RESEARCH REPORT

Disability and Climate Resilience Research Project

April 2018

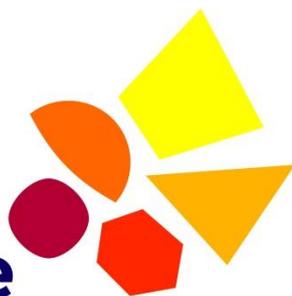# ACRONYMS

ACTS	African Centre for Technology Studies
CCA	Climate-change adaptation
CIDP	County Integrated Development Plan
COP23	Conference of the Parties 23
CRPD	UN Convention on the Rights of Persons with Disabilities
CSID	Centre for Services and Information on Disability
DFID	UK Department for International Development
DPO	Disabled people's organisation
DRR	Disaster risk reduction
GIS	Geographical information systems
ICCCAD	International Centre for Climate Change and Development
INGO	International non-governmental organisation
LCRC	Leonard Cheshire Research Centre
NEMA	National Environmental Management Authority
NGO	Non-governmental organisation
PI	Principal Investigator
SDGs	Sustainable Development Goals
UP	*Union Parishad*
UPDK	United Disabled Persons Kenya
UNEP	United Nations Environment Programme
UQAC	*Université du Québec à Chicoutimi*
USAID	United States Agency for International Development

CONTENTS

FOREWORD

This report was prepared by Dr Maria Kett and Ellie Cole[1], Leonard Cheshire Research Centre, UCL, with input from Dr John Twigg (ODI), Fred Smith (Sightsavers), Dr Saleemul Huq, Dr Feisal Rahman and Shababa Haque (ICCCAD); Winnie Khaemba (ACTS), Anderson Gitonga and Washington Oloo (UDPK); Mathieu Simard (UQAC/McGill University); Khandaker Jahurul Alam and Iftekhar Ahmed (CSID).

The team would like to thank all of those who gave their time to this project, particularly members of the communities in Kenya and Bangladesh.

This research has been funded by UKAID. However, the views expressed do not necessarily reflect the UK Government's official policies.

EXECUTIVE SUMMARY

To date, very little work has explored issues around people with disabilities and resilience-building in the context of longer-term climatic and environmental change. This 14-month exploratory research project aims to address this gap and increase the understanding of the links between disability and climate resilience, and in turn to support the delivery of policy and programme work that builds the resilience of people with disabilities to climate shocks and stresses. In order to do so, it addresses the following overarching questions:

- What is the relationship between disability and an individual's vulnerability/resilience to climatic shocks and stresses?
- How can interventions build the resilience of people with disabilities to climatic shocks and stresses?

To address these research questions, a range of methods were used to gather as comprehensive a picture as possible of the current situation, as well as obtain empirical data from affected populations in Kenya and Bangladesh. These were selected as they face a number of development challenges, including multiple and diverse hazards associated with the impacts of climate change; both have committed to increasing the climate-related resilience of their populations; and both governments have shown commitment to the rights of people with disabilities. Given the different climate challenges facing each country, they also offer potentially useful contextual comparisons from which to develop a range of approaches in this area. However, to date, there has been little research that explores the impact of these from the perspective of people with disabilities. This research therefore aims to contribute to this small, but growing, evidence base and generate further research interest from the results presented here.

The research comprises: an extensive literature review to identify the current evidence and gaps; a global online survey to identify current practices being implemented in the field around climate change and climate-related disasters, and the extent to which disability issues are addressed in programming; policy analyses, complemented by key informant interviews with policymakers and practitioners; and focus group discussions with people with disabilities in climate-impacted areas of Bangladesh and Kenya.

This report synthesises the results of the desk- and field-based research, and outlines implications of the findings for policy and programming and identifies recommendations for further action. It is hoped that the findings highlighted in this report can be extrapolated to develop more disability-inclusive practice and will also be applicable for other contextually marginalised people. The report concludes with identifying areas for further research.

1.1. Findings

Lack of Evidence
- The limited available evidence generally demonstrates that at-risk people, including people with disabilities, have a heightened vulnerability to the more severe impacts of climate change and reduced capacity for resilience, compared to the wider population.
- There is limited evidence to date of *how* the resilience of people with disabilities to climate risk has been enhanced by any interventions, or of effective best practices within this field.

- Standard climate vulnerability and resilience measures (e.g. assets frameworks) tend to evaluate resources and needs at the level of the household, rather than looking at intra-household distribution, which would give a more nuanced picture of differential impacts, as well as help to identify resources that people with disabilities require.

Policymakers talk a good talk – but are they effectively implementing policies?
- While some progress towards increasing resilience to environmental change and hazards, and inclusion and rights of people with disabilities is being made at policy level, there are many gaps regarding implementation, funding, monitoring and outreach which reduce their impact at the local level.
- Discussion relating to people with disabilities has not been well integrated into broader discussions or frameworks relating to climate change. Many implementing organisations are unaware of the extent to which disability is incorporated into national policies and targets, making it unlikely that any aims in this area will be achieved.
- There is a need for better data to facilitate planning and inclusion, particularly data disaggregated by disability and other socioeconomic characteristics.

Missing inclusion and rights
- Disability inclusion is often not understood from a rights-based perspective, and people with disabilities seem to be largely excluded from discussions about climate-related policy and practice, essential for understanding risk and building resilience. Tougher measures to enforce rights and challenge social norms are needed.
- There is an urgent need to raise awareness and build capacity of disabled people's organisations (DPOs) around climate issues so that they can support advocacy and the inclusion of people with disabilities in planning, decision-making and implementation of climate strategies.

Integration, institutional separation and 'silos'
- There appears to be growing recognition that an integrated approach, linking disability with both disaster risk reduction (DRR) and climate change adaptation (CCA), can have a positive impact on resilience-building although at present this is mostly not translated into practice. The relatively limited available evidence suggests that the climate sector is currently behind DRR and humanitarian practice in implementing disability-inclusive approaches.
- Progress in general towards more disability-inclusive disaster relief seems to have had an uneven impact on the ground for people with disabilities in disaster-affected communities due to the widespread lack of data on people with disabilities, their impairments and requirements, together with lack of coordination between responders.
- Government ministries have attempted to address coordination and communication of cross-cutting issues such as disability and gender by having focal points, representatives or committees. However, respondents in both countries were disparaging about the capacities and effectiveness of such committees at the local level.

Lost in mainstreaming?
- Disability can be linked to wider aspects of vulnerability but persons with disabilities are not a homogenous group, so care needs to be taken not to assume a 'one size fits all' approach will work for everyone. However, as many mainstream (that is, non-disability specific) programmes aim to include all members of target populations, there is an underlying assumption that everyone – including people with disabilities - are able to access the programme activities. Using

a broad definition of disability, even approaches that aim to reduce vulnerability or protect vulnerable populations can, unintentionally, result in people with disabilities becoming invisible – 'lost' - within these programmes. Therefore there needs to be a synchronous 'twin track' approach – both targeting specifically and including generally adults and children with disabilities into policies, programmes, research etc.

▪ Connected to this is the need for more work on understanding intersectionality, in particular how sociocultural, economic and other dynamics can interact to create conditions of vulnerability (and resilience) amongst certain populations at any given time.

▪ The research found few examples of interventions that mainstream inclusion. However, the literature review identified twelve themes that could form an inclusive approach and be incorporated into CCA and DRR initiatives. There also appears to be a demand for training on disability, access to examples of best practice, and greater knowledge-sharing.

Resilience

▪ As noted above, people with disabilities are not a homogenous group, and individuals have widely varying degrees of resilience to climatic shocks – many of which are not directly related to their impairment. Failure to recognise these factors may lead to perpetuation of existing exclusions and hierarchies. Data analysis and interpretation therefore need to take these layers of complexity into account.

Limited capacity to adapt to livelihoods effects of climate change

▪ Anecdotal evidence from persons with disabilities suggest that not only do they need to be more informed and aware about climate and environmental issues, but that they were likely to be more badly affected than other groups in society, would be slower to recover from climate-related shocks, have less capacity to diversify their livelihoods or seek alternative sources of work or income, and therefore be more reliant on others for support in crises.

Accessibility of social protection and finance

▪ Access to social protection will be of growing importance for people with disabilities in the face of climate change. Currently, most programmes offer targeted, rather than universal coverage, with a tendency to identify beneficiaries through eligibility assessments, often undertaken by people who may not be fully trained to make such assessments, and often with limited registration systems, which end up relying on the same eligibility assessments. Moreover, eligibility criteria based on household poverty may mask the additional costs related to disability.

1.2. Recommendations

1. Enhance the evidence base

The evidence presented here supports previous findings on vulnerability to extreme events/disasters, suggesting that people with disabilities have a heightened vulnerability to the more severe impacts of climate change and reduced capacity for resilience, compared to the wider population. From the findings presented in the report, it is clear there is a need for more evidence to better understand not only *if* but also *how* the resilience of people with disabilities to climate risk can be enhanced by interventions. More clarity is also needed about what indicators should be used to demonstrate successful inclusion and increased resilience actually look like on the ground.

Also noted above, there are both knowledge and methodology gaps around intersectionality, with much more work needed on how to analyse this in the field. New technologies such as geographical information systems (GIS) and social media have the potential to play a greater role in helping to prepare and protect people with disabilities during disasters, but there is no evidence of them being used on a significant scale. More research on this is also needed.

2. Close the policy implementation gap

From the initial evidence presented here, more work needs to be done to strengthen implementation of policies, particularly to remove barriers at the local level and join up policymaking on cross-cutting issues such as disability and climate change. However, a range of factors impede this, including lack of budgetary allocation for disability-focused programmes, as well as for targeting disability in mainstream programming, limiting the delivery of policies. There also needs to be stronger monitoring mechanisms, with effective and established recourse mechanisms if they are not enforced.

3. Strengthen inclusion and rights

Tougher measures to enforce rights and challenge social norms are needed. It is clear from the research presented here that there is a need to build capacity of all actors involved in issues around climate change and disability, making use of existing national, regional and local structures. In particular, there is urgent need to raise awareness and build capacity of DPOs around climate issues so that they can support advocacy and the genuine inclusion of persons with disabilities in planning, decision making and implementation of climate strategies (including National Action Plans) which are currently being developed.

4. Learn lessons from good practice

The relatively limited evidence available suggests that the climate sector is currently behind DRR and humanitarian practice in implementing disability-inclusive approaches, though these appear to have had an uneven impact on the ground for people with disabilities in disaster-affected communities. There is however growing recognition that an integrated approach, linking disability with both DRR and CCA, can have a positive impact on both inclusion and resilience-building. This may also present an opportunity for the climate sector to get ahead of the curve, and not only learn from the experiences of inclusive-DRR, but actively to use these lessons to ensure that adults and children with disabilities are included in climate-related policies, programmes, research and development from the outset.

5. Implement a twin-track approach

It is clear that while mainstreaming adults and children in policies and programmes is beginning to happen, the other side of the track – the targeted approaches – is being left behind. This is resulting in an equity gap that will be difficult to close. From the empirical data presented here, subsuming disability within broader category of vulnerability, or assuming adults and children with disabilities can access mainstream programmes in the first place, can result in people with disabilities getting lost or even worse, becoming invisible within these mainstream programmes. This in turn leads them to want to be segregated or separated as they feel – perhaps not without some justification – that their issues are being ignored.

6. Resilience needs to be linked to social protection

Access to social protection will be of growing importance for people with disabilities in the face of climate change. As the research has highlighted, many persons with disabilities perceived they were

more likely to be affected by climate related shocks and be slower to adapt to climate change due to a lack of capacity (or willingness) to diversify economic activities; challenges with alternative sources of income, and their greater reliance on others for support in crises. Few yet had any links to formal climate finance mechanisms, though some accessed existing social protection schemes not directly linked to climate, but rather related to disability status. However, these are often restricted by definitional parameters, leading to some persons with disabilities not be considered 'poor enough', and therefore not eligible for programmes and despite the fact they may have extra costs related to their disability (e.g. for transport), their level of poverty is masked. There is therefore a need for greater clarity around these issues, as well as stronger linkages across sectors providing this support.

7. Importance of intersectionality

More information is needed on how to tease out the differing intersectional vulnerabilities of people, as current interventions tend to focus on homogeneous groups, often as part of a wider 'vulnerable group', where they often only focus on one specific aspect of perceived vulnerability, rather than how they intersect. Initial evidence presented here suggests how the impact of disability is mediated by a range of other factors, including power, poverty, class, and status, rather than the impairment itself. But more evidence is needed to explore these issues in detail.

8. Need for indicators

To date, there is little general agreement of what appropriate indicators would look like for disability inclusive climate programmes. Even if there are some limited targets on paper, there is little evidence of them actually being applied on the ground. As countries are currently setting their targets and indicators for the SDGs and other national development indices – including climate related targets – there is an opportunity to consider how disability-inclusive targets could be developed. Further research around existing tools and approaches, as well as developing new ones, is also needed.

1. INTRODUCTION

It is well recognised that people with disabilities are at increased risk during humanitarian disasters and that disaster preparedness and response must be inclusive of people with disabilities (Kett and Twigg 2007; Fujii, 2012; Stough and Kang, 2015; Sendai Framework, 2015). However, to date, very little work has explored issues around people with disabilities and resilience-building in the context of longer-term climatic and environmental change. The overall purpose of this research project was to respond to DFID's Terms of Reference (see **Annex 1**) on disability and climate resilience, specifically around the relationship between disability and an individual's vulnerability or resilience to climatic shocks and stresses, and the ways in which interventions can – or could – build the resilience of people with disabilities to such climatic shocks and stresses. The research also aimed to increase understanding of the links between disability and climate resilience and use this evidence to support the delivery of more effective policy and programme work that builds the resilience of people with disabilities.

The project addressed a range of questions around the relationship between disability and an individual's vulnerability/resilience to climatic shocks and stresses, including around identifying barriers; gendered and other intersectional issues; and around interventions that have attempted to

build the resilience of people with disabilities to the impacts of climate change. The research focused on two related overarching questions, as well addressing a set of related sub-questions:

What is the relationship between disability and an individual's vulnerability/resilience to climatic shocks and stresses?

- What are the different factors (social, economic and political) that influence exposure, sensitivity and ability to adapt to climate change for people with disabilities?
- What is the impact of intersecting inequality? How do other social characteristics (e.g. gender, age, and ethnicity) affect exposure, sensitivity and ability to adapt to climate change for people with disabilities?
- How do different disabilities affect exposure and sensitivity to the impacts of climate change and the ability to adapt?

How can interventions build the resilience of people with disabilities to climatic shocks and stresses?

- What are the specific drivers of vulnerability and resilience that need to be addressed for people with disabilities?
- How can these be addressed through policy and programme interventions? What is the strength of evidence for these approaches?
- What action can be taken by programme and policy staff working on climate change to ensure this work is disability inclusive?

To respond to these questions, the report begins by summarising the literature review which outlines the current global context and evidence gaps (Smith et al, 2017). It then moves on to discussing the results of a global online survey undertaken in 2017, which provides some examples of good practice being implemented in the field around climate change and climate-related disasters. The majority of work presented here is based on desk-based and field research in Kenya and Bangladesh. The research utilised various approaches to build up a picture of the current situation, comprising reviews of both climate-focused and disability-focused polices in the two countries, key informant interviews with policymakers and practitioners, as well as interviews and focus group discussions with people with disabilities in climate-impacted areas of the two countries. Though the two countries are experiencing different climatic changes, the impact of these changes on the lives of people with disabilities in both countries is in fact strikingly similar.

The report concludes by making recommendations for donors, policymakers and practitioners, as well as identifying avenues for further research. The audience for this work is diverse and includes DFID to support their priorities on resilience building, particularly in relation to climate change, and on reaching the poorest and most vulnerable people, including people with disabilities. It will also be relevant for international and national partners working on poverty alleviation, climate resilience and on the rights and empowerment of people with disabilities in developing countries more broadly, as ultimately the research aims to bring about changes in practice.

1.1. Country context

1.1.1. Kenya

In Kenya, extensive work has already begun in the areas of climate change adaptation (CCA) and disaster risk reduction (DRR)/management. The National Climate Change Action Plan (2013-2017) aims to integrate CCA into Vision 2030 (Kenya's development agenda), as well as mainstreaming CCA into the County Integrated Plans of Kenya's 47 counties. Kenya is also the only country in the region with a climate change performance benefits measurements framework for assessing progress on adaptation and mitigation.[2] Kenya has also signed up to the East African Communities' Disaster Risk Reduction and Management Bill. It is also the only country in East Africa with a Climate Change Act (2016); and a Climate Change Response Strategy (2010), and is developing a National Action Plan on Disaster Risk Reduction. In early 2016, Kenya piloted indicators to assess progress toward this Plan in Kisumu (Kenya's third largest city), which is prone to flooding due to its proximity to Lake Victoria.

Kenya has also shown a strong commitment to disability issues in the revised Constitution (2010). In line with this and its commitments to the UN Convention on the Rights of Persons with Disabilities (CRPD; signed and ratified in 2007 and 2008 respectively), there is also a National Policy for Persons with Disability (2013) and a revised Persons with Disabilities Act (2012). Kenya is also signatory to the East African Community Persons with Disability Bill (2015).

However, a specific focus linking the two issues of people with disabilities and climate change resilience is only just emerging. Kenya has been classed – alongside other countries in the region – as being vulnerable to climate change for a range of factors, including its location along the Equator; its reliance on climate-sensitive sectors such as rain-fed agriculture and tourism; and its low coping capacity. Communities in Kenya are already grappling with food insecurity, famine and the impact of large-scale population displacement due to prolonged drought, flooding and rising sea levels along the coastal belt, as well as an increase in climate-related diseases such as malaria. Action to address this is ongoing but closer linkages between actions relating to resilience, DRR and people with disabilities are yet to crystallise.

While Kenya's Climate Change Act does not make specific reference to people with disabilities, the intention to 'cater for special needs, vulnerabilities, capabilities, disparities and responsibilities' (Government of Kenya, 2016) is clearly outlined. The new Constitution of Kenya (2010) resulted in the Devolution Agreement (2013), which in turn led to the decentralisation of numerous government functions. However, to date, it appears that county governments have done little to integrate climate change into development plans, or develop adaptation policies for vulnerable populations, including people with disabilities.

In sum, the impacts of the changing climate on people with disabilities in Kenya are a result of a range of factors, including a limited evidence-based data on people with disabilities, in particular on the compounding factors that would affect people with disabilities in times of disasters and emergencies caused by climate change. This is in part due to limited or weak data collection mechanisms in Kenya. Moreover, there are competing interests (at local and national level) and limited political will to provide leadership for the participation of people with disabilities in climate change policies and issues. To date, any championing for the inclusion of disability issues in climate policy dialogues has been minimal, and people with disabilities have not being involved in decision-

---

[2] Kenya moves to complete the National Adaptation Plan

making processes. These gaps are further compounded by persistent sociocultural norms that stigmatise, discriminate and promote negative practices towards people with disabilities, which create obstacles and results in limited access to education, health, food, rehabilitation services, employment and other forms of social protection. Finally, there is limited funding for research and development around these issues, which means that recommendations are seldom implemented, leading in turn to a lack of innovation, dissemination, and uptake of new technologies that address climate change issues.

1.1.2. Bangladesh

Bangladesh has been identified as the one of the countries globally that is most at risk of and vulnerable to the impacts of climate change (Verisk Maplecroft, 2016; Kreft et al, 2015). Bangladesh – often working with international partners – has invested heavily in increasing the country's resilience to environmental hazards at all levels through a range of programmes including advanced warning systems and community-based preparedness schemes.

In the coastal areas of Bangladesh environmental hazards are part of everyday life. Frequent storms formed in the Bay of Bengal and associated tidal surges often transform the landscape. One example is Cyclone Sidr (2007) which struck the south-west coast of Bangladesh with winds up to 240km per hour. People with disabilities are particularly vulnerable to the impacts of these disasters: during Cyclone Sidr, there were reports of incidents of people with disabilities being left behind during evacuations (Rahman and Mallick 2007; Islam 2015).

Other environmental impacts, such as flooding, regularly inundate the land. The environment is altered through river erosion, siltation, rising sea levels, arsenic pollution and groundwater salinity. The increasing salinity of the earth is a major challenge as it has a significant impact on crop and paddy yields, causing food and livelihood insecurity. Regular environmental hazards frequently undermine the resilience of local livelihoods by washing away assets and reducing the productivity and fertility of the land. As the impacts of climate change increase, the options of people in impacted communities are affected. A high level of migration away from unproductive areas further undermines the resilience of the land and people who remain. These challenging contexts limit the range of livelihoods available, and impact poverty levels.

The Government of Bangladesh has recognised the connection between disability and disasters, and is seeking to ensure this relationship is better addressed and understood, as evidenced by its co-hosting with UNISDR of the Dhaka Conference on Disability and Disaster Risk Management in December 2015, resulting Dhaka Declaration on Dhaka Declaration on Disability and Disaster Risk Management, which was adopted at the conference.

There has been a growing focus in Bangladesh on disability-inclusive legislation, following the ratification of the CRPD in 2007. The Rights and Protection of Persons with Disabilities Act (2013) has helped to align previous disability-focused Acts and Standing Orders. Continued advocacy among disabled people's organisations (DPOs) and other civil society groups has also resulted in increased attention, including a letter issued by the Ministry of Local Government Rural Development and Cooperatives specifying the role of local government and calling on Union Committees (*Union Parishad* in Bengali – who are responsible for a range of issues including planning and addressing risk) to ensure the inclusion and representation of people with disabilities, and a High Court ruling

[calling on government departments to fully activate the Disability Rights and Protection Act](#) into their work.

However, much of this legislation is yet to be realised in practice. People with disabilities living in Bangladesh continue to face a particularly challenging environment. Barriers in accessing education, health care, employment and forms of social protection are compounded by high levels of discrimination from within communities, households and families. These barriers are often heightened for girls and women with disabilities, who face additional constraints due to societal norms, and experience sexual violence and other abuse.

2. THE TEAM

The research team was led by Dr Maria Kett, Head of Research at [Leonard Cheshire Research Centre](#) (LCRC) and was supported in the UK by Ellie Cole (formerly Research Assistant); Dr John Twigg, Principal Research Fellow at [Overseas Development Institute](#) in the Risk and Resilience team; Mr Fred Smith, Head of Policy at [Sightsavers International](#); as well as Mr Mathieu Simard (a PhD candidate based in Canada).

In Kenya, Winnie Khaemba, Research Fellow at the [African Centre for Technology Studies](#) (ACTS) led the team in partnership with Mr Washington Oloo from [United Disabled Persons of Kenya](#) (UDPK).

In Bangladesh, the research was led by Dr Saleemul Huq, Director of [the International Centre for Climate Change and Development](#) (ICCCD) at the Independent University, Bangladesh, along with Dr Feisal Rahman, Lecturer at ICCAD and IUB and Ms Shababa Haque, Research Officer at ICCCD. The research was undertaken in partnership with [Centre for Services and Information on Disability (CSID)](#), in particular Mr Iftekhar Ahmed and Mr Khandaker Jahurul Alam.

