack of attention to disability in policies and representation of people with disabilities in policymaking). DRR/DRM programmes with a specific focus on disability inclusion did tend to address institutional barriers through DPOs' collaboration with government departments.
- Mainstreaming: 25 programmes took a mainstreaming approach to disability inclusion or mentioned disability
 inclusion in documentation. The 19 programmes that had a primary focus on disability inclusion or people with
 disabilities provided much more evidence of effective disability inclusion practice. Most of these disability-specific

⁸ The mapping was completed by searching for key search terms⁸ on Google, and on project and programme databases or research portals such as D-Portal, Devtracker, the Australian Humanitarian Partnership Knowledge Hub, and the Green Climate Fund (GFC) website.

⁹ Programmes often do not mention implementing partners meaning it is difficult to know whether DPOs are involved in programme delivery.





programmes took a twin-track approach to mainstreaming: ensuring people with disabilities were included across all programme activities, while also addressing the specific barriers that people with disabilities face in climate resilience programming.

- **Impairment types:** None of the identified programmes mentioned inclusion of people with psychosocial disabilities, and only one of the programmes specified participants' types of impairment.
- Climate finance: Of 24 Green Climate Fund (GFC) climate change adaptation programmes in the Asia-Pacific region, only five mention that they will work with or consider the needs of people with disabilities in their proposals. This highlights a potential gap in disability-inclusive climate financing, as the GFC is one of the most significant funding mechanisms for climate resilience programmes.
- The desk review found no programmes related to clean energy, transboundary rivers or climate resilient transport systems that aimed to include people with disabilities.

ii. Availability of evidence from programmes

While the number of climate resilience projects and programmes seeking to include people with disabilities is increasing, the evidence on what works and lessons learned for future programming is extremely limited. No programmes reviewed had generated substantial evidence on effective disability inclusive climate resilience programming. There are many case studies and one evaluation publicly available on DRR and DRM programmes that suggest the twin-track approach to disability inclusion is effective in climate resilience programming (CBM International et al, 2019; ASB, 2018).

Only six programmes out of 45 had publicly available independent evaluations that mentioned disability inclusion (Coffey, 2017; Danish Management A/S and ECO consult, 2018; Australian Humanitarian Partnership (AHP), 2019a and 2019b; Leavy et al., 2020; ASB Indonesia and the Philippines, 2018) and only two had publicly available independent research on disability inclusion (The Nossal Institute for Global Health and CBM, 2017; Save the Children and ACAPS, 2018). Only one piece of research (The Nossal Institute for Global Health and CBM, 2017) analysed the specific situations of women with disabilities, in the humanitarian response to Cyclone Pam in Vanuatu. This points to the need for more research and evaluations focused on gender and disability in climate resilience programming, especially given that there is indicative evidence that women with disabilities may be at increased vulnerability during climate emergencies (Gaskin et al., 2017; Kett et al., 2017). While there is currently extremely limited evidence on disability-inclusive climate resilience programming, there are several new climate resilience programmes that seek to include people with disabilities that have recently started or are currently in design, for example, Building the Resilience of Persons with Disabilities to cope with Climate Change in the Asia Pacific Region (a new programme currently in design); Australian Humanitarian Partnership Disaster Ready (2018-2022); Building Resilience through Inclusive and Climate-Adaptive Disaster Risk Reduction (BRDR, 2018-2022); and the Canada-Caribbean Climate Resilience Facility (CRF). It is not known whether these programmes will publish evaluations or research that include analysis or evidence of disability inclusion. More research on disability-inclusive climate resilience programming is required in order to build upon and improve current and future practice.

iii. Key findings from programme evaluations and research¹⁰

Of the six evaluations found in the mapping, three evaluations found that the programmes had had a substantial focus on disability inclusion, but effectiveness in disability inclusion had been limited. One evaluation covering 15 projects found that none of the projects had reported deliberate action to promote disability inclusion, and that disaggregated data by age, disability and other forms of social exclusion was lacking. One evaluation of a DRR/DRM-focused programme in the Philippines echoed the lessons learned from other disability-inclusive

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¹⁰ Please note these findings are drawn from the available research and evaluation from the programmes mapped in this rapid review. The next section details learning drawn more broadly from the literature on climate resilience for people with disabilities. This learning was largely echoed by the findings from the mapping.





