



Research article

The ways of Improvement for the Livelihood approaches of Persons with Disabilities: A case study on Kachia, Bhola Sadar

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<https://doi.org/eiki/10.59652/jcpas.v1i2.97>

Abstract: A person with disabilities faces difficulties throughout their life. From the very early stages of life, they found themselves facing challenges due to the social structure and financial condition of our country. The Bangladesh government is now launching various initiatives to improve the lives of people with disabilities. As well as several NGOs and INGOs working for the development and inclusion of people with disabilities in different sectors, this paper is about identifying the challenges and limitations of their services and trying to find ways out for possible solutions to solve those shortcomings. Bhola is an area where disaster is also an issue that affects human life. In a survey of 285 households, 53% were persons with disabilities. The average family size was 5, with 65% literacy. Community structures like Union Parishad Members (54%) and Child Clubs (30%) were prominent. Education findings revealed 24% had knowledge for small businesses. 21% of families with disabilities had adequate resources, and 6% of health professionals enhanced skills. Inclusive education knowledge increased for 20%, with 20% of trained teachers adapting methods. Disaster risk reduction training improved skills for 19%. Regarding climate-related risks, 23% of persons with disabilities reported adoption measures. Overall, the study focuses on enhancing inclusivity, education, and disaster resilience among persons with disabilities. A person's disability becomes more difficult during a disaster. Education and health services are required for the improvement of the lives of people with disabilities. Simultaneously, conditions during disasters were a major focus of this research. Self-help groups and connections with local NGOs/INGOs will be beneficial. Government service linkage and access to information will be helpful for the person with a disability. This study aims at identifying potential ways to improve the lives of people with disabilities and to find ways to increase their employment opportunities in the community.

Keywords: persons with disabilities; livelihood improvement; development; social studies.

Received: December 02, 2023

Accepted: December 22, 2023

Published: December 25, 2023



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1. Introduction

People with disabilities are those who “experience 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,” according to the United Nations Convention on the Rights of Persons with Disabilities. Approximately 1 billion individuals worldwide have a handicap of some kind. Approximately 15% of the world's population falls into this category. The majority of persons with disabilities (80%) reside in low- and middle-income countries (LMICs), where it has been demonstrated that individuals with disabilities are disproportionately the most marginalized group in society (Saran et al., 2020).

In Bangladesh, people with disabilities (PWD) make up a sizable and diverse minority population. The government of Bangladesh's 7th Five Year Plan (2016-2020) states that almost 500,000 people in Bangladesh have various impairments, making up around 9% of the country's total population (Ali, 2014). According to an earlier NGO estimate, the prevalence of disability in Bangladesh might range from 5.6% to 7.8% (Nfowd & Hi, 2005). The percentages of persons with various sorts of impairments are as follows, according to the Bangladesh Bureau of Statistics (2009): visual disability (31.3%), physical disability (including

leprosy and goitre) (35.6%), hearing and speech (28%), and psychological disability (4.9%). In these circumstances, this study aimed to improve the well-being of all types of persons with disabilities & their families, children with disabilities and without disabilities, widows, women, and youth who will be direct beneficiaries of the targeted location of Bhola.

The overall study concerns PWDs and most vulnerable people who are empowered and enjoy rights with social acceptance and dignity for a resilient community. Moreover, the study also focuses on PWDs, parents of children with disabilities, widows, women, and PWDs from vulnerable extremely poor families who will be involved as members of Self-Help Groups (SHGs). The school-going children with disabilities will be provided support on education with necessary education devices & materials, assistive devices, and awareness sessions in the school on their disabilities and their rights. Children with disabilities and children without disabilities will be the members of Child Clubs (CCs). Teachers will be able to provide training on inclusive education and awareness of disabilities rights so that they are aware, sensitized, and provide necessary support to the children with disabilities in the school. The study has paved a way for the GO-NGO service providers, private sectors, and local governments will be involved through linkage, advocacy, and networking with the target beneficiaries for their necessary services. To enhance knowledge or learning on disability rights, inclusive education, inclusive disaster, and livelihood in the context of Bangladesh is the main purpose of this project. Moreover, the study aims at understanding the current development situations of the project's targeted community.

2. Literature Review

Disability and poverty are two complex, interconnected problems. A substantial amount of empirical data demonstrates that people with disabilities typically have lower educational attainment, greater unemployment rates, poorer living circumstances, and higher rates of poverty in industrialized nations. The objective of this project is to further empirical research on the social and economic circumstances of individuals with disabilities in emerging nations. This research provides a glimpse of the economic and poverty condition of working-age people with disabilities and their households in fifteen developing nations using comparable data and techniques across countries. (Mitra et al., 2011).

Dassah et al. (2022) employed a qualitative method, conducting in-depth interviews with 33 people with physical impairments and medical professionals. The material from these interviews was then thematically analyzed. We determined 4 key concepts. Health care could be made more accessible, in the opinion of the participants, by: (1) making it more affordable; (2) expanding the number of providers and services; (3) offering more guidance on navigating the system; and (4) enhancing access to equipment and facilities that are more accommodating for people with disabilities. Modifications to policy and practice were the focus of the proposals made by the participants. (Tigere & Moyo, 2021) showed that PWDs are capable individuals who, if given the right help, can completely change their social and economic circumstances.

The study findings, which are based on 51 observations, show that working-age people with impairments were disadvantaged in a variety of areas, including employment, access to healthcare, transportation, and acceptability. The sample's disabled participants likewise relied on the disability payment to get by. The combined findings recommend alterations to Trinidad's educational, employment, and healthcare systems in order to increase the long-term wellness of working-age people with disabilities (Parey, 2020).

Shakil Mahmud et al. (2014) studied Gaibandha area of northern Bangladesh, where the poorest and most vulnerable people frequently live in reed huts at the confluence of two rivers, a cross-sectional prospective survey of 50 persons with disabilities was conducted. Also highlighted were the demands for warning systems that people can comprehend, service coordination, and post-disaster job training. The survey's findings shed light on the occupational therapist's role in disaster relief, particularly when it comes to helping those with impairments. Disability occurs in Bangladesh for a variety of reasons, including accidents, incorrect pathology diagnoses, maternal malnutrition, a lack of qualified birth attendants and nurses, polio, typhoid, crime and violence, acid burn, child marriage, marriages between close relatives, and more (Hasan et al., 2018). These claims are supported by a small but rising body of research that links disability status to increased risk of social exclusion from schooling and economic productivity, as well as limited access to healthcare across a range of settings and nations. (Mitra et al., 2011; Mactaggart et al., 2015; WHO, 2012). People with disabilities are

often referred to as those who have long-term physical, mental, intellectual, or sensory impairments that prevent them from fully and effectively participating in society. These impairments might be congenital, the result of illness or accident, or both. Incorporating disabled people into disaster risk reduction (DRR) plans, designs, and implementation is a relatively recent phenomenon worldwide. The Sendai Framework for Disaster Risk Reduction (SFDRR), an international framework for disaster risk reduction that runs from 2015 to 2030, is strengthened by the UN’s human rights framework (Stough & Kang, 2015).