The team regularly communicated by Skype over the lifetime of the project and had quarterly minuted meetings. UK-based colleagues met in person six times over the duration of the project. Dr Maria Kett also met the project team twice in Kenya and twice in Bangladesh during the course of the research; as well as meeting Winnie Khaemba and Shababa Haque in Bonn, during the Conference of the Parties (COP) 23.

3. METHODOLOGY

To address the questions framed in the terms of reference, a range of methods were used to gather as comprehensive a picture as possible of the current situation, as well as obtain empirical data from affected populations. The team started with an extensive literature review to identify the current evidence and gaps. We also undertook a global online survey to identify current practices being implemented in the field around climate change and climate-related disasters. In addition to policy analyses from both Bangladesh and Kenya, empirical data using key informant interviews and focus group discussions with people with disabilities in climate-impacted areas of Bangladesh and Kenya was also obtained. Each of these is outlined in turn below.

3.1. Literature review

At the outset of the research, a literature review was undertaken by the team in London, led by Fred Smith (Sightsavers),to understand the links between climate change, disaster risk management and

development practices, and to identify evidence of disability-inclusive practices in climate change adaptation programme (Smith et al, 2017).

The review covered literature from 2007 onwards relating to low- and middle-income countries. The reviewers retrieved and screened 1,011 articles and 546 grey literature sources. A total of 107 relevant sources were selected from the published and grey literature, of which 53 were included in the final review. Search terms focused on disability and climate change, disasters, DRR and natural hazards (see Smith et al, 2017 for search terms). The bibliographic databases searched were Eldis, PreventionWeb, Science Direct, Scopus and Source.

The review was completed in April 2017 and has been uploaded online to ResearchGate (a social networking site for scientists, researchers and practitioners to share papers, ask and answer questions, and find collaborators).

3.2. Online survey

To substantiate the literature review and to capture the array of work being done globally, a short online survey was developed. The survey tool was based on finding from the literature review, as well as previous online surveys developed by the African Centre for Technology Studies. The survey aimed to assess the current situation regarding disability-inclusive climate resilience programming; what, if any, emphasis organisations are placing on disability issues; and the strategies in place for including people with disabilities (see **Annex 2**).

The survey, which was designed by Ellie Cole with support from the research team, contained both structured and open-ended questions to enable detailed information about organisations' climate and disability-focused programming to be drawn out. It was uploaded to SurveyMonkey, and the link was shared widely with a range of actors, including key identified stakeholders (such as international and national NGOs, DPOs and their constituents, policymakers and academics), the research team's professional contacts, and mailing lists and listservs including the International Disability and Development Consortium and the disability-disasters listserv. The survey was active and open for submissions for two months, during which time 100 responses from 28 countries were generated. Results from the survey are presented below.

3.3. Policy analysis

To better understand the links between policy and practice, a comprehensive policy analysis was undertaken that specifically addressed the issues of climate change and disability. The analysis aimed to identify how policy specifically addresses people with disabilities and resilience; their access to information on climate change; participation in planning and decision-making; budgeting for targeted programmes and monitoring for disability-specific interventions. The country-based research teams identified at least three key pieces of legislation, policies or road maps regarding climate change; as well as at least three (where available) pieces of legislation, policies or road maps that aimed to address disability issues in their countries. These selected documents were discussed and agreed with the UK teams, and the policies from each country were analysed using a standardised framework to enable comparability. Training on applying the tool to the selected policies was given to the Kenya team during the inception meeting by Dr Maria Kett with remote support from Ellie Cole. Ellie trained the Bangladesh team on using the tool via Skype.

The tool was adapted from the methodology set out in Walt and Gilson ([1994](#)). Each policy was scored against several criteria to determine the extent to which people with disabilities were included in the policies and where (the tools can be found in **Annex 3**). Each criterion was scored on a scale of 1-4 depending on the extent to which disability is addressed in the policy: 1 (weak); 2 (questionable); 3 (medium); and 4 (high). The review sought to identify whether specific issues such as accessibility of services for people with disabilities were addressed, the extent of their representation in the document, as well as the existence of targeted plans and strategies for monitoring implementation. The scores reflect inclusion or gaps in provision and help identify areas for possible strengthening.

The review also examined the context in which the policies were developed, including an examination of the political, economic and social contexts and how these might have influenced the policymaking processes. A review of the actors involved during the process was also undertaken, and also sought to identify who might be notably absent.

3.4. Interviews and focus group discussions

The aim of the empirical part of the research was to explore in-depth the relationship between disability and an individual's vulnerability/resilience to the impacts of climate change, looking at perceptions of climate resilience, existing policies, programmes and practices aimed at promoting individual and community resilience (and their perceived effectiveness); as well as asking for examples where the resilience of people with disabilities to climate risk had been enhanced by these interventions. Findings from the literature review, online survey and policy analysis fed into the development of the research tools: thematic guidelines for focus group discussions with people with disabilities in climate-affected communities; and semi-structured interview guides for key informants (**annexes 4 and 5**). A list of 20 potential key informants from each country was shared and agreed prior to the teams going into the field. Access to people with disabilities in the selected communities was facilitated by UDPK in Kenya; and CSID in Bangladesh.

Fieldwork was undertaken between June and November in the two focus countries with support from the UK-based team. A total of six focus group discussions with people with disabilities and 19 key informant interviews were conducted in Bangladesh; and a total of four focus group discussions; and 10 key informant interviews conducted in Kenya. Case studies were also gathered during the field research phase and are presented in **annex 7**. Further comparative analysis of the data by the UK-based team sought to draw out evidence of existing social divisions and inequalities; understand how intersecting inequalities affect exposure to climate risk, shocks and stresses; and identify areas of good practice.

Table 1 Overview of qualitative research activities

Region	Research activity	Respondents
Kenya		
Isiolo	Focus group discussions (2)	1 women with disabilities; 1 men with disabilities
	Key informant interview (3)	National Environmental Management Authority (NEMA); Ministry of Environment Water, Energy and National Resources;

		National Council for Persons with Disabilities
Kisumu	Focus group discussions (2)	1 women with disabilities, 1 men with disabilities
	Key informant interview (2)	NEMA; Department of Environment
Nairobi	Key informant interviews (5)	Inter-agency Working Group; National Council for Persons with Disabilities; National Drought Management Authority; SUSWatch; Ministry of Labour;
Bangladesh		
Barisal	Focus group discussions (4)	2 women with disabilities; 2 men with disabilities
	Key informant interview (7)	Ministry of Disaster Relief and Management; Department of Environment; University academic; Community representatives (2); DPO representatives (2)
Gaibanda	Focus group discussions (2)	1 women with disabilities; 1 men with disabilities
	Key informant interview (2)	1 women with disabilities; 1 men with disabilities
	Key informant interview (6)	Parent of child with disabilities, 1 male, 1 female; Union Parishad member, 1 male, 1 female; school teacher, 1 male, 1 female
Dhaka	Key informant interview (4)	Ministry of Social Welfare; Department of Disaster Management; INGOs (Handicap International[3] and Sightsavers)

3.4.1. Kenya

A total of four focus group discussions were held in two locations in Kenya: Kisumu and Isiolo. Kisumu is prone to flooding due to its proximity to Lake Victoria. It was also one of the pilot locations for a climate risk-based adaptation analysis conducted in 2012 during the preparation of the National Climate Change Action Plan. This analysis included pilot indicators for monitoring performance, and although there are references to the 'climate vulnerable poor' and 'vulnerable groups', in the report, the exact make up of who was included in these groups was not gicen. In Kisumu, two focus group discussions were held with people with disabilities (one with men and the other with women). The same procedure was followed in the second location, Isiolo, an arid and semi-arid land area in the Upper Eastern region. Here the county government has gone as far as developing its own Isiolo County Climate Change Fund Bill (2016), which stipulates that Ward Planning Committees should include one person with disabilities as an 'interest group'.

3.4.2. Bangladesh

A total of six focus groups were held in two regions in Bangladesh facing different types of climatic hazards. Gaibanda is located in the northern part of the country and faces climatic stresses such as river erosion and flooding during the monsoon season. In 2017, the water level to rose to more than 17cm above river danger levels. This led to severe flooding in the area and caused many houses to

---

[3] Now Humanity and Inclusion

be washed away as a result of erosion of the Brahmaputra riverbank. By contrast, Barisal is located in the southern part of Bangladesh. It is a coastal region susceptible to cyclones and flooding. In 2007 when Cyclone Sidr struck the south-west coast of Bangladesh, a large segment of the population was affected. People with disabilities were amongst those hit the hardest for a variety of reasons, including that they were note able to evacuate their homes easily. Many were left behind, and many faced severe trauma following the cyclone.

Four focus groups were held in Barisal (two with men with disabilities; two with women with disabilities); two focus groups were held in Gaibanda (one male and one female). Each focus group had approximately 12 participants.

In addition to the focus group discussions, 17 key informant interviews were also undertaken in the two locations plus in Dhaka. Two case studies from Bangladesh have been selected to illustrate some of the impacts of repeated disasters on people's lives (see **annex 7**).

3.5. Limitations

While the research has highlighted a number of key issues, it should be acknowledged that it is limited in both size and scope. Using mainly the online survey and some focus group discussions and key informant interviews has given us some insights to people's experiences, but less capacity to draw out the range of socioeconomic differentials or differential impacts of gender, age, class and impairment. We do present some discussions based around issues of intersectionality below (see section **Error! Reference source not found.**).

An additional challenge in in Kenya was the post-election violence, which led to some delays in the undertaking of the qualitative research.

4. OUTPUTS AND IMPACT

Members of the research team have been involved in a number of activities to raise awareness and interest in the project with a view to increasing its overall impact and uptake.

The project was [formally launched by Professor Saleemal Huq](#) in January 2017at the [3rd Gobeshona conference](#), held in Dhaka (8-11 January 2017). The conference was attended by around 350 people from around 10 different countries. Delegates represented academia, non-governmental organisations and government. Dr Maria Kett (PI) attended the conference to meet partners as well as a range of stakeholders, including representatives from DFID Bangladesh and the United Nations Environmental Programme (UNEP). Shababa Haque, Winnie Khaemba and Dr Maria Kett were invited to give an informal summary of the project at an evening side event at COP 23 in Bonn on 'Loss and Damage', hosted by ICCCAD on 9th November 2017. The event was attended by over 50 people, including representatives from UNEP, World Bank, CARE and academia, including the United Nations University, Bonn and the Earth Science Institute at Colombia University. The team received very good feedback from the audience, including colleagues from Practical Action, UCL and GiZ.

The [results of the research were formally presented](#) at the [4th Gobeshona conference](#) in Bangladesh (January 2018). The conference was attended by over 400 people, including representatives from the Bangladesh government, USAID, DFID, the UNEP, NGOs including Practical Action; academics from 14 different countries; as well as students, civil society and other stakeholders. The panel on Disability Inclusion was attended by over 30 participants of academics and practitioners, and was

well-received. The project also had coverage in the Dhaka Tribune, a national English-language daily newspaper which features a monthly special section on climate issues. Dr Kett and Ellie Cole wrote an [article highlighting the issues in the research](#) for the paper's regular climate-focused supplement (11 January 2018).

The PI, Dr Maria Kett, has also had the opportunity to engage with DFID on multiple occasions: in June 2017, she was invited to join Rachael Freeth (formerly Social Development Advisor, Climate Evidence Division, DFID) to present on 'Disability inclusion in climate, environment and infrastructure interventions' at an internal event in London, which generated interest and discussion. In Kenya, she met with Christine Kolbe, Head, East Africa Research Hub (this was a wide-ranging meeting to discuss several areas of work including this); and in January 2018, she met with representatives in DFID Bangladesh.[4]

The literature review has already been uploaded to ResearchGate and Source and has already generated interest' to date it has been downloaded over 40 times (17 April 18), as well as cited in other publications.[5] The team are in the process of developing a number of publications to be submitted to peer-reviewed journal such as *Environment and Development*. On acceptance, these will be published as open-access papers, so that they can reach the widest possible academic and advocacy audiences. Short summaries will be shared via a range of social media such as Twitter, and existing networks including the [Disability and Disasters listserv](#), [Prevention web](#) and other similar resources.

5. RESULTS

5.1. Literature review

An important theme identified by the literature review is the clear link between the impacts of climate change, disasters and disability ([Smith et al, 2017](#)). However, there is a lack of evidence of *how* to enhance the resilience of people with disabilities in CCA and DRR programmes. The data available demonstrate heightened vulnerability for at-risk people, including the more severe impact of climate change on people with disabilities – and reduced capacity for resilience – than the wider population.

Given this lack of available data, the literature review also drew on findings from disability-inclusive DRR and humanitarian practice. DRR programmes are increasingly inclusive of people with disabilities, and some examples of good practices include inclusive hospital preparedness plans, targeted cash transfers and training for children with disabilities.

Understanding climate resilience and intersectionality also emerged as an important theme. Evidence on the relationship between climate resilience and other people considered to be at risk – including women, children, older persons and indigenous people – demonstrated that an individual's resilience is shaped by existing inequalities, individual and social characteristics, and how these factors intersect. Available evidence also suggests that what constitutes disability-inclusive practice is also true for other people who are considered at risk. The review noted that there is a prevailing trend to apply a broad and rather static understanding of 'vulnerable' people, rather than

---

[4] Full list of names available on request.
[5] Including 'Prioritizing CVID-specific Child Protection Programming in Complex Emergencies'

considering how a range of factors may intersect to highlight specific aspects of of vulnerability. To this end, it highlighted a number of gaps in what we know in relation to climate resilience, disability and other at-risk groups.

Available evidence reflects the challenges with over-simplification. As with definitions (e.g. of resilience), there is a danger of homogenising issues around disability which in turn perpetuate existing exclusions and hierarchies. Data analysis and interpretation therefore needs to consider layers of complexity and how they intersect, as well as how they can be used to foster resilience, while being careful not to bolster one group's power and privilege to the detriment of another.

Although the review found a shortage of concrete examples of enhancing resilience of people with disabilities to climate risks, it did identify examples of organisations targeting or initiating specific interventions. There are though few examples of interventions that mainstream inclusion. Based on the available evidence, the review identified twelve themes that could form an inclusive approach and should be incorporated into CCA and DRR initiatives to help develop evidence-based recommendations and guidelines on building the resilience of people with disabilities (Smith et al, 2017; p:35-42).

The review concludes that there is increasing evidence that the most effective and sustainable approaches to dealing with the risks posed by climate change, disasters and poverty are connected, and therefore efforts to address – and build resilience to – them should be integrated and, critically, inclusive. For the Paris Agreement, Sendai Framework and Agenda 2030 to be realised in practice, the rights of people with disabilities must be embedded in mainstream CCA, DRR and poverty alleviation efforts. The effective participation, engagement and empowerment of people with disabilities – and other people considered to be at-risk – will ultimately define their success. Inclusive, integrated approaches to address climate change, disasters and poverty are required to ensure the systematic inclusion of people with disabilities in programmes and policies, and empower people with disabilities to play an active and leading role in CCA, DRR and poverty alleviation.

5.2. Online survey

The online survey was live for two months (July and August 2017), during which time 100 respondents from 28 countries participated. The majority of respondents were from Africa (49%) or Asia (31%), but the sample also included 21 individuals from other regions. Of these, most organisations were based in the USA or Europe but implementing programmes in Africa and Asia focused on DRR or humanitarian response. Several of the academic institutions who responded reported having degree programmes and courses related to disasters and DRR.

5.2.1. Organisations and programmes

The initial questions of the survey invited information about respondents and their organisations. The majority of respondents were in senior management (40%) or team leader (27%) roles and had been with their organisation for 5 years on average (range 1 month-40 years). Over half of the sample (57.9%) had attended disability training.

		Have you attended any disability training?	
		No	Yes
Region	Africa	36.2% (17)	63.8% (30)

	Asia	48.3% (14)	51.7% (15)
	Americas	12.5% (1)	87.5% (7)
	Europe	77.8% (7)	22.2% (2)
	Australasia	50.0% (1)	50.0% (1)
Total		42.1% (40)	57.9% (55)

Respondents were asked whether their organisations had departments or focal points focused on disability or climate change. Almost two thirds (64.2%) stated that their organisation had a focal point/department working on disability issues. Of the respondents whose organisation had a disability focal point, 88% reported working with them, and 88% of these worked with the focal point regularly.

		Does your organization have a focal point/department working on disability issues?			
		No	Yes	Don't know	Total
Region	Africa	29.8% (14)	61.7% (29)	8.5% (4)	100.0% (47)
	Asia	34.5% (10)	62.1% (18)	3.4% (1)	100.0% (29)
	Americas	12.5% (1)	87.5% (7)		100.0% (8)
	Europe	44.4% (4)	55.6% (5)		100.0% (9)
	Australasia		100.0% (2)		100.0% (2)
Total		30.5% (29)	64.2% (61)	5.3% (5)	100.0% (95)

The majority of respondents (70.5%) also reported that their organisation had a focal point/department working on climate change and environmental issues. Over three quarters of respondents (78%) whose organisations had climate change focal points reported working with them, and 91% of these worked with them regularly.

		Does your organization have a focal point/department working on climate change and environmental issues?			
		No	Yes	Don't know	Total
Region	Africa	34.0% (16)	63.8% (30)	2.1% (1)	100.0% (47)
	Asia	20.7% (6)	75.9% (22)	3.4% (1)	100.0% (29)
	Americas	25.0% (2)	75.0% (6)		100.0% (8)
	Europe	22.2% (2)	77.8% (7)		100.0% (9)
	Australasia		100.0% (2)		100.0% (2)
Total		27.4% (26)	70.5% (67)	2.1% (2)	100.0% (95)

Only 8 respondents reported not having focal points for both environmental and disability issues in their organisations. However, the survey only shows the existence of the different focal points, not the extent to which they work together.

		Does your organization have a focal point/ department working on disability issues?			Total
		No	Yes	Don't know	
Does your organization have a focal point/department working on climate change and environmental issues?	No	8	18	0	26
	Yes	21	42	4	67
	Don't know	0	1	1	2
Total		29	61	5	95

Over half of respondents stated that people with disabilities were included in their climate-focused programmes (58.5%). However, people with disabilities were much more likely to be included in climate-focused programmes in Asia (69.0%) than in Africa (52.2%).

		Are people with disabilities included in your climate-focused programmes?			
		No	Yes	Don't know	Total
Region	Africa	28.3% (13)	52.2% (24)	19.6% (9)	100.0% (46)
	Asia	20.7% (6)	69.0% (20)	10.3% (3)	100.0% (29)
	Americas	12.5% (1)	75.0% (6)	12.5% (1)	100.0% (8)
	Europe	22.2% (2)	33.3% (3)	44.4% (4)	100.0% (9)
	Australasia	0.0% (0)	100.0% (2)	0.0% (0)	100.0% (2)
Total		23.4% (22)	58.5% (55)	18.1% (17)	100.0% (94)

5.2.2. At-risk or vulnerable populations

One question asked respondents to choose from a list the populations that they consider to be the most vulnerable in climate affected communities. Up to three population groups could be selected:

- Women
- Children
- Older people
- People with HIV/AIDS
- People with disabilities
- LGBT people
- Migrant people
- Displaced people
- People living in extreme poverty
- People from ethnic minority groups
- Other

Across all respondents, women were by far the most likely to be picked as the 'number one' vulnerable populations – however, this may be an artefact of 'women' being first in the options list. Children were the second most likely vulnerable group to be chosen as the first 'vulnerable' population.
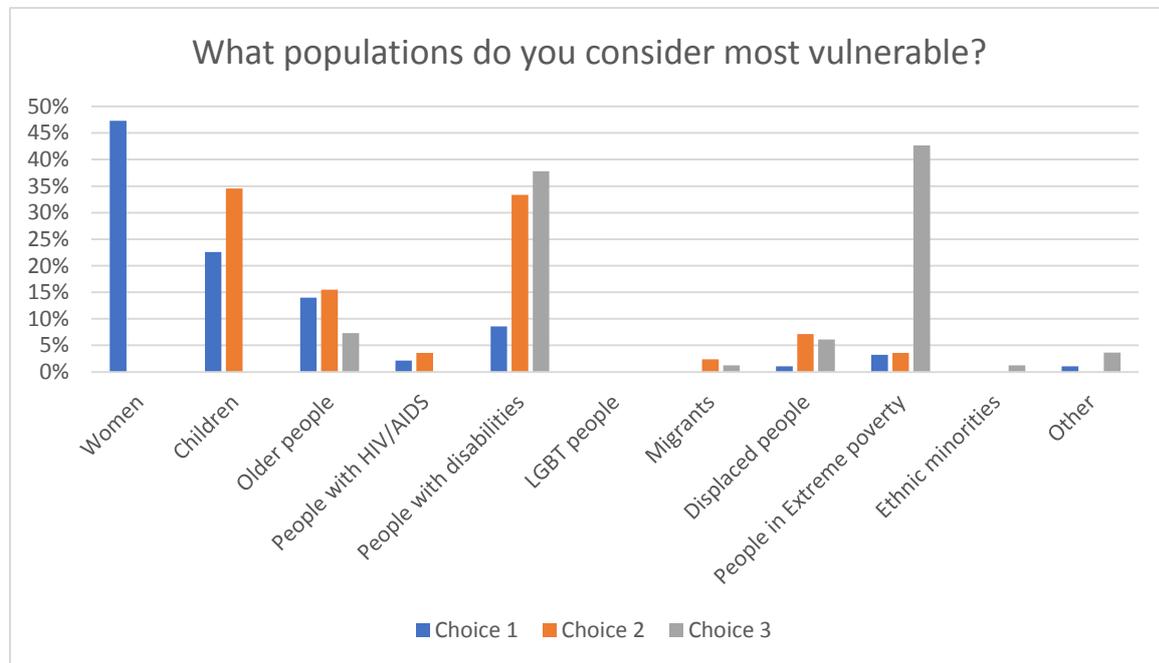
Children and people with disabilities were the most common second option choice, and people with disabilities and people living in extreme poverty were the most likely third option. Interestingly, no respondents selected LGBT people as a vulnerable population, and migrants, displaced people and ethnic minorities were similarly consistently overlooked. This is an interesting result, particularly because many of the respondents were located in Bangladesh, and the survey was implemented well after the Rohingya refugee crisis began.

The aggregated results potentially mask regional differences. Therefore, the Asia and Africa regions were also analysed separately.