DRR/DRM programmes, as outlined below. Some of the findings across the limited number of case studies, learning papers, evaluations and research include:

- The importance of disability inclusion expertise: Without an implementing organisation with specific disability inclusion expertise, programmes were not able to reach people with disabilities and include them in programming to the extent that they had planned for (Coffey, 2017; AHP, 2019a). Once disability-focused organisations were later introduced in to programme implementation, they were able to build the foundational disability inclusion capacity required to ensure disability inclusion was mainstreamed across activities (Coffey, 2017; AHP, 2019a). One evaluation covering 15 climate resilience projects (without a disability-focused implementing organisation) found that none of the projects had reported deliberate action to promote disability inclusion, and that disaggregated data by age, disability and other forms of social exclusion was lacking (Leavey et al., 2020). One programme evaluation found that there had been "good" participation of people with disabilities (Danish Management A/S and ECO consult, 2018), but it provided no evidence to demonstrate this, and it is not clear whether people with disabilities were consulted during the evaluation. One evaluation of a DRR/DRM-focused programme that employed DPOs from the beginning found the mix of partners with a focus on disability inclusion and others with a focus on DRR was instrumental to the success of the programme, building capacity across organisations and ensuring more inclusive and effective interventions (ASB Indonesia and Philippines, 2018). This suggests that including disability-focused NGOs and DPOs in implementation from the beginning of programmes may lead to better outcomes in disability inclusion. Similarly, learning papers from disability-inclusive DRR and DRM programmes suggest that the engagement of disabilityfocused NGOs, DPOs and people with disabilities in programme implementation is essential to ensure disability inclusion is mainstreamed across activities (CBM International et al., 2019; CBM International, 2018).
- Collecting and using disaggregated quantitative and qualitative data on disability is a foundational activity for disability inclusion, according to independent research and evaluations from three programmes (Save the Children and ACAPS, 2018; Danish Management A/S and ECO consult, 2018; The Nossal Institute for Global Health and CBM, 2017; Oxfam, 2018). Three programmes in the Pacific focused on collecting quantitative data on disability prevalence and qualitative data on disabled people's capacities and experiences in humanitarian preparedness and response to inform future humanitarian responses and build capacity of national institutions. For example, after Cyclone Pam in Vanuatu a survey found that people with disabilities, and especially women with disabilities, had poorer access to DRR efforts compared to people with disabilities; 43% respondents were unable to read a message on a mobile phone – a simple test of literacy particularly common for early-warning systems; and that assessments immediately after the cyclone had not reliably collected information about the unmet needs of people with disabilities – the survey was to inform the National Disaster Management Office for future responses (The Nossal Institute for Global Health and CBM, 2017). An evaluation of the Finnish-Pacific Project: Adapting to climate change in Oceania (Finpac) programme found that consultations with people with disabilities and vulnerability assessments at the start of the programme had enabled the development of disability inclusive early warning and disaster response systems (Danish Management A/S and ECO consult, 2018). Three programmes were identified that provided cash transfers conditional upon and automatically triggered by weather patterns (see Annex A: Kenya Hunger Safety Net Programme; Weather Index-Based Crop Insurance; and the Sahel food crisis response in Niger, 2011 and 2012), but none of these programmes explicitly targeted people with disabilities. Considering the finding above, programmes such as these have the potential to be disability inclusive if disabilitydisaggregated data is collected and used.
- Participation of disabled people and DPOs can change attitudes in communities and institutions to
 recognise the leadership of people with disabilities and strengthen inclusive governance: An evaluation
 and case studies from DRR/DRM programmes suggest that inclusion of people with disabilities and their
 representative organisations in DRR/DRM community structures and with governments changes community
 members' attitudes towards disabled people, enables disabled people to be recognised as leaders in their
 communities, and strengthens disability-inclusive governance and cooperation; and that targeted support and
 capacity-building for community-based DPOs and self help groups for disabilities is useful to ensure their
 effectiveness (CBM International et al, 2019; CBM International, 2018; ASB Indonesia and Philippines, 2018). The
 new Australian Humanitarian Partnership Disaster READY programme is unique in that it uses capacity-building of





DPOs and capacity-building of DRR/DRM institutions on disability inclusion as its key approach to disability inclusion across the multi-country programme (AHP, 2020).

