AN ANALYTICAL REPORT ON DISABILITY AND HOUSEHOLD POVERTY IN NEPAL

Insights from the Nepal Living Standards Survey - IV (2022/23)

Government of Nepal
Office of the Prime Minister and Council of Ministers
National Statistics Office
Thapathali, Kathmandu
Nepal

Published by:
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Recommended Citation

National Statistics Office. (2026, August). *An analytical report on disability and household poverty in Nepal*. National Statistics Office. https://www.nsonepal.gov.np

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FOREWORD

The National Statistics Office (NSO) is pleased to present "*An Analytical Report on Disability and Household Poverty in Nepal: Insights from the Nepal Living Standards Survey - IV (2022/23)*". This report offers a methodologically rigorous examination of the intersection between disability and household economic vulnerability, drawing on comprehensive data from the fourth round of the Nepal Living Standards Survey.

Socio-economic indicators form the backbone of any effective statistical system. They provide the empirical foundation for assessing human development, tracking economic inclusivity and guiding policy formulation. Building on the rich dataset of the NLSS 2022/23, this report combines core socio-economic metrics with advanced econometric modeling to examine structural poverty dynamics. The analysis reveals the compounded resource constraints faced by households supporting persons with disabilities across Nepal's diverse geographical regions; a reality that conventional poverty measures often fail to capture.

To ensure analytical rigor, internal consistency and international comparability, the estimates presented in this report were developed in accordance with the Washington Group Short Set on Functioning (WG-SS). Beyond standard poverty metrics, we have incorporated an evaluation of the multidimensional Standard of Living (SoL) Index and equivalence transfers to assess the indirect economic costs associated with disability. By examining disparities at the provincial level, the report underscores the critical role of disaggregated demographic statistics in informing equitable resource distribution and targeted planning within Nepal's federal framework.

The NSO is committed to enhance the quality, coverage, timeliness and methodological integrity of national demographic data. I extend my sincere gratitude to UNICEF Nepal for the collaboration and support throughout the preparation of this report. I also acknowledge the dedication of the Deputy Chief Statisticians, Undersecretaries, Directors, the Household Survey Section team and our consulting experts; whose technical expertise and tireless effort were instrumental in bringing this work to completion.

This report is intended as an empirical resource for policymakers, economists, academic researchers, and organizations working in alignment with the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD). We welcome feedback and recommendations from readers in relation to the improvement of official statistics in future.

30 July 2026

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Foreword

I am delighted to present "*An Analytical Report on Disability and Household Poverty in Nepal: Insights from the Nepal Living Standards Survey - IV (2022/23)*". As Nepal navigates its path toward inclusive socio-economic growth, unpacking the relationship between functional limitation and household economic vulnerability is paramount. While our nation has achieved notable milestones in poverty alleviation, the distinct economic marginalization experienced by families supporting persons with disabilities remains a pressing challenge that necessitates targeted, evidence-based policy interventions.

Anchored in the robust methodological framework of the Nepal Living Standards Survey (NLSS) 2022/23, this report systematically quantifies the hidden financial burdens borne by these vulnerable households. By operationalizing the Washington Group criteria and deploying advanced econometric modeling, the analysis brings to light the severe "resource compression" and substantial "equivalence transfers" required just to maintain a basic standard of living. This publication serves as a vital diagnostic tool, illuminating the critical trade-offs families are forced to make — particularly concerning the reduction in vital non-food expenditures — to secure basic survival.

I wish to extend my profound appreciation to everyone instrumental in the realization of this comprehensive analytical report. My sincere gratitude goes to UNICEF Nepal for their continued partnership and support. I am also thankful to the Directors, Undersecretaries, the dedicated technical experts at the Household Survey Section, and all associated members whose meticulous efforts shaped this report.

As we advance toward equitable and sustainable development, the National Statistics Office remains committed in its mandate to deliver high-quality, actionable data. It is our earnest belief that these insights will catalyze rights-based policies, ultimately fostering greater dignity, inclusion, and resilience for all our citizens.

30 July 2026

Dr. Sharad Kumar Sharma
Deputy Chief Statistician
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सारांश

यस प्रतिवेदनमा नेपाल जीवनस्तर सर्वेक्षण २०७९/८० (NLSS 2022/23) को तथ्याङ्कमा आधारित रहेर नेपालमा अपाङ्गता र गरिबीबीचको सम्बन्ध विश्लेषण गरिएको छ। सर्वेक्षणमा ९,६०० घरपरिवारहरूबाट विवरण सङ्कलन गरिएको थियो। यस सर्वेक्षणबाट राष्ट्रिय गरिबीको रेखा प्रतिव्यक्ति प्रतिवर्ष रू. ७२,९०८ (खाद्यतर्फ रू. ३५,०२९ र गैर खाद्यतर्फ रू. ३७,८७९) निर्धारण गरिएको र सो अनुसार नेपालमा कुल जनसङ्ख्याको २०.२७% गरिबीको रेखामुनी रहेको पाइएको छ। अपाङ्गता केवल एक व्यक्तिगत र शारिरिक अवस्था मात्र नभई सम्पूर्ण घरपरिवारको आर्थिक स्थायित्व, श्रम सहभागिता र उपभोग ढाँचालाई परिवर्तन गर्ने एक महत्त्वपूर्ण पारिवारिक घटना समेत हो भन्ने यस विश्लेषणबाट देखिएको छ।

वासिङ्टन ग्रुप वर्गीकरण (Washington Group Classification)

अपाङ्गताको मापन गर्न परम्परागत चिकित्सकीय मोडलको सट्टा, अन्तर्राष्ट्रिय स्तरमा तुलनायोग्य तथ्याङ्क उत्पादनका लागि वासिङ्टन ग्रुपको सङ्क्षिप्त प्रश्नावली प्रयोग गरिएको थियो। यसले देहायका छ वटा मुख्य कार्यगत क्षेत्रमा कठिनाइको मूल्याङ्कन गर्छ:

- **देख्न (Seeing):** चस्मा लगाएर पनि देख्न गाह्रो हुने।
- **सुन्न (Hearing):** श्रवणयन्त्र (Hearing aid) लगाएर पनि सुन्न गाह्रो हुने।
- **हिँड्न (Walking):** हिँड्न वा भर्याङ चढ्न गाह्रो हुने।
- **सम्झन (Remembering):** सम्झन वा ध्यान केन्द्रित गर्न गाह्रो हुने।
- **आफ्नो हेरचाह गर्न (Self-care):** नुहाउन वा लुगा लगाउन गाह्रो हुने।
- **सञ्चार गर्न (Communicating):** आफ्नो कुरा बुझाउन वा अरूको कुरा बुझ्न गाह्रो हुने।

अपाङ्गताको गम्भीरतालाई ४ तहमा विभाजन गरिएको छ:

- **(Disability 1):** कम्तीमा केही कठिनाइ (Some difficulty) भएको।
- **(Disability 2):** मध्यम स्तरको कठिनाइ (Moderate difficulty) भएको।
- **(Disability 3):** धेरै कठिनाइ वा कुनै पनि क्रियाकलाप गर्न नसक्ने (Severe difficulty) भएको।
- **(Disability 4):** कुनै पनि क्रियाकलाप गर्न नसक्ने (Cannot do at all - Most Severe) भएको।

अपाङ्गता भएका घरपरिवारको गरिबी दर (Poverty rate of the households with person with disability)

- नेपालमा घरपरिवारको राष्ट्रिय गरिबीको दर १६.७ % छ, तर अति गम्भीर अपाङ्गता भएका सदस्य रहेका घरपरिवारमा यो दर दोब्बरभन्दा बढी अर्थात् ३३.६% छ। गरिबी नभएका (Non-poor) परिवारमा समेत अपाङ्गताले "स्रोतको सङ्कुचन (resource compression)" ल्याएको देखिन्छ।
- अति गम्भीर अपाङ्गता भएका सदस्य हुने परिवारको प्रतिव्यक्ति कुल उपभोग खर्च राष्ट्रिय औसतभन्दा २७ % ले कम छ। आफ्नो आधारभूत खाद्य सुरक्षा कायम राख्न यी परिवारहरू स्वास्थ्य र शिक्षा जस्ता गैर-खाद्य आवश्यकताहरूमा ठूलो कटौती गर्न बाध्य छन्।

- Econometric modeling र जीवनस्तर सूचकाङ्क (Standard of Living Index) को विश्लेषणले देखाएअनुसार, अपाङ्गता नभएका परिवारको जस्तै जीवनस्तर कायम राख्न अपाङ्गता भएका परिवारलाई अतिरिक्त थप स्रोतको आवश्यकता पर्दछ। सामान्य कठिनाइ भएका परिवारलाई २५.३% र गम्भीर अपाङ्गता भएका परिवारलाई ४७.६% थप अतरिक्त खर्च आवश्यक पर्ने देखिन्छ। यस अध्ययनले अपाङ्गता र गरिबी निवारणका लागि लक्षित र विशेष नीतिहरूको आवश्यकता देखिन्छ।
- विकासोन्मुख देशहरूमा अपाङ्गता र पारिवारिक आर्थिक अवस्थाबीचको सम्बन्ध अत्यन्तै जटिल छ। नेपालमा भएका राजनीतिक, जनसाङ्ख्यिक र आर्थिक परिवर्तनको सन्दर्भमा, "दोहोरो बोझ" लाई बुझ्नु समावेशी विकास नीतिका लागि महत्त्वपूर्ण हुन्छ। अपाङ्गता भएका सदस्य भएको घरपरिवारले प्रायः स्रोत सङ्कुचनको चक्रको सामना गर्नुपर्छ, जहाँ उनीहरूको प्रतिव्यक्ति खर्च घट्छ तर स्वास्थ्य सेवा र विशेष आवश्यकताका लागि खर्चको भार भने बढ्छ। नेपालले गरिबी निवारणमा प्रगति गरेतापनि, अपाङ्गता भएका परिवारले यसको समान लाभ पाउन सकेको देखिँदैन र अझै पनि यस्ता घरपरिवार उच्च गरिबीको जोखिममा रहेको तथ्याङ्कले देखिन्छ ।

हेरचाहकर्ताको प्रभाव (caregiver effect)

- वासिङ्टन ग्रुपको कार्यगत कठिनाइसम्बन्धी संक्षिप्त प्रश्नावली (Washington Group Short Set on Functioning) को प्रयोग गरी नेपाल जीवनस्तर सर्वेक्षण २०७९/८० मा अपाङ्गताको विवरण संकलन गरिएको थियो। संकलित विवरणको विश्लेषणबाट नेपालका करिब २४% घरपरिवार (करिब १७ लाख घरपरिवार) मा कम्तीमा एक जना कार्यगत कठिनाइ (functional difficulty) भएका सदस्य छन् जसमा सबैभन्दा बढी "देख्न नसक्ने" र त्यसपछि "हिँड्न कठिनाइ" हुने समस्याहरू रहेको छ। तथ्याङ्कले स्पष्ट रूपमा "हेरचाहकर्ताको प्रभाव (caregiver effect)" देखाउँछ जस अनुसार अपाङ्गताको गम्भीरता भएका घरपरिवारमा औसत सदस्य संख्या पनि बढी छ । सर्वेक्षण अनुसार घरपरिवारको औसत आकार ४.०० रहेकोमा अति गम्भीर अपाङ्गता भएका घरपरिवारको औसत आकार ५.०५ रहेको छ। यसबाट नेपालमा अपाङ्गता भएका व्यक्तिहरूको हेरचाह र सहयोगको प्राथमिक संरचना भनेको उनीहरूको परिवार नै हो भन्ने बुझ्न सकिन्छ।

अपाङ्गताको व्यापकता (prevalence of disability)

- नेपालका कुल घरपरिवारमध्ये २४% घरपरिवारमा कुनै न कुनै किसिमको अपाङ्गता (Disability 1) रहेको देखिन्छ।
- राष्ट्रियस्तरमा सबैभन्दा धेरै (९ लाख १८ हजार) घरपरिवारमा "देख्न कठिनाइ" हुने अपाङ्गता रहेको देखिन्छ, त्यसपछि "हिँड्न कठिनाइ" (७ लाख ७३ हजार घरपरिवार) रहेको छ।
- गम्भीर अपाङ्गता (Disability 3/4) भएका घरपरिवारमध्ये "हिँड्न कठिनाइ" हुने अपाङ्गता पहिलो स्थानमा (२ लाख ५ हजार घरपरिवारमा) र "देख्न कठिनाइ" हुने अपाङ्गता दोस्रो स्थानमा (१ लाख ४४ हजार घरपरिवारमा) रहेको देखिन्छ। "आफ्नो हेरचाह गर्न र सुन्न कठिनाइ" हुने घरपरिवारहरूको सङ्ख्या पनि उच्च रहेको छ।
- अपाङ्गता भएका घरपरिवारको सङ्ख्या ग्रामीण क्षेत्र (५ लाख ८७ हजार) को तुलनामा सहरी क्षेत्रमा (११ लाख) करिब दोब्बर भन्दा बढी छ।

