

## Disability Inclusion Helpdesk Report No: 87

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Authors	Rebekah Martin and Mosharraf Hossain
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Query	<ul style="list-style-type: none"> <li>i. What is the link between disability inclusion and nature-based solutions (NbS)?</li> <li>ii. What is best practice in disability inclusion in NbS programming?</li> <li>iii. What are the barriers persons with disabilities and organisations of persons with disabilities (OPDs) face to engaging with NbS programming?</li> </ul>
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### 1. Methodology

This report draws on a desk-based literature review focusing on NbS programming and disability inclusion. Where data was not available, resources on inclusive climate change responses and disaster risk reduction have been used. The report focused on evidence from low- and middle-income countries. Key informant interviews were held to address gaps in data.

### 2. Overview

#### Box 1: Key definitions

##### Persons with disabilities are:

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

##### Climate change:

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

##### Nature Based Solutions:

*'...actions to address societal challenges through the protection, sustainable management and restoration of ecosystems, benefiting both biodiversity and human well-being'* (IUCN, 2020).

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**There is an increasing focus on NbS to address the climate crisis.** Day seven of the United Nations Framework Convention on Climate Change (UNFCCC) COP26 focused on NbS, recognising its potential to provide approximately a third of the carbon dioxide mitigation needed to hold global warming below 2°C, particularly through sustainable agriculture and halting deforestation (Griscom et al., 2017, UN, n.d.). NbS can provide cost-effective ways of protecting, managing and restoring ecosystems whilst addressing societal challenges such as climate change, climate-related disasters, biodiversity loss and inequality (Hou-Jones et al., 2021).

**The international community is increasingly recognising the links between climate change and disability,** with key international frameworks including the UNFCCC, the UN Convention on the Rights of Persons with Disabilities (UNCPRD), the Paris Agreement and the Sendai Framework highlighting these links. Evidence shows that NbS programming must be designed, implemented, managed, and monitored by or in partnership with local communities, including Indigenous Peoples and persons with disabilities, to ensure the needs of different groups are taken into account and sustainability of NbS<sup>1</sup>.

**There are some positive examples of disability inclusion being considered in NBS programming.** For example, the Australian-Pacific NbS Challenge, an Australian government initiative in partnership with WWF-Australia, supports a number of NbS programmes with disability inclusion elements.<sup>2</sup> OPDs, and INGOs focused on disability inclusion are also increasingly working to promote the participation and leadership of persons with disabilities in this space. Conservation organisations are also recognising the need to improve accessibility and promote economic opportunities for persons with disabilities. **However, evidence of disability inclusion in action in NbS programming is still limited.**

**This report provides a rapid review of the evidence on best practice of disability inclusion in NbS programming.** The report focuses on programming that goes beyond facilitating the participation of person with disabilities, and instead focuses on the leadership of persons with disabilities and transformational change. There are a wide range of interventions contained under the header of 'nature-based solutions' and whilst data on disability inclusion in NbS is limited, there is information available for climate-smart agriculture. Key informants interviewed for this report, confirmed that there is limited engagement in other areas such as mangrove management<sup>3</sup>.

### 3. What is the link between disability inclusion and NbS?

**Available evidence on the relationship between disability and climate change highlights that the impacts of climate change are more severe for persons with disabilities** than the general population. Studies on climate change and disability often cite theoretical or anecdotal evidence or extrapolate from data on other socially excluded groups or disability and disaster response (Kett, 2017). However, emerging evidence indicates that persons with disabilities are more likely to experience adverse effects of climate change and barriers to increasing their resilience (Lee et al., 2020). This is in large part due to persons with disability being more likely to live in poverty and

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<sup>1</sup> This is one of the four key messages on NbS for decision makers in 2021, developed by a consortium of 20 organisations ahead of UNFCCC COP26: <https://nbsguidelines.info/>

<sup>2</sup> Read more online here: <https://www.climate resilient by nature.com/nbs-challenge>

<sup>3</sup> Key informant interview with Parvan Muntha.

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barriers created by a lack of accessible communications, programming and disaster planning.

**Persons with disabilities are also more likely to live in low-and middle-income countries (LMICs), which are disproportionately affected by climate change,** including through the physical impacts of climate change and the costs associated with adapting (IIED, 2019). 15% of the global population is estimated to have a disability, with 80% of persons with disabilities living in LMICs (WHO, 2011).