• Disability mainstreaming approaches need to be implemented more broadly across climate resilience activities: several DRR/DRM case studies and one evaluation point to the need to integrate livelihoods and/or social protection activities with DRR/DRM programmes to strengthen people with disabilities' resilience. However, none of the evaluations or case studies across the programmes provided evidence of effective approaches to disability-inclusive livelihoods or social protection. Similarly, only one programme was identified that addressed disabled people's food security, but no evidence was available on effectiveness. One evaluation found that less progress was made in livelihoods and social protection work because implementing organisations had less capacity in these areas than DRR/DRM (ASB Indonesia and Philippines, 2018). There may be lessons learned from disability inclusive DRR/DRM mainstreaming approaches that could be applied more broadly across resilience programming integrating livelihoods and social protection.

4. How can climate resilience programmes be more effective in including people with disabilities with a larger impact?

The limited available literature (Kett et al., 2017; Kett et al., 2018; Twigg et al., 2018) and programme examples highlighted in this review, means making specific climate resilience recommendations difficult.¹¹ However, the literature does suggest that there are important lessons to be gained from the disaster risk reduction and humanitarian sectors. Findings from the mapping echo these broad recommendations, which are also supported in large part by several policy frameworks that focus on climate resilience and/or disability inclusion.

Key lessons for climate resilience programmes on how to be more effective in including people with disabilities with a large impact include:

- Implement the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) by
 adopting a rights-based approach to resilience programming, which understands disability as a result
 of the interaction between impairments and barriers to people with disabilities' full and active participation in
 society. In this respect, addressing issues of stigma and discrimination and the intersectional nature of
 vulnerability are key to strengthening resilience amongst people with disabilities. This approach involves
 identifying and removing barriers to participation and is in line with DFID's Disability Inclusive Development
 Strategy 2018-2023 (DFID, 2018).
- Meaningfully engage people with disabilities and their representative organisations (DPOs), including ensuring that people with disabilities participate in governance structures at local, national and regional levels. For example, the Community Empowerment and Resilience Association programme in Rakhine State, Myanmar supported by Malteser International conducted participatory hazard vulnerability and capacity assessments (HVCAs) and encouraged participants to develop climate change adaptation plans. Non-disabled participants reported more positive attitudes to people with disabilities in response to

¹¹ Please note the following frameworks and agreements provide some recommendations on inclusive climate resilience work:

The Sendai Framework for Disaster Risk Reduction 2015-2030 which recognises the importance of universal design as well as the involvement of people with disabilities and DPOs in the implementation and monitoring of the framework (United Nations Office for Disaster Risk Reduction, 2020). Note universal design is defined as: Universal Design is the design and composition of an environment so that it can be accessed, understood and used to the greatest extent possible by all people regardless of their age, size, ability or disability.

⁻ The Dhaka Declaration on Disability and Disaster Risk Management, which calls on governments and other stakeholders to implement the UNCRPD within DRM programmes (The Dhaka Declaration on Disability and Disaster Risk Management, 2015);

⁻ Several of these recommendations are in line with DFID's Disability Inclusive Development Strategy which outlines <u>five minimum standards on disability inclusion</u> across DFID's work.





working together with them, whilst people with disabilities had greater awareness on how to build their own resilience (Kett et al., 2017; expert input from Lorraine Wapling).