What populations do you consider most vulnerable? Africa

What populations do you consider most vulnerable? Asia
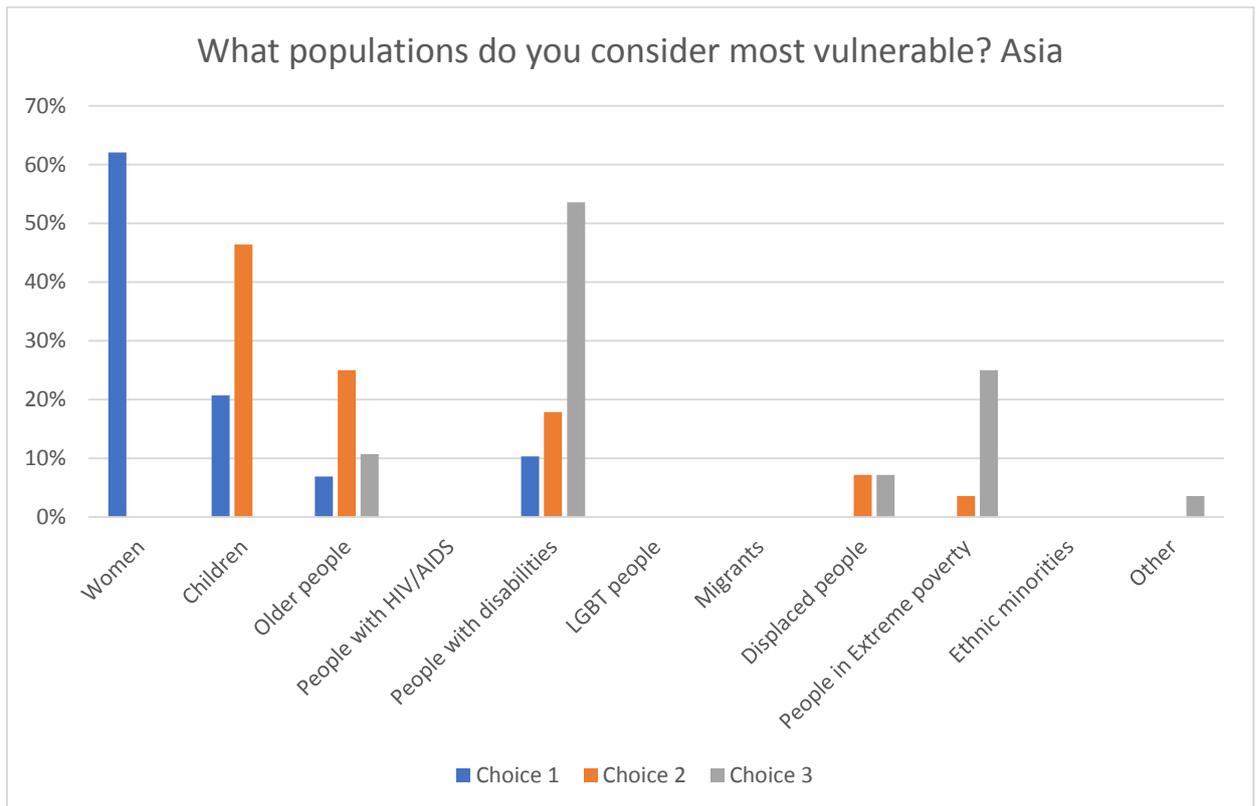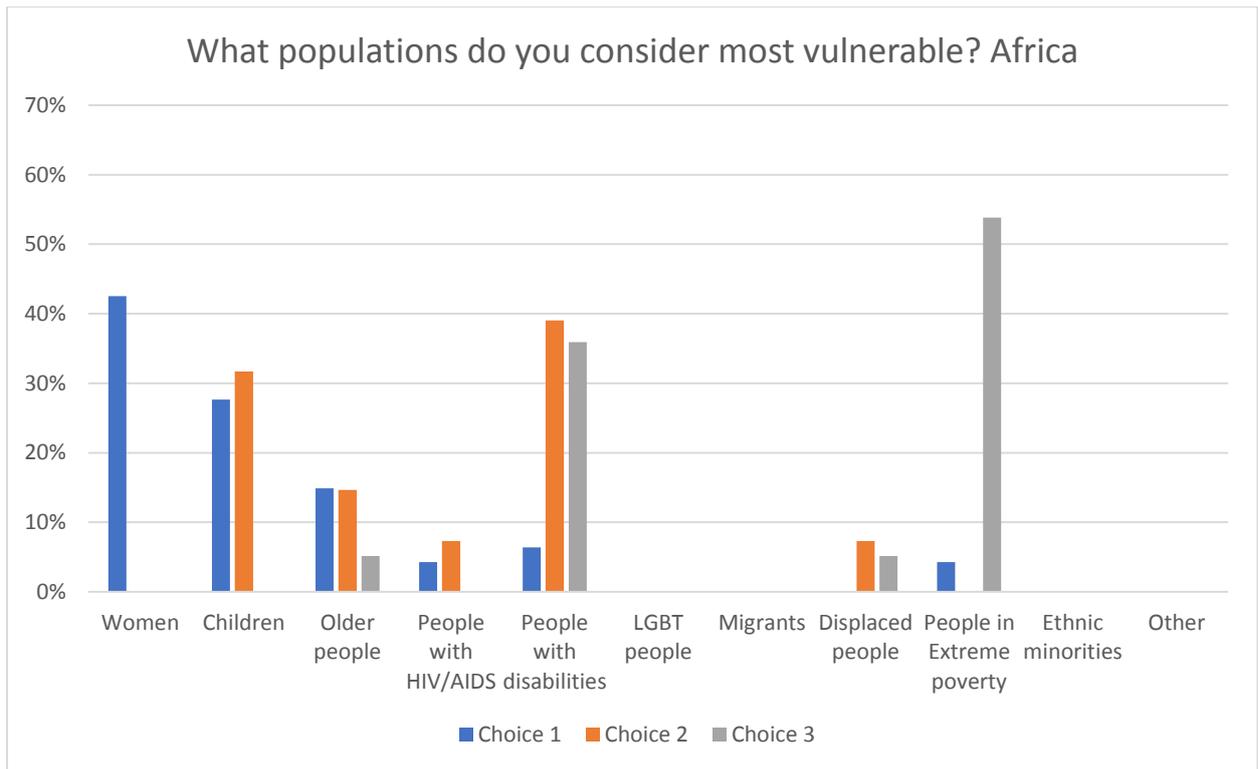
In both regions, women were the most likely population to be picked first, followed by children. However, in Africa, people with disabilities were the most likely second choice (as well as children), but children and older people were considered to be more vulnerable in the Asia region. People

living in extreme poverty were most likely to be picked as the third option in the Africa region, followed by people with disabilities. The reverse distribution was found in Asia.

5.2.3. National policies

The next section of the survey asked about national policies, priorities and disability inclusion. Three quarters of respondents (74.5%) reported their country having a disability policy; yet all the respondents' countries have signed and ratified the CRPD (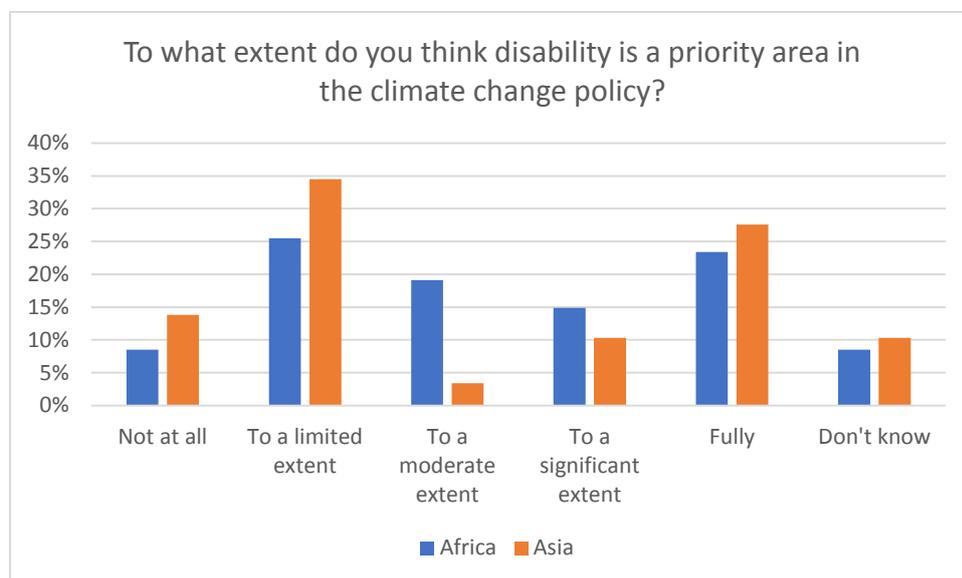apart from the USA, which is only a signatory to the Convention), meaning that they should have disability policies in line with the terms of the Convention. Worryingly, 16% of the sample did not know whether their country had a disability policy, which may have implications on how they effectively include people with disabilities in their programming if they are not aware of national policies.

		Is there a national disability policy in your country?			
		No	Yes	Don't know	Total
Region	Africa	14.9% (7)	68.1% (32)	17.0% (8)	100.0% (47)
	Asia	3.4% (1)	86.2% (25)	10.3% (3)	100.0% (29)
	Americas	14.3% (1)	85.7% (6)	0.0% (0)	100.0% (7)
	Europe	0.0% (0)	55.6% (5)	44.4% (4)	100.0% (9)
	Australasia	0.0% (0)	100.0% (2)	0.0% (0)	100.0% (2)
Total		9.6% (9)	74.5% (70)	16.0% (15)	100.0% (94)

Respondents were then asked the extent to which they felt that disability was a priority in their national climate change policies. Across the whole sample, responses tended to be split between 'to a limited extent' (33%) and 'fully' (21.3%).

		To what extent do you think disability is a priority area in the climate change policy?						
		Not at all	To a limited extent	To a moderate extent	To a significant extent	Fully	Don't know	Total
Region	Africa	8.5% (4)	25.5% (12)	19.1% (9)	14.9% (7)	23.4% (11)	8.5% (4)	100.0% (47)
	Asia	13.8% (4)	34.5% (10)	3.4% (1)	10.3% (3)	27.6% (8)	10.3% (3)	100.0% (29)
	Americas	0.0% (0)	85.7% (6)	0.0% (0)	14.3% (1)	0.0% (0)	0.0% (0)	100.0% (7)
	Europe	22.2% (2)	33.3% (3)	22.2% (2)	0.0% (0)	11.1% (1)	11.1% (1)	100.0% (9)
	Australasia	50.0% (1)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	50.0% (1)	100.0% (2)
Total		11.7% (11)	33.0% (31)	12.8% (12)	11.7% (11)	21.3% (20)	9.6% (9)	100.0% (94)

Responses from the Africa and Asia regions are also presented below (the sample sizes from the other regions were not large enough to show accurate tends). Like the global results, the graph shows a similar distribution.

To what extent do you think disability is a priority area in the climate change policy?

Respondents were asked whether national climate change policies included disability-specific targets. The most striking finding was that a significant proportion (46.2%) did not have an answer to this.

		Are there disability-specific targets in the national climate change policy?			
		No	Yes	Don't know	Total
Region	Africa	23.9% (11)	26.1% (12)	50.0% (23)	100.0% (46)
	Asia	37.9% (11)	31.0% (9)	31.0% (9)	100.0% (29)
	Americas	42.9% (3)	14.3% (1)	42.9% (3)	100.0% (7)
	Europe	11.1% (1)	11.1% (1)	77.8% (7)	100.0% (9)
	Australasia	50.0% (1)	0.0% (0)	50.0% (1)	100.0% (2)
Total		29.0% (27)	24.7% (23)	46.2% (43)	100.0% (93)

The graph below shows the distribution of the extent to which disability was perceived as a priority area disaggregated by whether disability targets are included in climate policy. As might be predicted, where disability targets were included, respondents felt that disability issues were a priority in climate policy. Conversely, where disability-specific targets were not present, respondents reported disability issues being a lower priority.

Are there disability-specific targets in the national climate change policy? To what extent do you think disability is a priority area in the climate change policy?
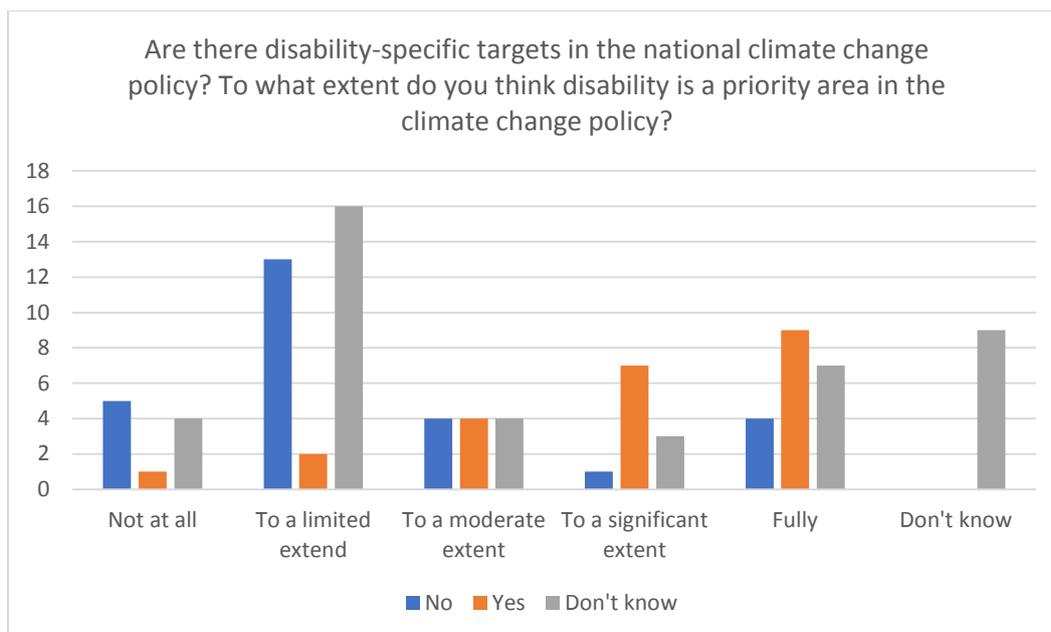
Respondents were asked whether they considered climate policy to be successfully implemented. Less than a fifth (18.3%) felt that the policy was being implemented successfully, and just over half (54.8%) responded negatively.

		Do you think that the climate policy is implemented successfully?			
		No	Yes	Don't know	Total
Region	Africa	52.2% (24)	19.6% (9)	28.3% (13)	100.0% (46)
	Asia	58.6% (17)	20.7% (6)	20.7% (6)	100.0% (29)
	Americas	57.1% (4)	14.3% (1)	28.6% (2)	100.0% (7)
	Europe	55.6% (5)	11.1% (1)	33.3% (3)	100.0% (9)
	Australasia	50.0% (1)	0.0% (0)	50.0% (1)	100.0% (2)
Total		54.8% (51)	18.3% (17)	26.9% (25)	100.0% (93)

Respondents were then asked the extent to which they felt that people with disabilities were represented in policy-making and implementation related to climate resilience. Almost half of the sample stated that people with disabilities were not represented at all (16.8%) or only to a limited extent (31.6%). A third of respondents (32.6%) did not know the level of representation of people with disabilities in policy-making and implementation.

		To what extent are people with disabilities represented in climate resilience policymaking and/or implementation?						
		Not at all	To a limited extent	To a moderate extent	To a significant extent	Fully	Don't know	Total
Region	Africa	12.8% (6)	34.0% (16)	12.8% (6)	6.4% (3)	2.1% (1)	31.9% (15)	100.0% (47)
	Asia	17.2% (5)	34.5% (10)	13.8% (4)	3.4% (1)	3.4% (1)	27.6% (8)	100.0% (29)
	Americas	25.0% (2)	50.0% (4)	0.0% (0)	12.5% (1)	0.0% (0)	12.5% (1)	100.0% (8)
	Europe	22.2% (2)	0.0% (0)	0.0% (0)	0.0% (0)	11.1% (1)	66.7% (6)	100.0% (9)
	Australasia	50.0% (1)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	50.0% (1)	100.0% (2)
Total		16.8% (16)	31.6% (30)	10.5% (10)	5.3% (5)	3.2% (3)	32.6% (31)	100.0% (95)

The responses from the Africa and Asia regions were similarly distributed to those of the global results. Respondents felt that people with disabilities were not represented in climate resilience policymaking or implementation, or only to a limited extent. Also, a large proportion of the respondents did not know about representation.
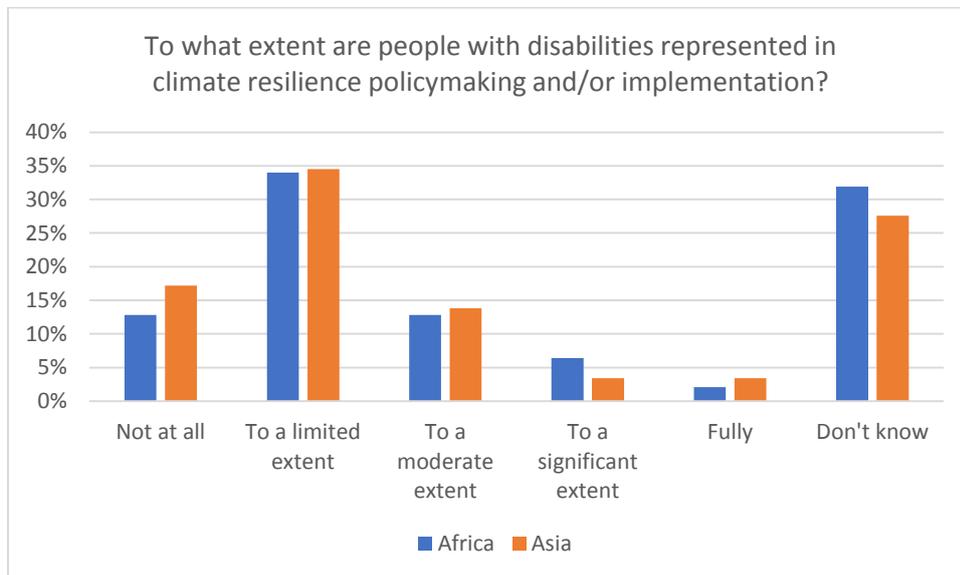
Finally, respondents were asked about the kinds of support that would be most useful in mainstreaming disability in their climate change work.

		What training or support would be useful in mainstreaming disability in your climate change work?						
		Training	Improved indicators	More contact with the focal point	Knowledge-sharing activities with colleagues	Access to best practice examples	Other	Total
Region	Africa	29.0% (40)	10.9% (15)	13.0% (18)	19.6% (27)	23.2% (32)	4.3% (6)	100% (138)
	Asia	26.5% (22)	9.6% (8)	14.5% (12)	24.1% (20)	21.7% (18)	3.6% (3)	100% (83)
	Americas	10.5% (2)	15.8% (3)	10.5% (2)	31.6% (6)	15.8% (3)	15.8% (3)	100% (19)
	Europe	15.8% (3)	21.1% (4)	10.5% (2)	10.5% (2)	26.3% (5)	15.8% (3)	100% (19)
	Australasia	16.7% (1)	16.7% (1)	0.0% (0)	16.7% (1)	16.7% (1)	33.3% (2)	100% (6)
Total		25.7% (68)	11.7% (31)	12.8% (34)	21.1% (56)	22.3% (59)	6.4% (17)	100% (265)

Across all regions, the need for further training on disability was highlighted (25.7%), along with improved access to examples of best practice (22.3%). Increased knowledge-sharing among colleagues (21.1%) was also raised as key for improving mainstreaming across their organisations.
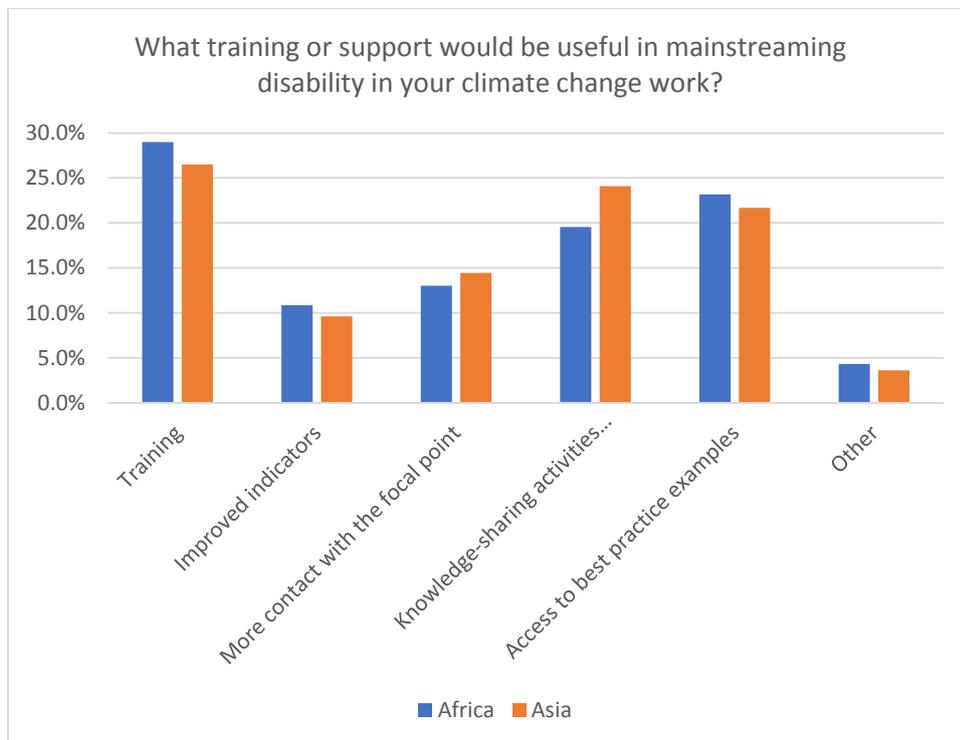
When comparing the Africa and Asia regions (regions with sufficient responses for comparative analysis), a similar distribution of preferences was found, with the most highlighted needs being training, knowledge-sharing and examples of best practice.

5.2.4. Open-ended questions

Several questions in the survey were open-ended, giving respondents the opportunity to give more information about the climate-focused programmes their organisations are running, and their strategies for including specific vulnerable populations. The responses were analysed by region to understand any regional variation. The main findings are presented below, with more detailed description in **Annex 6**.

The biggest difference in responses was the focus of programmes being implemented. In Africa (44 responses), most climate-focused programmes are related to adaptation, with fewer related to mitigation. Adaptation programmes reported tended to focus on access to water, climate-resistant crops and natural resource management, whereas mitigation programmes focused on clean/renewable energy, recycling and tree planting. However, it was not clear how several of the reported programmes specifically related to climate change issues.

In Asia (26 responses), disaster risk reduction (DRR) was much more of a focus of reported programmes (only one programme in Africa focused on DRR). There were no mitigation programmes reported by respondents from Asia.

In all regions, most programmes did not report specific strategies for including people with disabilities, including some where they were the specific focus of the programme. Predictably, this was not the case in the disability-focused organisations and DPOs, where people with disabilities tended to be included throughout the project cycle, with specific strategies for including them in programme activities (such as providing information in accessible formats, generating linkages between disability organisations and local authorities, and including representatives in disaster management committees). One exception to this was a programme on disability-inclusive DRR in Asia that appeared to be implemented through a mainstream organisation but did include people with disabilities throughout the programme cycle.

Several of the projects addressed groups with intersecting identities, such as women and children with disabilities, older people with disabilities, and women in marginalised groups.[6] However, the survey provided limited information on these aspects, so further probing of these issues and the ways in which – if any – intersectionality is addressed in disability and climate resilience programmes was undertaken in both the focus group discussions and the key informant interviews. This is discussed in detail below.