3. Materials and Method

3.1 Study Area Profile

The study is designed to work at Kachina Union of Bhola Sadar Upazila, which is highly prone to disasters, including tidal surges, cyclones, floods, and intrusion of saline water due to geo vulnerable location. The entire district is encircled by the rivers and communication is not easy from the Bhola Sadar, though it is only 6 kilometers from the district town. The study areas of the study are highly vulnerable to various natural disasters and also a victim of climate change. The dominating disasters were cyclones and associated storm surges in the southern coastal region of Bangladesh. Cyclones frequently hit the coastal districts and affected livelihood and damaged properties, and economic loss. Over the years, numerous public institutions, national and international non-governmental organizations (NGOs), and volunteer-based humanitarian networks have been working to increase the community level resilience in those multi-hazard prone areas while recognizing significant structural constraints related to poverty, governance, and history which create vulnerability and disaster risk over the long-term. But addressing the issues of livelihood for persons with disabilities and their families through exclusive services is not evident in the study area. Figure 1 shows the study area of Kachua Union of Bhola District.

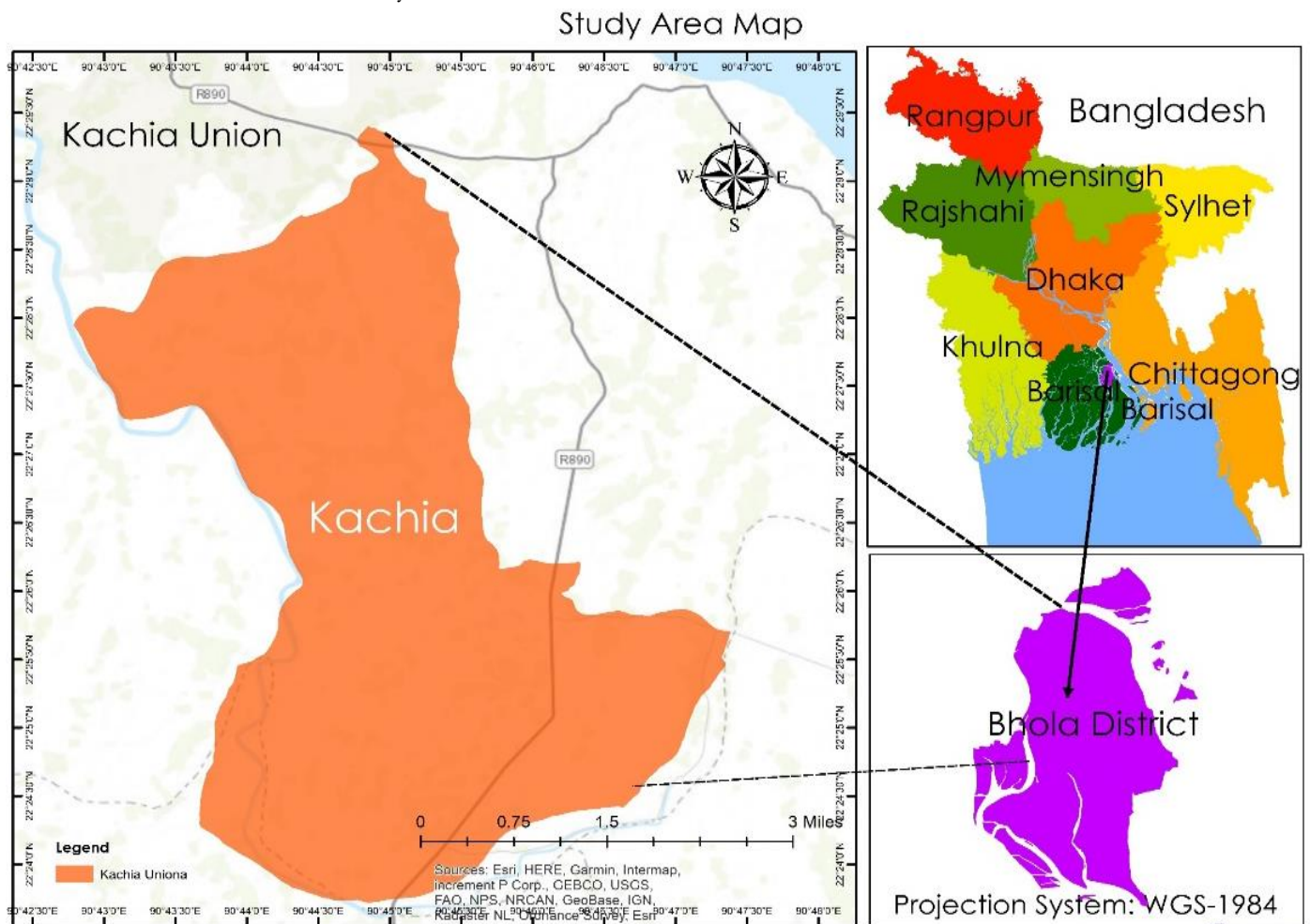


Figure 1. Study area map (Bangladesh - Subnational Administrative Boundaries - Humanitarian Data Exchange, n.d.)

3.2 Method

The general approach of the study was statistically robust, consultative, and feedback-oriented. In conducting this assessment, the mixed-method research approach, which was both quantitative and qualitative, will be employed. The study design, including the selection of data collection methods and tools, instrument development, analysis, and dissemination format and strategy was based on distinct conceptualization and proper documentation of the study objectives. While establishing the objectives of the research, Authors followed a critical process for ensuring a useful way of collecting data. Our approach, at the outset, was to clearly understand the primary purpose of the study, and therefore, to make sure that findings lead to actionable and evidence-based recommendations. Figure 2 demonstrates the methodological flowchart for this study.