गरिबी र अपाङ्गताको दोहोरो बोझ (the double burden of poverty and disability)

- कुल घरपरिवारमध्ये ६४.७९% घरपरिवारमा अपाङ्गता र गरिबी दुवै अवस्था नरहेको देखिन्छ । करिब १८.५% घरपरिवारमा अपाङ्गता भए तापनि उनीहरू गरिबीको रेखामुनि छैनन् ।
- ५.२३% घरपरिवारले गरिबी र अपाङ्गताको "दोहोरो बोझ" खेपिरहेका छन् । गरिबीको दर अपाङ्गताको गम्भीरतासँगै बढेको देखिन्छ । सामान्य अपाङ्गता (Disability 1) भएको घरपरिवारको गरिबी दर २२% रहेको छ । यस्तै अति गम्भीर अपाङ्गता (Disability 4) भएको घरपरिवारको गरिबी दर ३३.६% (राष्ट्रिय औसतको दोब्बर) रहेको छ।

प्रतिव्यक्ति खर्च र स्रोतको सङ्कुचन (resource compression and expenditure gap)

- घरपरिवारमा अपाङ्गताको कारणले उपभोग गर्ने क्षमतामा ह्रास आएको देखिन्छ । राष्ट्रियस्तरमा वार्षिक प्रतिव्यक्ति उपभोग खर्च रू. १ लाख ४१ हजार रहेकोमा अति गम्भीर अपाङ्गता (Disability 4) भएका घरपरिवारमा सो खर्च रकम रू. १ लाख ३ हजार मात्र रहेको छ ।
- गरिब घरपरिवारहरूले सामान्यतया खाद्यान्नमा बढी खर्च गर्ने गरेको देखिन्छ । अति गम्भीर अपाङ्गता (Disability 4) भएका गरिब घरपरिवारमा गैर-खाद्य (शिक्षा, स्वास्थ्य, लत्ताकपडा लगायतका) गरिबीको खाडल (non-food poverty gap) ३९% सम्म रहेको छ ।
- बालबालिका (५ वर्षमुनि) भएका घरपरिवारहरूमा उपभोग क्षमता थप ह्रास भएको देखिन्छ । यदि त्यस्तो घरपरिवारमा अति गम्भीर अपाङ्गता (Disability 4) भएको सदस्य पनि छ भने (गरीब नभएका परिवारमा समेत) गैर-खाद्य गरिबीको खाडल (non-food poverty gap) ३५% सम्म रहेको देखिन्छ ।

अर्थमितिय विश्लेषण (econometric analysis)

विवरणात्मक तथ्याङ्क (descriptive statistics) का अलावा यस अध्ययनमा विभिन्न econometric models को समेत प्रयोग गरी विश्लेषण गरिएको छ । यस्तो विश्लेषणबाट मुख्य रूपमा देहाय अनुसारको नतिजा देखिएको छः

- अपाङ्गता भएका र नभएका परिवारबीचको उपभोग खर्चमा तथ्याङ्कीय दृष्टिकोणले उल्लेखनीय भिन्नता रहेको छ । अपाङ्गता भएका घरपरिवारको स्वास्थ्य खर्च अपाङ्गता नभएका घरपरिवारको तुलनामा दोब्बर भन्दा बढि रहेको देखिन्छ ।
- **जीवनस्तर सूचकाङ्क र समतुल्य हस्तान्तरण (SoL index & equivalence transfer):** "प्रिन्सिपल कम्पोनेन्ट एनालाइसिस (PCA)" को प्रयोग गरी बनाइएको सूचकाङ्कले देखाएअनुसार, अपाङ्गता नभएका परिवारको जति नै जीवनस्तर प्राप्त गर्न गम्भीर अपाङ्गता (Disability 3) भएका परिवारलाई ४७.६% अतिरिक्त खर्च (extra spending of disability) आवश्यक पर्छ ।
- **लजिस्टिक रिग्रेसन (logistic regression):** औसत सीमान्त प्रभाव (Average Marginal Effect - AME) ले देखाएअनुसार, गम्भीर अपाङ्गता (Disability 3) भएको खण्डमा एउटा परिवार निरपेक्ष गरिबीमा पर्ने सम्भावना ६.७ प्रतिशत बिन्दु (percentage points) ले बढेको देखिन्छ ।

प्रादेशिक भिन्नता (Regional Disparities)

नेपालको भौगोलिक र प्रादेशिक विविधताले अपाङ्गता र गरिबीको स्वरूपलाई फरक फरक रूपमा प्रस्तुत गरेको छ जुन देहाय अनुसार छः

- **कर्णाली प्रदेश (Karnali province):** कर्णालीमा गम्भीर अपाङ्गताको आर्थिक बोझ देशमै सबैभन्दा उच्च छ । गम्भीर अपाङ्गता (Disability 3) भएका परिवारलाई समान जीवनस्तर कायम गर्न १२०.१% अतिरिक्त आय आवश्यक पर्ने देखिन्छ । ग्रामीण कर्णालीमा अति गम्भीर अपाङ्गता (Disability 4) भएका घरपरिवारको गरिबी दर ७५.५% रहेको छ । यहाँको ग्रामीण क्षेत्रमा अति गम्भीर अपाङ्गता भएका परिवारको औसत आकार बढेर ६.४६ पुगेको देखिन्छ ।
- **सुदूरपश्चिम प्रदेश (Sudurpashchim province):** सुदूरपश्चिमको ग्रामीण क्षेत्रमा गम्भीर अपाङ्गता (Disability 3) भएकाहरूको गरिबी दर ४१.२% छ । यस्ता घरपरिवारहरूमा समान जीवनस्तर कायम गर्न ९८.५% अतिरिक्त आय आवश्यक पर्ने देखिन्छ ।
- **बागमती प्रदेश र काठमाडौँ शहरी क्षेत्र (Bagmati and Kathmandu valley urban):** काठमाडौँ उपत्यकाको सहरी क्षेत्रमा गरिबी दर सामान्यतया कम (१०% भन्दा कम) रहेको देखिन्छ । यद्यपि, काठमाडौँ उपत्यकामा अपाङ्गता भएका घरपरिवारहरूको संख्या (१ लाख ६४ हजारभन्दा बढी) धेरै छ । बागमती प्रदेशमा गम्भीर अपाङ्गता (Disability 3) भएका घरपरिवारमा समान जीवनस्तर कायम गर्न ६५.१% अतिरिक्त खर्च आवश्यक पर्ने देखिन्छ । सामान्य घरपरिवारको औसत सदस्य संख्या ३.६६ छ भने अति गम्भीर अपाङ्गता हुने घरपरिवारको औसत सदस्य संख्या ५.४२ सदस्य छ ।
- **मधेश प्रदेश (Madhesh province):** नेपालभरि गम्भीर अपाङ्गता (Disability 3) को सबैभन्दा धेरै संख्या (१ लाख १ हजार घरपरिवार) मधेश प्रदेशमा छन् । मधेशमा देख्न कठिनाइ हुने गम्भीर समस्याहरू (४७,९१४) बागमती वा लुम्बिनीको तुलनामा धेरै गुणा बढी छ । देशमै सबैभन्दा ठूला घरपरिवार मधेशमा छन् र अति गम्भीर अपाङ्गता हुँदा घरपरिवारको आकार ६.२९ पुग्छ । यद्यपि, यहाँ अति गम्भीर अपाङ्गता भएकाहरूको गरिबी दर केही कम (१७.४%) देखिएको छ, जुन तथ्याङ्कीय नमुना आकारको सीमितता वा बलियो संयुक्त पारिवारिक संरचनाको कारण हुन सक्छ ।
- **कोशी प्रदेश (Koshi province):** कोशी प्रदेशमा सुन्न कठिनाई हुने समस्या मुख्य रूपमा रहेको छ, यस प्रदेशमा २८,५२९ घरपरिवारमा सुन्न कठिनाई हुने सदस्यहरू रहेका छन्। अपाङ्गताका प्रकारहरूमध्ये यो समस्या पहिलो स्थानमा पर्ने कोशी नै एकमात्र प्रदेश रहेको छ। यद्यपि, यहाँ गम्भीर अपाङ्गता भएका व्यक्तिहरूका लागि लाग्ने अतिरिक्त खर्चको भार (equivalence transfer) भने देशमै सबैभन्दा कम अर्थात् ११.६% मात्र देखिएको छ।
- **लुम्बिनी प्रदेश (Lumbini province):** लुम्बिनी प्रदेशमा कुनै पनि प्रकारको अपाङ्गता भएका घरपरिवारको कुल सङ्ख्या देशमै सबैभन्दा उच्च (३ लाख ८३ हजार) रहेको छ, जुन बागमती प्रदेशको भन्दा बढी हो ।

Executive Summary

This report, based on the fourth round of the Nepal Living Standards Survey (NLSS) 2022/23, explores the "Double Burden" of disability and poverty in Nepal. Disability is identified as a significant household-level event that is associated with shifts in economic stability, labor participation, and consumption patterns. Utilizing the Washington Group Short Set on Functioning, the analysis reveals that approximately 24% of Nepali households, roughly 1.7 million, include at least one member with a functional difficulty. The prevalence of disability follows a clear hierarchy, with "Seeing" and "Walking" reported as the most common difficulties nationwide. Furthermore, a pronounced "Caregiver Effect" is observed, where household size expands in line with the severity of disability. Nationally, households managing severe disabilities average 5.05 members, compared to a national average of 4.00 for the general population, suggesting that family units serve as the primary infrastructure for support and care.

The economic data highlights a critical "severity trap" where increasing functional limitations are linked to deeper economic deprivation. While the national poverty rate stands at 16.7% at the household level, this figure surges to 33.6% for households with a person with the most severe disability (Disability 4). This vulnerability is compounded by a "resource compression" effect; even among non-poor families, the presence of a person with a severe disability associates with a 27% reduction in total per capita expenditure (Rs. 103,480) compared to the national average (Rs. 141,032). To maintain basic food security, these vulnerable households are often forced to forgo some of their non-food needs, making spending cuts to essentials like education and healthcare. For poor households with a person with severe disability (Disability 3), the non-food expenditure gap reaches 40%, indicating a depth of deprivation significantly more acute than that of the general poor population.

Econometric modeling further quantifies the hidden costs of disability through the construction of a multidimensional Standard of Living (SoL) Index. The findings show that households with a person with disability require substantially more financial resources to achieve the same level of well-being as households without a person with disability. Nationally, a household with a member facing some difficulty (Disability 1) requires an additional 25.3% in spending to maintain a standard of living equivalent to that of households without disabled members, a burden that nearly doubles to 47.6% for severe disability (Disability 3). Multivariate logistic regression confirms these risks, showing that the presence of a severely disabled member increases the probability of a household falling into absolute poverty by 6.7 percentage points nationally, holding all other factors constant.

Regional disparities across Nepal create pockets of extreme vulnerability, particularly in the western and more remote provinces. In Karnali, the economic burden of severe disability is the highest in the country, with households with a person with disability requiring 120.1% more income than households without a person with disability to attain the same welfare level. In rural Karnali, the poverty rate for households with a person with severe disability reaches a staggering 75.5%, indicating the absence of economic safety nets. While urban centers like the Kathmandu Valley show greater resilience, they are not immune to the double burden, as the high cost of specialized care in urban areas continues to deplete household resources. Ultimately, the report underscores that inclusive development policy in Nepal must move beyond general poverty alleviation and prioritize targeted support for high-dependency households to bridge these substantial expenditure and welfare gaps.

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1. Introduction

1.1. Background

In developing countries, the relationship between disability and household economic well-being is complex and multifaceted. Disability is not merely an isolated individual experience but functions as a household-level event that reshapes consumption patterns, labor participation, and economic stability. As Nepal goes through political, demographic, and economic change, it is increasingly important to understand how disability and poverty intersect and reinforce each other. This helps inclusive development policy identify the groups most at risk of exclusion and design better-targeted interventions. The presence of a family member with a disability often creates a cycle of resource compression where households face reduced per capita expenditure while simultaneously bearing higher costs for healthcare and specialized needs.

Despite Nepal's progress in poverty alleviation over recent decades, these gains have not been evenly distributed. Households supporting members with disabilities continue to face higher rates of poverty and economic vulnerability. While the link between disability and poverty is widely acknowledged, there is limited evidence on this specific issue within the Nepalese context. To address the gap, this report explores these dynamics, examining how disability is linked to the economic well-being of households, particularly in rural and marginalized regions.

Estimates of disability prevalence in Nepal differ across various censuses and surveys. For example, the Nepal Population and Housing Census (NPHC) 2021 indicates a 2.2% prevalence, whereas the Nepal Demographic and Health Survey (NDHS) 2022 reports a 6.0% prevalence for individuals aged 5 and older who experience "a lot of difficulty" or "cannot do at all". The Nepal Multiple Indicator Cluster Survey 2019 recorded approximately 11% prevalence among children and adolescents aged 2-17 experiencing some form of functional difficulty. Such differences are due to the adoption of different definitions and criteria of disability by these census and surveys. The lower estimate of 2.2% from NPHC 2021 reflects a more restrictive administrative classification, often linked with eligibility requirements for national social protection schemes and the issuance of disability cards. By contrast, the 6.0% figure reported in the NDHS 2022 comes from the application of the Washington Group Short Set on Functioning (WG-SS)'s "serious disability" threshold, identifying individuals who experience "a lot of difficulty" or "cannot do at all" in at least one of six core functional domains. This figure rose to 22.5% when the threshold lowered to "some difficulty" in the NDHS 2022.