5.3. Policy analysis
5.3.1. Kenya

Following a mapping exercise to identify the relevant policies, legislations and frameworks, the research team selected five laws and policies for analysis, along with the Constitution of Kenya (2010) and Vision 2030, the country's development road map (see Table 2). The aim of the analysis was to identify how climate-related policies specifically address disability and resilience; access to information around climate change; participation in planning and decision-making; the extent of any budget for targeted programmes; as well as monitoring disability-specific interventions.

---

[6] A body of literature underscores the fact that women and girls with disabilities are at greatly increased risk for such violence and abuse (WHO/World Bank, 2011).

Table 2: Selected policies – Kenya

Selected policies	
General	1. Constitution of Kenya (2010) 2. Vision 2030
Climate change	1. Climate Change Act 2016 2. Draft Climate Change Framework Policy 3. Draft Disaster Management Policy
Disability-specific	1. Persons with Disabilities Act (2003) – *currently being revised* 2. National Policy for Persons with Disability (2013)

Following selection, each policy was rated according to the pre-agreed set of criteria against a content analysis as outlined in **section 3.3** above. Results point to widespread recognition of inclusion as a key guiding principle; which is a key tenet of the Kenyan Constitution, but policies, strategies and plans fall short of providing specific and targeted interventions for people with disabilities to ensure climate resilience.

Climate change

The climate change laws and policies do not define disability. They however acknowledge people with special needs, marginalised and vulnerable groups who are considered to be most at risk and vulnerable to climate change. The right to inclusion, participation, programming and information management rank highly because they are considered in these frameworks. This can be explained by the fairly advanced level of engagement on climate change in the country since it hosted the UNFCCC COP 12 in Nairobi in 2006.

Table 3: Climate policy scoring – Kenya

Climate policies		Mean score
Climate change	Climate Change Act 2016	2.43
	Draft Climate Change Framework Policy	2.79
	Draft Disaster Management Policy	2.79

Disability policies

Disability-specific policy in Kenya has strived to align its provisions with the CRPD as well as make provisions for addressing disability issues across all sectors. However, there are still areas that remain untouched by policy especially as relates to enforcement, meaning that people with disabilities remain at a disadvantage. These could be addressed by revisions in policy and legal instruments. It is noteworthy that Kenya's constitution considers all international agreements as law once ratified. This means that the CRPD, the UNFCCC and other could be used locally as a legal tool to advocate for rights, access, information, inclusion of people with disabilities and enforcement of disability-targeted policies and strategies. However, there is need to harmonise the definition of disability in the Kenyan policy and legal framework to adopt the provisions of the CRPD, which removes the focus from the person or the disability and shifts the emphasis on the various barriers that hinder full and effective participation of people with disabilities on an equal basis with others.

Results point to widespread recognition of inclusion as a key guiding principle; this is a key tenet of Kenya's constitution, but policies, strategies and plans fall short of providing specific and targeted interventions to ensure climate resilience for people with disabilities.

5.3.2. Bangladesh

In Bangladesh, following a mapping exercise to identify relevant policies, legislations and frameworks, the research team selected three climate-related Acts/policies, three disability-specific Acts/policies and two general policies.

Table 4 Selected policies – Bangladesh

Selected policies	
General	1. 7th Five Year Plan, 2016
	2. Bangladesh Perspective Plan, 2011
Climate change	3. Standing Order on Disasters, 2010
	4. Bangladesh Climate Change Strategy and Action Plan, 2009
	5. Climate Change and Gender Action Plan, 2013
Disability-specific	6. National Disability Policy, 1995
	7. Persons with Disability Rights and Protection Act, 2013
	8. Neuro-developmental Disability Protection Trust Act, 2013

As with Kenya, the overall aim of the analysis was to identify how climate-related policies specifically address disability and resilience; access to information around climate change; participation in planning and decision-making; the extent of any budget for targeted programmes, as well as monitoring disability-specific interventions. Each policy was rated according to the same pre-agreed criteria outlined in **section 3.3** above.

Key findings

The policy review revealed that government programmes and plans do cover disability issues, for example the 7th Five Year Plan discusses programmes for people with disabilities, including children with disabilities. However, there are no clear actions mentioned that target people with disabilities specifically, which is why the needs and requirements of disabled communities to adapt to climate change are often ignored. Another issue that became clear when reviewing policies was the tendency to include issues of disability and people with disabilities under the umbrella of 'vulnerable people', which (as the online survey also revealed) can be dominated by women and children's issues. For example, it states: "In addition to women, vulnerable populations in Bangladesh encompasses different social groups such as children, elderly, ethnic and religious minorities, people with disabilities or physical impairments and low caste groups. All these heterogeneous groups are generally vulnerable to extreme poverty, natural disasters, and other external shocks that may impact their well-being." (7th Five Year Plan: 635). As a result, many projects designed have special components considering gender issues but do not incorporate issues regarding disability.

Climate policies

Table 5: Climate policy scoring – Bangladesh

Climate policies		Mean score
Climate change	Standing Order on Disasters, 2010	2.71
	Bangladesh Climate Change Strategy and Action Plan 2009	1.57
	Climate Change and Gender Action Plan, 2013	1.86

Compared to the Kenya climate policy scoring, Bangladesh's policies scored much lower overall. This may be due to the emphasis that Kenya has placed on disability issues in recent years: the climate policy is very new (2016), and the two other policies reviewed are still in draft. However, it is particularly worrying that Bangladesh's relatively recent Climate Change and Gender Action Plan (2013) scored very low, particularly as the policy was enacted well after the country ratified the CRPD.

Interviews with government officials working in the climate change and environment sector shed some light on this, pointing to the fact that sectors are still working in silos when it comes to climate change and disability, and awareness about disability issues is still missing in many sectors. Officials who focus on environment or climate issues often regard disability as an issue that should be dealt with by the responsible ministry (Ministry of Social Welfare), instead of mainstreaming it within their own work plans. Given this gap, it follows that there are no plans for implementation, monitoring or recourse.

In sum, in both countries, the policies tend to reference people with disabilities as part of a broader category of 'vulnerable group', rather than addressing their needs specifically. This is despite both countries having progressive policies regarding the rights of people with disabilities. One of the main challenges noted in both countries is that even if person with disabilities are mentioned in policies, there is little evidence of strategies to implement plans for effective inclusion (systemic access); monitoring, or recourse if policies are not enacted. Without measures in place it will be difficult to assess if policy aims are being achieved.

In order to further substantiate these findings, the research teams undertook a series of key informant interviews to gain a more in-depth understanding on why there are these gaps, what the barriers are, and what strategies are needed to address them. These were complimented by a series of focus group discussions with people with disabilities living in climate-impacted areas in the two countries.

5.4. Qualitative findings

Based on analysis of the interviews and focus group discussions, several themes emerged, which are discussed in turn below.

1. Policymakers talk a good talk - but are they effectively implementing policies?

As outlined above, in both countries there are a range of measures in place through national policies and legislation to support the rights of people with disabilities to be included in activities, including climate-related activities. In Kenya the constitution is seen as a key tool for the inclusion of people with disabilities because it guarantees equality for all citizens. This in turn is having an impact on how policies are being designed – and the road maps to achieve them. For example, stakeholders are keen to engage people with disabilities in designing strategies for adaptation as well as disaster risk reduction including early warning, but how effective are these strategies?

In Bangladesh, despite a Presidential Standing Order on Disasters, there are still gaps:

> *"The policies and programs in our sector do not specifically mention the inclusion of disabled persons. However, the Standing Order on Disasters (SOD)*

> *does include disabled people within a cluster of vulnerable people… Vulnerable people usually include women, extremely poor people, disabled persons, elderly people and children… Disability issues are mainstreamed within the national Five Year Plans. Our department plays an advisory role in different plans and policies that include disability issues and need perspective from a disaster management point of view. (*Governmental official, Department of Disaster Management; Ministry of Disaster Management and Relief, Dhaka)

In Kenya, the decentralisation policy has led to new policies being developed at County level. Despite this, people with disabilities and local government officials tended to report a lack of inclusion in policymaking processes at the local level, and in local implementation; there was also a lack of understanding about why they might not have been included:

> *"In Kisumu County, we were doing a climate change policy, rather domesticating the policy to suit the county needs; and we have had meetings for a very long time for a period of about one year and now we are done and unfortunately I did not see any person with disability during those meetings… [interviewer - maybe because they were not invited?] …But surely people with disability also have an ear on what is happening in this county? They belong to groups that should know what is happening and so really there shouldn't be excuses of not being invited. They should shout out"* (NEMA Official, Kisumu)

In Isiolo, the NEMA Official reiterated that there were no relevant policies addressing inclusion of people with disability in the County; he thought the reason for this was because all the policies and programmes were drawn from the County Integrated Development Plan (CIDP) and the current five-year CIDP made no mention of matters pertaining to people with disabilities. As he affirmed, everything within the Counties must be done within the CIPD, it "…it is sad that people with disability agenda is not factored in" (NEMA Official, Isiolo Country), suggesting that disability issues are unlikely to receive any attention if they are not in the current mandate of the County.

Another factor inhibiting the inclusion of people with disabilities within policies and programmes is a lack of budgetary allocation for both disability-specific programmes as well as mainstreaming of disability in general programming. For example, as one official in Bangladesh stated:

> *"There is no budget allotted for ministries that do not work directly on disability issues to include these issues in their regular curriculum. Without budget it becomes difficult to include these issues within the scope of our work. Finance is an important aspect here." (Director, Department of Environment, Dhaka)*

Another challenge is the view that all issues pertaining to disabilities should be the responsibility of social welfare departments. Such a perspective lessens the possibility of mainstreaming disability issues across other government ministries.

However, perhaps a bigger challenge is how to monitor the policies that do exist to ensure they are carried out – and not just once a disaster has happened. As one respondent noted:

> *"Department of Disaster Management, Ministry of Disaster Management and Relief, Government of Bangladesh has a strategy and in our sub district there is a committee also name Disaster Management Committee. But the committee is not active in this area and they just organize meeting when any disaster happen. Bangladesh is a country of many policies, but in the field level the implementation of policy is very poor. So I think the monitoring system should strong to implement the policy."* (Journalist, Faridpur)

2. People with disabilities regularly reported inaccessible relief programmes following disasters or being excluded from relief programmes.

Another theme that was repeated frequently in both countries, despite the fact that progress has been made with inclusive disaster relief, at least in terms of guidance and policies, these do not seem to have had a significant impact on people with disabilities in affected communities. Though the links between climate change and climate-related disaster and DRR are increasingly being made (Wallace, 2016), there was a disconnect between what policymakers and officials believed and what those on the ground experienced:

> *"…there is no specific project or programme for disabled persons. However, in our regular programmes and activities this issue is addressed. For example, the cyclone or flood shelters are made as disabled-accessible (with ramps and accessible toilets). This group of people is given priority during risk reduction, relief distributions and rehabilitation activities. Disability inclusion entails providing disaster risk reduction and response related services available and accessible to the people with disabilities [sic]. Disabled people are given priority during humanitarian assistances run by the DDM……We lack research on disabled people. [A] Database of disabled people with disaster vulnerability, with details of their nature of disabilities and requirements and needs is a must. There is a lack of coordination among different government bodies who deal with this issue. We need to be aware of the activities run by other agencies including INGOs/NGOs."* (Deputy Director of the Department of Disaster Management, Bangladesh)

On the one hand, there is provision for people with disabilities, while on the other, there is still a clear need for further information to ensure they are adequately catered for during disasters. A female participant in one of the focus groups in Bangladesh painted a picture of how this is experienced on the ground:

> *"They [people with disabilities] need training to help them survive disasters. Usually disabled people need assistance to go to the shelter during disaster. Those with multiple disabilities, especially physically disabled person are helpless during disasters and emergencies. Every union has at least one person who is physically disabled. If the Union Parishad develops special facilities prioritizing disabled people it will be easier for them to access cyclone shelters. Training should be given on how people can go to safe places more easily. Once in the shelter other people treat them with disrespect. They do not feel*

comfortable in the shelter. They wish for a separate shelter for disabled people. They feel obligated to keep a good relation with their neighbours so they can assist them during disasters" (Focus group discussion, women with disabilities, Barisal).

A focus group respondent in Kenya continued this theme of co-dependency and how people become reliant on relief:

"As I said before nobody has come forward to prepare us on what we should do to face the effects of climate change. Generally it is an individual effort even for those with no disability. Floods are not new in this country; there are places that always worst hit year in year out.   And in these places, people are forever depending on relief supplies." (Male focus group discussion participant Kisumu)

Others pointed out that the training was only partial, and for example missed out children:

"Regarding Disaster Risk Management, there are training drills for preparation against earthquakes and other disasters. However no training is provided for disabled children and how they should help reach shelter or evacuate the building in such situations. The teachers are not trained on how to help those who are disabled in case of disasters either. CSID has provided trainings for some of the teachers in the school regarding disability related issues. However, teachers change by rotation so there is no way to ensure that majority of the teachers/ all of the teachers are trained. There are no fire extinguishers in the school." (Teacher, Barisal)

3. Continued silo-ing of disability issues within one ministry

As already alluded to above, a continual challenge – and one that links up issues of (lack of) funding and prioritisation – is the pervasive perception of disability as a separate, specialist issue, rather than an issue of equity or rights. For example, officials in Bangladesh reported:

"If within our work, we come across issues that are specific to disability issues we contact the social welfare department or the mental health institute" (Department of Disaster Management, Dhaka)

"There are no training facilities available in our department, which is a major issue. Most of the officials I work with are not aware of ways to include disabled persons within their programs or projects…. Within our scope of work, such as pollution control or environmental resource management, disabled persons and organisations working on disability are not directly included in the planning, implementation or evaluation processes." (Director, Department of Environment, Dhaka)

While this may be necessary to ensure people with disabilities get the support and services they need, it may lead to the problem that if they need other non-disability specific services – including

for example, advice and support about climate change – they are unlikely to be able to get this from social welfare ministries:

> *"There is a need to mainstream these issues within most work streams, not just social welfare. Knowledge about these issues should be spread across all sectors and all streams of work. For example, engineers, architects, city planners and designers all need to be aware of disability issues, so they can incorporate this into their work. Making infrastructures more accessible for disabled persons…I think we are all working in silos, we need to have more dialogue and coordination about issues like disability. These should be crosscutting issues touching all departments and sectors in the country."*
> *(Director, Department of Environment, Dhaka)*

Moreover, the budgets of social welfare ministries tend to be smaller, and smaller still if it is for disability-specific programmes. The size of these budgets is often linked to a (lack of) data around persons with disabilities. One way that government ministries have tried to address coordination and communication of cross-cutting issues such as disability and gender is to have focal points or representatives on committees in each department, and the majority of respondents to the online survey reported the presence of such focal points. However, respondents in both countries were disparaging about the effectiveness of such committees at the local level, for example, at the local council level (*Union Parishad*, UP) in Bangladesh:

> *"The UP members have a designated disaster management committee who sit for meetings once they get informed about an upcoming disaster…the committee does not function properly. Meetings meant to plan for mitigating risks and damages from future disasters do not take place. Till now the committee has only sat for a hand full of meetings. One meeting every three or four months is the norm."* (UP representative)

In Kenya, the National Council of Persons with Disabilities has representatives in each county, including a team of 15 people with disabilities representing different DPOs who work together with the officer in charge of disability issues in Isiolo to forward the disability agenda. However, there are no relevant policies addressing inclusion of people with disability at county level in Isiolo. As noted above by the National Environment Management Authority Officer (**point 1** in this section), this is because all the policies and programmes are drawn from the County Integrated Development Plan (CIDP), and despite lobbying, the current five-year plan does not mention matters of disability. This may be because, according to one man in Isiolo, "…they are looked down upon by most major stakeholders and are not seen as major stakeholders who can make any meaningful contribution…. [they are] not major decision makers but rather used to rubber stamp whatever has already been decided…"

4. Limited capacity to adapt to effects of climate change

In both Kenya and Bangladesh, many of the focus group respondents acknowledged that they needed to be better informed and aware about climate and environmental issues, as well as how to become more resilient, and be better prepared during disasters. Not only were they less well-informed, but many also felt that people with disabilities were more likely to be affected:

> *"[The] Impacts are many. You will find that when it rains for a long time, then we have floods and crops are destroyed and the same happens when we have long periods of droughts. Now when I narrow it to people with disability you will find that we are greatly affected because in most cases the economic activities that we engage in…. we tend not to be diverse and that is why we take we take long to switch with the climatic patterns. And so you find in the long run we are most affected." (Male focus group discussion participant, Kisumu)*

Another respondent highlighted the issue that although people with disabilities may experience the same impacts as other non-disabled farmers, their ability to recover may be slower, and they become more reliant on other:

> *"Like I said before it has resulted to loss of livestock and probably you have people with disability that are livestock farmers and livestock have to die you also do what people that do not have disability do so that you do not incur loses. You sell your animals and wait for when the climatic conditions are favourable then you start restocking again. And if it is too much flooding and people are migrating then you definitely have to migrate with the other people and come back when the climate is somehow safer... When it comes to food availability we are all affected whether we disability or not, although PWDs are most affected given that many of us have little incomes so food becomes unaffordable. When it gets to that point then one has to rely on people of good will to support." (Male focus group discussion participant, Kisumu)*

Not only do people become increasingly reliant on the good will of others, but in some cases, end up losing their livelihoods altogether:

> *"As a consequence of environmental issues, the households went through damages for not being able to adapt to these changes [sic]. Due to river erosion, they lost all their assets including their lands and agricultural asset like: paddy land and vegetable lands. They had to get involved in micro credit programs and in many cases they could not get themselves out of the complex micro-credit cycle, they ended up losing property in the process. They had to bear the loan for the whole year and face its consequences" (focus group discussion respondent, Barisal])*

Therefore, while some respondents reported becoming 'trapped' in complex micro-credit loan schemes, risking losing any remaining assets, others reported how some banks and other formal financial institutions refused to provide loans to people with disabilities. Women in one of the focus group discussions in Bangladesh highlighted this issue, telling of how they had to manage their capital with local cooperatives and organisations, or use all their savings to start new business. Even more problematic was the fact that they did not receive any training to try to find alternative livelihood options. Some of the women shared that they got microcredit loans from NGOs to start new businesses, perhaps risking the cycle of repayments. Moreover, these new businesses may actually increase their risk to climate-related and other shocks of they used up all of their savings to

start a business., leaving them even more vulnerable to any unexpected shocks – including climate related shocks.

In Kenya, participants in the focus group discussions in Kisumu raised another issue that may increase the vulnerability of people with disabilities in their communities: whereby others might have the opportunity to move to seek work or other security, people with disabilities may have less opportunity to move to cities or towns away from their locality - even if moving will improve their chances of finding alterative livelihood opportunities. As women in Isiolo highlighted by way of example, during heavy flooding those who engage in their own business are not able to engage in income-generating activities, which has a severe impact on the household income. The regularity of the floods is increasing, in turn increasing their insecurity.

A similar issue was also reported by respondents in Bangladesh, and both policymakers and people with disabilities also stated there were very few training opportunities for alternative livelihoods. This lack of diversity in economic activities may heighten the risk of people with disabilities to the economic impacts of climate change.

5. Accessibility of social protection and finance

Participants in both Kenya and Bangladesh called for both national and local governments to implement programmes to assist people with disabilities to recover from their losses following a disaster or climate-related economic failures:

> *"Government should have programs to assist PWDs recover from losses when their calamities." (Female focus group discussion participant, Kisumu)*

Currently there are no mechanisms in place in either Bangladesh or Kenya to compensate people for climate-related losses, though they may be covered by existing social protection programmes, including the Hunger Safety Net Cash Transfer Programme in Kenya and the Social Safely Net Programme in Bangladesh. However, there were complaints from participants in the focus group discussions that they had difficulty accessing these social protection mechanisms. For example, some people with disabilities may be assessed as not 'poor enough', and therefore not eligible for programmes. This may be a result of the level of poverty being masked by the overall household income, rather than taking into account any extra costs related to their disability (Mitra et al, 2017).:

> *"The VGD (Vulnerable Group Development Social Safety Net Program) is only for the ultra-poor, those with disability cannot access VGD easily. People with political connections get more priority." (UP member, female Barisal)[7]*

In the focus groups, participants illustrated this point with the example of the need to pay the additional funds needed to get to school, In Bangladesh, the focus group discussion participants pointed out, that this could make education costs almost double for a person with disability, depending on the type of transport they avail themselves with. For a student that has difficulty walking, for example, on rainy days when public transport is too overcrowded for them to use, they have to hire (at their own expense) private auto-rickshaws to help them reach their destination.

---

[7] She did not define who is 'ultra poor'

They also pointed out that if disabled beneficiaries received any form of social protection or financial aid they are no longer eligible for education support.

6. Risk that people with disabilities become 'lost' in mainstreaming

As noted in above (section 5.3), a lack of budgetary allocation for disability-specific programmes, and for mainstreaming of disability in general programming, can lead to disability issues being side-lined or ignored, as it is seen as the responsibility of another ministry - usually that tasked with disability issues. Or it can result in a rather tokenistic assumption that just by mentioning people with disabilities in a policy or programme or building a ramp– that this equates to effective and equitable disability inclusion. As one ministry respondent in Bangladesh pointed out, if the focus is only on ensuring that facilities exist, it is possible to overlook whether people with disabilities can actually access and use them:

> *"However, I feel that a big problem is that there is no discussion on how much they can actually access. Focus is usually only on ensuring that facilities exist, how the target population takes these facilities can often be ignored. More conversation needs to happen regarding this." (Deputy Director, Department of Disaster Management (Bangladesh)*

Another official felt that the current focus on mainstreaming does not go far enough, and made the point:

> *"When we talk about mainstreaming, it is like we are looking for a way for inclusivity and it should not be like that instead there should be a direct command that this should happen." (Programme Officer, Department of Environment, Kisumu)*

Also in Kenya, respondents talked about the need for targeted programming:

> *"when these problems are being addressed; there is usually no clear framework like which group is being targeted, they just do it general for all that are affected whether persons living with disabilities or those living with disabilities… It is very hard to find that the government is coming up with a proper program during disaster to target only persons living with disabilities and that is where the insensitivity comes in. The support program is there only it may not have specific programs for People with disabilities" (focus group discussion participant, Kenya)*

People with disabilities themselves were more ambivalent about the successes of mainstreaming, and what inclusion means or looks like. In Kenya, one woman highlighted this point very graphically:

> *"The gap is mainstreaming. This mainstreaming is making our issues not to be heard. They tend to focus on things in general and disability as a component is not given much attention. Mainstreaming is not working for us. It is like a river that has been running and then you drop something into it. So the disability component has just been dropped in such that even if it gets stalk (sic) they will just proceed. People talk about mainstreaming disability but you find that they*

disability part of it is not working for us." (Female focus group discussion participant, Kisumu)

Also in Kenya, one man raised the issue of effective inclusion, reiterating the point made earlier that it is of no benefit to anyone if people with disabilities are merely present, rather than having the opportunity to contribute, and build their knowledge, skills and capacities to make their inclusion more meaningful:

> *"The question is what next after including us. Inclusion should come with building our capacities all round. It is not just including us. Subjects such as environmental change or climate change…. People read for these things and that is why you will find that such bodies are composed of Professors… professors; they don't even talk of doctors there and so petitioning a body to bring on board an incompetent to come amongst them is not possible." (Male focus group discussion participant, Kisumu)*

His comments do raise the interesting question of the extent to which a non-specialist can participate in the kinds of community development forums discussed above (**section 5.3**). Some people with disabilities in Kenya identified a:

> *"…missing link between the government and the people themselves. This is because there is little participation by the people and those who participate are normally chosen because of their closeness or relationships with those in power… PWDs not represented in County boards. They will appreciate if they could be present to participate in meetings and also contribute to decision making. PWDs to be included in decision making and also policy making. (Male focus group discussion participant, Isiolo)*

Another challenge raised was that while there are funds available post-disaster for 'vulnerable' groups, who these are is not specified, which means that people with disabilities may miss out on available assistance. Several of the respondents bought up the issue of including people with disabilities in part of a catch all group of 'vulnerable groups' – where again, disability issues can get ignored:

> *"Disabled persons cannot be clustered within the group- vulnerable. The issue gets lost in the cluster and eventually neglected." (Bangladesh policymaker)*

This means there is a tension between 'mainstreaming' and targeted approaches to ensure current efforts to ensure inclusion are more fully realised.