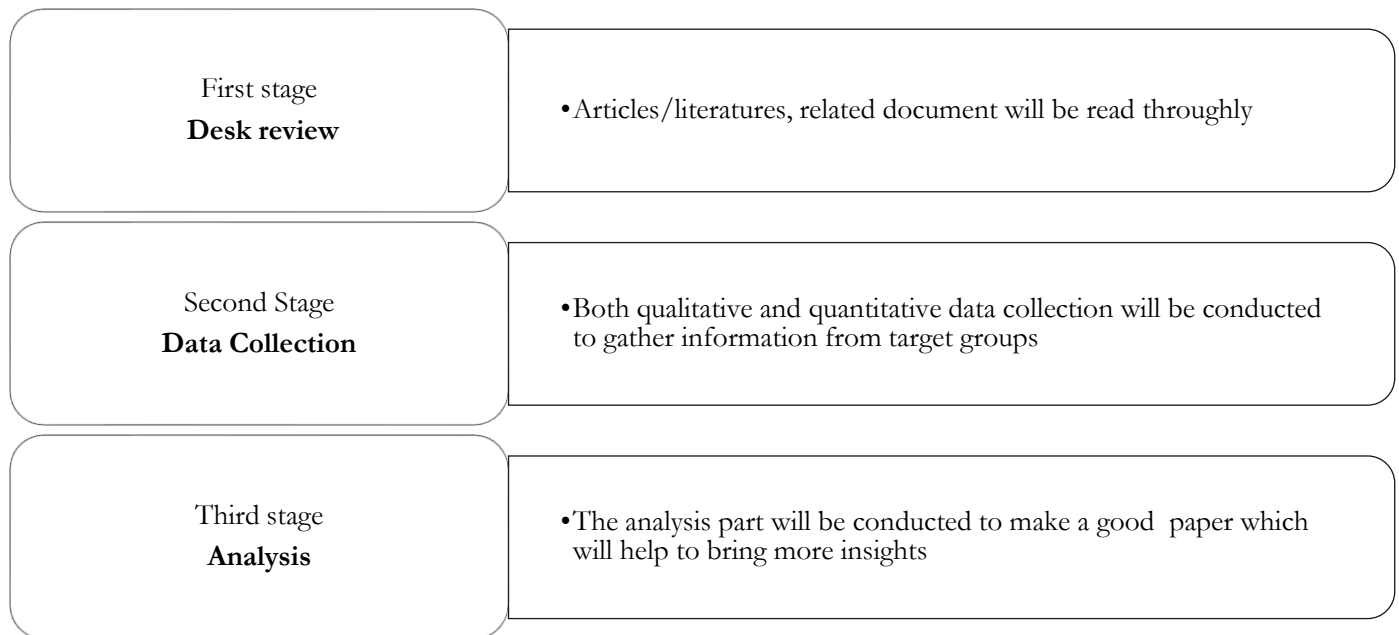


Figure 2. Methodological flowchart

3.2.1 Quantitative Sampling Design

Kachia is a union under Bhola Sadar Upazila of Bhola District with a total population of 13560 (BBS, 2011). The standard statistical formula (Cochran formula) allows calculating an ideal sample size given a desired level of precision, desired confidence level, and the estimated proportion of the attribute present in the population.

The formula was:

$$n = \frac{n_0}{1 + \frac{n_0 - 1}{N}}$$

Here,

n= estimated sample size

z= 1.645 with 90% confidence interval

e= margin of error at 0.5 %

p=0.5, the Estimated prevalence with 50%

N=Total target population= 13560

To avoid non-response errors due to the absence of any other reason (considering the frequent movement of the respondents to other locations), 5 % additional samples have been added for non-response. That gives $266 + (5\% \text{ of } 266) = 280 \sim 285$ samples were selected to cover the expected size. This sample will be distributed to locations based on Sex, age and disability disaggregated way.

3.2.2 Qualitative Sampling Design



A qualitative study was employed to meet the objective of the study. The qualitative study was organized and conducted mainly with the facilitators/secondary stakeholders who were mainly service providers. The qualitative data collection plans were explained and distributed in a different table based on the methods and beneficiaries. The number of conducting qualitative methods depended on the data saturation. Only the assumption list has been added here. In total from all areas, 6 FGD and 8 KII had been planned. Table 1 shows FGD snapshot for the study.

Table 1. FGD distribution

Qualitative Tools	Number (Depend on data saturation)	Target Group
FGD	6	People with disabilities and their family members/Caregivers People with disabilities *Other Community Members

KIIs was conducted with all the key stakeholder of the project. We added some of the key stakeholders of the study such as PCC officials, Service providers, Different community members, Gender actors, teachers, doctors, CBO officials, community volunteers, etc. to conduct this qualitative tool. Table 2 shows etc. KII snapshot for the study.

Table 2. KII distribution

Qualitative Tools	Number (Depend on data saturation)	Target Group
*KII	8	Project Management Team Upazila level officer- Livestock, agriculture, youth department, education department, fishery department, child and women affairs department, social welfare department tec. Different community members Community leaders/ Religious representative Disability & Inclusion actors (Doctors/Teachers/ Upazila SW officer) Food Security actors (family member/caregiver) Livelihoods actors Sub Sectors of the person with Disabilities and family members Upazila agriculture and livestock officer Upazila child and women affairs officer Teacher/SMC member Community-based organization (CBO) officials Community Volunteers

4. Analysis and Findings

4.1 Demography and Household Information

Profile of Surveyed HHs: total of 285 HHs were surveyed by using a structured questionnaire by 10 Enumerators (both male and female), among those HHs, 53% were the person with disabilities and 47% were vulnerable people without disabilities. Among them, 150 were persons with disabilities, and 135 were vulnerable with no disabilities. Among those households, the minimum number of members was 3 and the maximum number of members of a household was 12. Average family size is 5.

Table 3 shows that the highest number of respondents can only sign both the male and female gender. The number of females was 58 and that was 48% similarly, 64 males and that was 52%. The Literacy rate is 65% found during this baseline study. Figure 3 concerns the gender proportion for the study.

