



POLICY BRIEF #5

# THE CLIMATE REALITIES OF THE DEAF:

EVIDENCE FROM A CLIMATE VULNERABILITY ASSESSMENT OF THE FILIPINO DEAF COMMUNITY

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Oscar M. Lopez Center for Climate Change Adaptation and Disaster Risk Management Foundation, Inc.



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## EXECUTIVE SUMMARY



Persons with disabilities are affected by climate change in a more severe and distinct way compared to others, as stated by the UN Office of the United Nations High Commissioner for Human Rights (OHCHR) in 2020. In its 2022 report, Working Group II of the Intergovernmental Panel on Climate Change (IPCC) emphasized that priority should be given to addressing disability-related inequities in climate adaptation efforts. In the Philippines, inclusive and participatory approaches to tackling the climate crisis have been recognized as beneficial by laws and policies. However, implementing these policies has been challenging. Concrete and appropriate measures to address the vulnerability of the disability

sector, including the d/Deaf community, to climate change and its impacts are still lacking. Data on the nature of the disability sector's vulnerability to climate change could inform the kind of interventions that would be necessary. Indeed, data is crucial for evidence-based decision-making. A climate vulnerability assessment of Deaf communities in the Philippines revealed that critical information, such as early warnings about impending disasters and climate education, has yet to be made accessible to the Deaf who have unique communication needs and primarily rely on Filipino Sign Language. Impacts of climate-related hazards on the Deaf's physical and mental well-being and livelihood were also reported.

**KEYWORDS**

Rights-based, Deaf-informed, UNCRPD

## INTRODUCTION



In 2019, the United Nations Human Rights Council (UNHRC) acknowledged that persons with disabilities are often the most affected population in emergency situations. The Council also highlighted that these people have the least access to emergency support<sup>1</sup>. Another report by the UN studied the impact of climate change on the rights of persons with disabilities. The report called for the inclusion of persons with disabilities in climate action, underscoring that it is only by involving them that their specific needs and concerns can be effectively addressed<sup>2</sup>. The report emphasized that evidence-based decision-making plays a critical role in achieving a rights-based, disability-inclusive approach to climate change. Availability of data is crucial for such decision-making.

The Philippines has an obligation to uphold the rights of persons with disabilities in the context of its efforts to address climate change and its impacts. As a signatory to the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) and the international treaty on climate change Paris Agreement, the country is obligated to fulfill these commitments. However, while Philippine laws and policies recognize the need for an inclusive and participatory approach to tackling the climate crisis, implementation has been insufficient. Current policies lack concrete and appropriate measures to address the vulnerability of persons with disabilities, such as the d/Deaf community, to climate change and ways to increase their adaptive capacity. The authors of this policy brief believe that data on the nature of the disability sector's vulnerability to climate change, including the d/Deaf community, would be useful in informing appropriate measures and interventions. As noted by the 2020 report of the UN OHCHR, data is essential for evidence-based decision making.

Previous research on the link between disability and climate change has mostly examined the overall situation of persons with disabilities and has not

differentiated between various subgroups such as the d/Deaf. Studies have found that as a result of climate change, persons with disabilities are more vulnerable to health risks, including vector- and water-borne diseases and mental health issues<sup>3</sup>. In addition, they face reduced employment opportunities<sup>4</sup>, and higher risk of gender-based violence<sup>5</sup>. However, there is a shortage of research on how climate change affects different subgroups within the disability sector, such as the d/Deaf who have very unique communication needs in comparison to other disability subgroups.

The purpose of this policy brief is to draw attention to the impact of climate change on the Filipino Deaf community. It also aims to provide insights on the status of disability rights in relation to climate change in the Philippines. The information presented in this brief is based on the findings of a Climate Change Vulnerability Assessment (CCVA) Report on the Deaf Communities in the Philippines. This policy brief promotes a climate response that is grounded in evidence based on the actual experiences of disadvantaged communities, including the Deaf sector.