1.2. Data source

This report utilizes the fourth round of the Nepal Living Standards Survey (NLSS) 2022/23, the most recent household survey available in the country. Drawn from NPHC 2021 sampling frame, the survey is representative at the national level and across fifteen geographical domains with a sample size of 9,600 households. This survey establishes the new national poverty line at NPR 72,908 (NPR 35,029 for food and NPR 37,879 for non-food) per capita per annum for the reference year of 2022/23. The survey provides a comprehensive set of indicators such as consumption, health access, housing, and social security.

1.3. Operational Definitions: The Washington Group Classification

To ensure international comparability and accuracy, this report utilizes the WG-SS to identify disability status. Unlike traditional medical models that focus solely on physical diagnosis, the WG framework assesses functional limitations based on self-reported difficulties in performing basic activities within the current environment. The assessment identifies people with disabilities by evaluating difficulty levels across six core functional domains:

- **Seeing:** Difficulty seeing, even if wearing glasses.
- **Hearing:** Difficulty hearing, even if using a hearing aid.
- **Walking:** Difficulty walking or climbing steps.
- **Remembering:** Difficulty remembering or concentrating.
- **Self-care:** Difficulty with self-care activities such as washing or dressing.
- **Communicating:** Difficulty understanding or being understood by others using one's usual language.

NLSS-IV collected information on a range of functional impairments, including difficulties related to vision, hearing, mobility, cognition, self-care, and communication, to estimate the prevalence of functional disability. To measure disability, NLSS-IV adopted the analytical guidelines recommended by the Washington Group on Disability Statistics, which conceptualize disability as a continuum of functional difficulty rather than a binary condition.

Accordingly, respondents were asked to report their level of difficulty in each functional domain using a four-point response scale: ***No difficulty, Some difficulty, A lot of difficulty, and Cannot do at all***. Based on these responses, disability prevalence can be estimated using four alternative thresholds. While the WG-SS identifies individual functional limitations, this analysis aggregates these individual-level results to examine the broader implications for the household unit; i.e.,

households are categorized based on the presence of members reporting difficulties in these domains, with severity classified into four distinct tiers:

- **Disability 1 (Mild/Any):** A household falls into this category if at least one member reports "some difficulty" in performing activities in any one of the six core functional domains identified by the Washington Group (seeing, hearing, walking, remembering, self-care, or communicating). It does not require multiple domains—difficulty in just one domain is sufficient for this classification.
- **Disability 2 (Moderate):** This category includes households where either: (1) any member report "some difficulty" in performing activities across more than one of the six core functional domains (seeing, hearing, walking, remembering, self-care, or communicating), or (2) any member report "a lot of difficulty" or "cannot do at all" in any functional domain.
- **Disability 3 (Severe):** A household is classified as Disability 3 (Severe) if at least one member reports either "a lot of difficulty" or "cannot do at all" in any of the six core functional domains: seeing, hearing, walking, remembering, self-care, or communicating.
- **Disability 4 (Most Severe):** A household falls into this category if at least one member is completely unable to perform a key activity in any domain — even with help or aids — such as being unable to see, hear, walk, remember, self-care, or communicate at all. This represents the highest level of limitation, where a person's ability to manage essential daily activities is entirely absent.

1.4. Analytical framework

To move beyond basic descriptive summaries and to fill the gap in analysis about how disability relates to household economic well-being in Nepal, this report uses descriptive cross-tabulations alongside three complementary statistical approaches. By combining these approaches, the analysis aims to provide a clearer picture of the situation for persons with disabilities and their families in Nepal.

- **Descriptive Analysis:** The descriptive analysis in this report employs cross-tabulation techniques to explore the relationship between disability prevalence and poverty levels across multiple geographic divisions, such as provinces, urban versus rural areas, and ecological zones. By systematically comparing the proportion of households with members experiencing different levels of disability (ranging from mild to most severe) against poverty indicators, the analysis identifies spatial patterns and disparities in economic vulnerability. This approach identifies whether certain regions or localities have higher concentrations of households facing both disability and poverty, pointing to where targeted intervention is required. Additionally, cross-tabulation assist to examine how household characteristics such as household size and composition intersect with disability status and economic well-being. Through these descriptive

comparisons, the report establishes a basic understanding of the distribution and overlap of disability and poverty, setting the stage for further statistical testing and econometric modeling presented in subsequent sections.

- **Hypothesis Testing:** In this analysis, weighted t-tests are employed to identify meaningful differences in spending patterns between households with a member who has a disability and those without. The expenditure categories examined include food, non-food items, total consumption, and health-related costs. When results are found to be statistically significant, this indicates that the observed variations in expenditure are not due to chance but rather reflect genuine disparities between the two groups.
- **Equivalence Transfer Estimation:** This study constructs a composite Standard of Living (SoL) Index using Principal Component Analysis (PCA) to estimate the equivalence transfer, which represents the extra cost of disability as the percentage increase in household spending required for a household with person with disability to attain the same standard of living as a household without one. The construction of the index is based on household-level responses regarding the adequacy of consumption in areas such as housing, clothing, healthcare, and children's education.
- **Multivariate Logistic Regression:** A logistic regression model is utilized to estimate the Average Marginal Effect (AME) of disability on household poverty status. The AME represents the increase in the likelihood of a household falling below the poverty line associated with disability status, while controlling independent variables such as education, household size, and location.

1.5. Objectives

The primary objective of this report is to quantify the economic and expenditure burdens placed on households with a person with disability using both descriptive and econometric lenses. Specifically, this analysis aims to

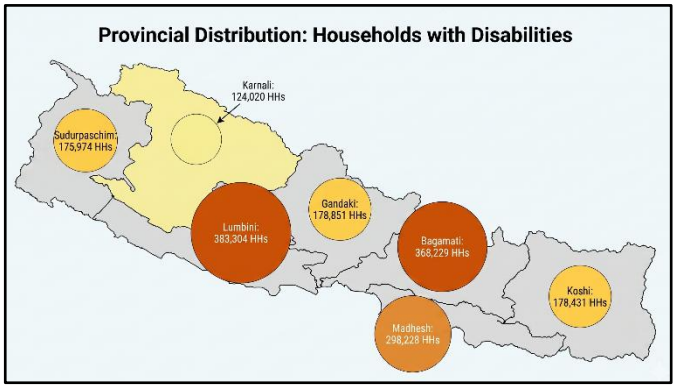
- use cross-tabulation and descriptive analysis to examine the nexus between disability, expenditure, and poverty.
- confirm whether expenditure gaps represent statistically significant disparities between households with a person with disability and those without one.
- quantify the additional expenditure required for households with a person with disability to maintain an equivalent standard of living as that of households without a person with disability.
- calculate the marginal increase in probability of a household falling into poverty given disability status.

2. Disability and households

2.1. Households with any level disability



Table A1 (in the appendix) provides an overview of the disability landscape in Nepal based on the Nepal Living Standard Survey 2022/23 data. According to the table, 1,707,038 households have a member with a functional disability, representing 24% of the total households. This high prevalence likely reflects the multigenerational structure of typical Nepali households: the probability that at least one member, particularly an elderly grandparent, experiences a functional difficulty is substantial. "Seeing" difficulties are the most common disability reported by households nationwide (affecting 918,791 households), followed closely by "Walking" difficulties (affecting 773,240 households). Conversely, "Communicating" is consistently the least reported difficulty (affecting only 254,290).



There is a significant divide between Urban and Rural areas. Nationally, the number of urban households reporting any disability (1,119,310) is nearly double that of rural households (587,728). Regarding provincial trends, almost all provinces follow the national pattern where "Seeing" is the top difficulty, except for Koshi province where "Hearing" is the primary issue. Although Bagamati Province is widely recognized for its high population density, Lumbini Province records the greatest number of households reporting any disability (383,304), marginally exceeding Bagamati Province (368,229). Notably, within Bagamati Province, the Kathmandu Valley, an urban area, accounts for 164,202 households with disabilities. This concentration in the Kathmandu Valley is significant, as it is nearly equivalent to the total number of households with disabilities found in the entire province of Gandaki (178,851) as well as Koshi Province (178,431), underscoring the high prevalence within this urban pocket.

2.2. Households with a lot or severe level of difficulty

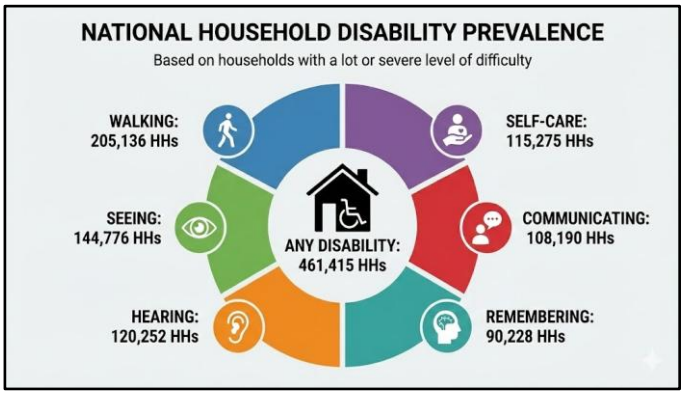
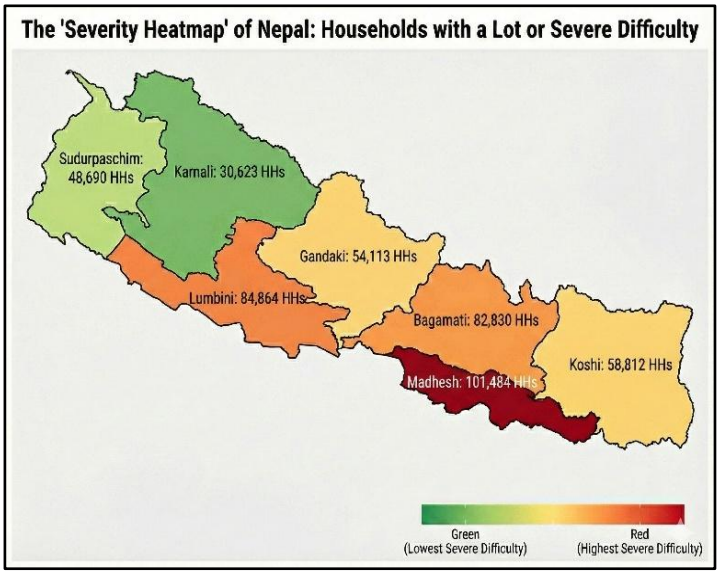


Table A2 (in the appendix) presents the number of households with severe functional limitations (i.e., those reporting "a lot of difficulty" or "cannot do at all"). Unlike the households with any level of difficulty (as seen in Table A1) where "Seeing" was most common, "Walking" becomes the most prevalent functional difficulty nationally for severe cases (205,136 households), with "Seeing" ranking second (144,776 households). While Lumbini and Bagamati were the highest reported provinces for any level of difficulty (as seen in Table A1), Madhesh Province takes the top spot for severe disabilities with 101,484 households. Nationally, "Self-Care" (115,275) and "Hearing" (120,252) show very similar figures in severe numbers, forming a distinct "middle tier" of severity behind Walking and Seeing.



Although "Walking" is the most prevalent severe issue nationally, Madhesh is unique in reporting a high number of severe "Seeing" difficulties (47,914). This figure is nearly double the number of severe seeing cases in Lumbini (24,468) and triple that of Bagamati (16,842). Similar to the observation in households with any level of difficulty, Koshi Province remains an outlier where "Hearing" (28,529) is the most prevalent severe difficulty, ranking higher than Walking (26,400) or "Seeing" (13,393). It is the only province where severe "Hearing" issues at the top of the list.

While vision problems are widespread, often due to age or the need for corrective glasses, they are generally manageable. Walking difficulties, however, often come from physical trauma, paralysis, or advanced frailty, none of which can be easily "corrected". This leads them to be classified more frequently as involving "a lot of difficulty" or being "cannot do at all".

2.3. Households as per the Washington Group's disability classification

The Washington Group on Disability Statistics has established a set of internationally recognized questions for use in population censuses and household surveys to identify persons with disabilities. Unlike traditional approaches, which often focus solely on medical conditions or diagnoses, these questions are structured around six core functional domains: seeing, hearing, walking, remembering, self-care, and communicating. Respondents are asked about the degree of difficulty they experience in each of these functional domain, ranging from "no difficulty" to "cannot do at all." This framework recognizes that disability is not simply a binary condition but can present as a spectrum of functional limitations.