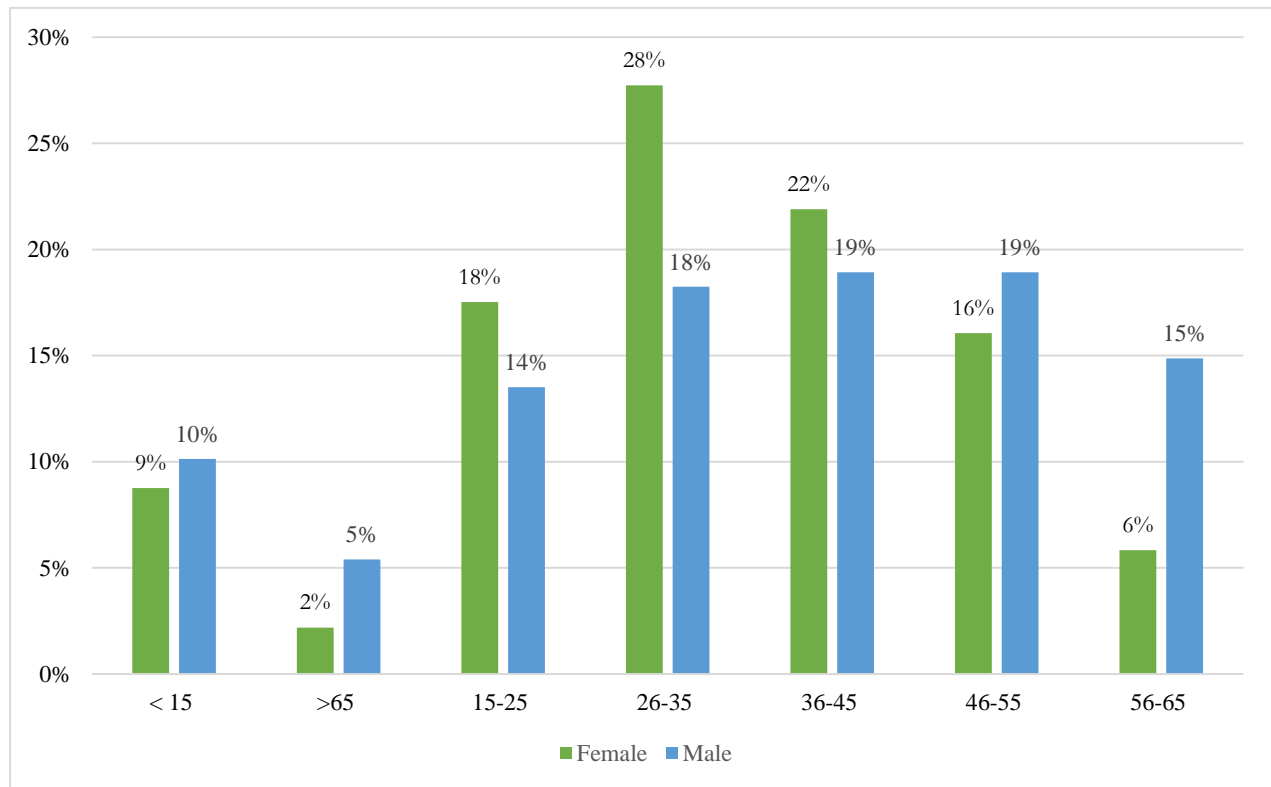


Figure 3. Gender ratio of the study

Table 3. Education level of the respondents

Level of Education	Female Frequency	Female Percentage	Male Frequency	Male Percentage
Can only sign	58	48%	64	52%
Can read /write	2	29%	5	71%
Graduate	0	0%	1	100%
HSC	1	25%	3	75%
JSC/Class VIII	11	58%	8	42%
No Education	40	46%	47	54%
Other	3	38%	5	63%
Preschool	1	33%	2	67%
PSC/Class V	16	76%	5	24%
SSC	5	38%	8	62%
Grand Total	137	48%	148	52%

Household composition: Among the surveyed HHs, Data shows that male and female respondents within the disability respondents group the maximum number was 20% and the type of disability was physical disability. Most people with disabilities had their disabilities from an early age. Figure 4 shows gender-based disability ratio for the study.

4.2 Community Structure and Services

Findings-1: In this study, it was to find out that Strengthening the capacity of different types of local community groups and stakeholders such as Community- Based Organizations (CBOs)- (apex body of Self-Help Groups), Child Clubs (CCs), Local Protection Committees, Union Parishad Members, School Teachers, Local Health Practitioners, Community/Religious Leaders, GO/NGO representatives and Media in promoting and defending the rights of persons with disabilities through advocacy, campaign, training, and workshops by 2024.