6. FINDINGS

6.1. Lack of Evidence
The evidence available generally demonstrates that at-risk people, including people with disabilities, have a heightened vulnerability to the more severe impacts of climate change and reduced capacity

for resilience, compared to the wider population. Given the lack of data on climate change-related interventions (adaptation or mitigation) supporting people with disabilities, this study has also drawn on findings from disability-inclusive DRR humanitarian practice. These show that DRR programmes are increasingly including people with disabilities: good practices include inclusive hospital preparedness plans, targeted cash transfers and some evidence of training for children with disabilities. However, in all regions, the need for further training on disability was highlighted, along with improved access to examples of best practice and increased knowledge-sharing among colleagues. Empirical data has also highlighted gaps in training across both countries, including at ministry level. Nevertheless, there is a clear desire for further information and training on disability and inclusion in order to implement genuinely disability-inclusive climate-focused programmes. This project found few concrete examples which built the resilience of people with disabilities to climate risks. However, there are signs that some organisations working on climate and disasters are starting to target people with disabilities, and there are examples of specific interventions that offer useful lessons for inclusive resilience building. There is limited evidence to date of *how* the resilience of people with disabilities to climate risk has been enhanced by these interventions, or of best practice.

6.2. Policymakers talk a good talk - but are they effectively implementing policies?

While at international level there has been an increased focus on disability inclusion following the CRPD, the Sustainable Development Goals (SDGs) and the 'leaving no one behind' agenda, and the Sendai Framework for Disaster Risk Reduction, there is still a great deal to do to ensure inclusion takes place. In legislative and policy terms, both Kenya and Bangladesh have made considerable progress towards increasing resilience to environmental change and hazards, and inclusion and rights of people with disabilities: a specific focus on linking the two issues of people with disabilities and climate change resilience is beginning to emerge. Nevertheless, there are many gaps regarding implementation and outreach in practice, particularly at local levels where exclusion of people with disabilities in policymaking, plans and programme implementation appears to remain widespread: there appears to be limited political will for achieving inclusion in these areas. There is also a shortage of budgetary allocation for disability-focused programmes, and for mainstreaming of disability in general programming.

Whilst both countries have some relevant disability and climate resilience or adaptation policies, these are rarely monitored or funded effectively, which reduces their impact at the local level. Policy making on the two issues of disability and climate tends to take place in parallel. Discussion relating to people with disabilities has not been well integrated into broader discussions or frameworks relating to climate change. Many implementing organisations are unaware of the extent to which disability is incorporated into national climate change policies and targets. In Kenya for example, county governments are starting to develop policies to disburse County Adaptation Funds,[8] which aim to assist the most vulnerable communities to enhance resilience. There has been some debate as to how these communities are assessed, including the use of indicators focusing on quantifying reduced vulnerability/increased resilience. Alternative ways of measuring the approaches, which may be interesting in terms of many of the issues raised here for people with disabilities, have been suggested:

---

[8] These use funds directly from the International Climate Fund to implement county and ward adaptation actions directly

"...a more practical approach might involve a qualitative analysis, through questions such as (i) has poorer development performance coincided with climate extremes or climate-related disasters/crises, and (ii) is there convincing documentary evidence of causal links between poor development outcomes and climate stresses.... An alternative, less resource and time intensive way of assessing vulnerability is participatory well-being ranking." (Brooks et at 2013: 19-20)

One of the main challenges noted in both countries is that even if people with disabilities are mentioned in policies, there is little evidence of strategies to implement or monitor plans for effective inclusion. This means that it is unlikely these policy aims will be achieved. As further challenge is the lack of indicators on inclusion, so even if adults and children with disabilities are being included, there is little evidence to support this. Either way, it means countries have little data to support their progress towards the targets and goals in both climate –related frameworks or the broader SDGs.

Therefore there is a need for better data to facilitate both monitoring and planning in both countries, particularly data disaggregated by disability and other socioeconomic characteristics. Official data collection mechanisms remain limited or weak. This means there is a limited evidence-based data on people with disabilities, in particular on the compounding factors that would affect them in times of shocks and stresses caused by climate change. New technologies such as geographical information systems (GIS) and social media have the potential to play a greater role in helping to prepare and protect people with disabilities during disasters, as well as monitoring individual and community impact, but there is no evidence of them being used on a significant scale.

6.3. Inclusion and rights

The research has highlighted that there remains an ongoing need to ensure the focus on a rights-based approach as promulgated by the CRPD and most of the policies in the two countries studied here, which acknowledges agency, empowerment and ways to enhance one's own resilience, whilst ensuring that the perspectives, knowledge and experience of people with disabilities is maintained. Disability inclusion in both DRR and CCA is still often not seen from a rights perspective (this was particularly the case in Bangladesh), and people with disabilities in general across the world seem to be largely excluded from discussions about climate-related policy and practice, essential for understanding risk, and building resilience. This may be due in part to emergency management or humanitarian response perspectives, which tend to view people with disabilities as 'vulnerable', and in need of support and assistance, rather than actors in their own right. For instance, they are unlikely to be involved in emergency preparedness activities such as the design of cyclone shelters or planning accessible evacuation routes. There are questions relating to access and eligibility for support in the face of climate change challenges, and to the factors that facilitate or inhibit participation of people with disabilities. The standard conceptualisation of resilience in terms of systems tends to overlook issues of social equity, inclusion and power relationships.

Plans and processes are needed for ensuring the participation of people with disabilities in all stages of preparedness and response, through effective situation analysis and mapping, as well as through broader engagement, representation and leadership of people with disabilities in decision-making bodies and in informing practice. Alongside this, there should be capacity building for other

stakeholders on disability rights. In particular, there is an urgent need to raise awareness and build capacity of DPOs around climate issues in order that they can support advocacy and the inclusion of people with disabilities in planning, decision making and implementation of climate strategies. As noted above, this should be meaningful and genuine inclusion, so those tasked with joining committees, forums or monitoring groups need to be given as much information as possible to ensure they understand what they are committing to, what is required of them and how they can influence the committees, as well as the implication of any findings.

Disability-focused organisations and DPOs generally include people with disabilities throughout the project cycle, with specific strategies for including them in activities (such as providing information in accessible formats, generating linkages between disability organisations and local authorities, and including representatives in disaster management committees). However, few of the disaster and environmental organisations interviewed online or in person reported specific strategies for including people with disabilities, and people with disabilities themselves tended to be sceptical of existing participatory forums, which gave them little or no opportunity to contribute and take part in decision making. Tougher measures to enforce rights and challenge social norms are needed.

6.4. Integration, institutional separation and 'silos'

There appears to be growing recognition that an integrated approach, linking disability with both DRR and CCA, can have a positive impact on resilience building although at present this is mostly not translated into practice. For example, although the organisations responding to the international online survey worked on disability or climate change/environmental issues, few seemed to work on both, a fact corroborated by the empirical data. The relatively limited evidence that is available suggests that the climate sector is currently behind DRR and humanitarian practice in implementing disability-inclusive approaches. This reflects a broader historical lack of evidence of inclusive practice in CCA programmes.

Another theme repeated frequently in both countries, was that progress in general towards more inclusive disaster relief seems to have had an uneven impact on the ground for people with disabilities in disaster-affected communities. In theory, people with disabilities needs are a priority in humanitarian response, but in practice meeting these needs is highly challenging given the widespread lack of data on people with disabilities, their impairments and requirements, together with lack of coordination between responders.

Perhaps one of the reasons for the lack of integration is the lack of coordination and collaboration required between the diverse range of actors in disaster and humanitarian response: the government, and people with disabilities and their representative organisations. However, stakeholders in both countries, but particularly Bangladesh, drew attention to the problem that disability issues tend to be addressed by a single government department, whether these issues are related to DRR, humanitarian or development efforts. This 'silo' effect – a lack of learning and linking across different sectors or groups – is also evident in donors, NGOs and civil society. Awareness of disability issues is still missing in many sectors. Disability continues to be seen as a separate, specialist issue, rather than an issue of inclusion, equity and rights. Officials who focus on environment or climate issues often regard disability as an issue that should be dealt with by other specific ministries (such as social welfare), instead of mainstreaming it within their own work plans.

Given this perspective, it is unlikely that they will be able to give people with disabilities advice and support about climate change.

One way that government ministries have tried to address coordination and communication of cross-cutting issues such as disability and gender is to have focal points, representatives or committees. However, respondents in both countries were disparaging about the capacities and effectiveness of such committees at the local level.

6.5. 'Lost' in mainstreaming– need to remember there is another track!

In both Kenya and Bangladesh, policies and programmes tend to include people with disabilities as part of a broader category of 'vulnerable groups' (encompassing a range of groups including people with disabilities, women, children, older persons and indigenous people), in spite of the fact that both countries have progressive policies to address the rights of people with disabilities. Approaches to vulnerability reduction can result in people with disabilities becoming subsumed within mainstream programmes: 'lost in the river', as one of the respondents in Kenya memorably put it. Disability is not always defined clearly in climate change laws and policies, let alone some disability policies; although these generally acknowledge people with special needs, marginalised and vulnerable groups who are considered to be most at risk and vulnerable to climate change. Vulnerability reduction programmes can also be skewed towards particular high-profile groups (often women and children), and often fail to address the specific needs of people with disabilities. Some interview respondents talked about the need for more targeted programming to ensure people with disabilities needs were addressed.

Many mainstream climate or other related programmes aim to include all members of target populations, there is an underlying assumption that everyone – including people with disabilities - are able to access the programme activities. However, this tends to be a 'one size fits all' approach, which clearly will not work for everyone. Both climate change and DRR interventions often demonstrate similar standardised approaches rather than understanding the differences and intersectionality between different vulnerable groups. Therefore there needs to be a synchronous 'twin track' approach – both targeting specifically and including generally adults and children with disabilities into policies, programmes, research etc. Connected to this is the need for more work to on understanding intersectionality, in particular how sociocultural, economic and other dynamics can interact to create conditions of vulnerability (and resilience) amongst certain populations at any given time (see section6.9 below)

A related issue – as pointed out in Bangladesh – is that while there are funds available post-disaster to support 'vulnerable' groups, who these are is not actually specified, which means that people with disabilities may miss out on available assistance. More broadly, a lack of budgetary allocation for disability-focused programmes, and for mainstreaming of disability into more general programming, can lead to disability issues being seen as the responsibility of another ministry (and hence side-lined or ignored). Making mainstreaming everyone's responsibility can result in nobody taking responsibility for it: the need for a more directive approach was sometimes brought up in the interviews, with some focus group discussion participants also feeling that mainstreaming could prevent people with disabilities' distinct perspectives being heard. It can also result in assumptions that people with disabilities are being effectively and equitably included, even though actual

interventions are more narrowly focused: for example, on physical accessibility alone rather than more fundamental factors inhibiting people with disabilities' access.

6.6. Resilience

People with disabilities are not a homogenous group, and individuals with disabilities have widely varying degrees of resilience to climatic shocks – many of which are not directly related to their impairment. Failure to recognise these factors may lead unwittingly to perpetuation of existing exclusions and hierarchies. Data analysis and interpretation therefore need to take these layers of complexity into account. The Kiswahili words for resilience *Kustahimili* or *ustahimilivu* translate as the 'ability to endure/ withstand'; both of which highlight how many people with disabilities perceive their lives. As one woman noted:

> *"On my side I can say that we people with disabilities have a lot of resilience, because we were born and found our elders, living in bad situations. PWDs were never recognized in our communities until recently when we have now PWDs trying to get education with increasing awareness on rights of PWDs. We are now able to air out our problems not as those who grew up before us. Many [of us] have in the past persevered with bad situations but now many of are able to air out concerns and be heard" (Female focus group discussion participant, Kisumu)*

The stigma and discrimination experienced by many of those interviewed has also resulted in a lack of trust toward other people. For example, almost all the mothers interviewed in both countries stated they did not trust other people to take care of their disabled children, in particular girls and those with intellectual impairments. This lack of trust will lessen individuals' social capital and in turn their capacity for resilience.

6.7. Limited capacity to adapt to livelihoods effects of climate change

In both Kenya and Bangladesh, many of the focus group respondents acknowledged that they needed to be better informed and aware about climate and environmental issues, as well as how to become more resilient, and better prepared during disasters. Many also felt that people with disabilities were likely to be more badly affected than other groups in society, would be slower to adapt to climate change recover from shocks, principally because of their relative poverty, the fact that their livelihoods tend to be less diverse, the challenges they faced in moving in search of alternative work or income, and their greater reliance on others for support in crises. Lack of diversity in economic activities was evident among people with disabilities in both countries, with very few training opportunities for those seeking to develop alternative livelihoods, compounded by the reluctance of banks and formal financial institutions to lend them money, or over-dependence on complex and restrictive micro-credit schemes.

6.8. Accessibility of social protection and finance

Linked to their limited resilience was the need to have better support from governments. In both Kenya and Bangladesh, participants called for national and local governments to implement programmes to assist people with disabilities to recover from their losses following a disaster or climate-related economic failures. Currently there are no mechanisms in place in either country to

compensate people for climate-related losses, though they may be covered by existing social protection programmes. However, there were complaints from several participants in the focus group discussions that they had difficulty accessing these social protection mechanisms. For example, people with disabilities may not be considered 'poor enough', and therefore not eligible for programmes, and despite the fact they may have extra costs related to their disability (e.g. for transport), their level of poverty is masked.

Access to social protection will be of growing importance for people with disabilities in the face of climate change. However, there are currently very few universal disability programmes, nor are discussions about climate-related loss and damage mechanisms fully completed.

6.9. Intersectionality

Despite the limited primary research undertaken, looking across the focus groups and key informant interviews, a number of themes emerge that relate to current debates about intersectionality (e.g. Rapp, 2012; Kang and Bodenhausen, 2015) and how issues of poverty, disability, gender, age, class, ethnicity etc., as well as more subjective ideas around self-perception and trust are all linked, and it is how these linkages play out that impact on individual vulnerability and resilience.

From the responses gathered it is striking how in both countries, gendered norms seem to remain deeply entrenched, with men – with or without disabilities – primarily being seen as providers, while expectations are that women – disabled or non-disabled – will marry and have children. Women are seen as the primary carers of children – even when their children with disabilities grow up and are physically much bigger than them, it still largely falls on the mothers to do everything for their child. This can have an impact beyond the home. For example, in Bangladesh, several mothers and teachers reported that if they have a child with a 'severe' disability in the school, the mother is required to stay within the school environment to help their child use the bathroom etc. (see for example the story of Lipi in **annex 7**). This means that the mothers are restricted in what other activities (economic or even respite) they can do.

Almost all the mothers interviewed stated they did not trust other people to take care of their disabled children, in particular girls and those with intellectual impairments. In Bangladesh, one of the UP council representatives shared a story about a girl who was deaf, who had been left at home alone while her mother went out. When her mother came back, she saw there were multiple bruises on the girl's body, but since her daughter was unable to testify, and moreover existing evidence had been destroyed, and no action was taken.[9] The woman telling this story was also president of the child protection committee.

Several of the people with disabilities interviewed – both men and women – also spoke about preferring to be with other people with disabilities. Both these examples seem to indicate a lack of trust in other (often non-disabled) people, as do the stories from women with disabilities being abandoned by their husbands (including from one woman whose husband had bigamously married her), and their families. Such abandonment can be compounded by being poor and feeling let down by a system that seems to actively work against them. As the story of Lipi (**annex 7**) illustrates:

---

[9] It is unclear why the evidence was destroyed

Lipi feels let down by the justice system in place for disabled and poor people like herself. Her parents are old and her family is poor, she has no resources or connections to bend the system or make it work for her. She feels that her husband could betray her and lie to her and then leave her with a child without any consequences, and he could only do so because Lipi is helpless and cannot get justice for herself.

But this feeling of being let down – so there is no point in their complaining or trying to fight the system – is often mistaken as inertia or lack of responsibility by others:

"…Another barrier in my opinion is that society or even their own families do not take ownership of disabled persons. Because of their lack of confidence and lack of acceptance they do not have the strength to stand up for their own rights. They cannot raise their voice to claim resources or services." Deputy Director, Department of Disaster Management, Ministry of Disaster Management and Relief, Dhaka)

Whilst it appears the official is trying to support the rights of people with disabilities, he underestimates the impact of years of struggle and not being heard that many people with disabilities – and their families – experience, as well as the impact of existing social norms and expectations. These can be mitigated by intersecting factors, including having power and connections, which may influence how disabled adults and children are treated by others. For example, one respondent (Nazli), from Bangladesh, spoke about her 15-year-old son who is physically impaired, using crutches to mobilise. Nazli's brother is quite influential and so had some power over the local leaders and was able to convince the school principal to enrol Nazil's son in the local school. He is currently in grade 9, and dreams of being a police officer.

However, without these connections, aspirations are often thwarted. Also in Bangladesh, disabled women participating in a focus group discussion in Gaibanda told of their experiences of managing to get educated, one even up to degree level, yet they were still unable to get a job. One of them, Rasheda, who has an intellectual disability, said that she was the least likely to get a job, even with a 10% quota system in place to employ people with disabilities in government jobs. They complained that to avail this they would have to pay a bribe, which they did not have the money to do. They further complained that even if they passed the necessary exams, they are disqualified during the interview stage as the employers think they cannot work. The women agreed that while there are more accessible facilities provided, and that people in their community have become more aware of disability issues, they still face barriers around getting a job.

So whilst there have been some positive changes it seems from many women's experiences that these are not enough:

"On my side I can that we [people with disabilities] have a lot of resilience, because we were born and found our elders, living in bad situations. We were never recognized in our communities until recently when we have now [got] PWDs (sic) trying to trying to get education with increasing awareness on rights of PWDs. We are now able to air

*out our problems not as those who grew up before us. Many PWDs have
in the past persevered with bad situations but now many of are able to
air out concerns and be heard."* (Female FGD participant, Kisumu)

Other respondents highlighted the potential to manipulate the mechanisms in place to support adults and children with disabilities: one of the councillors (UP) members in Barisal explained how access to the disability allowance works:

*"Disability allowance is limited and the UP leaders are in charge of selecting
who should get this. This year only 18 out of 600 disabled people in the
community were given allowance. 250 out of 600 already had allowance, this
year 18 additional persons were allocated allowance…."* (Interview with UP
Member, Barisal, Bangladesh)

She further explained that it is the UP members who decide which of the numerous people who want to access the disability allowance that they will allocate the allowance to, on the basis of who they believe is 'more in need', taking into account level of impairment, etc. There is no formal way to assess this. This is problematic for a number of reasons. As noted above, adults and children may have additional (as well as invisible and/or unreported) costs associated with their impairment that are not factored in when these assessments are made. These may include transport costs, or as one woman in Kisumu noted, paying for someone to go and fetch water for them. None of these issues are usually factored into decisions about 'need', which from the discussions presented here seem largely to be based on the perceived severity of the impairment (and is largely based on what is visible, as well as the understanding of village leaders, rather than a formalised system); and so these additional costs go unnoticed.

Another issue becoming more prominent in both countries is the rise of a 'middle class'. Though class is still rarely discussed, a woman in Kisumu raised it as an issue when discussing a proposed rubbish dump, which the community is resisting, because, as she says: "They are middle class." While she highlights an important environmental issue that merely moving the dump without a proper waste management system in place will not improve the environment or reduce pollution; it is interesting to speculate what role the burgeoning middle class might have in terms of disability advocacy, voice and subsequent improved access to services. There has been much debate, notably within the Women's movement, that as wealthier and more vocal participants – often middle class (with perhaps with less to lose, but also better connection to those in power), get involved in specific causes, they gain increased prominence.

Finally, we come back to an issue that underpins much of the findings here: the discussion between mainstreaming and targeting. Many officials held the view that they were not actively excluding people with disabilities, so they would, by definition, are included in all programmes and activities without the need to actively target them. For example, in Bangladesh, in some Union Parishads, the disaster risk reduction committee keeps list of people with disabilities. Despite this, as one official noted:

*"During disasters disabled people are ushered to shelters alongside everyone
else. There is no separate practice for people with disability. There is no formal*

aid facility for those who have trouble travelling to the shelter alone. There are
no volunteers who take responsibility for informing those who are disabled."
(UP member, Barishal, Bangladesh)

In Kenya, one of the officials spells this out even further:

"In our set up disaster response is for [everyone]. When you address a woman,
the child and the father is involved. Securing the women and children is like
securing the whole nation. We do not discriminate in our response, though
vulnerable are always given priority" (NEMA Officer, Kisumu)

Not only do these officials seem to be unaware that there are family structures other than the typical heteronormative structure of husband/wife/children, but he also seems to be unaware of the tension that exists with women often being classified as 'vulnerable', while at the same time being heralded as the lynchpin of the family. As some of the examples here demonstrated, in many families, this is not yet the case. While there is slowly a shift towards greater visibility for women (and men) with disabilities, these gendered identities remain tied to class, power, wealth and impairment.

7. CONCLUSION AND RECOMMENDATIONS

This research project aimed to better understand the links between disability and climate resilience. In order to do this, it addressed two overarching questions, each with a number of sub-questions:

1. What is the relationship between disability and an individual's vulnerability/resilience to climatic shocks and stresses?
    a. What are the different factors (social, economic and political) that influence exposure, sensitivity and ability to adapt to climate change for people with disabilities?
    b. What is the impact of intersecting inequality? How do other social characteristics e.g. gender, age, ethnicity, affect exposure, sensitivity and ability to adapt to climate change for people with disabilities?
    c. How do different disabilities affect exposure and sensitivity to the impacts of climate change and the ability to adapt?

2. How can interventions build the resilience of people with disabilities to climatic shocks and stresses?
    a. What are the specific drivers of vulnerability and resilience that need to be addressed for people with disabilities?
    b. How can these be addressed through policy and programme interventions? What is the strength of evidence for these approaches?
    c. What action can be taken by programme and policy staff working on climate change to ensure this work is disability inclusive?