The CCVA Report is a landmark study on the intersection of disability rights and climate change in the Philippines. The Report primarily focused on the experience of the 'Deaf' who use Filipino Sign Language and identify as part of the linguistic and cultural community. It was produced under the Project "Signs for Inclusive Governance and Development" (Project SIGND), which is a USAID project being implemented by Oscar M. Lopez Center for Climate Change Adaptation and Disaster Risk Management Foundation, Inc. with technical support from the Gerry Roxas Foundation.

<sup>1</sup> [A/HRC/RES/41/21](#)

<sup>2</sup> [UN OHCHR, 2020](#)

<sup>3</sup> Jodoin, Ananthamoorthy, & Lofts, 2020; Kosniac, Petold, Martin-Lopez, & Razanajotovo, 2022; Human Rights Council, 2020

<sup>4</sup> Jodoin, et. al, 2020; Center for Climate Change and Environmental Research, n.d.

<sup>5</sup> Lozada, 2015; Handicap International, International Disability Alliance, CBM International, 2020

## CLIMATE REALITIES OF THE FILIPINO DEAF



The Philippines frequently experiences natural disasters due to its geographical location, which affects local communities. According to the CCVA report on the Deaf Communities in the Philippines, the Deaf are usually affected by storms (68%), flooding (65%), storm surge (37.6%), drought (18.8%), and landslide (17.6%), with flooding being their most common climate stressor. Climate-related hazards have primarily threatened the lives, livelihoods, and properties of the Filipino Deaf community, and have also impacted their physical and mental well-being.

The report also highlights that exposure to climate-related hazards and their impacts vary across different regions in the Philippines. Therefore, localized vulnerability assessments are crucial in identifying climate risks and designing programs and interventions tailored to the specific needs of the local communities. For example, in the northern part of Luzon, agricultural production and trade is a major source of employment for Deaf

communities. Yet, in recent years, intense tropical storms, coastal and riverine flooding, landslides, and extreme heat have hampered agricultural production, heavily affecting the amount and quality of agricultural produce, disrupting the Deaf communities' main source of income in the region. In the National Capital Region (NCR), typhoons and typhoon-induced climate impacts were reportedly exacerbated by urbanization and anthropogenic activities. Deaf residents in NCR shared that flooding has occurred more frequently and faster even after normal rainfall, which was attributed to population increase and urbanization in the region.

The next section of this policy brief will provide a more thorough discussion on the status of promotion and protection of the Filipino Deaf community's rights to accessible information, education, health, and livelihood in the context of climate change.



## DISABILITY RIGHTS IN THE CONTEXT OF CLIMATE CHANGE



Climate change affects the lives of persons with disabilities both directly and indirectly, impacting their ability to enjoy their human rights. According to a 2019 study by the UN Office of the High Commissioner on Human Rights, natural disasters caused by climate change have serious implications on persons with disabilities' access to critical needs and services such as food, water, healthcare, education, housing, and work. To further contextualize these findings in the Philippine context, this policy brief aims to review the status of protection and promotion of the rights of persons with disabilities enshrined under the UNCRPD, in the context of climate change in the Philippines.



### ACCESSIBILITY

Stipulated under Article 9 of the UNCRPD, States shall “take appropriate measures to ensure to persons with disabilities access, on an equal basis with others, to the physical environment, to transportation, to information and communications...” Relatedly, States are called on to provide other forms of live assistance and intermediaries, including professional sign language interpreters, to eliminate barriers to accessibility.

The Philippine Accessibility Law, also known as Batas Pambansa Bilang 344, has solely focused on physical accessibility, undermining accessibility of information and communication. While the law provides guidelines on the use of architectural facilities or structural features such as sidewalks, ramps, and railings for persons with disabilities, it fails to provide guidance on making information and communication accessible. This is particularly problematic considering that there are subgroups such as the d/Deaf who have unique communication needs. Although

subsequent laws have been enacted to address this gap, such as Republic Act No. 10905, which encourages the provision of English closed captions; Republic Act No. 7277, which mandates the use of sign language insets/subtitles in TV newscast programs; and Republic Act No. 11106, which requires the use of Filipino Sign Language (FSL) in all government transactions involving the Deaf, implementation has been a challenge. Policy makers and government institutions attribute this to a scarcity of FSL interpreters in the country, budgetary constraints, and other challenges.