Gender-based % of different disabilities

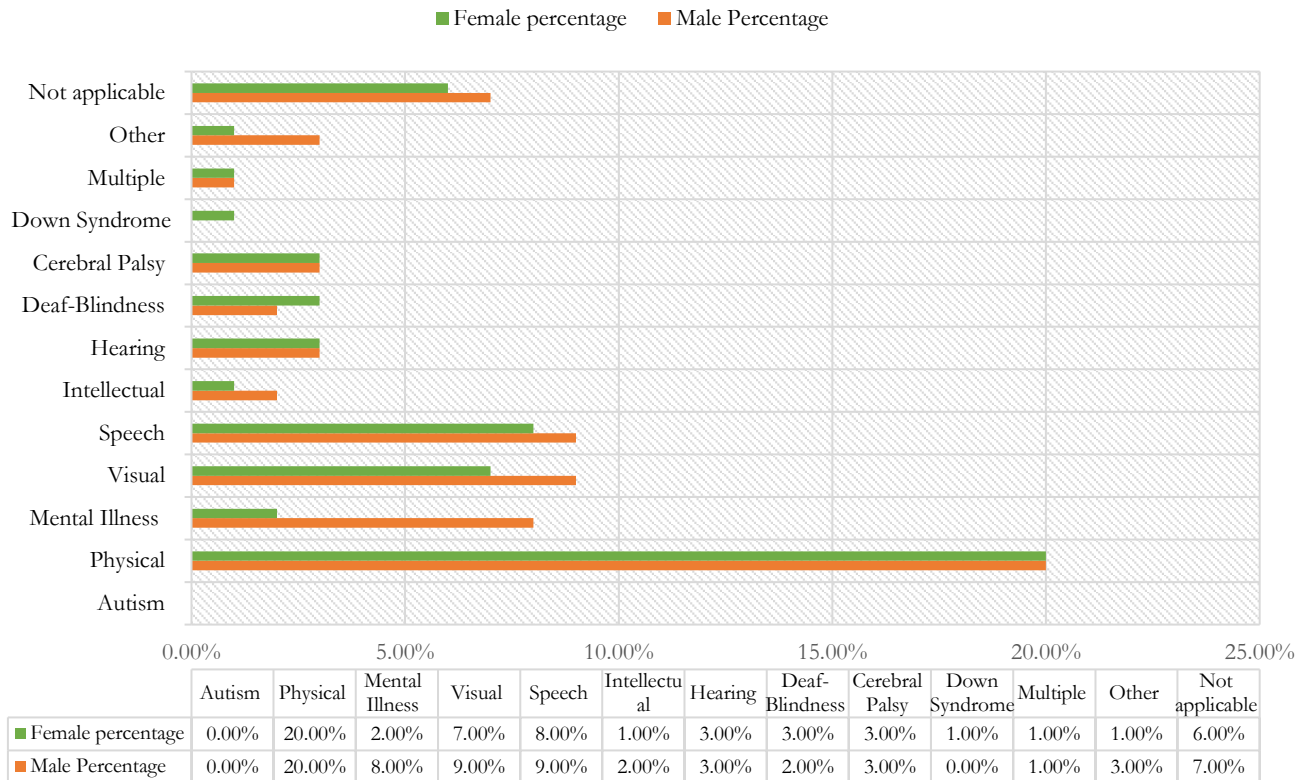


Figure 4. Gender-based disability ratio

Study found that 1 out of 7 and 14% of community structures were established and strengthened. Child clubs (CCs) and Union Parishad members are the most common local community group and stakeholders. Other community groups like CBOs, self-help groups, and local protection committee it is not that prominent. The baseline study team found that there were different types of community structures available. There was a total of seven types of community structure available and among them, one was most strengthened and that was union Parishad members. The other one was child clubs (CC). There was a different child club established by other NGOs who worked there before. However, those were deteriorating their strength over time because of no supervision and care. Table 4 shows Community Structures for the study.

Table 4. Community structures

Out of available Community Groups and stakeholders which one is most strong	Percentage
Child Clubs (CCs)	30%
Community-Based Organizations (CBOs) - (apex body of Self-Help Groups)	1%
GO/NGO representatives	3%
Local Health Practitioners	1%
Local Protection Committees	7%
School Teachers	5%
Union Parishad Members	54%
Grand Total	100%

The qualitative part of the study finds that the union Parishad was the most common community structure. Most of the respondents' responses were that they went to seek required services, information, and help from the Union Parishad. There were some other NGOs who helped them sometimes. The rights of persons with disabilities are required to



defend by different community structures. The study found that 15 out of 150 and 10% of persons with disabilities whose rights are defended by the different types of community structures. 10% of persons with disabilities reported that their rights are defended by the different types of community structures. Table 5 shows rights defended by community structures.

Table 5. Rights defended by community structures

Knowledge about the right of persons with disabilities	Person with disabilities receive their rights	Persons with disabilities whose rights are defended by the different types of community structures?	Count	%
Don't Know	Don't Know	Don't Know	8	5%
No	Don't Know	Don't Know	1	1%
No	Don't Know	No	1	1%
No	No	Don't Know	5	3%
No	No	No	45	30%
Yes	No	Don't Know	21	14%
Yes	No	No	34	23%
Yes	Yes	Don't Know	2	1%
Yes	Yes	No	18	12%
Yes	Yes	Yes	15	10%
Grand Total			150	100%

Table 6 data shows that 27 out of 150 and 18% of persons with disabilities were supported for obtaining a disability ID card, disability allowance, or stipend/provision of social safety Net. The qualitative part of this study found that most persons with disabilities and their families had struggled a lot to receive support. However, the observation and KII information represent that the lack of knowledge and willingness was the main reason behind not receiving proper support. During this baseline study, it was found that the economic condition of the study area was not that good. The main profession of most of the people was found fishing, boating, day labor, and other small activity. Those income-generating activities were found not enough for most of the families in the study area. Most of the family faces financial crisis and their income were based on the season of fishing and boating. Natural disasters had an impact on their life as well. The availability of health service providers is limited and they faced different health-related issues. Sometimes, those became crucial for them. In the societal aspect acceptance of the person with disabilities was somehow limited in different socio-cultural activities. Creating earning opportunities, increasing accessibilities, and education opportunities for the person with disabilities and children with disabilities required. At the same time, there were found a large number of the population were vulnerable because of their poor income, high risky profession (fishing with a small boat in a large river, living on the bank of a river during a natural disaster like cyclone, etc.) was common.

Table 6. Persons with disabilities receiving supports

Person with disabilities receive their rights	Person with disabilities receiving support for obtaining disability allowance, stipend	Count	%
Don't Know	Don't Know	1	1%
Don't Know	No	5	3%
Don't Know	Yes	4	3%
No	Don't Know	2	1%
No	No	66	44%
No	Yes	37	25%



Yes	Don't Know	2	1%
Yes	No	6	4%
Yes	Yes	27	18%
Grand Total		150	100%

Findings-2: Reduced ongoing discrimination against Persons with Disabilities from occurring or recurring by 2030.

Table 7 shows that 34 out of 150 and 23% of people living with disabilities reported a significant reduction in discrimination against them. However, there was discrimination and that was 77%. For reducing discrimination increase in the knowledge level was important. It was also observed that lack of knowledge and awareness was one of the major reasons behind the discrimination.

Table 7. Discrimination reduction

Opportunity of reducing discrimination against person with disabilities in future	Reporting discrimination against them	Knowledge about any discrimination report issue?	Count	Percentage
Don't Know	No	Don't Know	1	1%
Don't Know	No	Yes	3	2%
Don't Know	Yes	No	2	1%
Don't Know	Yes	Yes	1	1%
No	No	Don't Know	2	1%
No	No	No	9	6%
No	No	Yes	6	4%
No	Yes	No	23	15%
No	Yes	Yes	18	12%
Yes	No	No	8	5%
Yes	No	Yes	19	13%
Yes	Yes	Don't Know	1	1%
Yes	Yes	No	23	15%
Yes	Yes	Yes	34	23%
Grand Total			150	100%

Table 8 shows that 12% person with disabilities had access to decision-making at the family level. But in government and non-government structures, there is no participation yet. (Of local structures both government and non-government with increased representation of PWDs in decision-making bodies.) From the qualitative part, the study team found that those who have a very minor physical issue and can contribute to the family earnings had the right to provide a decision. Those who had no earnings and were physically unable to move had no right to put decisions in the family matters.