The primary aim of the Washington Group questions is to collect globally comparable data that highlights the prevalence of disability. These questions enable researchers and policymakers to assess whether an individual's engagement in areas such as education, work, or community life is limited by functional difficulties or external barriers. In this context, the United Nations Convention on the Rights of Persons with Disabilities advances a broader perspective, attributing disability not merely to individual impairments but to societal and environmental obstacles – including inaccessible buildings, discrimination, and inadequate support services – that restrict rights and participation. Accordingly, a rights-based approach emphasizes the need to dismantle these external barriers to achieve full inclusion and equality.

Recognising that disability exists on a spectrum rather than as a binary state, the Washington Group identifiers incorporate various cut-off points or thresholds. These thresholds determine who is counted as having a disability, based on the severity and number of barriers experienced. Consequently, this approach yields four distinct types of disability identifiers, ranging from the most inclusive definitions to those capturing only the most severe cases.

Classification of Disability Types

Type 1: The Broader Measure: This identifier represents the most inclusive level of disability. A person is included in this category if they report at least one functional domain as having "some difficulty," "a lot of difficulty," or "cannot do at all". This serves as the widest net for capturing disability prevalence. As presented in the NLSS-IV 2022/23 statistical report, 8.1 percent of the population reported this type of disability.

Type 2: The Moderate Measure: This category applies a stricter filter to identifying disability. A person is included in this category if the person reports at least two domains with "some difficulty," or any one domain with "a lot of difficulty" or "cannot do at all". As presented in the NLSS-IV 2022/23 statistical report, 3.05 percent of the population reported this type of disability.

Type 3: The High Severity Measure: This identifier focuses on significant functional limitations. A respondent is included in this category if any one functional domain to is coded as "a lot of difficulty" in or "cannot do at all". This category captures those with serious impediments to daily activities. As presented in the NLSS-IV 2022/23 statistical report, 1.8 percent of the population reported this type of disability.

Type 4: The Most Severe Measure: This is the most restrictive definition of disability. The level of inclusion is limited strictly to those who report any one functional domain that is coded as "cannot do at all". This group represents individuals with complete disability in at least one functional domain. As presented in the NLSS-IV 2022/23 statistical report, only 0.5 percent of the population reported this type of disability.

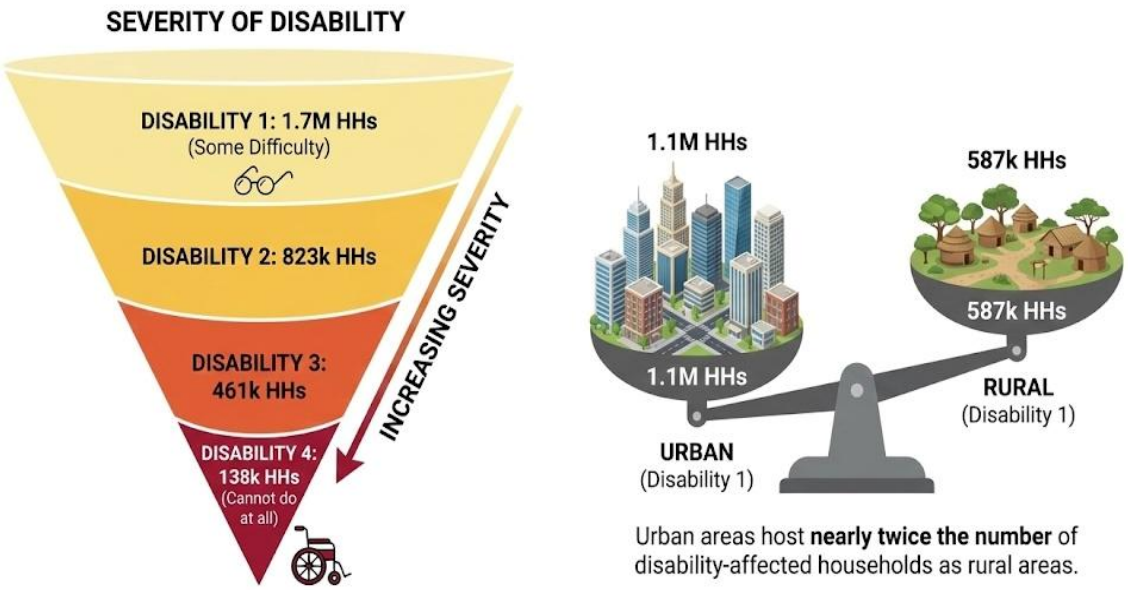
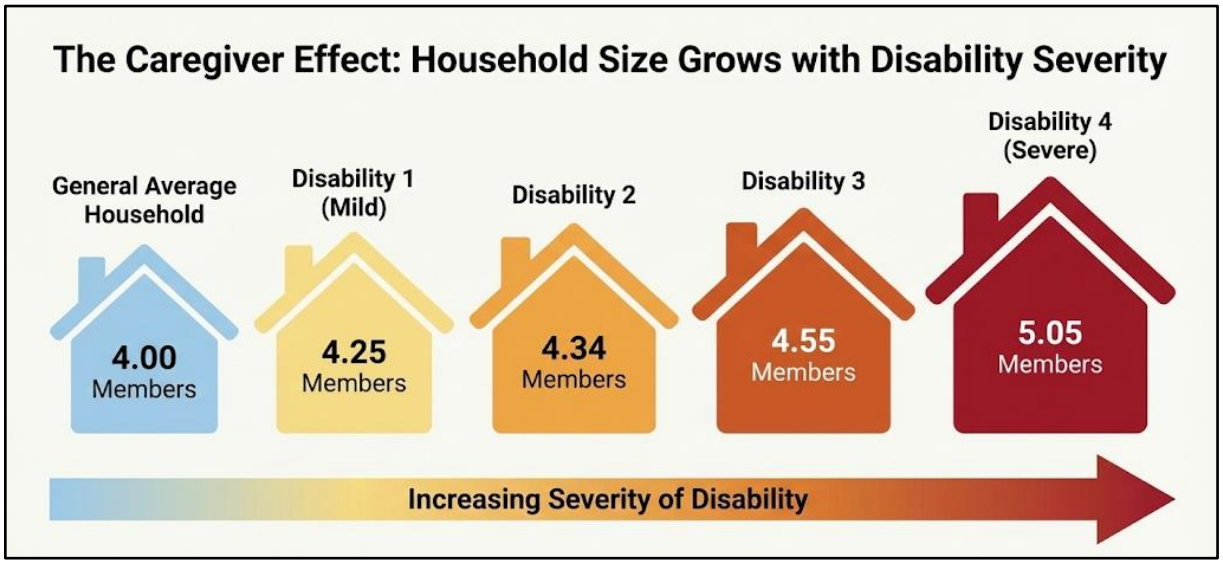


Table A3 (in the appendix) presents the number of households based on the Washington Group's disability classification. Out of total households in Nepal, a significant portion falls under the broadest disability definition, Disability 1, which represents "at least some difficulty." This category affects 1,707,038 households. However, there is a sharp decline in these numbers as the disability classification moves from disability 1 toward disability 4. The count drops from nearly 1.7 million for "some difficulty" (Disability 1) to just 138,814 households for the most severe "cannot do at all" category (Disability 4). Geographically, urban areas report higher numbers of households having person with disabilities than rural areas across all four categories. This disparity is evident in Disability 1, where urban households (1,119,310) are nearly double those in rural areas (587,728).

2.4. Average household size by disability status

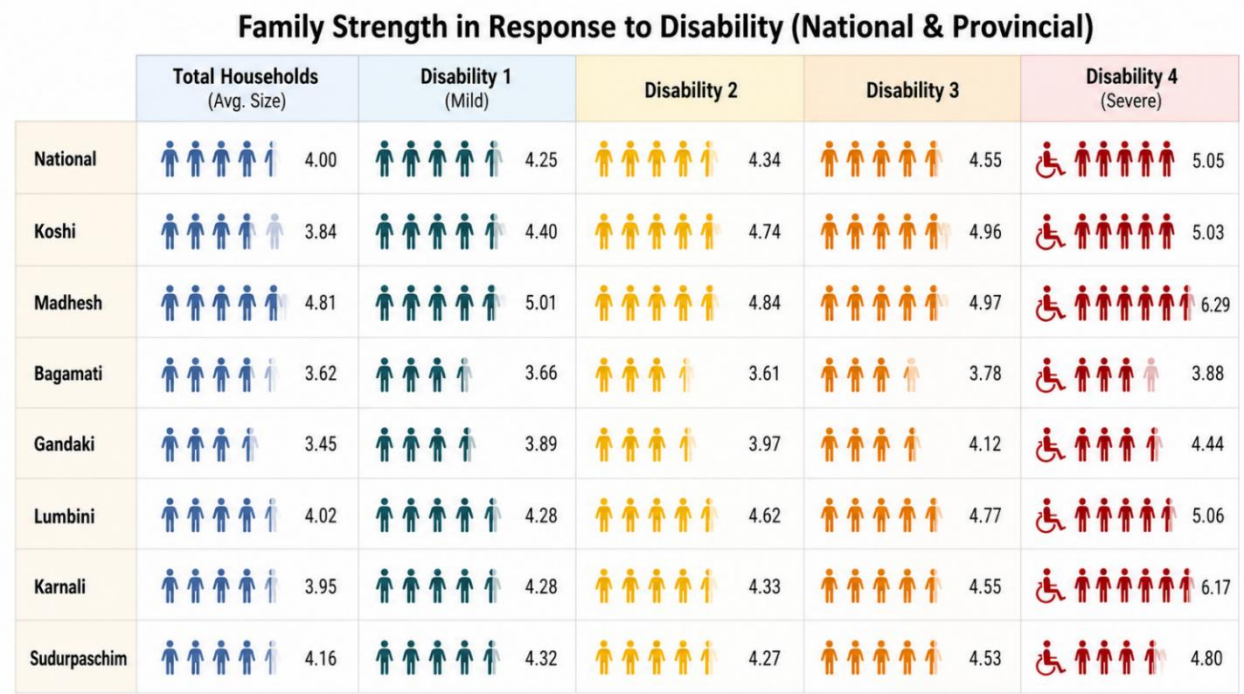
Table A4 (in the appendix), presents the average size of households based on the Washington Group's disability scale. The table indicates the caregiver effect across Nepal, where household size increases with an increase in the severity level of disability. At the national level, the average household size grows from a baseline of 4.00 to 4.25 for mild cases (Disability 1), and surges to 5.05 for the most severe cases (Disability 4). This trend suggests that families act as the primary safety net, relying on larger household sizes to provide the intensive care severe disabilities demand. The dynamic is most pronounced in Madhesh Province, which holds the largest average family size overall (4.81) and witnesses this figure climbing to 6.29 for households managing severe disabilities. To build on these findings, future research should integrate both qualitative and quantitative methods.



While the national trend points to larger families supporting disabled members, regional disaggregation reveals clear disparities. Madhesh Province consistently reports the largest household sizes, which enlarge further with disability status. Households with severe disability (Disability 4) in Madhesh average 6.29 members. Similarly, rural Karnali exhibits a substantial expansion in family size; the average household size jumps from a general 4.15 to 6.46 for severe cases (Disability 4), making it the largest average family size recorded. This indicates that in these regions, the family unit remains an important mechanism for disability management.

In the Kathmandu valley, the caregiver-effect stands out significantly. The average household size in the region is relatively modest, at just 3.66 members per household. However, among households with a member experiencing the most severe level of disability (Disability 4), the household size increases sharply to 5.42. The increased household size reflects the collective adaptation and mobilization of family members to provide the intensive care and assistance required for those with severe disabilities in Kathmandu valley. In contrast to the national trend,

rural areas in Sudurpashchim and Bagamati show an inverse relationship. In rural Sudurpashchim, the average household size actually drops for severe disability (Disability4) (3.97) compared to the general average (4.27).



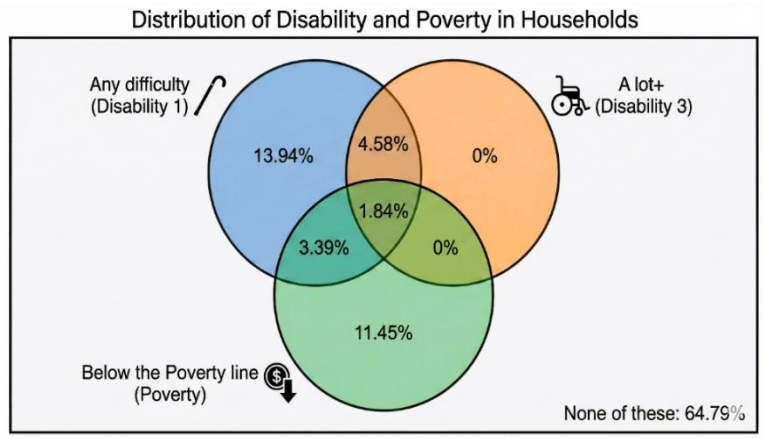
3. Disability and poverty

3.1. The intersection of disability and poverty

Table 1 presents a detailed classification of Nepalese households according to two key dimensions: the presence of disability, ranging from mild to severe, and their poverty status. This framework reveals a clear hierarchy of vulnerability across the country. The largest group, encompassing 64.79% of all households, reports neither form of disadvantage. A significant further portion, approximately 18.5% of households, lives with a member who has a disability but remains above the poverty line, with 13.94% facing mild difficulties and 4.58% experiencing severe ones. However, the most critical group for policy attention is the one confronting a double burden, accounting for 5.23% of all households in Nepal. Among them, 3.39% are living in poverty alongside a mild disability, while the most marginalized segment, comprising 1.84% of the population, endures the compounded challenge of severe disability and poverty simultaneously.