Research on the Deaf community and climate change has highlighted the issue of communication and language barriers as a major factor that contributes to their low adaptive capacity (see Calgaro, Craig, Craig, Dominey-Howes, & Allen, 2021). Communication barriers are a significant inhibitor to effective disaster preparedness and response among the Deaf community. Access to information during disasters and calamities is crucial as it affects an individual's ability to respond or evacuate immediately. The National Disaster Risk Reduction and Management Plan (NDRRMP) recognizes that the standard procedures and guidelines for multi-hazard early warning systems (EWS) should be inclusive of the needs of persons with disabilities. However, EWS in the Philippines have been generally inaccessible to the Deaf community as they are primarily in national spoken or written language and often audio-based. For example, local government units (LGUs) typically use sirens to signal high water levels, especially in riparian or riverine areas.

According to the CCVA Report, Deaf communities in the Philippines rely on Facebook (77%), TV (74%), National Disaster Risk Reduction and Management Council (NDRRMC) text alerts (66%), and announcements from the local government unit (24%) for weather-related information and early warning for calamities. It is important to highlight that a significant portion of the Deaf still rely on text alerts from NDRRMC, which are communicated in Filipino despite not being commonly used or understood by the Filipino Deaf community. According to the CCVA Report, the Filipino Deaf community primarily uses both FSL (Filipino Sign Language)

and English (38%), followed by FSL only (12%), and English only (10.5%). Their greater familiarity with FSL and English is associated with their access to education. In the experience of Deaf who are able to enter schooling, English and FSL are the primary medium of instruction and interaction in the school setting (read Policy Brief #2 on Deaf Education in the Philippines for more information). Meanwhile, Deaf individuals that rely on TV and Facebook as sources of information still require sign language interpreter insets and English closed captions to understand the content. While there are existing laws that mandate the provision of such accommodations, there are many concerns that are still held within the Deaf community regarding the quality and size of sign language interpretation and effectiveness of the implementation of these laws. In other cases, Deaf individuals rely on close relatives and neighbors as a source of information, asking them to translate NDRRMC text alerts, which takes away valuable time to prepare for and respond immediately in times of emergencies. Based on the stories on the ground, Deaf communities sometimes create their own system in circulating information to ensure information reaches other Deaf individuals. This is primarily driven by the lack of accessible information being made available for them. For example, there are Deaf organizations that create an FSL version of weather alerts and disseminate these using social media.

- Improve modes of dissemination of information to ensure critical information, like weather-related information, is able to reach the d/Deaf communities up to the grassroots level.



## EDUCATION

Article 24 of the UNCRPD recognizes the right of persons with disabilities to an inclusive education and lifelong learning directed to the development of their fullest potential and as an enabling factor to their effective participation in the society.

Education plays a crucial role in an individual's ability to adapt to the impacts of climate change. Access to education not only affects a person's employability, but also their awareness and understanding of the risks they face and strategies to reduce these risks. Despite legislative measures put in place to ensure equal access to education for the d/Deaf, such as the implementation of Republic Act No. 7277 and Republic Act No 11650, which recognizes the need to incorporate the special requirements of persons with disabilities in policies and programs; and Republic Act No. 10410, Republic Act No. 10533, and Republic Act No. 11106 and its Implementing Rules and Regulations, which officially recognize Filipino Sign Language as the language of learning for the Deaf, issues and barriers to inclusive education for the Deaf still exist.