Table 8. Access in family decision-making

Person with disabilities receive their rights	People with disabilities have participated in decision-making	Count	Percentage
Don't Know	Don't Know	3	2%
Don't Know	No	4	3%
Don't Know	Yes	3	2%
No	Don't Know	3	2%
No	No	62	41%
No	Yes	40	27%
Yes	Don't Know	1	1%



Yes	No	16	11%
Yes	Yes	18	12%
Grand Total		150	100%

4.3 Knowledge, Skills, and Resources

Findings-3: Persons with disabilities and their family members have increased knowledge, skills, and resources (information, inputs, etc.) to start diversified small businesses/Income Generating Activities (IGA) by 2024.

Table 9 shows that 68 out of 285 and 24% of project participants including persons with disabilities with knowledge, skills, and resources to start small businesses or diversify their businesses. For increasing their knowledge, it was required to provide support and training for income-generating activities. The study found that those who have responses on that knowledge, skills, and resources had an only idea about IGA. The qualitative study result shows that persons with disabilities who have simple physical issues can do small business, shop, and do other activities to generate income and improve their lives. 68 and 24% of project participants including persons with disabilities with increased knowledge, skills, and resources (they have knowledge base value) to start a small business or diversify their business. However, they need external support to start 27% person with disabilities were found engaged in income-generating approaches. During this baseline study, it was found that 48% of women have the opportunity to do IGA activity.

Table 9. Knowledge, skills, and resources to start small businesses

Skill or knowledge to earn money (For Caregiver)	Scope to do small business	Count	Percentage
Don't Know	Don't Know	3	1%
Don't Know	Yes	2	1%
No	Don't Know	6	2%
No	No	101	35%
No	Yes	47	16%
Yes	Don't Know	7	2%
Yes	No	51	18%
Yes	Yes	68	24%
Grand Total		285	100%

Findings-4: Persons with Disabilities and their families have adequate financial resources to ensure access to education, health, and the provision of appropriate rehabilitation services and assistive technologies for the Persons with Disabilities by 2030. Table 10 shows that 31 out of 150 and 21% of disability families reported (adequate financial resources to meetup health, education, and appropriate rehabilitation service.

The qualitative part of this study showed that most of the parents tried to ensure the best support for their children. The most common belief found that their responsibility is to ensure treatment, education, and other requirements of their family. However, the financial condition of most of the family was not that good to provide the best support. This baseline study found that the most common challenges faced in IGAs by the person with disabilities were lack of knowledge, training, financial capacity, and physical capacity. In the same situation, women face challenges from society, family and community levels. In these circumstances, it is really important to provide training, support and increase awareness in family, community and mainstreaming situations.

Table 10. Financial resources

Families with person with disabilities have enough resources t	Person with disabilities receiving access to education health and assistive device	Count	Percentage
Don't Know	No	1	1%
No	No	57	38%
No	Yes	19	13%



Yes	Don't Know	2	1%
Yes	No	40	27%
Yes	Yes	31	21%
Grand Total		150	100%

4.4 Health care facility

Findings-4: Caregivers, Community Volunteers, Community-Based Local Health Practitioners, and Local Health Institutions, Health Care professionals have increased knowledge, skills, and capacity to provide primary health care services including Primary Rehabilitation Therapy (PRT) and assistive devices to the persons with disabilities by 2024.

Table 11 shows that 18 out of 285 and 6% of project participants with increased knowledge, skills, and capacity to provide primary health care services to persons with disabilities. 18 and 6% of project participants have knowledge, skills, and capacity to provide primary health care services to the person with disabilities. That knowledge is preliminary level and they only know that person with disabilities needs special attention and support in terms of health care facility. In the Kacia Union, there was only one health care facility and that facility had not enough capacity to provide support to the person with disabilities. It was found that the idea of primary rehabilitation therapy (PRT) was 67% among the respondents.

Table 11. Primary healthcare services

have an idea about primary rehabilitation therapy (PRT)	have skill & knowledge to provide primary health service to person with disabilities	persons with disabilities receiving needed health care services including PRT and access to assistive products appropriate to their needs	person with disabilities receiving Primary Rehabilitation Therapy	Count	Percentage
Don't Know	Don't Know	No	No	10	4%
Don't Know	Don't Know	Yes	Yes	1	0%
Don't Know	No	No	No	1	0%
Don't Know	No	No	Yes	1	0%
Don't Know	Yes	No	No	1	0%
No	Don't Know	No	No	1	0%
No	No	No	No	49	17%
No	No	No	Yes	8	3%
No	No	Yes	No	5	2%
No	No	Yes	Yes	2	1%
No	Yes	No	No	12	4%
No	Yes	Yes	No	2	1%
No	Yes	Yes	Yes	1	0%
Yes	Don't Know	Yes	No	1	0%
Yes	No	No	No	29	10%
Yes	No	Yes	No	45	16%
Yes	No	Yes	Yes	4	1%
Yes	Yes	No	No	44	15%
Yes	Yes	No	Yes	17	6%
Yes	Yes	Yes	No	33	12%
Yes	Yes	Yes	Yes	18	6%
Grand Total				285	100%



Table 12 shows that 18 out of 150 and 12% of persons with disabilities receive needed health care services including PRT and access to assistive products appropriate to their needs.

The study team found that those who had received healthcare facility they received those from different locations and healthcare facilities. The condition of the local healthcare facility is not enough technical support to provide the required facility to the person with disabilities.

Table 12. Receive needed healthcare services

PWDs receiving needed health care services including PRT and access to assistive products appropriate to their needs	person with disabilities receiving PRT	person with disabilities receiving assistive device	Count	Percentage
No	No	No	63	42%
No	No	Yes	13	9%
Yes	No	No	25	17%
Yes	No	Yes	26	17%
Yes	Yes	No	5	3%
Yes	Yes	Yes	18	12%
Grand Total			150	100%

Table 13 shows that 70 out of 285 and 25% of respondents responded that health care professionals increased their knowledge and skill on how to meet the needs of patients with disabilities.

Table 13. Skills and knowledge

The needed health care services such as Physiotherapy, Hearing test, devices and eye test etc. services are available at Protibondhi Seba O Sahajjo Kendra.	The local health care service providers knowledgeable & capable enough to provide support for the PWDs health care?	Count	Percentage
No	No	153	54%
Yes	No	62	22%
Yes	Yes	70	25%
Grand Total		285	100%

Findings-5: Improved participation of Persons with disabilities in social activities/life by 2030.