**Evidence shows that NbS programming can reduce disaster risk, biodiversity loss and food insecurity, which disproportionately affect persons with disabilities.** For example, protecting and restoring coastal ecosystems, particularly mangrove forests, can strengthen protection against cyclones and rising sea levels, store atmospheric carbon and contribute to local livelihoods through increased numbers of fish, crabs and clams (UNU-EHS, 2021). A global study by UNDRR (2013) found that only 20% of persons with disabilities said they would be capable of evacuating immediately in the event of a sudden disaster and only 15% had participated in community disaster management and risk reduction processes in their communities. An increasing proportion of persons with disabilities are engaged in agriculture in LMICs, partly due to rural-urban migration of persons without disabilities and barriers to entering into other types of work (Ahlenbäck et al., 2020). Persons with disabilities, particularly women with disabilities, already experience barrier to engaging in agriculture and fisheries, with many reliant on subsistence farming. They are facing new barriers and increased food insecurity due to climate change and are less likely to be able to relocate to more fertile areas or adopt new approaches (Pacific Disability Forum, 2022). Disability inclusive NbS programming can address some of these challenges.

#### 4. What is best practice in disability inclusion NbS programming?

**Due to the limited programming and evidence on disability inclusion and NbS, this report cannot establish any thorough evidence of best practice but can highlight some insights and learnings from existing programmes and identify potential entry-points** for NbS interventions to consider in order to create opportunities for the leadership of persons with disabilities and transformative change. Best practice can also be drawn from NbS principles and the UNCRPD.

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### **Box 2: From participation to leadership in climate-smart agriculture, India**

CBM India collaborates with local partners across states in India to train farmers in organic farming practices. Focusing on organic and traditional farming methods has reduced the need for expensive agro-chemicals and improved soil quality and resilience. The baseline survey found that people with disabilities wanted to be involved in climate-smart agriculture but were unable to due to accessibility barriers. To address this, CBM developed accessible environments, communications and trainings. Accessible poly-tunnels and modified farming and adaptive agri tools removed barriers for people who use wheelchairs and people with visual impairments. Accessible trainings were developed, which swapped lectures for more practical training and accommodated people's different needs. This included tactile communication materials and signage, video trainings, and the creation of models of bio compost systems to allow for physical demonstrations.

The programme promoted the leadership of people with disabilities by facilitating them to become master trainers on climate-smart agriculture and business development. This led to greater recognition of the skills and leadership of people with disabilities in communities, countering stigma, and led to an increase in the number of persons with disabilities in leadership positions, with persons with disabilities found on 42% of boards, and women on 30%. Demonstrations of the success of their agribusinesses to government and banks led to increased funding and loans.

The programme worked with local government to promote greater awareness and participation of people with disabilities. A group of farmers with disabilities meet with local government to successfully advocate for greater spending on disability inclusive agriculture in their local area.

Source: key informant interview with Dinesh Rana, CBM India.

### **Key lessons on how to promote greater participation and leadership of persons with disabilities in NbS programming include:**

- **Implement the UNCRPD by adopting a rights-based approach to programming.** A rights-based approach understands disability as a result of the interaction between impairments and barriers to persons with disabilities' full and active participation in society. As such, addressing these barriers, particularly issues of stigma and discrimination and the intersectional nature of vulnerability are key to strengthening resilience amongst persons with disabilities. This approach involves identifying and removing barriers to participation and is in line with FCDO's Disability Inclusion and Rights Strategy 2022 - 2030.
- **Raise awareness and highlight the capabilities of persons with disabilities.** Stigma and negative stereotypes are commonly reported as a barrier to participation and leadership of persons with disabilities. In India, the Christian Blind Mission (CBM) used farming demonstrations and master trainer trainings to challenge negative perceptions within banks, communities, and local government by showing the skills and leadership capabilities of persons with disabilities (see Box 2).
- **Meaningfully engage persons with disabilities and OPDs.** Additional outreach efforts may

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be needed to engage people who are typically left behind. Separate focus group discussions with men, women and people with different gender identities are needed to take into account power dynamics within communities and promote the participation of all individuals and groups (CBM, n.d.). Steps should also be taken to ensure that engagement is safe and meaningful (Devandas Aguilar, 2021). Learning from DRR programmes indicates that persons with disabilities and OPDs are often recognised as leaders in their communities following their involvement in community structures and government decision-making on DRR (CBM et al., 2019; CBM, 2018). Engagement with OPDs in NbS programming could involve partnering in interventions or engaging with them for analysis, stakeholder mapping, scoping exercises or outreach activities.