The CCVA Report highlighted a connection between the level of education, the socio-economic status of the Deaf community, and their familiarity with climate change. Although 51% of the respondents reported being familiar with the term 'climate change,' 50% of them believed that climate change is a natural occurrence. The report also revealed that only 1 out of 20 participants in

## RECOMMENDATIONS:

- Review, establish, and update legislation, regulations, and standards to ensure equal access to information and communication, including through strengthening the implementation of existing laws and policies regarding the provision of FSL interpretation in-sets, English closed captions in TV newscast programs, and Filipino Sign Language interpreters, particularly during disaster scenarios; and developing alternative warning systems that are more visual to ensure its accessibility for the d/Deaf.

the focus group discussion (FGD) were familiar with the concept of climate change. These findings indicate a general low level understanding of climate change among the Deaf community, which may be due to the lack of comprehensive education on this topic. The problem is compounded by the difficulty in accessing education, especially for the Deaf. Even for those who were able to attend formal schooling, learning technical knowledge and concepts like climate change can be challenging. During a stakeholder consultation with Deaf representatives, it was noted that very few FSL signs for climate-related terminologies are being used in schools. As a result, climate change is not taught as frequently as other subjects like Math and English. The limited use of FSL in schools is a setback to promoting the linguistic and cultural identity of the Deaf. According to Article 30 of the UNCRPD, State parties are obliged to facilitate the learning of sign language, including in the school setting, recognizing its role in developing the linguistic identity of the Deaf community.

This information gap on climate change is concerning as it has actual implications for the Deaf community's capacity to adapt. According to the CCVA report, a group of Deaf respondents in a major city in the Philippines admitted being complacent during times of disasters due to their lack of understanding of how climate change impacts typhoons. Their limited understanding of how climate change impacts them affects their capacity and willingness to respond in cases of emergencies.

## RECOMMENDATIONS:

- Strengthen implementation of the FSL Act, specifically on the adoption of FSL in Deaf education.
- Secure institutional funding for development and production of accessible learning materials, including materials on climate education, specifically for d/Deaf learners.

- Enhance access of the Deaf to climate-related capacity building activities through formal (in schools) and non-formal education (through training for deaf adults and out-of-school youth) that could foster a better understanding of climate change and its impacts to their community.
- Develop an accreditation system for FSL interpretation.
- Adopt and mainstream FSL signs for climate change and disaster related terms to ensure accessibility of climate education modules and materials for the Deaf.



## HEALTH

Under Article 25 of the UNCRPD, State Parties are called on to take measures to enhance persons with disabilities' access to health services.

Slow onset events that occur more frequently and intensely due to climate change can increase the susceptibility of persons with disabilities to health concerns, including malnutrition, vector-borne and water-borne diseases, and mental health issues<sup>6</sup>. The CCVA survey has revealed that mental health concerns (34.12%) are among the most critical effects of climate-related calamities on Deaf families, while only 5% expressed concerns about disaster-

<sup>6</sup> Jodoin, et. al, 2020; Kosniac, 2022; Lewis & Ballard, 2011; Human Rights Council, 2020

related injuries and casualties. The experience of Deaf individuals with floods has resulted in severe physical and psychological stress. Panic, anxiety, depression, and post-traumatic stress are some of the psychological stressors experienced by Deaf individuals during times of emergencies, which can linger long after physical injuries, as reported in the CCVA Report. Focus group discussions with the Filipino Deaf community have also revealed their experience of physical health concerns. For instance, the Deaf community in Baguio City has shared that extreme heat during the dry season causes heat exhaustion due to frequent temperature changes.

According to the CCVA survey, only about 28% of Deaf respondents have access to basic health facilities (City Health Centers) during emergencies. The majority of them rely on private, provincial, and other government hospitals, which are either more expensive or physically inaccessible. It was also reported that these facilities do not have sign language interpreters available. It is worth noting that although mental health concerns are among the major impacts of climate-related disasters on Deaf, 54.7% of Deaf respondents said that they lack knowledge about where to access mental health services, particularly after a disaster.