In order to do address these questions, several interlinking components of research were undertaken over a 14-month period: a literature survey, which found a lack of available examples of programmes that build the resilience of persons with disabilities. The online survey did find some examples of programmes that were disability-inclusive; though it is not clear if this translates to

resilience. These inclusive programmes tended to focus on disaster-preparedness or DRR, rather than building resilience. These findings were corroborated by data from two countries selected for their vulnerability to climate change, as well as to disability inclusion: Kenya and Bangladesh. In total 4 focus group discussions were undertaken in Kenya in Kisumu and Isiolo, along with 10 key informant interviews. In Bangladesh, the two locations selected were Barisal and Gaibanda, where a total of 6 focus group discussions were held, and 19 key informant interviews.

From the examples presented here, a range of challenges around inclusion can be identified, which are remarkably similar in both countries, despite the different contexts. They include the lack of engagement around disability issues by those in the climate/environment sectors, and limited engagement by persons with disabilities with issues of climate change – with both groups seeing these issues as either beyond their mandate or that they do not have the capacity to deal with. While some government agencies have begun to put in place strategies and action plans whose effective implementation aims to ensure inclusivity for people with disability, a number of challenges remain - including lack of targeted funding, especially for interventions for specific groups; lack of capacity; and a lack of 'champions' for persons with disabilities in the climate change sector.

The following recommendations highlight the pivotal changes required to shift the current discourse. They are therefore the building blocks from which to start this work. They are based upon the findings of this research, and require different interventions by a range of actors to address these challenges and better understand the relationship between disability and an individual's vulnerability/resilience to climatic shocks and stresses, and what needs to be done to build the resilience of people with disabilities to climatic shocks and stresses.

7.1. Recommendations

1. Enhance the evidence base

The research presented here forms an initial contribution to the currently very small evidence base around disability, climate change and resilience. The evidence presented here both reaffirms and supports previous findings about vulnerability to extreme events/disasters (e.g. Kett and Twigg 2007; Fujii, 2012; Stough and Kang, 2015; Sendai Framework, 2015); suggesting that people with disabilities have a heightened vulnerability to the more severe impacts of climate change and reduced capacity for resilience compared to the wider population. This is due to a range of factors already outlined in the report. However, given the current lack of data on climate change-related interventions (adaptation or mitigation) supporting persons with disabilities, it is also useful to suggest what further research may be beneficial. From our findings here there is a need for more experiential evidence to better understand not only *if* but also *how* the resilience of people with disabilities to climate risk can be enhanced by interventions. To do this there is a need to know more about how to enhance the resilience of persons with disabilities to climate change and DRR programmes. There is also a need to do more research around what inclusion and increased resilience look like on the ground, including work around stigma, discrimination, and in turn increasing social capital; and linked to this, what indicators could be used to quantify measures such as inclusion and increased resilience. There are both knowledge and methodology gaps around intersectionality, with much more work needed on how to analyse this from the field (see point 7 below).

New technologies such as GIS and social media have the potential to play a greater role in helping to prepare and protect people with disabilities during disasters, but there is no evidence of them being used on a significant scale. More research on this is needed too.

2. Closing the policy implementation gap

Whilst there has been some progress around disability-inclusive policies, there are still gaps in implementation. For example, many implementing partners in both countries were unaware of the extent to which disability has been included in national policies and targets. If implementing organisations are not aware of the status of policies regarding disability and climate change, the implications are clear – persons with disabilities will continue to be left out. From the initial evidence presented here, there has been little progress on the ground so more work needs to be done to strengthen implementation of policies, particularly to remove barriers at the local level. Despite attempts to the contrary (e.g. disability focal points in Kenya), more concerted efforts are needed to join up policy making on cross-cutting issues such as disability and climate change. However, a range of factors stymie this, including a shortage of budgetary allocation for disability-focused programmes, as well as for targeting disability in mainstream programming; so money needs to be allocated to deliver policies. There also needs to be stronger monitoring mechanisms, with systems for recourse if they are not effectively enforced.

3. Strengthen inclusion and rights

Standard conceptualisation of resilience in terms of systems tends to overlook issues of social equity, inclusion and power relationships. Tougher measures to enforce rights and challenge social norms are needed. It is clear from the research presented here that there is a need to build capacity of all actors involved in issues around climate change and disability, making use of existing national, regional and local-level structures. In particular, there is an urgent need to raise awareness and build capacity of DPOs around climate issues in order that they can support advocacy and the genuine inclusion of people with disabilities in planning, decision making and implementation of climate strategies which are currently being developed. But climate scientists need to also be more aware of disability issues. Standard climate vulnerability and resilience measures (e.g. assets frameworks) tend to evaluate resources and needs at the level of the household, rather than looking at intra-household distribution; the latter would give a more nuanced picture of differential impacts, as well as helping to identify the resources that people with disabilities require. To be of value for people with disabilities, assessments would not only identify impairments, but also other additional needs/costs (see also point 6 below).

4. Learn lessons from good practice

The relatively limited evidence available suggests that the climate sector is currently behind DRR and humanitarian practice in implementing disability-inclusive approaches – though these appear to have had an uneven impact on the ground for people with disabilities in disaster-affected communities. There is however growing recognition that an integrated approach, linking disability with both DRR and CCA, can have a positive impact on both inclusion and resilience building (not currently translated into practice). Awareness of disability issues is still missing in many sectors. Disability continues to be seen as a separate, specialist issue, rather than an issue of equity or rights. Officials who focus on environment or climate issues often regard disability as an issue that should be dealt with by other specific ministries (such as social welfare), instead of mainstreaming it within

their own work plans**.** They are unlikely to be able to give people with disabilities advice and support about climate change. To facilitate this, better communication, coordination and collaboration between responders is needed. Ministry level focal points may go some way to address this, but from the evidence presented here, they need more resources and more authority to link up the diverse range of actors (see also point 3). But given the current focus on climate issues, including domestication of Climate Adaptation Funds and strategies currently taking place in Kenya, there is an opportunity for climate sector to get ahead of the curve, and not only learn from the experiences of inclusive DRR, but actively to use these lessons to ensure that adults and children with disabilities are included in policies, programmes, research and development from the outset.

5. Implement a twin-track approach

One of the key recommendations from the literature review was the need to properly implement a 'twin-track' approach[10] to effectively include people with disabilities in programmes to build climate resilience in communities. There was little evidence of the twin-track approach being used by the programmes reported via the online survey; rather, disability was 'mainstreamed' in general programmes, for example those focusing on vulnerable groups. It is clear that while mainstreaming adults and children in policies and programmes is (starting) to happen, the other side of the track – the targeted approaches – have been rather overlooked. This is resulting in an equity gap that will be difficult to close if it gets too wide.

From the evidence presented here, while people with disabilities may experience the same climate-related impacts as other non-disabled compatriots, their ability to recover may be slower, and they become more reliant on others. Therefore, to ensure equity, there needs to be a twin-track approach– one that both specifically targets people with disabilities, providing them with the additional resources, support and services they need to catch up with their peers, and ensuring that once they catch up, they stay at the same level as their peers; whilst at the same time, ensuring their peers received adequate services and resources to protect and compensate them for climate-related issues.

Some of the challenges for twin-tracking are due to a lack of clarity over definitions (e.g. of vulnerability, disability etc), but there is a continued need to target adults and children with disabilities specifically as well as including them in mainstream programmes to avoid leaving them behind.

6. Resilience needs to be linked to social protection

Access to social protection will be of growing importance for persons with disabilities in the face of climate change. Currently, the majority of programmes are targeted, rather than universal, with a tendency to focus on either disability assessments by ill-qualified persons, or an over-reliance on registration. As noted above, individuals with disabilities have widely varying degrees of resilience: this can be linked to knowledge, preparedness, adaptation and recovery. As the research has highlighted many persons with disabilities perceived they were more likely to be affected by climate related shocks and be slower to adapt to climate change due to a lack of capacity (or willingness) to

---

[10] The twin-track approach was first used by DFID in 2000 to illustrate the need to not only include adults and children in mainstream programmes, but at the same time, deliver specific initiatives to support and empower disabled people (DFID,2000).

diversify economic activities; challenges with alternative sources of income; and their greater reliance on others for support in crises. These were compounded by limited training opportunities; reluctance of banks and formal financial institutions to lend them money; or an over-dependence on complex and restrictive micro-credit schemes. Few yet had any links to formal climate finance mechanisms, though some accessed existing social protection schemes not directly linked to climate, but rather to disability status. However, these are often restricted by definitional parameters, leading to some persons with disabilities not be considered 'poor enough', and therefore not eligible for programmes, and despite the fact they may have extra costs related to their disability (e.g. for transport), their level of poverty is masked. Similarly, as noted above, current resilience assessment measures such as Assets Frameworks tend to evaluate need at the level of the household, rather than intra-household, which again may give a misleading picture if not accounting for additional costs. There is therefore a need for greater clarity around these issues, as well as stronger linkages across sectors providing this support.

7. Importance of intersectionality

Understanding intersectionality is an important aspect of resilience-building programmes, but more information is also needed on how to tease out the differing intersectional vulnerabilities of people, as current interventions tend to focus on homogeneous groups. Most of the findings reported targeting multiple groups (such as women, children, marginalised populations), but often as part of a wider 'vulnerable group', where they often only focus on one specific aspect of perceived vulnerability, rather than how they intersect. Initial evidence presented here suggests how the impact of disability is mediated by a range of other factors, including power, status, money and other factors, rather than solely the impairment itself. But more evidence is needed. Understanding how to mediate these relationships through subjective and objective wellbeing may enhance the understanding but requires more qualitative research. This should be complemented by better disability disaggregated data which can be cross-tabulated with other socioeconomic characteristics to not only better inform and improve the delivery of more targeted support and services, but also facilitate planning and monitoring

8. Need for indicators

As has already been noted above, despite some progressive policies to the contrary (for example, Kenya, one of the few countries in Africa with a climate change performance benefits measurements framework for assessing progress on adaptation and mitigation), there are very few indicators to measure progress against these targets and there is no mention of disability in the National Climate Change Action Plan (2013-2017). Even if there are specific targets in place – such as the Isiolo County Climate Change Fund Bill (2016), which stipulates that Ward Planning Committees should include one person with disabilities as an 'interest group', the empirical evidence presented here suggests that this is not done in practice, or is only done in a tokenistic manner. Nor is there any general agreement of what appropriate indicators would look like. As countries are currently setting their targets and indicators for the SDGs and other national development indices, it is timely to consider how disability-inclusive targets could be developed. Not doing so is a missed opportunity.

 However, there is a wider challenge around developing disability inclusive indicators. UNESCAP (2012) demonstrates an attempt to do this, but as yet these have not become widespread in use, and were developed for the Asian and Pacific region. They do have a goal on disability-inclusive

disaster risk reduction and management, with suggested targets and indicators, though this is disaster-related, rather than climate or resilience-focused.

Finally, it is worth noting that standard climate vulnerability and resilience measures (e.g. assets frameworks) tend to evaluate resources and needs at the level of the household, rather than looking at intra-household distribution: the latter would give a more nuanced picture of differential impacts, as well as helping to identify the resources that people with disabilities require. To be of value for people with disabilities, assessments would not only identify impairments, but also other additional needs/costs.

Given the lack of indicators for inclusion, further research around existing tools and approaches, as well as developing new ones, is warranted.

8. REFERENCES

Brooks, N., Anderson, S., Burton, I., Fisher, S., Rai, N. and Tellam, I., 2013. An operational framework for Tracking Adaptation and Measuring Development (TAMD). IIED Climate Change Working Paper No. 5. URL: http://pubs.iied.org/pdfs/10038IIED.pdf

DFID (2000). *Disability, poverty and development.* London: DFID

Fujii, K. (2012). The Great East Japan Earthquake and Disabled Persons: Their High Mortality Rate, Factors that Hindered the Support and the Current Challenges. [Provisional Translation] prepared for the United Nations Expert Group Meeting on Building Inclusive Society and Development through Promoting ICT Accessibility: Emerging Issues and Trends, 20 April, Japan. In : ESCAP (2015) *Overview of Natural Disasters and their Impacts in Asia and the Pacific, 1970 – 2014*, ESCAP Technical Paper, Information and Communications Technology and Disaster Risk Reduction Division.

Islam, M. S. (2015). Deficiency of disability issue in disaster risk reduction strategy: implications on human security and social cohesion. In *Land and Disaster Management Strategies in Asia* (pp. 111-119). Springer, New Delhi.

Kang, SK. and Bodenhausen GV. (2015). Multiple Identities in Social Perception and Interaction: Challenges and Opportunities, *Annual Review of Psychology*, 66:547–74

Kett, M., Twigg, J. (2007) Disability and disasters: towards an inclusive approach. *World Disasters Report 2007: Focus on Discrimination*. Geneva: IFRC, pp. 87-109

Kreft, S., Eckstein, D., Junghans, L., Kerestan, C., and Hagen, U. (2015) *Briefing Paper, Global Climate Risk Index 2015: Who Suffers Most From Extreme Weather Events? Weather-related Loss Events in 2013 and 1994 to 2013*. Berlin: Germanwatch e.V.
URL: https://germanwatch.org/en/download/10333.pdf

Mitra, S., Palmer, M., Kim, H., Mont, D., Groce, N. (2017) Extra costs of living with a disability: A review and agenda for research. *Disability and Health Journal* 10(4):475-484

Rahman, M. S., & Mallick, M. S. (2007). Community, disability and response to disaster mitigation in Bangladesh. Public Sphere Project.
URL:http://www.publicsphereproject.org/events/diac08/proceedings/16.Disaster_Mitigation.Rahman_and_Mallick.pdf

Rapp, R. (2012) 'Anthropology and the study of disability worlds'. In MC Inhorn and Wentzell EA (eds) *Medical Anthropology at the Intersections: Histories, Activisms, and Futures.* London: Duke University Press

Smith, F., Simard, M., Twigg, J., Cole, E., and Kett, M. (2017). Disability and Climate Resilience: A literature review. Leonard Cheshire Research Centre: London. URL:
https://www.ucl.ac.uk/iehc/research/epidemiology-public-health/research/leonard-cheshire-research/research/publications/documents/2017/Disability_and_Climate_Resilience_Lit_review.pdf

Stough, L.M. and Kang, D. (2015) The Sendai Framework for Disaster Risk Reduction and Persons *with Disabilities*, *Int J Disaster Risk Sci* (2015) 6: 140. doi:10.1007/s13753-015-0051-8

UNESCAP (2012). Incheon Strategy to "Make the Right Real" for Persons with Disabilities in Asia and the Pacific. United Nations, Bangkok. URL:

http://www.unescapsdd.org/files/documents/ESCAP%20Guide%20on%20Disability%20Indicators.pdf

Verisk Maplecroft (2016) *Climate Change and Environmental Risk Atlas (CCERA).* New Jersey: Verisk Maplecroft.

Wallace, B.D. (2016) *Disaster Risk Reduction and Climate Change Adaptation planning in New York City*, Thesis for partial fulfilment of MSc in Disaster Science and Management, Delaware University.

WHO/World Bank (2011) *World Report on Disability*. Geneva: World Bank

ANNEX 1: DFID TERMS OF REFERENCE

Policy Research Fund

Title: Disability and Climate Resilience

Key Policy Issue/Overarching Research Question – Please explain why this is a policy priority for DFID

The research will explore **how resilience to climatic shocks and stresses can be effectively increased for people with disabilities**.

This will support DFID priorities on **resilience building**, particularly in relation to climate change, and on **reaching the poorest and most vulnerable people**.

It is well recognised that world's poorest people will be most affected by the negative impacts of climate change. Many live in locations prone to flooding, storms, landslides or drought, are reliant on climate-sensitive sectors for their livelihoods (e.g. agriculture and fisheries) and have the least ability to cope with shocks and stresses due to limited human, physical and financial assets.

However, the climate-vulnerable poor are not a homogeneous group. Within this population, individuals and groups experience systematic and often multiple forms of discrimination and disadvantage that reinforce each other. These pre-existing inequalities increase the vulnerability of these individuals and groups to climatic and environmental changes. There is a relatively rich literature on gender, age and indigenous groups, but very little on disability as a factor that impacts vulnerability to climate change.

It is well recognised that people with disabilities are at particular risk during humanitarian disasters and that disaster preparedness and response must be inclusive of people with disabilities. DFID has produced a humanitarian guidance note on aging and disability in humanitarian response and a range of international actors are engaged in lobby for more disability inclusive humanitarian action.

However, **very little work is taking place on disability in the context of longer term climatic and environmental change**. Evidence on the extent to which disability affects an individual's vulnerability to climatic shocks and stresses and how approaches aimed at increasing resilience to shocks and stresses for disabled persons is extremely weak.

Of the one billion people globally with a disability, 80% live in developing countries. People with disabilities are over-represented amongst the persistently poor. While 1 in 7 people has a disability, this ratio increases to 1 in 5 for people living below the World Bank extreme poverty line.

Given these facts, it can be logically inferred that people with disabilities are likely to be particularlyat risk from the impacts of climate change and have less ability to adapt. People with disabilities are typically among the most 'resource poor' within a community, due to poor education, lack of income, social exclusion and limited access to decision-making authorities. Therefore they will have little access to or control over those resources which would facilitate adaptation and they are unlikely to participate in decisions about adaptation and mitigation strategies.

While a logical argument can be made about the relationship between disability and climate vulnerability/resilience, there is a **lack of empirical evidence to demonstrate this and to support policy work and programme design**.

What are the key questions to be addressed?

Key questions to be addressed would include:

1. What is the relationship between disability and an individual's vulnerability/resilience to climatic shocks and stresses?
   a. What are the different factors (social, economic and political) that influence exposure, sensitivity and ability to adapt to climate change for people with disabilities?
   b. What is the impact of intersecting inequality? How do other social characteristics e.g. gender, age, ethnicity, effect exposure, sensitivity and ability to adapt to climate change for people with disabilities?
   c. How do different disabilities affect exposure and sensitivity to the impacts of climate change and the ability to adapt?

2. How can interventions build the resilience of people with disabilities to climatic shocks and stresses?
   a. What are the specific drivers of vulnerability and resilience that need to be addressed for people with disabilities?
   b. How can these be addressed through policy and programme interventions? What is the strength of evidence for these approaches?
   c. What action can be taken by programme and policy staff working on climate change to ensure this work is disability inclusive?

What is the expected duration/timeframe for delivery – to a **maximum of 12 months**

10-12 months

How will the research contribute to;-   a) new knowledge and insights to inform policy and   b) build on existing studies and research knowledge.

The research will provide **new knowledge and insights to inform policy work and programme design**. This will be a global public good. While there is a significant and growing evidence based on both resilience and disability, there is very little and possibly no rigorous empirical evidence to demonstrate the relationship between these issues and to support good inclusive resilience building.

The research may draw on existing evidence on both disability and resilience to develop the analytical framework and to set hypothesis to guide the research.

What is the overall purpose of the research and what is it intended to accomplish?

The research will be a **global public good, contributing to the global evidence base with the potential to influencing policy and programmes of a range of development stakeholders**. It may be a catalyst for further research and other work.

Within DFID it will directly support policy development on leave no one behind and climate resilience and on climate smart development. It may directly influence centrally funded programmes supporting national capacity building. It will complement a new Topic Guide on leave no one behind in the context of climate and environment programming, for which the main audience is climate and environment advisors across DFID.

What type of research initiative is proposed? How will it be carried out and what methods might be used to generate the findings and outputs (desk reviews, surveys, fieldwork, etc.)?
This will be a **primary research study**, given the weak empirical evidence based. It is most likely that observational (non-experimental) research methods will be used, such as surveys, interviews, focus groups, case studies and other observational techniques. Data collection and analysis can be quantitative and qualitative, but qualitative data collection and analysis is likely to be required given the research questions, time frame and budget. Participatory methods may be used but are not essential. Field work will be required and should be undertaken across contexts to improve external validity of research findings. **Consultation with DFID staff** will also take place throughout the research to identify staff needs and opportunities for where and how DFID's climate and environment work can be more disability inclusive.
Research outputs – Must be in an open access place
Outputs are anticipated to include: • Final report on key findings, implications for policy and programmes and recommendations further research. This will include a section on research methods and annexes with primary data. • 4 page summary paper highlighting key findings and implications for policy and programmes. • 2 page case studies (if produced) • 1 page climate change and disability inclusion 'checklist' setting out steps that can be taken to ensure people with disabilities are reached by DFID programmes. All documents will be published (e.g. on R4D website) and open access.
Skills and personnel of the researcher/team
The research team will need to include social science researchers and practitioners with demonstrated expertise of completing primary research on social development and climate change issues. Experience of rigorous observational research techniques, including qualitative methods is essential. Experience of facilitating participator research is desirable. Partnerships with southern organisations, especially disabled persons organisations and NGOs working with people with disabilities will be essential and partnership with southern research organisations is encouraged. The team will also require strong data analysis, synthesis and communications skills.
Potential Users/User Engagement - inside DFID, across HMG and in partner countries
The research will be a global public good and may be used by a wide range of development stakeholders. Within DFID it is aimed at climate and environment advisors, social development advisors and other staff working on climate resilience, disability and the wider leave no one behind agenda. It will be used to engage and influence DECC and Defra, who spend a significant proportion of UK climate finance, as well as large multilateral partners such as the Green Climate Fund and Climate

Investment Funds for which DFID is a board member. Within Climate and Environment Department specifically it will inform our policy work in leave no one behind in the context of climate change as well as programmes such as BRACED which aims to build the resilience of the most vulnerable to climate change and programmes aimed at building national capacity to implement national mitigation and adaptation plans and spend multilateral climate finance.

The research can also be used by a range of external partners e.g. NGOs and other agencies working on disability but who are not yet engaged in work on climate resilience and similarly climate and environment focused partners who do not consider disability inclusion in their work at present. The research can also support advocacy work aimed at promoting change in policy, resource allocation and programmes.

Communication and dissemination strategy – engaging users and communicating findings (including R4D etc)

The research outputs will be published and open access. At a minimum these will be published on theR4D website and other publication channels will be explored. A range of social media such as the DFID climate and environment twitter feed will be used to publicise the research. We will share with a range of external partners and networks and seek opportunities for the research to be presented at external events. The engagement of national stakeholders in the research will also help increase interest in and use of the research. Within DFID events will be held for staff and communications tools such as yammer, newsletters, presentation to communities of practice on climate change and disability and possible cadre conferences will be used to disseminate. The proposed early engagement of the researchers with DFID country office staff and delivery of specific products for them will also help increase uptake and use of the research. A full communications plan will be developed during the inception stage.

Areas of potential conflict of interest or reputational risk

None identified.