- Strengthen disability-inclusive governance, partnership and cooperation, by enhancing collaboration with DPOs. There are increasing examples from countries such as Bangladesh, Vietnam, Myanmar and Philippines (see Kett et al., 2017) of the inclusion of people with disabilities and their representative organisations on decision-making bodies. This has also been a central mainstreaming approach in many emerging disability-inclusive climate resilience programmes. For example, one of the three main focuses of the Australian Humanitarian Partnership Disaster READY Programme is capacity development of the Pacific Disability Forum to support national DPOs across five Pacific Island countries to engage in disability inclusive DRR and preparedness (AHP, 2020).
- Take a twin track approach in programming ensuring disability inclusion is mainstreamed whilst providing targeted support where needed. For example, in Vietnam, CBM and the Malteser Foundation have provided specific training for people with disabilities and their families whilst ensuring people with disabilities are included in village disaster risk management plans to inform early warning systems and evaluation plans. Many DRR/DRM programmes have successfully used this approach, and it could be expanded across broader climate resilience programming (Kett et al., 2017).
- Apply an intersectional lens, unpacking the intersections between disability, age, gender and other factors which affect resilience to climate change and avoiding homogenising groups of people. People with disabilities are not a homogeneous group and other factors such as age and gender affect their resilience to climate change. For example, findings from the 2017 systematic review show that being a woman, living alone and coming from a minority cultural group increases disabled peoples' vulnerabilities during disasters (Gaskin et al., 2017). Multiple layers of vulnerability intersect reducing peoples' resilience and ability to adapt and respond. Some people with disabilities, particularly those with intellectual and psychosocial disabilities, are often excluded from climate resilience programming or fall through the gap between what DPOs and NGOs or government agencies typically do in local contexts (Kett et al., 2017; Gaskin et al., 2017).
- Address different types of barriers to people with disabilities' resilience to climate change. These include environmental (for example physical access to buildings and spaces), attitudinal (stigma and discrimination against people with disabilities) and institutional barriers (lack of inclusive policies). It is important to ensure that any services or training being provided is done so in accessible ways (which is where engagement with people with disabilities can help in providing contextually appropriate adaptations) which includes not just physical accessibility but also in terms of communication and information. It has to be considered that disabled people may not have the same levels of understanding or engagement with climate resilience conversations having not been to school or having been largely excluded from communities. This may mean they do not respond to programmes designed to build resilience in ways that might be predicted (Harris, 2014). Ensuring such programmes are designed in consultation with a range of persons with disabilities can mean messaging becomes more effective (expert input from Lorraine Wapling).
- Build capacity, including of mainstream climate resilience organisations to include people with disabilities through partnerships with disability-focused NGOs and DPOs, and build capacity of DPOs and the disability sector to strengthen climate resilience of people with disabilities (Gaskin et al., 2017; expert input from Humanity & Inclusion). A recent systematic review found that whilst DPOs did not tend to work to strengthen climate resilience, government agencies often failed to include people with disabilities in their resilience work (Gaskin et al., 2017). Building the capacity of representative organisations can also help in promoting advocacy. For example, in Indonesia, Arbeiter-Samariter-Bund (ASB) worked with DPOs to develop a DRR information sharing process through women's groups as well as conducting advocacy and working with government to establish DRR forums at district level (Kett et al., 2017).
- Focus on active resilience building of people with disabilities rather than assuming passivity and vulnerability. Much of the general discourse on climate change and disability is not rights- but needs-focused and does not take account of the knowledge, capabilities and experiences that disabled people have in adapting to change (Twigg et al., 2018).





• Gather data and generate evidence on inclusive climate resilience programming through monitoring, evaluation, research and learning. Ensure people with all impairment types are involved in research and data collection as people with intellectual and psychosocial disabilities are often left out (Gaskin et al., 2017). Ensure all qualitative and quantitative data is disaggregated by disability, age, gender and other identities; all monitoring, evaluation and reporting activities include questions on inclusion; and disabled people can access monitoring, evaluation and research findings.





Annex: Methodology

This rapid research query has been conducted as systematically as possible within 5.5 combined days of researcher and expert time. Climate resilience programmes were mapped using an Excel Spreadsheet (see Annex 1). The methodology is described below.