Table 1. Distribution of Disability and Poverty in Households

HHs has a person with any difficulty (Disability 1)	HHs has a person with lot+ disability (Disability 3)	HHs below Poverty line	%
NO	NO	NO	64.79
YES	NO	NO	13.94
NO	NO	YES	11.45
YES	YES	NO	4.58
YES	NO	YES	3.39
YES	YES	YES	1.84
	Total		100



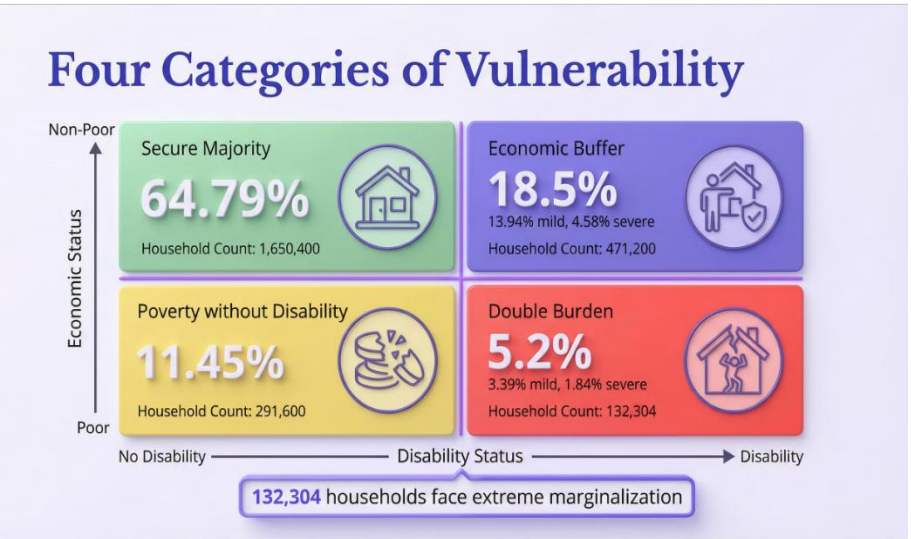
Households with individuals who have severe disabilities and are experiencing poverty encounter significant and multifaceted challenges. Unlike households experiencing poverty alone, which constitute 11.45% of the population, these families must cope not only with the standard challenges of deprivation but also with additional burdens. The costs associated with care, assistive devices, and accessible transportation place these households at an even greater disadvantage, deepening their level of hardship and limiting their ability to escape poverty. To fulfill the right to an adequate standard of living as outlined in Article 28 of the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD), it is essential that social protection policies specifically address the unique needs of households with severe disabilities. These households require targeted interventions to offset the high costs associated with health care, assistive technology, caregiving, and transportation. Without such focused measures, efforts to reduce poverty at the national level will continue to overlook the families with the greatest support requirements, perpetuating the cycle of deprivation and exclusion.

3.2. Poverty incidence by disability types

Table A5 in the appendix illustrates the poverty incidence of households based on disability types. The data demonstrates that the proportion of households below the poverty line rises alongside the severity of disability. While the national poverty rate stands at 16.7% at the household-level, households containing a member with any level of disability (Disability 1) face a higher poverty rate of 22.0%. This vulnerability intensifies with severity: households with the most severe

disabilities (Disability 4) face a poverty rate of 33.6%. Consequently, a household with a severely disabled member (Disability 4) is twice as likely to be poor compared to the national average.

The intersection of geography and disability creates pockets of extreme deprivation. The Karnali region exhibits the highest concentration of vulnerability. In Rural Karnali, the poverty rate for households with severe disability (Disability 4) reaches a staggering 75.5%. This indicates that three out of four households with severe disabilities in Karnali live under absolute poverty, suggesting an almost total absence of economic safety nets. Similarly, rural areas in Sudurpashchim report a poverty rate of 41.2% for severe disability, while this region generally maintains high poverty rates across all disability categories, such as 49.0% for Disability 3.



In contrast, urban centers, particularly in Bagamati Province (Kathmandu valley), show resilience to disability severity. The poverty rate for households with disabilities in the Kathmandu valley is well below 10%. Notably, the urban (KTM valley) domain shows no data for "Disability 4" due to the absence of sample households representing this specific group. Madhesh Province presents an anomaly where the poverty rate for the most severe disability (17.4%) appears lower than for moderate disability categories.

3.3. Functional domain of disability and poverty

Table 2 illustrates poverty rates within six functional domains (Seeing, Hearing, Walking, Remembering, Communicating, and Self-Care) categorized by three levels of severity. The figures reveal a clear linkage: as functional limitations worsen moving from Disability 1 to Disability 4, the prevalence of household poverty rises, albeit with distinct variations by disability type. The hearing domain exhibits poverty gradient and the highest overall incidence for the most severe category. While the poverty rate for "some difficulty" in hearing is 25.2%, it surges to 41.6% for households where a member "cannot do at all," marking the highest poverty rate in the dataset. Households with members reporting "a lot of difficulty" with self-care face a poverty rate of 41.1%, closely followed by severe remembering difficulties at 40.9%. In contrast, while "walking" and "seeing" are the most prevalent disabilities nationally, their association with poverty differs.

The poverty rate for walking difficulties increases with severity, from 22.6% for mild difficulties to 37.5% for those unable to walk at all.

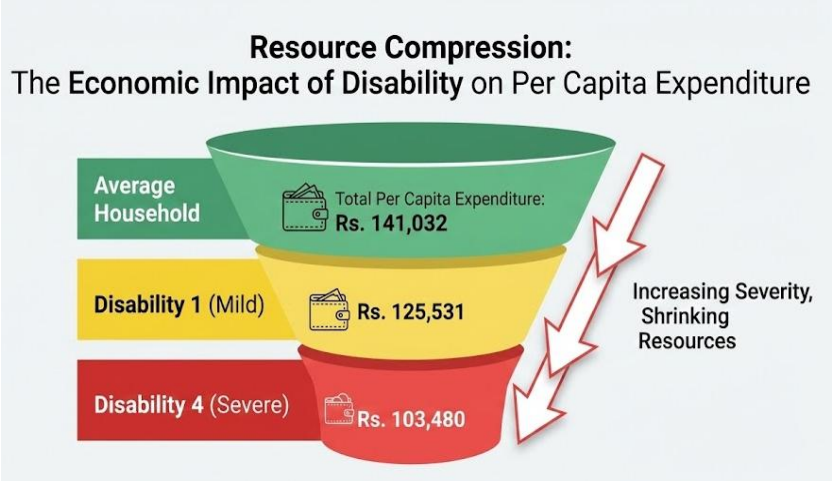
"Seeing" difficulties linked with the lowest poverty rates across all categories; even at the most severe level, the rate is 29.7%, notably lower than hearing or self-care. Ultimately, the data indicates a severity-trap where extreme functional limitation drives economic deprivation. Across all domains, the "cannot do at all" category represents the peak of vulnerability. For instance, the transition from "some difficulty" to "cannot do at all" in the hearing domain shows an increase of 16.4 percentage points, underscoring that poverty alleviation policies must prioritize households managing high-dependency disabilities.

Table 2. Poverty Rates by Functional Domain and Severity

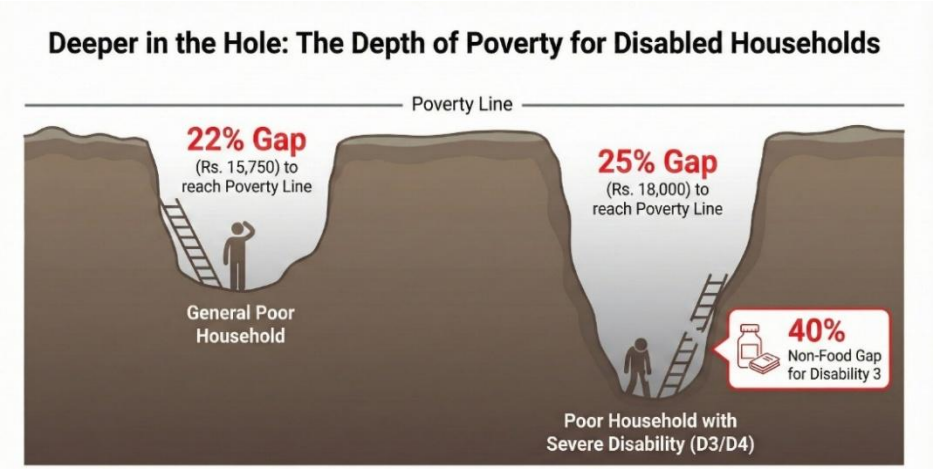
Level of Difficulty	Seeing	Hearing	Walking	Remembering	Self-Care	Communicating
Total Households						
Some difficulty	799,970	488,618	607,024	302,007	218,836	150,916
A lot of difficulty	121,808	88,116	148,694	51,278	60,212	45,735
Cannot do at all	24,216	32,786	60,927	38,950	56,378	62,455
Any difficulty	918,791	590,618	773,240	386,205	321,908	254,290
Poor Households						
Some difficulty	155,531	123,313	137,468	71,140	52,268	45,002
A lot of difficulty	23,106	23,333	43,365	19,418	24,752	21,060
Cannot do at all	7,200	13,645	22,839	15,912	21,230	23,875
Any difficulty	177,945	153,544	193,240	103,312	91,254	87,902
Poverty Rate (Percentage)						
Some difficulty	19.4%	25.2%	22.6%	23.6%	23.9%	29.8%
A lot of difficulty	19.0%	26.5%	29.2%	37.9%	41.1%	46.1%
Cannot do at all	29.7%	41.6%	37.5%	40.9%	37.7%	38.2%
Any difficulty	19.4%	26.0%	25.0%	26.8%	28.3%	34.6%

3.4. Per capita expenditure and the poverty gap

Table A6 (in the appendix) presents a per capita expenditure and poverty gap analysis by disability and poverty status. The data reveals a resource compression effect, where households with disabled members, even those classified as non-poor, operate with tighter budgets than the national average. Specifically, there is an inverse relationship between

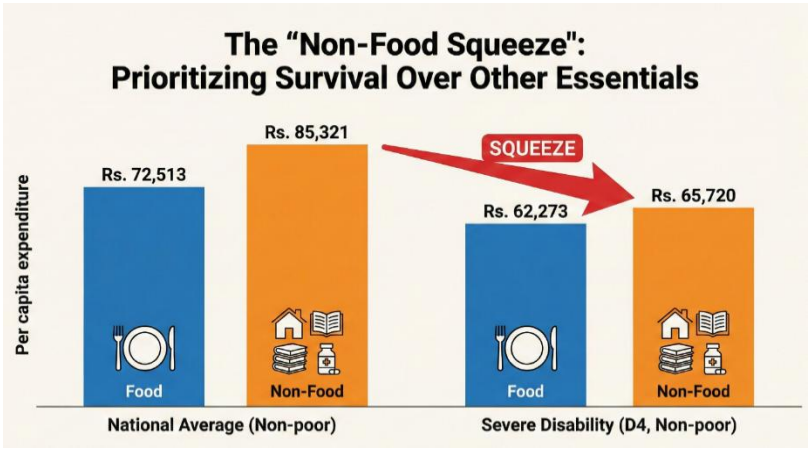


the severity of disability and household consumption. While the national average per capita expenditure stands at NPR 141,032, this figure drops steadily as disability severity increases from Disability 1 to 4.



Households with the most severe disabilities (Disability 4) report an average expenditure of just NPR 103,480, representing a 26.6% reduction in overall consumption levels compared to the national average (NPR 141,032). Even among non-poor households, disability exerts downward pressure. A non-poor household with a severely disabled member spends roughly NPR 30,000 less per year per person than the average non-poor household (NPR 127,993 vs. NPR 157,834).

For households below the poverty line, disability is linked directly with the severity of deprivation. The gap, defined as the shortfall between a poor household's expenditure and the national poverty line (NPR 72,908), shows that the average poor household in Nepal experiences a total expenditure gap of 22% (NPR 15,750). However, for poor households with severe disabilities (Disabilities 3 and 4), this gap widens to 25% (approx. NPR 18,000), indicating that the disabled poor are significantly poorer than the general poor population.