Nominated supplier OR list of suppliers for competition (limited competition is preferred, please provide justification in the case of nominated supplier)

Possible suppliers are:
- Leonard Cheshire Disability and Inclusive Development Research Centre
- University of Birmingham
- Social Development Direct
- Sightsavers

Breakdown of estimated budget

Estimated approx. total = £170,000
- Literature review and development of analytical framework and finalisation of research method – 10 days at approx. £600 (senior researcher) and 10 days at approx. £400 (junior researcher) = £10,000
- In country staff research costs – 40 days at approx. £600 (senior researcher), 40 days at approx. £400 (junior researcher) and 80 days at approx. £300 (local researcher) = 64,000
- Travel, accommodation and other in country research costs = £40,000

- Write up of outputs – 30 days at approx. £600 (senior researcher) and 50 days at approx. £400 (junior researcher) = £35,000
- Communication staff costs – 10 days at approx. £600 (senior researcher) and 10 days at approx. £400 (junior researcher) = £10,000
- Other communication and dissemination costs = £10,000

Policy/Operational Impact Assessment and research quality (this is a mandatory requirement and a condition of PRF funding approval. Assessments should be completed within 6 months of project completion and returned to Research Procurement Unit). Please provide details of;
  a) *any internal or external dissemination exercises or events held (including those planned for future dates)*
  b) *which audiences (internal or external) have engaged with the research findings*
  c) *how the research findings have been used to influence or shape policy or programme design (both internally or by other donors, development partners, etc)*
  d) *Assess the quality of the evidence. Looking at the principles of research quality (transparency, rigour, validity, reliability and cogency) and using the quality descriptors of High, Medium and Low, provide an overview of the quality of outputs produced and details of how satisfied internal and external users have been with the outputs.*

ANNEX 2: ONLINE SURVEY

Disability and climate resilience online survey

#	Question	Response options	Type/comment
Section 1: personal information			
1	Respondent name		String
1a	Email address		String
2	Respondent organisation		String
3	Location		String
4	Position in organisation	Senior management Team leader Support staff Technical staff (e.g. finance, procurement) Other	String – other
5	Time with organisation	Years Months	
6	Does your organization have a focal point/department working on climate issues?	Yes No Don't know	
7	Does your organization have a focal point/department working on disability issues?	Yes No Don't know	
8	Do you work with the climate change focal point/department?	Yes No Don't know	If 6=no/dk, skip
8a	If yes, how often?	Regularly Rarely	If 8=no/dk, skip
9	Do you work with the disability focal point/department?	Yes No Don't know	If 7=no/dk, skip
9a	If yes, how often?	Regularly Rarely	If 9=no/dk, skip
10	Have you attended any disability training?	Yes No Don't know	
Section 2: organisation experience with disability and climate change			
11	Please give details of your organisation's climate-focused programmes	"Include project titles, location, donor, project duration and any other information"	String
12	Are vulnerable populations included in your programmes?	Yes No Don't know	
13	If so, please list		String If 12=no/dk, skip
14	Which populations do you consider to be most vulnerable in climate-affected communities	Women Children Older people People with HIV/AIDS	Limited to 3 options

		People with disabilities LGBT people Migrant people Displaced people People living in extreme poverty People from ethnic minority groups Other	
15	Are people with disabilities included in your climate-focused programmes	Yes No Don't know	
16	How do programmes ensure that people with disabilities are able to access the activities and resources?		If 15=no/dk, skip String
Section 3: policy environment			
15	What national climate policies or strategies exist in your country?		String
16	Is there a national disability policy?	Yes No Don't know	
17	To what extent do you think disability is a priority area in the climate change policy?	Not at all To a limited extent To a moderate extent To a significant extent Fully Don't know	
18	Are there disability-specific targets in the national climate change policy/policies?	Yes No Don't know	
19	Do you think that the climate policy/policies is implemented successfully?	Yes No Don't know	
20	To what extent are people with disabilities represented in climate resilience policymaking and/or implementation?	Not at all To a limited extent To a moderate extent To a significant extent Fully Don't know	
Section 4: conclusions			
21	In order for you to better mainstream disability in your work on climate change, what type of support would be most useful?	Training Improved indicators, More contact with the focal point Knowledge-sharing activities with colleagues Access to best practice examples Other	Other=string
22	Would you be happy for us to contact you if we would like more information?	Yes No	
Thank you for taking the time to complete this survey			

ANNEX 3: POLICY ANALYSIS TOOL: CLIMATE-RELATED POLICIES

The analysis must look at content, context, actors and process. The table for the rating must be completed for each policy separately.

Content analysis:

Ratings of can use 3.5, 2.5, 1.5 and 0.5

Explain in the table with the ratings why you used the rating you did.

	High (Score 4)	Medium (Score 3)	Questionable (Score 2)	Weak (Score 1)
Right to comprehensive inclusion of children and adults with disabilities	Policy explicitly acknowledges that all children and adults have a right to inclusion and specifically mentions children and adults with disabilities being accommodated in ALL climate change focused programmes.	Policy explicitly acknowledges that all children and adults have a right to inclusion and specifically mentions children and adults with disabilities but does not specify accommodation within ALL climate change focused programmes.	Policy states right to inclusion but not mentioning children and adults with disabilities specifically or accommodation within ALL climate change focused programmes.	No mention of the right to inclusion and/or no mention of right of children and adults with disabilities to accommodation in climate change focused programmes.
Accessibility of climate change programmes and information on these for children and adults with disabilities	Policy fully addresses physical and informational accessibility for children and adults with disabilities: • Transport • Infrastructure • Assistive devices • Materials in Braille and Sign Language, large print, etc. The focus is on creating accessible climate change focused programmes rather than meeting needs only of individual children and adults with disabilities	Policy mentions many but not all – some gaps; focus is not primarily on system accessibility but rather on meeting individual needs only	Policy addresses some of these but many gaps and focus is entirely on individual needs with no reference to creating accessible climate change focused programmes.	Policy does not specifically mention any of these and if there is a mention it refers to an individual child or adult's needs.

	High (Score 4)	Medium (Score 3)	Questionable (Score 2)	Weak (Score 1)
Inclusivity of climate change programmes for children and adults with disabilities	Policy addresses awareness raising, training of staff in climate change focused programmes, and ensuring that programmes are inclusive and accommodate individual needs.	Not all addressed and when addressed are with reference to disability-specific programmes only; e.g. disability targeted assistance with little recognition of the access to the ALL climate change focused programmes.	Only addressed within disability specific climate change progammes and no recognition of the importance of access to general climate change focused programmes.	Policy does not mention any needs of children and adults with disabilities in terms of accessing climate change focused programmes.
National climate change programme implementation plans for children and adults with disabilities	Policy has clear plan of action including specific actions to be taken and responsible parties with respect to children and adults with disabilities • Set out in or in tandem to the policy documents • Actors and targets are clearly indicated • Monitoring plan is clearly set out • Intervals for monitoring are specified	Policy mentions a clear plan of action with different components but does not specify the detail of who does what, how and when to monitor and budget guidelines	Policy sets out an action plan but without any specific mention of actors, monitoring, budget, etc.	Policy does not set out any plan of action or monitoring plan
Enforcement mechanism for aspects relating to inclusion of children and adults with disabilities	Clear enforcement mechanism is described with an Enforcement agency named; Clear penalties for non-compliance (e.g. through an Act related to the policy); Not taking proactive steps to implement the policy is seen as non-compliance in addition to obstructing the implementation	Describes the enforcement mechanism and contains penalties but no mechanism for enforcement is specified in the policy; there is no mention of penalties for not implementing the policy proactively.	Minimal description of an enforcement mechanism with minimal penalties and only a focus on obstruction of the policy implementation rather than lack of proactive implementation.	No mention of enforcement and penalties

	High (Score 4)	Medium (Score 3)	Questionable (Score 2)	Weak (Score 1)
Budgetary concerns for aspects relating to inclusion of children and adults with disabilities	Budget guidelines for children and adults with disabilities are clearly specified in terms of • What has to be budgeted for • Where budget should be allocated from • Funding is mandated and must be made available	Budget guidelines for children and adults with disabilities are specified in terms of • What has to be budgeted • Where budget should be allocated from But Funding is conditional on budget availability	Budget guidelines are not specified specifically for children and adults with disabilities and Funding is conditional on budget availability	No clear budgetary guidelines and no mandated budget for children and adults with disabilities
Information management system for aspects relating to climate change focused programmes of children and adults with disabilities	The policy specifies clearly what information should be collected, by whom, at what intervals and what indicators will be used to monitor progress of children and adults with disabilities in climate change focused programmes	The policy specifies the need for data and a plan for what information should be collected concerning children and adults with disabilities in climate change programmes but with minimal detail on who should collect it, when and what indicators should be used for monitoring	No clear Information Management System (IMS) for children and adults with disabilities but some recognition that data collection is important for monitoring	There is no IMS specified nor the importance of data recognized for children and adults with disabilities and even all children and adults generally

Component

Context
Describe the context factors that could have had or have an impact on how the policy was developed, e.g. economic (Cost containment and austerity measures or growth), power relations between government and people, private-public relations, culture, public information on disability

Actors
Describe the actors who were involved in the development of the policy, e.g. local, regional & international groups and individuals, people with disabilities and DPOs, government (parliamentarians and bureaucrats) and civil society, international organisations and donors, religious and traditional leaders, etc.

Process
Describe the process of how the policy was developed, e.g.
inclusive or exclusive processes, which groups included, what evidence used (CRPD, Review of best practices), public consultation, etc.

ANNEX 4: FOCUS GROUP DISCUSSION GUIDELINES

County: _____

Type of FGD Category_____   Bio data of Participants [____]   Male/Female [____]

Introduction:

My name is _____and I am with_____. We are conducting research for a project on [disability and climate resilience, funded by the UK government]. We want to talk about your experiences in this community. Everyone is encouraged to speak, and we will give priority to people who have not spoken. One person should talk at a time. It is okay to disagree, but please respect each other's views. There are no right or wrong answers.

Our research is about the opportunities and experiences of people with disabilities in your community. This is a very large topic and there is a lot to discuss in the time available, so we may have to stop and interrupt you at times. It will be good to think about all sorts of people with impairments and disabilities, men and women, boys and girls, and those with different types of functional limitations or experiencing challenges and difficulties.

1.   Can we start by talking about what you understand or have experienced about climate change – probe - what, if any, impact of these changes have you experienced? How did you cope with these?

2.   Are any of you engaged with any national/county/other stakeholders on these issues (probe, if not, why not)?

3.   Now we want to hear about what you understand or have experienced about 'resilience' (may need to agree a locally understood definition)

4.   Do you know of any work the government is doing in this area around climate [change] or resilience [as defined above] (If yes, probe: How did you hear about these programs, are they effective etc)

5.   Are people with disabilities included in this work? Can you give some examples?

6.   Are any of you engaged with any national/county/other stakeholders on these issues (probe, if not, why not)?

7.   What do you think could be done to better support you and your communities around the impact of climate?

8.   What support is available to you individually and as a community in terms of climate impact (probe, if yes, what sort, how is it accessed; is it fairly distributed etc?

9.   What gaps do you think there are around these issues, and what need to be done to change these?

10.   What would some of the recommendations be that you would make to your government; to INGOs (and anyone else?)

Finally, we have discussed a lot of things, but is there anything on the subject of disability and poverty that we have not discussed that you think it important for us to know about? Do you have any questions or comments?

Thank you again for sharing your time, experience and insights with us. We really appreciate your taking the time to talk to us today.

ANNEX 5: KEY INFORMANT INTERVIEW GUIDE

Key informant interviews with policy-makers

Name of Ministry/organization:_____

Name of Interviewee:_____

Gender of informant: Male [____]   Female [____]

Interviewer name: _____

1. What is the remit of your Ministry/Department and what services do you have responsibility for?

2. Do you provide any specific programme or services for people with disabilities? (Probe – what about other vulnerable groups, for example....? how are these defined in your ministry?)

3. Do you have anyone in your Department/Ministry who works specifically on disability issues? (probe - If yes, who are they, how do they coordinate their work, e.g. With other departments, across ministries etc? Do they have any focal points for other groups?)

4. What are some of the relevant policies in your sector to ensure inclusion of people with disability in your country (probe – if yes, what does disability inclusion mean within your programmes? At what stages are people with disabilities included? If relevant - who are considered vulnerable in climate policy/ implementation processes? Are there any specific programmes targeting these groups?

5. How effective do you think these policies are? Any suggestion for improvement?   (probe – to what extent are they in line with the CRPD and national disability legislation?)

6. Does your Department/Ministry have specific projects/programmes or financial assistance that specifically target people with disabilities? (Probe – if yes, please give further details of these programmes; are these specifically targeted to certain impairment groups, and if so, which ones? If not: do they fund any other specific groups? Would they support targeting people with disabilities, and if so, how should these funds be allocated? How?

7. To what extent are people with disability able to access these services? (Probe, if not able to, why not, what barriers, what could be done better/differently?)

8. What can you say about your capacity to implement disability inclusive programmes and services (Probe – How do programmes ensure that all people with disabilities are reached? Are there any manuals, codes or guidelines that direct this?)

9. Do you involve disabled people's organisations and people with disabilities in your planning, implementation and evaluation processes? (probe - if yes, please give details; if No, please state the reasons for not involving them)

10. Do you work with other local, regional and international partners (for example, local NGOs, international NGOs and donor agencies) on disability issues? (probe - if yes, please ask for details; if No, please ask the reasons why they are not involved etc)

11. Does your Department/Ministry have any plans to develop its services for people with disabilities? (Probe – or example, are there any capacity building initiatives to support people with disabilities? Is there any evidence of this; any reports that can be shared? (If yes, please give details and obtain copy if possible)

12. What in your opinion are the challenges of meeting the needs of people with disabilities (Probe: programmatic, policy, budgetary, human resource)

13. Do in your opinion, what are the most important challenges/barriers that people with disabilities face in your country?

14. Is your office accessible for people with disabilities?

And finally, we have asked you lots of question, is there any you would like to add?

Thank you for taking the time to talk to us today.

Key Informant Interviews with NGOs

Time of interview: Start [___|___:___|___] End [___|___:___|___] |___:___|___]

Name of /organization:_____

Name of Interviewee:_____

Gender of informant: Male [___]   Female [___]

Interviewer name: _____

1.   What is the remit of your organisation and what services do you provide?

2.   Do you provide any specific programme or services for people with disabilities? (Probe – if yes, please give further details of these programmes; are these specifically targeted to certain impairment groups, and if so, which ones? What about other vulnerable groups, for example....? how are these defined in your organisation?)

3.   Do you have anyone in your organisation who works specifically on disability issues? (probe - If yes, who are they, how do they coordinate their work, e.g. With other NGOs, ministries etc? Do they have any focal points for other groups?)

4.   What are some of the relevant policies in your sector to ensure inclusion of people with disability (probe – if yes, what does disability inclusion mean within your programmes? At what stages are people with disabilities included? If relevant - who are considered vulnerable in climate policy/ implementation processes? Are there any specific programmes targeting these groups?

5.   How effective do you think these policies are? Any suggestion for improvement? (probe – to what extent do you think are they in line with the CRPD and national disability legislation?)

1.   To what extent are people with disability able to access your services? (Probe, if not able to, why not, what barriers, what could be done better/differently?)

2. What can you say about your capacity to implement disability inclusive programmes and services (Probe – How do you ensure that all people with disabilities are reached? Are there any manuals, codes or guidelines that direct this?)

3. Do you involve disabled people's organisations and people with disabilities in your planning, implementation and evaluation processes? (probe - if yes, please give details; if No, please state the reasons for not involving them)

4. Do you work with other local, regional and international partners (for example, local NGOs, international NGOs and donor agencies) on disability issues? (probe - if yes, please ask for details; if No, please ask the reasons why they are not involved etc)

5. Does your organisation have any plans to develop its services for people with disabilities? (Probe – or example, are there any capacity building initiatives to support people with disabilities? Is there any evidence of this; any reports that can be shared? (If yes, please give details and obtain copy if possible) Do you have any case studies and examples of good practice, and would you be willing to share them with us?)

6. What in your opinion are the challenges of meeting the needs of people with disabilities (Probe: programmatic, policy, budgetary, human resource)

7. Do in your opinion, what are the most important challenges/barriers that people with disabilities face in your country?

8. Is your office accessible for people with disabilities?

And finally, we have asked you lots of question, is there any you would like to add?

Thank you for taking the time to talk to us today.

ANNEX 6: ONLINE SURVEY OPEN-ENDED QUESTIONS SUMMARY

Africa

East Africa

The majority of organisations that reported projects from the Africa region were from East Africa (30 out of 44 respondents).

Kenya

Kenya had the most respondents of any African country (16). There, climate projects tended to be focused on **adaptation** or **mitigation**.

Mitigation activities included tree-planting projects (Khwisero Sports Academy) and initiatives around green buildings (State Department for Housing and Urban Development) and green energy (State Department for Housing and Urban Development; Energy and Environmental Partnership). These activities did not specifically include people with disabilities as a 'vulnerable population'. **Mitigation** projects focused on including single mothers and orphans, or people living in informal settlements, rather than people with disabilities. However, the Khwisero Sports Academy did report having a centre where people with disabilities could get information on climate-related activities.

Adaptation activities included promoting water-efficient/drought-resistant crops (Inades Formation Kenya; African Agricultural Technology Foundation), enhancing access to water/water conservation (CWS; Inades Formation Kenya). Most projects highlighted various 'vulnerable' populations in their projects, including women, children, old people and youth, and two (Inades and AATF) mentioned people with disabilities. Only Inades mentioned its strategy for including people with disabilities: 'trainings focusing on income generating activities that are disability friendly depending on individual disability level'.

Two **disability-focused** organisations reported climate-focused projects. The Disability Caucus on Implementation of the Constitution (DCIC) Devolution Working Group (DWG) has a one-year project on disability and climate change adaptation for people with disabilities. Despite this seemingly narrow focus, the target 'vulnerable' populations were broader than just people with disabilities, and also included minorities and marginalised communities, children, youth and the elderly. People with disabilities are included at all stages of planning, implementing and evaluation, and DCIC/DWG aims to make materials available in accessible formats.

The Mumias/Matungu Disability Network reported a project with United Disabled Persons Kenya and Handicap International[11] on gender-based violence, which comprised civic education and advocacy, and which included 'parents of severely disabled children'. However, it is not clear how this is related to climate change.

United Nations Major Group for Children and Youth, Kenya was the only organisation in the region that reported implementing a Disaster Risk Reduction project. However, no further information was given.

5 of the 16 organisations from Kenya said that they had no climate-focused projects. These organisations included government ministries and DPOs.

---

[11] Now Humanity and Inclusion

Uganda

Of the two respondents in **Uganda**, only one (the Ministry of Water and Environment) identified an **adaptation**-focused project on environment and natural resources. This project aimed to include rural and urban poor but did not identify any strategies for including people with disabilities in the project.

The other respondent (Youth for Life Foundation) did not identify any climate-focused projects, and focused its projects on child mothers and child-headed households. It aimed to include people with disabilities through the distribution of seedlings for tree planting (presumably for climate **mitigation** activities), including them in community savings and loans association, and promoting advocacy on disabilities rights and support of information, education and communication materials.

Ethiopia

Ethiopia was the only country in Africa where reported climate projects were predominately focused on **climate policy**. This may be due to two of the three respondents being from the African Climate Policy Center in UNECA. The focus populations were women and youth, and projects aim to mainstream climate info policing and programming that work to achieve development goals. The third respondent from Ethiopia, Youth Environmental Care Voluntary, reported training people with disabilities. The project focused on disability and environment in universities.

Rwanda

13 respondents were from organisations based in **Rwanda**. None of the respondents reported any climate **mitigation** projects. Two organisations mentioned projects focused on **adaptation** (VSO and the Rwanda Environment NGO Forum [RENGOF]). Reducing Vulnerability to Climate Change through Community Adaptation is a three-year project implemented by the Rwanda Ministry of Natural Resources, which is focused on women, youth, poor people and 'historically marginalised people'. VSO is implementing a livelihoods project in the East and West provinces, which includes a broad range of 'vulnerable' populations: people with disabilities, unemployed youth, widows, extremely poor people, children. However, it is not clear what specific activities are undertaken to include people with disabilities in the project.

The only project in Rwanda that focuses on climate policy is undertaken by UNDP, and the 'vulnerable' populations included are women, children and people living in poverty. 7 of the 13 respondents reported having no projects focused on climate change. This included all bar one of the **disability-specific** and DPO respondents[12], and the National Council of Persons with Disabilities. However, the Rwandan Organization of Women with Disabilities (UNABU) mentioned that while it did not have specific projects focused on climate change, it is considered as cross-cutting across all implemented projects. Most of these organisations stated that they included people with disabilities at all stages of project design, implementation and evaluation. Their target populations were people with disabilities, with some focusing specifically on women and girls with disabilities, or on specific impairment types such as deaf/deafblind communities, people with dwarfism, or people living with HIV.

---

[12] UPHLS, NOUSPR, UNABU, NUDOR, Rwandan Organisation of Women with Disabilities, Troupes des Personnes Handicapées Twuzazanye

The only DPO that reported a project was the Rwanda National Association of Deaf Women, which has a one-year project 'sustainable partnership for access to social protection by deaf and deaf blind women'. The DPO specifically focuses on deaf and deafblind women in two districts in Rwanda (Ruhango and Kamonyi), but it is not clear how it addresses issues of climate change.

West Africa

Only three respondents reported projects in West Africa (2 in *__Ghana__*, 1 in *__Nigeria__*). Most of the projects reported focused on climate **mitigation**. The Kenyasi Institute of Technology (Ghana) has a 'one child one tree' project, which aimed to include people with disabilities by providing access of transportation, training and education. The Daughters of Charity of St. Vincent De Paul (Nigeria) promoted proper waste disposal and management in its projects: this project did not focus on vulnerable populations, but was geographically focused, and aimed to include people with disabilities by creating access to information, provision of clean water and promoting the use of simple recycling methods. The third project mentioned was focused on climate **adaptation**. The Strategic Youth Network for Development (Ghana) had a project on the youth role in climate adaptation. The project did not have strategies to include people with disabilities, and the target 'vulnerable' populations were youth and aged people. One respondent from Nigeria said that they had no climate-focused projects.

Southern Africa

Projects in Southern Africa focused on climate change **mitigation** through renewable energy (Africa Enterprise Challenge Fund, **Tanzania**; EEP, **Southern** and East Africa). Neither project identified strategies for including people with disabilities, and they had similar 'vulnerable' populations of focus (women and rural poor, and children). **Adaptation** projects focused on agriculture (VUNA, **South Africa**) and climate-resilient water infrastructure (CRIDF, Southern Africa). Neither project had specific activities for including people with disabilities. Projects focused on women, poor people, and children (CRIDF) or youth (VUNA). The only **disability**-specific organisation to respond to the survey in Southern Africa was S4S-UK (**Zimbabwe**). They did not report any climate-focused projects, but did include people with disabilities at all stages of project design, implementation and evaluation, and their population of focus was people with disabilities, their families and communities.

North Africa

Only one respondent in the Africa region was not from sub-Saharan Africa (**Morocco**). The OXYGEN foundation had projects focused on raising awareness about renewable and clean energy, and training youth in recycling techniques. A variety of 'vulnerable' populations were mentioned, including youth, rural women, people with disabilities and children. However, they did not identify how people with disabilities were included in projects.

Asia

South Asia

Bangladesh had by far the most responses to the survey (16 out of 26) in the Asia region. The majority of projects reported were related to **adaptation** or **disaster risk reduction**.