Table 14 shows that 40 out of 150 and 27% of disabled people reported significant engagement in social life. The person with disabilities face didn't face any social challenges like marriage, bullying, or participation issues in the social gathering. The person with disabilities who had comparatively simple impairment had more opportunities.

Table 14. Engagement in social life

Any scope for PWDs to engage in the social life	PWDs face any social challenge like marriage, bullying or participation issue in social gathering	Count	Percentage
No	No	76	51%
Yes	No	34	23%
Yes	Yes	40	27%
Grand Total		150	100%



4.5 Education Facility/ services

Findings-5: Increased understanding of inclusive education and associated teaching-learning methods among the stakeholders including school teachers, parents, SMC members, and GoB education authority by 2024. Table 15 shows that 59 out of 290 and 20% of participants increased knowledge, and skills and sensitized to the idea of inclusive education.

Table 15. Inclusive education

Have idea about inclusive education?	Any learning opportunity for children with disabilities	Count	Percentage
No	No	136	47%
Yes	No	33	11%
Yes	Not Applicable	62	21%
Yes	Yes	59	20%
Grand Total		290	100%

Table 16 shows that 2 out of 10 and 20% of teachers who received in-service training have increased knowledge and skills on inclusive teaching-learning methods.

Table 16. Increased knowledge

teachers receiving in-service training have increased knowledge and skills on inclusive teaching learning methods	In-service training for teacher helped to increase knowledge and skills on inclusive teaching learning methods?	Count	Percentage
No	No	1	10%
No	No	4	40%
Yes	No	3	30%
Yes	Yes	2	20%
Grand Total		10	100%

Table 17 shows that 2 out of 10 and 20% of teachers who receive in-service training have adapted inclusive teaching-learning methods. Among the 10 interviewed teachers 2 teacher received training and those 2 teachers adapted inclusive teaching-learning methods.

Table 17. Adaptation on Inclusive Teaching-Learning Methods

Teachers receiving in-service training have increased knowledge and skills on inclusive teaching learning methods?	All teachers of your school who receive in-service training, have adapted inclusive teaching learning methods	Count	Percentage
No	No	2	20%
No	No	3	30%
Yes	No	3	30%
Yes	Yes	2	20%
Grand Total		10	100%

4.6 Disaster Risk Reduction

Findings-6: Persons with Disabilities, Community Leaders, Caregivers, CBO leaders, DMC members, Local Community Volunteers, Local Government Officials, and Health Professionals have increased knowledge, skills, and capacity in making disability-inclusive disaster/climate risk management plans. 53 out of 285 and 19% of training including persons with disabilities with increased knowledge, skills, and capacity to make disability-inclusive disaster/climate risk management plans.



Findings-7: Improved resilience of Persons with disabilities to climate-related disaster risks 2030.

Table 18 provides insights into the involvement of persons with disabilities in the disaster management committee and their reported adoption of climate-related risk and mitigation measures. The table categorizes responses based on the committee members' awareness of disability representation and their reported actions. Among the 150 respondents, 3% indicated a lack of awareness (Don't Know) regarding disability representation, with 32% of those reporting no adoption of climate-related measures. Notably, 23% of persons with disabilities reported actively adopting such measures, reflecting a positive engagement in climate risk mitigation within the disaster management committee. The table underscores the varied responses and highlights the importance of disability inclusion in climate resilience efforts.

Table 18. Climate Risk and Mitigation

Any PWDs in the disaster management committee	Present condition PWDs reporting adoption of climate related risk and mitigation	Count	Percentage
Don't Know	No	4	3%
Don't Know	Not Applicable	5	3%
Don't Know	Yes	4	3%
No	No	48	32%
No	Not Applicable	2	1%
No	Yes	16	11%
Not Applicable	No	5	3%
Not Applicable	Not Applicable	6	4%
Not Applicable	Yes	5	3%
Yes	No	18	12%
Yes	Not Applicable	2	1%
Yes	Yes	35	23%
Grand Total		150	100%

5. Result and Discussions

Regarding rights defended by community structures, the study found that 10% of persons with disabilities reported their rights being defended by various community structures. This finding is essential in understanding the advocacy and support landscape for persons with disabilities. An alarming finding was that 18% of persons with disabilities were supported in obtaining disability ID cards, allowances, or social safety net provisions, indicating a need for more robust support systems.

The study also highlighted the economic conditions of the area, dominated by fishing, boating, and day labor. These occupations are often insufficient for family needs, exacerbating the financial struggles of families, particularly those with disabled members. In terms of healthcare, the survey revealed that only 6% of project participants had increased knowledge, skills, and capacity to provide primary healthcare services to persons with disabilities. This statistic underscores the need for improved healthcare training and resources, especially in primary rehabilitation therapy and assistive devices.

Another critical area of the study was the participation of persons with disabilities in social activities. It was found that 27% of disabled individuals reported significant engagement in social life, indicating a positive trend towards social inclusion. However, this also suggests that a significant portion of the disabled population still faces social challenges. The study also delved into the realm of education, revealing that 20% of participants had increased knowledge and were sensitized to inclusive education. This finding is significant for understanding the progress in educational inclusivity for persons with disabilities. Linkage with several government agencies for treatment assistance, education, social safety net,

agriculture and livestock extension services, and skill development training through the Youth Department is necessary for improvement of life of person with disabilities. Long-term and solid relationships with community members within group like Self-help group is needed. Income-generating strategies must be developed through a review of physical, financial, marketing, and profitability feasibility. The UDMC, Ward DMC, and Youth Clubs are partially reliant on the development organization, the project would be useful in fostering ownership among local government leaders as well as other community people active in those committees.

A community-oriented action plan and community-led initiatives are required for sustainability and shifting attitudes toward reliance on external help. Given the sensitivity of the WASH situation, need-based interventions to enhance the situation may be adopted. Facilitation of increased accessibility and affordability will be more effective than direct intervention. Home-based and appropriate IGAs for female family members, as well as Self-Help Groups affiliated with local MFIs, may be introduced. Friendly interventions for women, girls, and socially excluded persons to reduce their vulnerability factors through capacity building and awareness. Women, youth, and socially excluded persons should be included in various DRR-related forums, committees, and youth clubs. The initiative must involve local government, elites, business sectors, various allies, and organizations in comprehensive intervention design and implementation that contributes to long-term sustainability. Within NGO/INGO collaboration is required during intervention and setting up the goal. It might help to improve the life of person with disabilities and vulnerable group. In summary, this study depicts the current condition as well as people's accessibility and worry about climate risk, livelihood, and access to various service providers. Catastrophe experience and other challenges relating to disaster, health, and WASH scenario

The paper also discusses the current position of persons with disabilities, as well as their challenges and concerns. This study demonstrates significant potential for strengthening the capabilities of impoverished HHs, enhancing services for individuals with disabilities, making handicapped-friendly complete education in the region, participation in DMCs, and incentive to enhance their responsibilities. Data from this baseline survey can be utilized to address concerns planned for interventions that will aid in the effective implementation of activities leading to the achievement of project objectives. It would be desirable to communicate with the target population before moving forward with community-driven activities and building networking among public and commercial entities that can help to project goal attainment.