The breakdown of the expenditure gap suggest toward an important survival strategy: households prioritize food security at the expense of non-food necessities. The gap for food expenditure remains relatively low and stable across all groups (8% to 9%), suggesting that even the poorest households with person with disability try to meet basic caloric needs. Most of the shortfall occurs in non-food spending. Among poor households, the non-food gap is about 35%, but for those with severe disabilities (Disability 3), it increases to 40%. This implies that to maintain food intake, poor households with person with disability are forced to make drastic cuts to non-food consumption. Within this context, households

experiencing greater resource constraints due to disability severity are often compelled to make difficult choices. These limitations commonly result in reduced access to healthcare services, diminished spending on necessary assistive devices, and lower investments in education or transportation. Such trade-offs ultimately perpetuate the cycle of disability and poverty, as families are unable to allocate sufficient resources to break free from the challenges associated with both economic deprivation and functional limitations.

3.5. Per capita expenditure and the poverty gap (households having children <5 years)

Households raising young children face a unique set of economic vulnerabilities due to the dual demands of childcare and income generation. Data from Table A7 (in the appendix) reveals that households with at least one child aged 5 or under operate on a lower economic baseline than the national average, with an overall per capita expenditure of NPR 111,130 (compared to the national average of NPR 141,032 seen in Table A6). This financial pressure intensifies further when a member of such a household also has a disability.

Contrary to the broader pattern, where disability is generally associated with lower overall spending, per capita expenditure appears higher for families with a young child and a member with severe disability (Disability 4). Among non-poor households in this category, non-food expenditure stands at NPR 89,127, compared with the average of NPR 68,800 for other non-poor families with young children. This excess is likely attributable to the increased care costs associated with both the needs of a small child and those of a family member with disability. Such households tend to allocate a larger portion of their resources towards specialized support, such as healthcare, therapy, and assistive devices. Consequently, they face more financial pressure, as their budgets must be stretched to cover early childhood requirements alongside disability-related expenses.

The Disability 3 group reports the lowest overall per capita expenditure at just NPR 95,691, lagging nearly 14% behind the average for families with young children (dropping from NPR 111,130 for all households to NPR 95,691 for Disability 3). Unlike the Disability 4 group, which sees high non-food spending (likely due to acute medical needs), the Disability 3 group observes relatively lower spending.

Poor households that include both young children and a member with disability face severe resource constraints, with the level of deprivation varying according to the severity of the disability. Where the disability is mild (Disability 1), these families are forced to reduce non-food spending by as much as 40% in order to maintain adequate food provision for all members. In cases of severe disability (Disability 4), however, even this strategy proves insufficient, as households struggle to cover food costs and experience a 10% shortfall that directly threatens their basic nutritional needs. This pattern reveals a double vulnerability for families with young children and severe disabilities,

as they are forced to make choices between essential areas of expenditure, often forgoing healthcare, education, or other necessities simply to keep food on the table.

4. Econometric insights: deep dive into disability and poverty

While the descriptive analysis in the preceding chapters highlights significant disparities in expenditure and poverty status between households with and without person with disability, it is crucial to determine whether these gaps persist when accounting for confounding factors. Basic correlations may not always provide an accurate interpretation; for example, higher disability rates in rural regions, where incomes tend to be lower, could result in a poverty gap linked more closely to geographic factors than to disability. Consequently, this section utilizes several econometric methods to investigate the relationship between disability, expenditure, and poverty.

To address this issue, this analysis begins with hypothesis testing to determine whether statistically significant differences in per-capita expenditure exist between households with and without a person with disability. Subsequently, we develop a multidimensional Standard of Living (SoL) Index to estimate the "extra cost of disability." Employing an expenditure equivalence approach, we quantify the additional spending necessary for households with disabled members to attain the same SoL as those without. Lastly, we utilize a multivariate logistic regression model to examine the association between disability and the probability of a household falling below the poverty line, while controlling factors such as education, geographic location, and household size.

4.1. Hypothesis testing

In this section, hypothesis testing was done for average per capita expenditures specifically food, non-food, total consumption, and health expenditures—to determine if the observed disparities between households with and without disabled members are statistically significant or simply a result of sampling variation. To examine this, we assess the difference in mean per capita expenditures between households with a person with disability ($D = 1$) and those without ($D = 0$) using a weighted sample t-test. The test statistics are specified as:

$$t = \frac{\overline{X_{D=1}} - \overline{X_{D=0}}}{\sqrt{\frac{s_{D=1}^2}{n_{D=1}} + \frac{s_{D=0}^2}{n_{D=0}}}}$$

Interpretation: This statistic (t) evaluates whether the difference between the mean per capita expenditure ($\bar{X}$) of the two groups (disabled and non-disabled households) is statistically significant, accounting for the variance (s^2) and sample size (n) of each.

To determine the level of significance, we compare the absolute value of the calculated t-score against standard critical values. For the large sample size provided by the NLSS, the criteria are as follows:

10% Level of Significance ($p < 0.10$): A t-score greater than 1.65 implies that there is about a 10% probability that the observed difference is due to random chance.

5% Level of Significance ($p < 0.05$): A t-score greater than 1.96 implies that there is about a 5% probability that the observed difference is due to random chance.

1% Level of Significance ($p < 0.01$): A t-score greater than 2.58 implies that there is about a 1% probability that the observed difference is due to random chance.

The findings, set out in Table 3, present average per capita expenditure according to disability status, alongside the differences between households with no disability and those with disability. The data indicate that households with any functional limitation (Disability 1), as well as those with severe limitations (Disability 3), show differences that are statistically significant at the 1% level when compared against the no-disability baseline. In these groups, overall consumption expenditure tends to decline, while spending on health rises with the presence of disability.

Table 3. Average per capital expenditure by disability status

Category	**No Disability** (N=5,478,065)	**Disability 1** (N=1,707,038)	**Disability 3** (N=461,415)	**Diff.** (No Dis. vs Dis. 1)	**Diff.** (No Dis. vs Dis. 3)
Total Consumption	**145,862**	**125,532**	**110,979**	**20,331*****	**34,883*****
	(2,228)	(2,833)	(3,439)	(2,886)	(3,774)
Food	67,204	61,367	55,102	5,837***	12,102***
	(840)	(1,041)	(1,190)	(1,223)	(1,375)
Non-Food	78,659	64,165	55,878	14,494***	22,781***
	(1,732)	(2,170)	(2,827)	(2,131)	(3,049)
Total Health	**4,244**	**9,146**	**10,913**	**-4,901*****	**-6,669*****
(Non-Comm. + Comm.)	(199)	(821)	(1,382)	(824)	(1,384)
Non-Communicable	3,896	8,751	10,484	-4,855***	-6,588***
	(196)	(816)	(1,365)	(821)	(1,372)
Comm. & Injuries	348	395	428	47	80
	(21)	(53)	(144)	(55)	(144)

Notes: Standard errors are in parentheses below the means. *** $p < 0.01$.
Total Health includes non-communicable, communicable, and injuries.

The analysis of total consumption shows that households with no disability have an average annual per capita expenditure of NPR 145,862. This drops to NPR 125,532 for Disability 1 and to NPR 110,979 for Disability 3. This reduction results in a per capita consumption decline of NPR 20,331 for Disability 1 and NPR 34,883 for Disability 3, both of which are statistically significant at the 1% level. Decomposing the expenditure reveals that the consumption gap is consistent but skewed

towards non-food consumption. For Disability 1, the per capita non-food consumption gap is NPR 14,494, which is more than double the food consumption gap of NPR 5,837. Similarly, for Disability 3, the per capita non-food consumption gap is NPR 22,781, which is nearly double the food consumption gap of NPR 12,102. These gaps are statistically significant at the 1% level.

In contrast to food and non-food spending, health expenditure increases as the severity level of disability in the households rises. Households with Disability 1 spend over double (NPR 9,146) the amount households without person with disability spend (NPR 4,244). This expenditure rises to NPR 10,913 for Disability 3. The data clearly shows this increase is driven almost entirely by non-communicable diseases, where the gap is statistically significant at the 1% level. Interestingly, expenditure on communicable diseases and injuries is small and does not show a statistically significant difference.

4.2. The standard of living (SoL) analysis

We applied the equivalence approach[1] to measure the economic burden arising from disability-related barriers. This method recognizes that households with a member who has a disability face distinct constraints and elevated baseline needs, meaning that they require greater resources than households without such a member in order to achieve the same level of well-being. Relying solely on monetary expenditure as a measure of well-being might not be appropriate, since high spending in a household with a disability may simply reflect healthcare costs rather than genuine prosperity. To address this limitation, we constructed a multidimensional Standard of Living (SoL) Index to serve as a proxy for household well-being.

The methodology

To construct the index, we employ Principal Component Analysis (PCA), a dimensionality-reduction technique that aggregates multiple variables into a single continuous index representing the latent SoL variable. This index integrates household responses concerning the adequacy of residential facilities, clothing, healthcare, and children's education. We calculate the SoL score for household i as a linear combination of these specific factors:

$$SoL_i = \sum_{k=1}^{p} w_k I_{ki}$$

where SoL_i is the composite index score for household i, and I_{ki} represents the standard response score for indicator k. The weights (w_k) correspond to the eigenvectors derived from the first

[1] For details, see the publication "Methodological Guidelines on Assessing Household Disability: Related Costs and Their Implication for Participation" from the World Bank. (URL: https://hdl.handle.net/10986/43800)

principal component, which captures the maximum proportion of variance across the underlying indicators. Here, higher scores indicate a higher standard of living.

Building on this SoL index, we estimate the "Equivalence Transfer", the additional resources needed by households with person with disability to maintain the same level of SoL as their non-disabled counterparts, using the following regression model:

$$SoL_i = \alpha + \beta_1 \ln(Y_i) + \beta_2 D_i + \beta_3 \ln(N_i) + \beta_4 P_i + \varepsilon_i$$

where $\ln(Y_i)$ is the log of per capita expenditure for household i, D_i is the dummy variable of disability status, N_i is the household size, and P_i is the Paasche price index. The coefficient β_2 captures the specific structural shift in welfare associated with disability.

The derivation of the equivalence transfer

We equate the SoL index of a household with person with disability ($D = 1$) spending Y^d to that of a non-disabled household ($D = 0$) spending Y^{nd}, assuming all other characteristics are held constant:

$$\alpha + \beta_1 ln(Y^d) + \beta_2(1) = \alpha + \beta_1 ln(Y^{nd}) + \beta_2(0)$$

Subtracting α and $\beta_1 \ln(Y^{nd})$ from both sides and rearranging to solve the spending difference:

$$\beta_1 \ln(Y^d) - \beta_1 \ln(Y^{nd}) = -\beta_2$$

$$\beta_1 (\ln(Y^d) - \ln(Y^{nd})) = -\beta_2$$

$$\ln\left(\frac{Y^d}{Y^{nd}}\right) = \frac{-\beta_2}{\beta_1}$$

Exponentiating both sides yields the ratio of spending:

$$\frac{Y^d}{Y^{nd}} = \exp\left(\frac{-\beta_2}{\beta_1}\right)$$

The Transfer Estimate, which represents the percentage increase in spending required for the household having person with disability $(\frac{Y^d - Y^{nd}}{Y^{nd}})$, is therefore:

$$ET = \frac{Y^d}{Y^{nd}} - 1 = \exp\left(\frac{-\beta_2}{\beta_1}\right) - 1$$

The results

The regression results (see Appendix A8) show a positive relationship between the SoL index and per capita expenditure and a negative relationship between the SoL index and disability status. Using the coefficient estimations of these relationships, we calculated the equivalence transfer which is presented in Table 4. At the national level, a household with a member facing "some difficulty" (Disability 1) requires 25.3% additional spending to maintain the same SoL as a non-disabled counterpart. This burden nearly doubles to 47.6% for households with members facing "severe difficulty" (Disability 3).

Table 4. The equivalence transfer estimates

	Disability 1	Disability 3
National	25.3%	47.6%
Koshi	4.8%	11.6%
Madhesh	46.5%	50.5%
Bagamati	21.6%	65.1%
Gandaki	3.8%	25.3%
Lumbini	15.6%	31.3%
Karnali	84.6%	120.1%
Sudurpashchim	73.6%	98.5%

However, despite these national averages, regional disparities persist. The economic burden of disability is relatively high in the western, less developed provinces.

- **Extreme Burden in Karnali and Sudurpashchim:** In Karnali, the extra cost is the highest, reaching 84.6% for mild disability (Disability 1) and 120.1% for severe disability (Disability 3). Similarly, Sudurpashchim shows transfer requirements of 73.6% (for Disability1) and 98.5% (Disability 3), respectively. This implies that in these remote regions, a household with a severely disabled member needs more than double the spending of a household without a disabled person just to maintain the same welfare level. This likely reflects the high logistical costs of accessing care, lack of public infrastructure, and higher prices for goods in these areas.
- **Variation in Developed Provinces:** In contrast, provinces like Koshi (4.8% and 11.6%) and Gandaki (3.8% and 25.3%) show significantly lower transfer estimates. This could be due to the better infrastructure, accessible markets, and public services in these regions which might have helped reduce some of the costs of disability.

- **The Case of Bagamati and Madhesh:** Bagamati shows a moderate cost for Disability 1 (21.6%) but a very high cost for Disability 3 (65.1%), possibly reflecting the high cost of specialized medical care and urban living expenses in Kathmandu. Madhesh shows consistently high costs (around 50%) for both categories, possibly indicating a generalized lack of accessible services.