Three of the respondents to the online survey were from Bangladesh Rural Advancement Committee (BRAC) and gave the most detailed account of projects they undertake in Bangladesh. Five projects were reported:

1. Addressing Climate Change-related Destitution (ACCD) – locations: Khulna, Bagerhat, Pirojpur, Jhalokathi, Barisal, Patuakhali, Barguna, Bhola; 2015-2016
2. Disaster Management and Climate Change (DMCC) – *see below for detail*
3. Cyclone Roanu Recovery Project - locations: Chittagong, Cox's Bazar districts; Bill & Melinda Gates Foundation and BRAC; July 2016-December 2017.
4. Promoting sustainable technologies and resilient infrastructure - selected climate-vulnerable areas; Strategic Partnership Arrangement (DFID-DFAT); 2016-2020.
5. Establishing a funding mechanism and facility to address rural-urban migration; climate-vulnerable urban settlements of Khulna, Rajshahi, Sirajganj, Satkhira and Barisal; KfW (German Development Bank) and BRAC; 2018-2023

Activities in the ACCD project include poverty-alleviation initiatives, such as asset transfer, enterprise development, capacity building, financial inclusion and social integration.

The DMCC project aimed to build capacity at the community level on DRR and increase **adaptability** and coping ability in natural disasters. Activities include conducting predictive research, information transfer and education related to climate change and natural disasters. The project is also involved in the provision of psychosocial counselling and training to support communities in the aftermath of disasters. DMCC also works on access to safe water and sanitation.

The DMCC project has generated standard operation procedures and protocols to ensure quick and effective response during emergencies. DMCC has conducted trainings for BRAC staff to streamline disaster management. The project aims to build community capacity through trainings at the grassroots level; and community outreach efforts to spread awareness have also been implemented. Disaster-resilient structures in the southernmost regions of the country have been built, further equipping communities to tackle disaster impacts. Increasing adaptability and coping ability is a key aspect of the DMCC project. Relief assistance is highly prioritised for disaster-affected areas after the emergency. Alternative livelihood options are given to vulnerable households to ensure sustainable living.

The projects mentioned included people with disabilities during the planning and selection of target populations. However, people with disabilities were not identified as a population of focus, which were defined as the ultra-poor and disaster-affected people in specific districts of Bangladesh.

Four **disability-focused** organisations responded from Bangladesh. ADD International reported projects undertaken in Patuakhali and Bagherhat districts. Project aims include increasing accessibility to services through local government institutions and addressing climate change and **DRR** issues through DPOs. **Adaptation-focused** projects have improved sanitation for women and children with disabilities. The projects include people with disabilities by organising self-help groups through DPOs, and actively including them in the development process. People with disabilities are the sole focus of the projects, predominantly in remote island and coastal areas.

Sightsavers reported on its project "Disability Inclusive Disaster Preparedness and Management Focusing Alternative Livelihood" in Satkhira , which ended in 2014. People with disabilities and their families were the sole focus of this project, and were included at all stages of the project cycle. The

project also engaged people with disabilities with local authorities, communities, and district disaster management committees.

The Centre for Services and Information on Disability has implemented projects on disability and climate change, but did not identify any specific projects. It includes people with disabilities using an 'inclusion checklist', but gave no further details as to its contents. In addition to people with disabilities, other 'vulnerable' populations of focus are working children, people living in slum areas, and family members of children with disabilities.

Three respondents were from the **academic** sector: Independent University Bangladesh (IUB, Patuakhali Science and Technology University, and International Centre for Diarrhoeal Disease Research, Bangladesh (icddr,b). IUB and icddr,b work on projects focused on climate change adaptation, and Patuakhali University offers projects in Disaster Management and Climate Change at undergraduate and postgraduate levels, as well as doctoral projects conducting research in the field. The only 'vulnerable' populations highlighted were communities in the coastal zone (IUB and icddr,b). Disability was not mentioned, apart from in awareness-raising (Patuakhali).

Finally, Integrated Social Development Effort (ISDE) Bangladesh reported a project to integrate persons and children with disabilities in non-formal education. Activities included forming groups of adults with disabilities, and income generation through the provision of loans. Projects also provide minor medical treatment and equipment for people with disabilities. Currently ISDE is providing services for people with physical impairments and rickets in Moheshkali Island of Cox's Bazar district with technical support from the Center for Disability and Development (CDD). The project includes people with disabilities during project development, and projects also focus on old people and vulnerable women. However, it is not clear how this project addresses issues of climate change.

Four of the respondents reported having no projects related to climate change. VSO highlighted that they consider disability as a cross-cutting issue and undertake Social Exclusion Analysis to ensure that people with disabilities are included in all implemented projects. Only Rupantar Uddyog stated a target vulnerable population: marginalised farmers.

India, Nepal, Sri Lanka

Two organisations described implementing projects in India. SMRC reported ongoing research and advocacy work that aims to include people with disabilities in designing and implementing projects (although it did not go into more detail). The 'vulnerable' populations of focus also included women and children. The Datamation Foundation has projects focused on people with disabilities and **DRR**, with a range of target populations, comprising people living in extreme poverty, old people, women, children and people with multiple disabilities. The Foundation gave unusually detailed information on the inclusion of people with disabilities, having devised tailor-made strategies which include 'voice-over for people who are unable to operate devices, robotics and artificial intelligence is also proposed to be used in our future projects'. However, it is not completely clear whether these strategies are put into practice in current programming or if they are aspirational.

The only organisation from **Nepal** that responded to the survey (Arbeiter-Samariter-Bund Deutschland) is running an inclusive **DRR** project in Dolakha and Nuwakot. It states people with disabilities are included throughout the project cycle and attempts to remove barriers to accessing

information. In addition to people with disabilities, projects also focus on older people as a 'vulnerable' population.

Both responses from **Sri Lanka** were from the University of Colombo, reporting projects and research related to **DRR** and disaster relocation. One respondent reported that people with disabilities were included through 'aided participation', but did not give more information as to what this entailed; the other stated that as projects work with whole communities, people with disabilities are ostensibly included in this. The whole community was regarded as the 'vulnerable' population.

South-East Asia

Indonesia

The ASEAN Disability Forum (**Indonesia**) was the only **disability-focused** organisation in the Asia region outside Bangladesh that responded to the survey. It does not have any climate change-focused projects, but, as would be expected of a DPO, report that the 'planning, implementing and evaluation staff should be people with disabilities'. The other two respondents from Indonesia were both from the Resilience Development Initiative. They reported case studies and situational analyses in West Java and Semarang, as well as an adaptation consultation study. They did not report specific activities related to disability, and people with disabilities were not included in their list of 'vulnerable populations' targeted in their projects. They did state that during the assessments they 'consider impacts caused by climate change that might affect people with disability' but did not mention potential impacts specifically.

The Philippines

There were two responses to the survey from the **Philippines** that highlighted ongoing projects. A2D (Alternatives 2 Development) is running a disability-inclusive **DRR** project in Tabogon. People with disabilities are included by organising them into formal groups, but no information about what these groups entailed or the activities that they undertook was provided. Other 'vulnerable' populations targeted by the project included children, women and older people. The New Hope Workers Collective has a project which is broadly **DRR**-focused (relief operation and medical missions), and detailed strategies to include people with disabilities such as holding 'regular meetings, training and proper information dissemination'. People with disabilities were the only target of this project.

Other regions

The Americas

Five respondents were from organisations based in the **USA**. Four of the five were from **disability-focused** organisations. The World Institute on Disability gave the most comprehensive response on climate-focused projects, although it is not entirely clear where the project is being implemented. Its 'New Earth Disability' project examines the impact of climate change on people with disabilities at several levels, and promotes 'adaptive climate justice'. Related to this, WID has produced publications, collaborated with the disaster preparedness and response community in the US (including California agencies), and is pursuing educational efforts. To that end, it has held a workshop and has an upcoming webinar with support from the California Department of Public Health's Office of Health Equity. The project is currently supported through organisation general funds, but WID is searching for funding to make the project sustainable in the long-term. People

with disabilities are the focus of the project, and WID aims to include them through a 'user testing service' to ensure that projects and products are fully accessible to people with a range of impairments.

The Disability Rights Fund supports projects in Asia, the Pacific and Haiti, mainly focused on disaster risk reduction and disability. It is also working with disability projects to increase their focus on climate, but did not give any examples of this. It aims to make responses to climate change a focus of its grant-making activities. DRF aims to include all types of disabilities in its projects, and additionally considers women, youth and indigenous populations as 'vulnerable' groups. A respondent from Rehabilitation International stated that its activities are centralised in the International Commission on Technology and Accessibility Commission. It is not clear if these activities are climate-focused. It considers people with disabilities to be its 'vulnerable' population of focus, particularly women and girls with disabilities. The final **disability-focused** organisation in the USA, the Center on Disability and Development, reported having no ongoing climate-focused projects.

The other respondent based in the USA was a Senior Social Development Specialist from the World Bank. She reported having a large array of Climate Investment Funds, investment lending, technical assistance, projects on NDCs and PPCR, but did not report any strategies for including people with disabilities. Projects considered 'vulnerable' populations to be people living in poverty, women, indigenous peoples, older people and people with disabilities.

Two respondents to the online survey were based in **Canada**. Rehabilitation International reported having a Task Force[13] that works on issues related to humanitarian emergencies and disability, including DRR and extreme events. RI included people with disabilities through improving accessibility through the use adaptations and technology when required. Its projects focus solely on people with disabilities.

The other respondent was from Global Alliance on Accessible Technologies and Environments (GAATES) who reported extensive work on disability-inclusive DRR, having developed guides and handbooks for EMO/DMOs, first responder organisations and people with disabilities. The respondent did not report any activities for including people with disabilities, or whether the guides and handbooks are available in alternative formats. The 'vulnerable' populations of focus are adults and children with disabilities, and their support networks.

One respondent was from an organisation based in **Antigua and Barbuda** (GEF/SGP). This organisation had an adaptation project focused on hydroponics and green house gardening. The project aimed to include people with disabilities in the training on the project and assist with project proposal writing. Strategies for this inclusion were not reported. GEF/SGP did not mention people with disabilities as a 'vulnerable' population, instead highlighting people living with HIV/AIDS, youth dropouts and single teenage mothers.

There was one respondent from **Mexico**. The *Secretaría de Medio Ambiente y Recursos Naturales* (Ministry of the Environment and Natural Resources) is the government ministry with responsibility for climate change policy development and implementation, for both **mitigation** and **adaptation**

---

[13] Task Force on Disability, Armed Conflict, and Natural Disasters

activities. It did not report any activities or including people with disabilities and 'vulnerable' populations were considered as those most at risk to the impacts of climate change.

Europe

Most of the European respondents were based in the **UK**. Two of these organisations reported projects predominantly focused on climate change **mitigation**. The Rainforest Foundation has a range of projects in Central Africa and Latin America, supporting community management of tropical forests and land rights. It did not report any strategies for including people with disabilities in projects; the 'vulnerable' populations of focus are indigenous peoples, especially those living in the Congo Basin.

The Leprosy Mission England and Wales also has climate change **mitigation** activities in its projects, including green energy (Mozambique and Ethiopia) and emission-reducing initiatives (Myanmar). Projects also included **adaptation** and **DRR** activities, and poverty-alleviation for people living with leprosy. People with disabilities and people affected by leprosy are the main focus of all projects, as well as the ultra-poor, low-caste people and indigenous people.

The only other **disability-focused** organisation that responded from the UK was Handicap International[14]. HI has. They have been working on disability-inclusive DRR for 15 years in several countries and continents, including Central America, the Caribbean, Latin America, and South and South-East Asia. The main focus of projects is to ensure that the groups most at risk of being impacted by natural hazards (people with disabilities, as well as women, children, older people and other socially excluded groups) are fully part of DRR policies and practices. Projects recognise that these are diverse groups and aim to ensure that strategies are tailored to challenges and people. HI includes people with disabilities in decision-making. To ensure that all groups who may be vulnerable to the impacts of natural hazards are included in projects, it carries out vulnerability assessments to identify specific at-risk populations.

Two organisations from the UK reported projects that were predominantly climate adaptation-focused. CARE International highlighted three on-going projects: (1) Adaptation Learning Project, DFID - Kenya, Niger, Ghana (2001-2017); (2) BRACED PRESENCES, DFID - Niger (2013-present); (3) Enhancing Community Resilience Project, DFID - Malawi (2011-present). CARE did not mention any strategies of including people with disabilities in its projects. The 'vulnerable' populations of focus were women, youth and the rural poor. The respondent from IOD Parc discussed initiatives undertaken throughout their career. These included projects aimed at climate change and water access, identifying characteristics of resilience, understanding what makes adaptation 'transformational'; and work with the National Council for Voluntary Organisations to think about what support vulnerable groups need to deal with a changing climate, and work on climate justice. The populations of focus for these projects are people in conflict situations, ethnic minorities, and people living in poverty. It is not clear how many of these projects were implemented with IOD Parc.

The UK Met Office undertakes climate **research** and international development projects in Africa and Asia, but did not mention any specific activities. It is currently developing approaches for systematic inclusion of people with disabilities, including exploring different services depending on need. The projects consider populations in Africa and Asia as 'vulnerable'.

---

[14] Now Humanity and Inclusion

Two respondents were from academic organisations based in **Germany**. Public Safety and Emergency Management at the University of Wuppertal has a project creating evacuation systems for people who are unable to self-evacuate in **emergencies**, using data lists from government and welfare facilities. The University of Osnabrueck has no specific projects, but has research and doctoral studies looking at climate issues. An example is Know2Adapt, which involves knowledge transfer for climate change adaptation. It did not mention any specific 'vulnerable' populations of focus in their research. Another respondent was from a university in **Estonia** (Tallinn University of Technology). Again, there were no specific climate-focused projects in the organisation, but some **research** projects have a climate focus.

Australasia

The two responses from the Australasia region. CBM (**Australia**) reported limited climate-focused projects, but has greater experience with DRR than CCA. However, CBM is starting to build climate change adaptation projects with mainstream organisations in Africa, Latin America and Asia, as well as undertaking inclusive **DRR** projects in Bangladesh and the Philippines. Projects focus on people with disabilities within the community approach, and both populations are considered 'vulnerable'. CBM also takes an intersectional approach, including aspects of gender, pregnant or nursing mothers, age, poverty, and ethnic or religious minority.

The University of Auckland (New Zealand) report having research focused on climate change, and has sustainability initiatives within the university. Research activities include people with disabilities, although no information is given as to how they are included. It reports focusing on various 'vulnerable groups' in research: people with disabilities, children, gender minorities, ethnic minorities, prisoners, homeless people and migrants.

ANNEX 7: CASE STUDIES

Bangladesh

These case studies are presented in their original form to reflect the local terminologies and understandings. They have been transcribed and translated by the project teams from Bengali.

Case Study: Lipi

Lipi is 23 years old and lives [in a village?] in Barisal on the southeast coast of Bangladesh. She has a physical impairment, and is unable to mobilise at all and has to use a wheelchair. When Lipi was young, she started school but the school closest to her house did not have wheelchair accessible facilities. The school toilets were inaccessible – and therefore unusable - for Lipi. Because of this, she could not stay at school all day, but could only attend for a few hours before coming back home as soon to use the toilet. Her mother had to push her in the wheelchair to school and back. Her mother also waited for Lipi in the school since she did not know when she would need to go to the bathroom, and have to be taken home. During exams her seat could be allocated at any other school and it was difficult for her mother to take Lipi in her wheelchair upstairs. None of the schools (where the exams were held) in the area have lifts or ramps or any accessible facilities for that matter.

Lipi was married off by her family at quite young age, and eventually gave birth to a baby boy. She later found out that her husband was already married to another woman in another village. Eventually, he left her and went back to his first wife and family. Lipi and her son live with her parents now. Her parents are quite elderly now and cannot support her and her son. She spends most of her days indoors, as she is unable to leave the house without assistance, so she stays at home making clothes and handicrafts to provide for herself and her boy.

During the monsoon season, Lipi's house is completely waterlogged and she cannot leave the house at all during this time. The only way she can venture beyond her house is to cross a narrow bamboo bridge, which she cannot do without assistance in her wheelchair. Therefore she spends most of her days in a small room inside the house. This is her life.

Her parents can barely take care of themselves, let alone protect to Lipi and her son. So when Cyclone SIDR hit Lipi s neighbourhood, it destroyed her family's house when a tree fell on the house. Not only that, but Lipi was still in the village as it had not been possible for her mother to push her to the shelter in such conditions. Her mother had somehow managed to pull her out of the house and moved her to a neighbouring house, which was not as badly damaged and Lipi survived. She was badly injured and traumatised - but alive.

After Cyclone SIDR, other disabled members of Lipis community were allotted relief money to help them recover. But the conditions were that the disabled person would have to come in person to 'prove' their disability before they could collect the money. Lipi called and explained that her house was waterlogged and that she could not come in person, but the authorities would not allow her mother to collect the relief on her behalf. Lipi feels let down by the justice system in place for disabled and poor people like herself. Her parents are old and her family is poor, she has no resources or connections to bend the system or make it work for her.

Case study: Nessa

Nessa is over 60 years old (her family do not remember exactly how old she is) and has a hearing and speech impairment. Due to this, she was accompanied by her brother who told her story. Nessa never married and after her parents passed away she moved in to live with her brother and his family in Sadar Upazila (Barisal). She spends most of her days in her brother's courtyard taking care of the poultry and is very attached to the birds: in fact, her family say that even though she cannot speak, she can communicate with the birds better than anyone else in the house! Due to her age and disability, when her family members travel out of town, as it is inconvenient for them to take Nessa they leave her at home. Because of this, during the time of Cyclone SIDR, her brother and his family were in Dhaka city and she was alone in Barisal.

When the cyclone alarm started, since Nessa could not hear anything, she did not know to evacuate the house, nor could she reach out to neighbours to help her. When all the neighbours started evacuating their homes they were in such a rush, they did not remember to inform Nessa. Everyone took their families and fled to the shelter. Nessa was alone. As the wind got stronger she got more and more scared but was unable to scream or call out for help. Eventually she ran out to the backyard. The wind blew away the tin roof covering her house and the tin house collapsed. Nessa sustained head injuries but somehow she survived. When her brother and his family came back home they found Nessa in a corner of the compound with the chickens, trembling with fear. Ever since then, if the wind is too strong or it rains heavily, she feels anxious that the same thing will happen to her again.

DFID disability and climate resilience programme – NGO case study

> *"Addressing disability and climate change is become [sic] a priority agenda of Bangladesh. A long-term sustainable, need specific approach is required to address disability issues in disaster scenarios, as persons with disabilities are the major victim of disaster and climate change"*

During times of disaster, many people with disabilities face multiple barriers and challenges that risk their survival: they often don't know safe places to go or are unable to evacuate their homes; cyclone shelters are often inaccessible; negative attitudes of community members and service providers limits their access to risk reduction programmes and other services; and there is a lack of rehabilitation services or psychosocial support for people with disabilities post-disaster. A lack of accurate data in disaster-prone areas limits the effectiveness of pre-disaster preparedness activities, and post-disaster relief efforts. A programme undertaken by Sightsavers aimed to address some of these gaps and issues.

The 'Disability Inclusive Disaster Preparedness and Management focusing Alternative Livelihood' project was implemented over three years from 2012 to 2014. The project was undertaken in partnership with the Disability Rehabilitation and Research Association (DRRA) with financial support from DFID. The aim of the project was to develop a strong community-based disability-inclusive emergency preparedness and disaster risk reduction (DRR) management programme in an area that is highly prone to the impact of climate change: Satkhira and Koira, Bangladesh.

The project emphasised post-disaster livelihoods, as well as rehabilitation, linkages with government actors and the promotion of the rights of persons with disabilities. From the initial project designs

and through to implementation, Sightsavers involved and ensured the participation of persons with disabilities, as well as with local government authorities and community members.

The project enhanced the skills of people with disabilities on disaster-related issues, DRR and coping mechanisms, and explored alternative livelihoods options. The project supported people with disabilities to form self-help groups (SHGs) and provided training to the SHGs and Youth Volunteers Teams (YVT) in basic ADL and mobility training and orientation on 'disability rights and DRR'. It also provided leadership (skills and advocacy) training on 'Gender, Disability and DRR' for selected SHG and YVT members.

The project promoted disability issues within the community and district. This ensured that the rights of people with disabilities were taken into consideration in pre-, during- and post-disaster planning, including in rescue and evacuation procedures, relief mechanisms and cyclone shelters. The project also undertook capacity building on DRR and coping mechanisms for people with disabilities, their family members, and members of the community through the dissemination of IEC materials, awareness-raising pot-song sessions and relevant day observations.

The project also raised awareness about disability issues at the Union, Upazilla and district-levels. At the outset of the project, there was no representation of people with disabilities on committees mandated with developing programmes for disaster survivors or early warning systems, and there was no specific programme focusing on people with disabilities. The project therefore promoted linkages with the Cyclone Preparedness Programme (CPP) to develop disability inclusive early warning system and increased representation of persons with disabilities in Upazilla and Union Disaster Management Committees, so that they can more effectively plan for the specific needs of people with disabilities within the communities, including through the promotion of accessible cyclone shelters.

The project also established links with national level government offices (Disaster Management Bureau (DMB), Comprehensive Disaster Management Program (CDMP) and Cyclone Preparedness program (CPP)) that are assigned for dealing with disaster related issues. The result of this engagement has been the increased representation of people with disabilities on Disaster Management Committees and CPP teams. As the organisations responsible for co-ordinating disaster preparedness, evacuations and response at local level, the inclusion of people with disabilities will help to ensure that all stages of the disaster management cycle incorporate inclusive perspectives, and will help to ensure enhanced resilience to climate change into the future.

Resilience building case study:
Name – Miss Sabina Yesmin (18), Asasuni village, Satkhira District.

Sabina Yesmin is 18 and lives in Asasuni village, in the Satkhira district of south west Bangladesh. Her father was a day labourer and she has one sister. Her father's limited earnings meant that the family had to live hand-to-mouth, and due to high levels of poverty, and the challenges she faced living with a physical impairment, it became impossible for her to continue her school education.

Sabina tried to contribute to her family by doing some tailoring work, but due to her lack of proper training, she was not able to earn much. She became very upset and thought that she could never successfully contribute, and her family members viewed her disability as a curse.

After meeting with project staff, Sabina was appointed as a volunteer in the Asasuni Sadar self-help group. Through the project, she received training on tailoring and poultry-keeping from the Women's Affairs Department, Asasuni. She also received ADL and mobility training.

After receiving those trainings, she has started a tailoring business in her home where she collects orders from her local area. She has also started a poultry farm in a small range in her home. These

initiatives have enabled her to greatly contribute to her family. Moreover, she has learned a lot about disability, her rights and during-, pre- and post-disaster preparedness through attending the monthly self-help group meetings.

With the assistance of the project, she became the member of the local Union Disaster Management Committee where she acts as a representative of persons with disabilities and raises issues which are helpful for them during disasters. She also became a Cyclone Preparedness Program (CPP) team member and helps plan inclusive evacuations.

Her family and community now realise that a person with disabilities can play an important role in the family and society. Sabina has gained her confidence and dreams that after finishing her studies, she can go on to become a successful entrepreneur.