- **Ensure environments, materials and tools are accessible.** Programmes need to consider accessibility of communications materials, trainings, and programme activities to enable meaningful participation of persons with disabilities. This may include using large font, video or audio, braille, sign language or easy-read formats for communications, and including budgets for reasonable accommodations, increased outreach, and disability inclusion specific activities. Examples of modified tools for climate-smart agriculture and forestry include motorised harvesting carts and modified rice seeders (Zero Project, 2022a).
- **Consider the accessibility of conservation areas, protected habitats and eco-tourism interventions.**<sup>4</sup> The management of Steart Marshes coastal habitat by the UK Wildfowl and Wetlands Trust, which focuses on habitat creation and flood defence, created a network of accessible pathways and encouraged persons with disabilities to work on the wetland environment, creating work and training opportunities and benefiting overall wellbeing (Laver, n.d.). In Chile, Fundación Eres, an OPD, launched a programme to promote access to national parks for persons with disabilities. The Senderismo sin Limites (Hiking without Limits) project has worked with civil servants, tourism professionals and park rangers to challenge stereotypes and improve accessibility, through training, development of self-assessment tools and action plans for organisations, and production of modified wheelchairs for use on the trails (Zero Project, 2022b).
- **Recognise that persons with disabilities are not a homogenous group and take an intersectional approach.** Consider the intersections between age, disability, gender, and other factors, which affect resilience to climate change, biodiversity loss and food security. Programmes should ensure that data on persons with disabilities is captured by baseline surveys and through monitoring, evaluation and learning activities. A robust gender equality, disability, and social inclusion (GEDSI) analysis can provide information on the needs and leadership capabilities of different groups, including persons with disabilities, as well as the potential risks and opportunities in the context.
- **Ensure do no harm and safeguarding principles are considered throughout programming.** Programmes need to be aware of the stigma and discrimination that may be present in communities and to sensitise communities on disability inclusion and the risks of harm caused by exclusion and discrimination to prevent backlash or harm within programmes (CBM, n.d.). It is important to remember that feedback mechanisms and programme signage (such as emergency exits or danger warnings in workspaces) should also be available in

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<sup>4</sup> Expert contribution from Abhishek Kumar.



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accessible formats for safeguarding and safety purposes (RSH, 2022).

- **Take an integrated approach to NbS programming.** NbS programmes generate the best results when an integrated approach is used; efforts to protect forests may fail if the environmental and social pressures which lead to their destruction are not addressed (WFP, 2021). It is important to ensure that other initiatives, including social and financial protection schemes, such as microinsurance and financial services, are accessible for persons with disabilities and meet their needs. The CBM climate-smart agriculture programme in Box Two supported persons with disabilities to register with the government for disability payments and rehabilitation services, improving financial security and health outcomes, and allowing more time for focusing on engagement with the programme.

### 5. What are the barriers persons with disabilities and OPDs face to engaging with NbS programming?

**There are a range of attitudinal, environmental and institutional barriers that affect access to NbS programming for persons with disabilities.**<sup>5</sup> Attitudinal barriers include a lack of awareness about the capabilities of persons with disabilities to participate in and lead NbS interventions, particularly misconceptions that persons with disabilities are incapable of being involved in farming, forestry or conservation. Environmental barriers include inaccessible infrastructure, a lack of accessible equipment, information and trainings. Institutional barriers include a lack of targeted approaches from organisations, discriminatory policies, and a lack of access to, or ownership of, land.

Discriminatory attitudes, or a lack of consideration, towards persons with disabilities amongst governments or organisations leads to the creation of programmes that do not include persons with disabilities or consider their needs.<sup>6</sup> Persons with disabilities who belong to other commonly socially excluded groups, such as women with disabilities, are likely to face additional barriers due to compounding stigma based on these identities.

There are four main factors that compound this:

- > **A lack of awareness of responsibilities towards persons with disabilities**, for example, through local laws, government mandates, donor funding requirements or international agreements like the UNCPRD.<sup>7</sup> There is a lack of inclusion of the needs and capabilities of people with disabilities in climate change policies and commitments, which also presents a barrier; only 35 of 192 state parties to the Paris Agreement refer to people with disabilities in their Nationally Determined Contribution (NDC), and most of these references are cursory in nature, often listing people with disabilities amongst other groups especially vulnerable to climate change (DICARP and IDA, 2022).
- > **Data is scarce on persons with disabilities**, including on climate change and NbS. This includes data on the impacts of climate change and climate-related disasters on persons with disabilities. There is also a lack of disaggregated data generated by programmes; a thematic

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<sup>5</sup> Expert contributions from Dinesh Rana.

<sup>6</sup> Expert contributions from Mosharraf Hossain.

<sup>7</sup> Expert contribution from Pavan Muntha.

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review of climate smart agriculture across a portfolio of FCDO programmes found that there was insufficient disaggregated data to understand which groups, including people with disabilities, benefited from the interventions and which suffered (NIRAS, 2021). Evidence and case studies on the participation and leadership of persons with disabilities in NbS programmes are also scarce.

- > **A lack of consultation and meaningful engagement of persons with disabilities and OPDs in government decision making and programme design**, which makes it more difficult to identify their needs and opportunities to engage. In particular, women with disabilities and persons with disabilities from rural areas face barriers to consultation and decision making.
- > **A lack of dedicated resources**: limited budgets and concerns regarding additional costs associated with disability inclusion can prevent outreach activities taking place or accommodations being made (Grant, 2022).

### 6. Expert contributors

Abhishek Kumar, NCPEDP-Javed Abidi Fellow on Disability.

Dinesh Rana, CBM India.

Pavan Muntha, Swadhikaar Center for Disabilities Information, Research and Resource Development.

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