4.3. The multivariate logistic regression

Finally, we employ a multivariate logistic regression model to investigate the probability of a household falling into absolute poverty. This method isolates the marginal association of disability with poverty status while holding other variables constant. The following model predicts the log-odds of being poor based on disability status and a vector of control variables:

$$ln\left(\frac{P_i(Y_i = 1)}{1 - P_i(Y_i = 1)}\right) = \beta_0 + \beta_1 D_i + \sum_{j=1}^{J} \gamma_j X_{ij} + \varepsilon_i$$

where the dependent variable is the log-odds of being poor. D_i represents disability status, and X_{ij} represents a vector of covariates including household size, urbanization, dependency ratio, household head sex, household head education level, caste, and remittance recipient dummy. While the logistic regression coefficients indicate the direction of the relationship (positive or negative), they represent changes in the log-odds of poverty, which can be difficult to interpret. Thus, we estimate average marginal effect (AME) of disability which represents the average change in the probability of being a household poor (in percentage points) when the household status changes from members without disability to with disability. The AME estimation is given by,

$$AME = \frac{1}{n}\sum_{i=1}^{n}[P(Y_i = 1|D_i = 1, X_i) - P(y_i = 1|D_i = 0, X_i)]$$

Table 5. Average marginal effects of disability on the probability of a household being poor

	Disability 1				Disability 3			
	AME		Std. Error	p-value	AME		Std. Error	p-value
National	0.038	***	0.000	0.000	0.067	***	0.017	0.000
Koshi	0.029	***	0.001	0.001	0.059	***	0.016	0.000
Madhesh	0.024	***	0.003	0.003	0.046	***	0.013	0.000
Bagamati	0.034	***	0.001	0.001	0.071	***	0.020	0.000
Gandaki	0.025	***	0.001	0.001	0.055	***	0.015	0.000
Lumbini	0.034	***	0.001	0.001	0.070	***	0.018	0.000
Karnali	0.041	***	0.001	0.001	0.085	***	0.022	0.000
Sudurpashchim	0.046	***	0.001	0.001	0.097	***	0.025	0.000

*** p < 0.01

Table 5 presents the AME estimates of disability on the probability of a household falling below the absolute poverty line. At the national level, the presence of a household member with at least "some difficulty" (Disability 1) increases the probability of that household falling below the poverty line by 3.8 percentage points, holding all other factors constant. This marginal change nearly doubles when the severity of disability increases. For households with a member facing "severe difficulty" (Disability 3), the probability of being poor rises by 6.7 percentage points. This confirms the severity gradient observed in the earlier descriptive and SoL analyses.

While the positive association between disability and poverty is significant across all provinces ($p < 0.01$), there is noticeable regional heterogeneity in the magnitude. Consistent with the findings from the Standard of Living analysis, the western and more remote provinces exhibit the highest marginal probabilities. In Sudurpashchim, severe disability (Disability 3) increases the probability of poverty by 9.7 percentage points, the highest in the country. Karnali follows closely, where severe disability raises the poverty risk by 8.5 percentage points. This suggests that in regions with low levels of economic development, the presence of disability is far more likely to push a household into absolute poverty. Interestingly, Bagamati, despite being a more developed province, shows a high marginal effect for severe disability (7.1 percentage points). This may reflect the high cost of living and medical care in urban centers like Kathmandu, where severe disability can rapidly deplete household resources. Conversely, Madhesh and Gandaki show relatively lower marginal effects (4.6 and 5.5 percentage points for severe disability, respectively).

5. Discussion

About 24% of Nepali households nearly 1.7 million have at least one member with a functional difficulty, which is expected given Nepal's multigenerational household structure. Elderly and person with disability family members often live at home rather than in institutions. The WG-SS identifies these limitations throughout life, with "Seeing" and "Walking" being the most reported issues, largely due to aging and limited access to aids like eyeglasses or orthopedic support, especially in rural communities.

The increment of household size as disability severity increases underscores the extent to which the family unit remains Nepal's primary social protection mechanism. The jump from a national average household size of 4.00 to 5.05 for households managing the most severe disability (Disability 4) reflects a collective adaptation strategy: family members cohabit and reorganize to absorb caregiving responsibilities, though it needs additional investigation. Severe disability is linked to larger households in Madhesh and Karnali, but rural Sudurpashchim and Bagamati show smaller household sizes for severe disability cases. Further research should combine household data with migration and care patterns.

This report highlights “resource compression,” where disability reduces household spending even among non-poor families. Non-poor households with severe disabilities spend about NPR 30,000 less per person annually than the national average, making them vulnerable to economic shocks despite being above the poverty line. This is likely due to reduced earnings and increased costs for care and medical needs.

The expenditure gap analysis reveals that the primary domain in which poor households with disabilities sacrifice is non-food spending. Among poor households with severe disability (Disability 3), the non-food expenditure gap reaches 40% against the non-food poverty line component significantly worse than the 35% gap experienced by the general poor. This pattern indicates that such households are forced to prioritize caloric survival over education, healthcare, transportation, and other non-food investments that are nonetheless critical to escaping poverty. The result is a self-reinforcing cycle: resource compression today forecloses human capital investment and productivity tomorrow, perpetuating the intergenerational poverty-disability nexus. For households that also include young children, this trade-off is particularly damaging, as cuts to education spending during a child’s formative years can have lasting consequences for future earning potential and social mobility.

Empirical evidence shows a strong link between severe functional limitations and higher poverty risk. While the national poverty rate is 16.7%, it rises to 33.6% in households where members report “cannot do at all” in any one of the six functional domains (Disability 4). Econometric analysis indicates that disability status increases household poverty probability by 6.7 percentage points, holding other socio-economic factors constant.

Equivale transfer estimates reveal the hidden costs of disability, showing that households with disabled members need significantly more resources to achieve the same standard of living as those without disability 25.3% more for mild cases (Disability 1) and 47.6% more for severe cases (Disability 4) at the national level. Regional differences are substantial: in provinces like Karnali and Sudurpashchim, households with severe disabilities require over double the spending of comparable households without disability due to factors like isolation, higher care costs, and limited public support, creating compounded vulnerability not shown by standard poverty measures. In Bagamati, the increased cost (65.1%) for severe disability is likely to be linked to high urban medical and specialist service expenses rather than supply shortages.

6. Policy implications

This report outlines several key implications for Nepal's social protection system. Standard poverty measures often underestimate deprivation in households affected by disability; those just above the poverty line may still lack essential resources. Social protection policies should use disability-adjusted poverty criteria for more accurate targeting. Vulnerability is concentrated in Karnali and Sudurpashchim, requiring provincial strategies and targeted grants, as universal transfers may not suffice. Households with both young children and disabled members need integrated support models to reduce administrative burden and ensure comprehensive assistance. Article 28 of the UNCRPD affirms the necessity of active state intervention. The report also identifies important data gaps future surveys should track households longitudinally and collect qualitative information to better inform policy. The unusual poverty pattern in Madhesh province needs further exploration for a clearer understanding.

7. Conclusion

Drawing on the Nepal Living Standards Survey 2022/23, this report uses descriptive and econometric analysis to show that disability is a key factor in economic vulnerability across Nepal. Disability affects entire households, altering their financial wellbeing and consumption patterns.

This report reveals that about one in four Nepali households has a member with functional difficulties, and these families experience higher poverty rates, lower spending, and greater welfare gaps. The concurrent challenges of disability and poverty is 5.23% of households, representing more than 376,000 families who face both circumstances. Economic challenges intensify as the severity of disability increases; households with members experiencing substantial limitations incur greater expenses attributable to decreased labor capacity, elevated healthcare requirements, and restricted access to education and long-term welfare resources.

Regional disparities remain significant in Nepal, with rural households having persons with disability in Karnali experiencing a poverty rate of 75.5% and requiring twice the spending of households without persons with disability. Urban regions such as Bagamati also confront difficulties arising from elevated healthcare expenses. To address these issues, it is recommended that Nepal integrate disability considerations into national poverty reduction strategies by broadening social protection measures, implementing subsidies, ensuring accessible healthcare services, and strengthening caregiver support programs. Addressing disability-related poverty effectively necessitates the implementation of rights-based and targeted policy interventions that prioritize individuals most affected.

Appendix

Table A1. No. of HHs having any level of difficulty

	Type of disabilities (any level of difficulty)						
	Seeing	Hearing	Walking	Remembering	Self-Care	Communicating	Any
National	918,791	590,618	773,240	386,205	321,908	254,290	1,707,038
Urban	616,839	367,312	494,888	252,875	219,230	164,983	1,119,310
Rural	301,952	223,306	278,352	133,330	102,679	89,307	587,728
Koshi	75,943	83,534	65,891	51,157	36,079	47,184	178,431
Urban	46,395	51,155	38,876	33,023	24,047	32,626	109,301
Rural	29,548	32,379	27,015	18,135	12,032	14,559	69,130
Madhesh	165,116	95,216	121,064	62,047	66,321	48,245	298,228
Urban	119,470	61,762	82,682	43,726	50,492	30,643	213,402
Rural	45,646	33,454	38,381	18,321	15,829	17,601	84,825
Bagamati	195,447	117,325	193,736	89,130	81,543	52,636	368,229
Urban (KTM valley)	87,581	47,779	79,416	38,077	27,456	18,749	164,202
Urban (excluding KTM valley)	63,409	39,516	67,221	28,872	32,435	20,137	120,367
Rural	44,456	30,030	47,099	22,181	21,653	13,751	83,661
Gandaki	100,458	82,388	82,402	40,420	32,055	26,053	178,851
Urban	68,352	52,407	55,311	24,561	23,046	18,760	117,903
Rural	32,106	29,981	27,091	15,860	9,009	7,293	60,948
Lumbini	198,156	98,940	179,795	82,940	68,498	36,045	383,304
Urban	119,224	51,419	95,883	47,182	39,416	16,971	213,299
Rural	78,933	47,521	83,913	35,758	29,082	19,074	170,006
Karnali	79,154	60,930	49,838	23,484	19,251	21,411	124,020
Urban	41,777	33,180	24,788	13,522	11,093	11,262	66,101
Rural	37,377	27,750	25,050	9,961	8,158	10,149	57,918
Sudurpashchim	104,517	52,284	80,515	37,026	18,162	22,716	175,974
Urban	70,630	30,093	50,711	23,912	11,246	15,836	114,734
Rural	33,887	22,191	29,804	13,114	6,915	6,880	61,240

Table A2. No. of HHs having a lot or severe level of difficulty

	Type of disabilities (a lot or severe level of difficulty)						
	Seeing	Hearing	Walking	Remembering	Self-Care	Communicating	Any
National	144,776	120,252	205,136	90,228	115,275	108,190	461,415
Urban	103,627	75,077	137,299	61,353	79,631	69,159	301,680
Rural	41,149	45,176	67,836	28,875	35,644	39,032	159,735
Koshi	13,393	28,529	26,400	18,793	17,343	27,276	58,812
Urban	11,341	21,889	17,737	13,981	11,423	19,203	39,452
Rural	2,052	6,639	8,662	4,812	5,920	8,073	19,360
Madhesh	47,914	11,148	30,612	19,333	21,755	12,294	101,484
Urban	42,499	5,130	21,081	13,590	15,933	9,819	77,348
Rural	5,415	6,018	9,531	5,742	5,822	2,474	24,135
Bagamati	16,842	17,926	56,701	16,417	26,004	16,114	82,830
Urban (KTM valley)	5,141	4,638	22,241	5,596	7,762	4,918	29,154
Urban (excluding KTM valley)	5,727	8,186	21,568	7,937	13,777	7,802	30,621
Rural	5,975	5,102	12,892	2,884	4,464	3,394	23,055
Gandaki	9,592	18,638	22,897	8,104	11,841	11,736	54,113
Urban	5,843	10,631	16,301	4,549	9,465	8,192	35,185
Rural	3,749	8,008	6,596	3,555	2,376	3,544	18,928
Lumbini	24,468	21,460	39,626	15,992	26,404	24,559	84,864
Urban	13,170	10,046	20,561	6,775	13,333	9,173	42,304
Rural	11,299	11,414	19,065	9,217	13,070	15,386	42,560
Karnali	15,534	13,594	8,534	5,031	6,252	7,147	30,623
Urban	8,375	7,662	3,826	3,981	3,709	3,862	14,873
Rural	7,160	5,932	4,708	1,050	2,543	3,284	15,750
Sudurpashchim	17,032	8,958	20,365	6,559	5,676	9,065	48,690
Urban	11,532	6,896	13,983	4,943	4,228	6,190	32,742
Rural	5,500	2,063	6,382	1,616	1,449	2,875	15,947

Table A3. No. of HHs as per the Washington Group's disability identifier

	Households (in %)	No. of Households as per the Washington Group's Disability Identifiers			
		Disability 1	Disability 2	Disability 3	Disability 4
National	100.0	1,707,038	823,264	461,415	138,814
Urban	69.9	1,119,310	534,633	301,680	95,971
Rural	30.1	587,728	288,631	159,735	42,843
Koshi	16.9	178,431	92,847	58,812	27,141
Urban	11.2	109,301	59,447	39,452	21,873
Rural	5.7	69,130	33,399	19,360	5,269
Madhesh	18.8	298,228	163,486	101,484	23,705
Urban	14.1	213,402	119,744	77,348	19,586
Rural	4.7	84,825	43,742	24,135	4,119
Bagamati	22.6	368,229	163,570	82,830	21,681
Urban (KTM valley)	11.8	164,202	63,390	29,154	4,480
Urban (excluding KTM valley)	6.8	120,367	58,789	30,621	13,561
Rural	4.1	83,661	41,390	23,055	3,640
Gandaki	9.7	178,851	100,761	54,113	14,077
Urban	6.6	117,903	66,923	35,185	9,588
Rural	3.1	60,948	33,838	18,928	4,490
Lumbini	18.9	383,304	159,460	84,864	35,950
Urban	11.4	213,299	82,755	42,304	17,313
Rural	7.5	170,006	76,704	42,560	18,636

	Households (in %)	No. of Households as per the Washington Group's Disability Identifiers			
		Disability 1	Disability 2	Disability 3	Disability 4
Karnali	5.2	124,020	61,285	30,623	6,043
Urban	2.9	66,101	31,194	14,873	2,860
Rural	2.3	57,918	30,091	15,750	3,183
Sudurpashchim	8.0	175,974	81,857	48,690	10,217
Urban	5.3	114,734	52,390	32,742	6,711
Rural	2.8	61,240	29,467	15,947	3,506

Washington Group's Disability Identifiers

Disability 1: at least 1 domain/question is coded SOME DIFFICULTY or A LOT OF DIFFICULTY or CANNOT DO AT ALL.