Search strategy: Programmes and evidence were identified through a variety of search strategies;

- The review prioritised existing syntheses, evidence reviews, and systematic reviews where possible in order to draw on the fullest range of evidence possible (Kett et al., 2017; Kett et al., 2018; Gaskin et al., 2017).
- DFID Disability Inclusive Development Programme consortium partners¹² and relevant experts were contacted for evidence recommendations (see Section 6 for experts who responded).
- Google and relevant electronic databases (PubMed, Science Direct, and Google Scholar) for priority sources using a selection of key search terms¹³ used in other systematic reviews to identify more recent materials. The review also considered programmes which may have useful lessons but were excluded from systematic reviews, due to less rigorous evaluation methodologies.
- Review of project databases and portals, including D-Portal, Devtracker, the Australian Humanitarian Partnership Knowledge Hub, and the Green Climate Fund website.
- **Criteria for inclusion**: To be eligible for inclusion in this rapid review of the literature, programmes studies had to fulfil the following criteria:
 - **Focus**: Evidence reviews on links between climate change and disability OR programme documents, evaluations, case studies related to disability-specific or mainstreamed climate resilience programmes.
 - **Time period**: 2008¹⁴ 2020.
 - Language: English.
 - Publication status: Publicly available in almost all cases published online.
 - Geographical focus: LMICs with a focus on Asia Pacific.

¹² The Disability Inclusion Helpdesk is funded under the DID programme. The DID consortium partners are ADD International, BBC Media Action, BRAC, Institute of Development Studies (IDS), International Disability Alliance (IDA), Humanity & Inclusion, Leonard Cheshire Disability, Light for the World, Sense, Sightsavers and Social Development Direct.

¹³ Key search terms included: climate change, climate resilience, climate adaptation, community resilience, vulnerability, Disaster Risk Reduction, disaster preparedness, disaster management, coastal resilience, capacity building, weather and climate information, climate finance, climate risk, transboundary rivers and shared landscapes, early warning systems, climate and transport, sustainable land use, sustainable agriculture, agroecology, climate smart agriculture, food security, food systems, community-based adaptation, water management, water security, greening regional investment flows, air pollution, AND disabled / disability / disabilities, impairment, deaf, blind, wheelchair AND Asia, Pacific, AND interventions, programme, evaluation, review, research, study.

¹⁴ Note: The Disability Inclusion Helpdesk reviews evidence from 2008 onwards as this is the year that the Convention on the Rights of Persons with Disabilities and its Optional Protocol came into force.





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About Helpdesk reports: The Disability Inclusion Helpdesk is funded by the UK Department for International Development, contracted through the Disability Inclusion Team (DIT) under the Disability Inclusive Development Programme. Helpdesk reports are based on between 3 and 4.5 days of desk-based research per query and are designed to provide a brief overview of the key issues and expert thinking on issues around disability inclusion. Where referring to documented evidence, Helpdesk teams will seek to understand the methodologies used to generate evidence and will summarise this in Helpdesk outputs, noting any concerns with the robustness of the evidence being presented. For some Helpdesk services, in particular the practical know-how queries, the emphasis will be focused far less on academic validity of evidence and more on the validity of first-hand experience among disabled people and practitioners delivering and monitoring programmes on the ground. All sources will be clearly referenced.

Helpdesk services are provided by a consortium of leading organisations and individual experts on disability, including Social Development Direct, Sightsavers, Leonard Cheshire Disability, ADD International, Light for the World, Humanity & Inclusion, BRAC, BBC Media Action, Sense and the Institute of Development Studies (IDS). Expert advice may be sought from this Group, as well as from the wider academic and practitioner community, and those able to provide input within the short time-frame are acknowledged. Any views or opinions expressed do not necessarily reflect those of DFID, the Disability Inclusion Helpdesk or any of the contributing organisations/experts.

For any further request or enquiry, contact enquiries@disabilityinclusion.org.uk

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