Persons with disabilities continue to face barriers in accessing healthcare services. Under Republic Act No. 11228, individuals registered in the Philippine Registry for Persons with Disabilities (PRPWD) should automatically have coverage under the National Health and Insurance Program of PhilHealth. PhilHealth is also required by the same law to develop exclusive packages catering to the specific health and developmental needs of individuals with disabilities. However, many persons with disabilities still struggle to obtain health insurance, which was associated with the poor implementation and management of the PRPWD. In discussions with local government representatives, it was noted that the lack of necessary equipment and internet in the LGUs to maintain the database, along with difficulties faced by individuals with disabilities in obtaining a persons with disabilities ID, are contributing factors to this problem (read Policy Brief #1 on data on persons with disabilities for more information).

Access to health services and advisories is crucial, as climate change can impact health and wellbeing. The

National Framework Strategy for Climate Change (NFSCC) in the Philippines has recognized the health risks associated with climate change and the need for a climate-responsive health sector. Improving the climate-sensitivity and responsiveness of public health systems and service delivery mechanisms to climate change is one of the priority areas identified by the NFSCC, particularly for marginalized sectors.

### RECOMMENDATIONS:

- Improve systems for encoding and updating data in the PRPWD as registration in the PRPWD is a prerequisite to receiving the mandatory PhilHealth coverage.
- Ensure that health services, including mental health services, for persons with disabilities are well integrated in the healthcare system.



### WORK AND EMPLOYMENT

Article 27 of the UNCRPD stipulates that States Parties must ensure protection and promotion of the right to work of persons with disabilities, on an equal basis with others.

Rising temperatures and extreme weather events, which are further worsened by climate change, have a significant impact on the livelihoods of the d/Deaf community. This is especially true for climate-sensitive livelihoods such as agriculture and fisheries, which are major sectors of employment in the Philippines. Climate-induced disasters such as droughts, floods, and storms have resulted in significant losses and damages in crops. Deaf residents

in Baguio City, whose main livelihood is farming, for example, have reported that their agricultural produce such as rice, vegetables and flowers are severely affected by prolonged dry periods and heavy rainfall. Other livelihoods of Deaf communities that are also impacted include tourism demand, fishing, and retail and commercial activities.

Republic Act No. 7277 stipulates that persons with disabilities should have equal opportunities for suitable employment as qualified abled-bodied persons. Despite livelihood programs being a common part of government efforts to aid recovery after disasters and calamities, persons with disabilities are not typically given priority during training for alternative livelihood opportunities. They are also less likely to relocate to other areas even if there are better job prospects elsewhere, as migration and displacement may only separate them from essential services, social networks, and other forms of support they need daily, including potential livelihood opportunities<sup>7</sup>. This lack of diversity in their economic activities contributes to the increased vulnerability of persons with disabilities to the economic impacts of climate change. This finding is echoed in the CCVA Report on the Filipino Deaf Community, pointing to the fact that the Deaf heavily rely on their social networks, such as neighbors and close relatives, to access information.

### RECOMMENDATIONS:

- Increase the participation of persons with disabilities in the technical-vocational education and training and other employment-support programmes through scholarships, subsidies and financial assistance to ensure access to decent and productive employment.
- Ensure that mainstream employment opportunities, including green job employment services, are accessible for persons with disabilities. This includes promoting disability-inclusive hiring practices, investing in trainings and similar activities that would equip persons with disabilities with the necessary knowledge and skills to transition to climate-smart industries and green jobs.



<sup>7</sup> Jodoin, et. al, 2020; Lewis & Ballard, 2011

## CONCLUSION

In fulfillment of its obligations under the UNCRPD and the Paris Agreement, the Philippine government has a commitment to consider the human rights of the Deaf in the implementation of its climate efforts. Under Article 11 of the UNCRPD, States have a specific responsibility to “take all necessary measures to ensure protection of persons with disabilities in situations of risk, including... occurrence of natural disasters.” Evident in the climate vulnerability assessment on the Filipino Deaf, climate change

impacts their access to information, education, health, work and employment. The Philippines’ climate response must therefore include efforts to ensure accessibility of information critical during emergencies, healthcare services, and climate-resilient livelihood opportunities to be able to achieve a rights-based and Deaf-informed climate action grounded in evidence based on the actual experiences of the sector.



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