Disability 2: at least 2 domains/questions are coded SOME DIFFICULTY, or any 1 domain/question is coded A LOT OF DIFFICULTY or CANNOT DO AT ALL.

Disability 3: any 1 domain/question is coded A LOT OF DIFFICULTY or CANNOT DO AT ALL.

Disability 4: any 1 domain is coded CANNOT DO AT ALL

Table A4. Average Household Size by Disability Status

	Total Households	Washington Group's Disability Identifiers			
		Disability 1	Disability 2	Disability 3	Disability 4
National	4.00	4.25	4.34	4.55	5.05
Koshi	3.84	4.40	4.74	4.96	5.03
Urban	3.81	4.64	5.09	5.15	5.21
Rural	3.90	4.03	4.13	4.58	4.29
Madhesh	4.81	5.01	4.84	4.97	6.29
Urban	4.79	4.87	4.62	4.79	6.30
Rural	4.88	5.35	5.44	5.56	6.23
Bagamati	3.62	3.66	3.61	3.78	3.88
Urban (KTM valley)	3.66	3.91	3.97	4.49	5.42
Urban (excluding KTM valley)	3.60	3.65	3.51	3.72	3.51
Rural	3.52	3.19	3.23	2.96	3.36
Gandaki	3.45	3.89	3.97	4.12	4.44
Urban	3.46	4.03	4.13	4.14	4.46
Rural	3.42	3.62	3.66	4.08	4.40
Lumbini	4.02	4.28	4.62	4.77	5.06
Urban	3.96	4.36	4.86	4.93	5.19
Rural	4.12	4.19	4.36	4.61	4.94
Karnali	3.95	4.28	4.33	4.55	6.17
Urban	3.80	4.09	4.01	4.24	5.84
Rural	4.15	4.51	4.66	4.84	6.46
Sudurpashchim	4.16	4.32	4.27	4.53	4.80
Urban	4.10	4.36	4.36	4.68	5.23
Rural	4.27	4.25	4.11	4.22	3.97

Table A5. Poverty incidence by disability status

	Poor Households		Washington Group's Disability Identifiers							
			Disability 1		Disability 2		Disability 3		Disability 4	
	No.	%	No.	%	No.	%	No.	%	No.	%
National	1,199,103	16.7	376,173	22.0	219,543	26.7	132,304	28.7	46,587	33.6
Urban	761,458	15.2	228,443	20.4	133,979	25.1	76,818	25.5	28,706	29.9
Rural	437,645	20.2	147,730	25.1	85,564	29.6	55,487	34.7	17,881	41.7
Koshi	176,086	14.5	44,665	25.0	25,913	27.9	20,967	35.7	10,791	39.8
Urban	107,597	13.4	28,616	26.2	17,892	30.1	14,530	36.8	7956	36.4
Rural	68,488	16.6	16,050	23.2	8,021	24.0	6,437	33.2	2835	53.8
Madhesh	263,784	19.6	72,657	24.4	47,995	29.4	20,556	20.3	4,118	17.4
Urban	190,923	18.9	49,877	23.4	32,480	27.1	11,924	15.4	2763	14.1
Rural	72,861	21.6	22,780	26.9	15,514	35.5	8,632	35.8	1355	32.9
Bagamati	172,708	10.6	43,019	11.7	30,196	18.5	16,734	20.2	4,737	21.8
Urban (KTM valley)	51,549	6.1	6,605	4.0	4,646	7.3	2,720	9.3	-	-
Urban (excluding KTM valley)	62,426	12.8	18,662	15.5	14,659	24.9	8,393	27.4	4663	34.4
Rural	58,734	20.1	17,752	21.2	10,891	26.3	5,621	24.4	74	2.0
Gandaki	69,029	9.9	20,524	11.5	16,790	16.7	11,599	21.4	3,051	21.7
Urban	51,592	10.9	13,039	11.1	10,726	16.0	7,986	22.7	2166	22.6
Rural	17,437	7.9	7,485	12.3	6,063	17.9	3,612	19.1	885	19.7
Lumbini	265,122	19.6	99,369	25.9	44,353	27.8	28,660	33.8	16,130	44.9
Urban	155,829	19.1	58,291	27.3	23,269	28.1	11,981	28.3	7244	41.8
Rural	109,294	20.3	41,079	24.2	21,084	27.5	16,679	39.2	8885	47.7
Karnali	80,298	21.5	31,741	25.6	18,537	30.2	9,945	32.5	3,113	51.5
Urban	38,696	18.4	14,734	22.3	9,122	29.2	4,007	26.9	711	24.9
Rural	41,602	25.5	17,007	29.4	9,415	31.3	5,938	37.7	2402	75.5
Sudurpashchim	172,076	29.9	64,197	36.5	35,760	43.7	23,846	49.0	4,648	45.5
Urban	102,847	27.2	38,619	33.7	21,184	40.4	15,277	46.7	3203	47.7
Rural	69,228	35.0	25,578	41.8	14,576	49.5	8,568	53.7	1445	41.2

Table A6: Per Capita Expenditure and Poverty Gap Analysis by Disability Status and Poverty Classification

	Poverty status	Per capita expenditure (Rs.)			Gap					
		Food	Non-food	Food & Non-food	Food (Rs.35,029)		Non-food (Rs.37,879)		Food & Non-food (Rs.72,908)	
					Rs.	%	Rs.	%	Rs.	%
All households	Non-poor	72,513	85,321	157,834						
	Poor	32,391	24,767	57,158	2,638	8%	13,112	35%	15,750	22%
	Both	65,817	75,215	141,032						
Disability 1	Non-poor	69,535	75,572	145,108						
	Poor	32,466	23,807	56,273	2,563	7%	14,072	37%	16,635	23%
	Both	61,367	64,165	125,531						
Disability 2	Non-poor	68,053	72,370	140,423						
	Poor	33,020	23,272	56,292	2,009	6%	14,607	39%	16,616	23%
	Both	58,710	59,277	117,987						
Disability 3	Non-poor	64,505	69,163	133,667						
	Poor	31,711	22,831	54,542	3,317	9%	15,048	40%	18,366	25%
	Both	55,102	55,878	110,979						
Disability 4	Non-poor	62,273	65,720	127,993						
	Poor	31,726	23,225	54,951	3,303	9%	14,654	39%	17,957	25%
	Both	52,021	51,458	103,480						

Table A7: Per Capita Expenditure and Poverty Gap Analysis by Disability Status and Poverty Classification (households having child < 5 years)

			Per capita expenditure (Rs.)			Gap					
						Food (Rs.35,029)		Non-food (Rs.37,879)		Food & Non-food (Rs.72,908)	
	Poverty status	Households count	Food	Non-food	Food & Non-food	Rs.	%	Rs.	%	Rs.	%
All households	Non-poor	1,736,180	62,059	68,800	130,859						
	Poor	616,407	31,515	24,044	55,559	3,514	10%	13,835	37%	17,349	24%
	Both	2,352,588	54,056	57,074	111,130						
Disability 1	Non-poor	23,593	60,874	66,510	127,384						
	Poor	10,222	31,827	22,743	54,570	3,202	9%	15,136	40%	18,338	25%
	Both	33,815	52,094	53,280	105,374						
Disability 2	Non-poor	8,800	60,714	70,010	130,724						
	Poor	5,565	34,089	26,394	60,482	940	3%	11,485	30%	12,426	17%
	Both	14,365	50,399	53,112	103,511						
Disability 3	Non-poor	3,593	65,434	79,171	144,604						
	Poor	4,888	34,208	25,530	59,738	821	2%	12,349	33%	13,170	18%
	Both	8,481	47,436	48,254	95,691						
Disability 4	Non-poor	3,013	63,150	89,127	152,277						
	Poor	2,856	31,610	24,468	56,078	3,419	10%	13,411	35%	16,830	23%
	Both	5,868	47,801	57,660	105,461						

Table A8. Regression estimation for the standard of living (SoL) Analysis

Dep var: SoL Index	Disability 1							
	National	Koshi	Madhesh	Bagamati	Gandaki	Lumbini	Karnali	Sudurpashchim
Intercept	-13.719 ***	-15.388 ***	-18.269 ***	-9.127 ***	-11.463 ***	-12.871 ***	-9.930 ***	-13.682 ***
	(0.604)	(1.248)	(1.975)	(0.859)	(1.289)	(1.232)	(1.469)	(1.241)
log(per capita expenditure)	1.074 ***	1.240 ***	1.531 ***	0.742 ***	0.997 ***	1.006 ***	0.825 ***	1.140 ***
	(0.047)	(0.097)	(0.176)	(0.066)	(0.102)	(0.090)	(0.108)	(0.092)
Disability 1^{+}	-0.243 ***	-0.058	-0.585 ***	-0.145	-0.038	-0.146	-0.506 ***	-0.629 ***
	(0.052)	(0.134)	(0.139)	(0.089)	(0.096)	(0.096)	(0.097)	(0.113)
Paasche Price Index	0.879 ***	0.376	-0.337	0.373	-0.454	0.910 **	0.008	0.123
	(0.143)	(0.392)	(0.619)	(0.256)	(0.387)	(0.315)	(0.342)	(0.413)
Households size	0.100 ***	0.113 ***	0.116 **	0.117 ***	0.116 ***	0.126 ***	0.106 ***	0.117 ***
	(0.014)	(0.023)	(0.041)	(0.017)	(0.029)	(0.022)	(0.029)	(0.023)
N (Unweighted)	9,600	1,416	1,392	2,028	1,200	1,416	1,008	1,140

*** p < 0.001; ** p < 0.010; * p < 0.050

+ Reference group is households without persons with disability.

Dep var: SoL Index	Disability 3							
	National	Koshi	Madhesh	Bagamati	Gandaki	Lumbini	Karnali	Sudurpashchim
Intercept	-13.280 ***	-15.708 ***	-17.606 ***	-8.791 ***	-11.979 ***	-12.377 ***	-9.048 ***	-12.410 ***
	(0.606)	(1.217)	(2.058)	(0.962)	(1.397)	(1.353)	(1.575)	(1.330)
log(per capita expenditure)	1.045 ***	1.259 ***	1.513 ***	0.707 ***	1.031 ***	0.966 ***	0.773 ***	1.039 ***
	(0.050)	(0.098)	(0.190)	(0.075)	(0.113)	(0.101)	(0.118)	(0.101)
Disability 3^{+}	-0.407 ***	-0.138	-0.618 ***	-0.354 *	-0.232	-0.263	-0.610 ***	-0.713 ***
	(0.072)	(0.218)	(0.152)	(0.146)	(0.141)	(0.144)	(0.165)	(0.186)
Paasche Price Index	0.810 ***	0.458	-0.844	0.528	-0.354	0.977 **	-0.197	0.095
	(0.157)	(0.366)	(0.691)	(0.297)	(0.438)	(0.373)	(0.349)	(0.393)
Households size	0.092 ***	0.118 ***	0.116 **	0.093 ***	0.118 ***	0.104 ***	0.090 *	0.097 ***
	(0.014)	(0.024)	(0.041)	(0.019)	(0.034)	(0.022)	(0.035)	(0.025)
N (Unweighted)	7,808	1,262	1,173	1,662	979	1,090	753	889

*** p < 0.001; ** p < 0.010; * p < 0.050

+ Reference group is households without persons with disability.

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