6. Conclusions

This in-depth study titled "The Ways of Improvement for the Livelihood Approaches of Persons with Disabilities: A Case Study on Kachia, Bhola Sadar" provides significant insights and actionable strategies to enhance the lives of persons with disabilities in the Kachia region. The research, based on data from 285 households, offers a detailed view of the challenges and opportunities for persons with disabilities in this area. The study underscores that community structures such as Union Parishad Members and Child Clubs are vital in supporting persons with disabilities, but there is a need for stronger and more effective structures. It was found that only a small percentage of persons with disabilities felt that their rights were adequately defended by these community structures, and a limited number received assistance in obtaining necessary disability ID cards, allowances, or social safety nets. This situation highlights a gap in advocacy and support systems that needs addressing. Economically, the region's reliance on fishing, boating, and day labor is insufficient to sustain most families, especially those including persons with disabilities. This challenge necessitates the development of more diverse income opportunities and improved access to education and employment for persons with disabilities. Healthcare is identified as a critical concern, with a mere 6% of project participants exhibiting increased capabilities to provide primary healthcare services to persons with disabilities. This finding points to the urgent requirement for better healthcare training and resources, particularly in areas like primary rehabilitation therapy and the provision of assistive technologies. Social inclusion of persons with disabilities is another crucial aspect, with 27% reporting significant engagement in social activities. However, this also implies that a considerable portion of the disabled population continues to face social challenges. Education, too, requires attention, with only 20% of participants showing an increased understanding of inclusive education. In the context of disaster risk reduction, the study reveals that 19% of training participants, including persons

with disabilities, have enhanced their knowledge and capacity to develop disability-inclusive disaster/climate risk management plans. This is essential for improving the resilience of persons with disabilities against climate-related disasters. To tackle these challenges, the study recommends fortifying community groups, boosting advocacy for the rights of persons with disabilities, improving access to health services and education, and developing inclusive disaster risk management plans. Additionally, better coordination is needed between government services, non-governmental organizations, and community-based organizations to provide comprehensive support to persons with disabilities. This study serves as a guide for stakeholders, including policymakers, community leaders, and advocacy groups, to develop and implement strategies that effectively improve the livelihoods of persons with disabilities in Kachia and similar settings. By adopting these recommendations, a more inclusive, equitable, and sustainable community can be fostered, where persons with disabilities can live with dignity and fully participate in societal life.

References

- Ali, Z. (2014). Economic Costs of Disability in Bangladesh. *Bangladesh Development Studies*, 37(04), 17–33.
- Bangladesh - Subnational Administrative Boundaries - Humanitarian Data Exchange. (n.d.). Data.humdata.org. Retrieved December 22, 2023, from <https://data.humdata.org/dataset/cod-ab-bgd?>
- Bangladesh Bureau of Statistics. (2011). Bangladesh population and housing census 2011. Bangladesh Bureau of Statistics.
- Dassah, E., Aldersey, H. M., McColl, M. A., & Davison, C. (2022). Health care providers' and persons with disabilities' recommendations for improving access to primary health care services in rural northern Ghana: A qualitative study. *PLOS ONE*, 17(9), e0274163. <https://doi.org/10.1371/journal.pone.0274163>
- Hasan, M. K., Ashraf, M., Narasimhan, P., & Aggarwal, R. (2018). Expanding freedoms of people with visual impairment through information and communication technologies: Narratives from Bangladesh. *International Journal of Disability*, 13(6). <https://doi.org/10.1017/idm.2018.7>
- Mactaggart, I., Kuper, H., Murthy, G. V. S., Sagar, J., Oye, J., & Polack, S. (2015). Assessing health and rehabilitation needs of people with disabilities in Cameroon and India. *Disability and Rehabilitation*, 38(18), 1757–1764. <https://doi.org/10.3109/09638288.2015.1107765>
- Mitra, S., Posarac, A., & Vick, B. (2011). Disability and poverty in developing countries: A snapshot from the World Health Survey. *Social Protection Discussion Paper*, 1109. World Bank, Washington, DC. <https://openknowledge.worldbank.org/handle/10986/27369> License: CC BY 3.0 IGO.
- Nfowd & Hi. (2005). *Ability through accessibility: Towards a barrier-free environment for persons with a disability*. Handicap International and National Forum of Organizations Working with the Disabled.
- Parey, B. (2020). Using Sen's capability approach to assess wellbeing among working-age persons with disabilities in Trinidad. *Social Indicators Research*, 151, 1129–1148. <https://doi.org/10.1007/s11205-020-02418-4>
- Saran, A., White, H., & Kuper, H. (2020). Evidence and gap map of studies assessing the effectiveness of interventions for people with disabilities in low-and middle-income countries. *Campbell Systematic Reviews*, 16(1). <https://doi.org/10.1002/cl2.1070>
- Shakil Mahmud, M. H., Mahmud, S., & Rahman, A. (2014). Challenges for people with disabilities during disasters in Bangladesh: An exploratory study in Gaibandha district. *World Federation of Occupational Therapists Bulletin*, 69(1), 53–60. <https://doi.org/10.1179/otb.2014.69.1.015>
- Stough, L. M., & Kang, D. (2015). The Sendai framework for disaster risk reduction and persons with disabilities. *International Journal of Disaster Risk Science*, 6(2), 140–149.
- Tigere, B., & Moyo, T. (2022). Disability-inclusive community development: A case of a community garden in Limpopo province in South Africa. *African journal of disability*, 11, 850. <https://doi.org/10.4102/ajod.v11i0.850>
- United Nations. (2006). Convention of the rights of persons with disabilities and optional protocol. United Nations.
- World Health Organization. (2012). World report on disability. Geneva: World Health Organization, 2011.