Research & Studies

Community-based solutions for economic resilience: Building on local knowledge and know-how to respond to climate change challenges (Nepal and Ethiopia)

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Content

Abstract

1. Context

Climate change and environmental stressors—such as droughts, floods, conflicts, and epidemics—disproportionately impact vulnerable populations, especially persons with disabilities, by undermining livelihoods and deepening socio-economic vulnerabilities. Traditional top-down aid approaches have often neglected local knowledge, resulting in limited community ownership and unsustainable outcomes. Current development and humanitarian frameworks increasingly emphasize **localization** and the value of indigenous knowledge in building resilience, as reflected in initiatives like the *Grand Bargain* and *Early Warnings for All (EW4All)*. Humanity & Inclusion, formerly Handicap International (HI) embraces this shift, supporting vulnerable communities in strengthening their resilience through locally driven, context-specific strategies. Evidence from countries like Nepal and Ethiopia highlights the urgency and effectiveness of bottom-up approaches in addressing climate risks and promoting sustainable development. However, rigid donor frameworks remain a challenge to fully operationalizing these community-led models. Advancing sustainable resilience requires deeper recognition, systematization, and promotion of local adaptation practices as essential assets for equitable, scalable, and lasting impact.

2. General and specific objectives

This study aims to document local climate mitigation and adaptation practices in Ethiopia and Nepal. By capturing these community-driven strategies, HI seeks to strengthen its livelihoods programming to ensure that interventions are inclusive, sustainable, and responsive to the needs of marginalized groups. Both Ethiopia and Nepal, despite their distinct contexts, face significant climate risks compounded by limited adaptive capacities, underscoring the importance of localized solutions. The selection of these two diverse yet similarly vulnerable countries was intended to reveal a broad range of practices that can inform and enrich future programming and recommendations.

3. Methods

The research utilized mixed-methods approaches (combining qualitative and quantitative), including interviews with 215 participants across both countries, focusing particularly on persons with disabilities and other marginalized groups. It relies on in-depth fieldwork, with particular emphasis on amplifying the voices of the most vulnerable populations to understand the coping mechanisms they develop in response to climate-related shocks. Community-level discussions and interviews provided rich, context-specific insights, which were subsequently complemented and deepened through a rigorous literature review. This

dual approach allowed for the collection of real, grounded data from within the communities, while also enabling a level of analysis that assesses the potential transferability of the identified practices and the specific conditions required for their successful adaptation in other contexts.

4. Findings

Climate vulnerabilities manifested differently in each country: Nepal faces landslides, floods, erratic rainfall, and human-wildlife conflict, while Ethiopia experiences severe droughts as the primary hazard, followed by human and livestock diseases. Both countries demonstrate that vulnerable communities possess valuable local knowledge and coping mechanisms, though these are increasingly overstretched as climate shocks intensify.

Key findings reveal that livelihood diversification serves as a cornerstone for resilience, with communities combining agriculture, small-scale trade, and skilled labour to create multiple income streams. Water management emerges as fundamental to community resilience, essential for human consumption, livestock survival, and agricultural productivity. The study identified that inclusive programming starting with the most vulnerable groups creates stronger community-wide resilience outcomes.

Critical gaps persist in supporting persons with disabilities, who often receive limited institutional support and remain dependent on family networks, particularly during crises. Traditional community-based practices prove most effective when they adopt holistic, multi-sectoral approaches that build on existing local knowledge and capacities rather than imposing external solutions.

5. Recommendations

Integrated approach for community development: this initial recommendation emphasizes treating communities as ecosystems through holistic, bottom-up approaches that prioritize local needs and knowledge over sectoral budget allocations. This requires implementing area-based and collective approaches that aggregate community feedback and align interventions to local priorities, while promoting coordination across sectors and engaging local partners in joint planning and implementation. The approach must address the entrenched sectoral structure of humanitarian funding through integrated analysis, shared decision-making platforms, and flexible funding mechanisms that support collective action.

Inclusion-centered programming: Programming should place persons with disabilities at the center of design, recognizing that focusing on their needs first sets higher standards for community resilience and benefits the broader ecosystem. This approach addresses systematic barriers including lack of education access, limited knowledge on how to assist persons with disabilities, and community attitudes that underestimate their potential

contributions. Strengthening institutional support systems is essential to reduce dependency on family networks during crises.

Sustainable livelihood diversification: The recommendations emphasize promoting diversification into value-adding sectors like agro-processing and small businesses while ensuring inclusion through vocational training for women, youth, and persons with disabilities. Creating inclusive financial mechanisms using trusted community guarantors is crucial for supporting the most vulnerable groups. Building on existing community needs and capacities through participatory frameworks ensures interventions align with local practices while avoiding externally driven solutions that undermine local ownership.

Water management and infrastructure development: Scaling up low-cost, community-owned water management solutions such as rainwater harvesting systems, communal wells, and small reservoirs is fundamental to community resilience. These initiatives must include practical training for system maintenance and establish inclusive water management committees to ensure effective governance, sustainability, and equitable access for all community members.

6. Conclusion

True resilience is about enabling communities to adapt and thrive independently. Evidence from Nepal and Ethiopia shows that even the most vulnerable groups hold valuable local knowledge to cope with crises. Yet, as climate shocks intensify, these traditional mechanisms are increasingly overstretched, sometimes leading to harmful coping strategies that further weaken communities.

To foster lasting resilience, development efforts must aim for transformational, multi-sectoral change that addresses interconnected risks and is firmly grounded in local priorities, knowledge, and governance. Investing in solid preparatory work—designed with and for communities, especially the most vulnerable—is essential to ensure that interventions are inclusive, relevant, and community-owned.

This requires a shift in humanitarian and development practice: communities must drive the agenda, rather than external actors. HI is well-positioned to champion this approach, promoting localized, community-led solutions that start with the most vulnerable and benefit the broader ecosystem.

In a context of shrinking aid and growing global instability, prioritizing financial autonomy, local leadership, and community-driven resilience is more critical than ever to achieving sustainable, equitable, and climate-adaptive futures.

Foreword

In a world increasingly marked by uncertainty and fragility, building the economic resilience of local communities is more critical than ever. This study on community-based economic resilience was led in Ethiopia and Nepal at the very beginning of 2025. It offers interesting insights into how resilience can be strengthened in ways that are based on the needs and knowledge of local communities, leading to approaches that are owned, that have shown lasting results, and on which new programming could be based to accompany communities in their strategy for climate adaptation.

Guided by the priorities of Humanity & Inclusion (formerly Handicap International), this research focuses on the most vulnerable groups that are affected by crises that are more frequent and more intense. Solid and lasting resilience cannot exist without inclusion: communities are more capable of facing hazards and dealing with conflicts when all members — regardless of ability — can fully contribute to and benefit from opportunities, including economic ones.

In Ethiopia and Nepal, where diverse challenges such as climate change, conflict, and economic instability threaten livelihoods, inclusive strategies are essential. By documenting lived experiences, identifying effective practices, and drawing actionable lessons, this study seeks to inspire policies and programs that foster equitable and sustainable development.

Humanity and Inclusion (HI) must prioritize economic resilience because the communities and individuals it serves -particularly people with disabilities and other vulnerable groups- are often the most exposed to shocks such as conflict, disasters, and climate change. These shocks can quickly erode livelihoods, pushing already marginalized populations deeper into poverty and exclusion, and making it difficult for them to recover and meet their basic needs. By working on economic resilience, HI not only helps these communities withstand and adapt to crises but also empowers them to build sustainable livelihoods, reducing their long-term dependence on aid and strengthening their self-reliance and cohesion.

Focusing on economic resilience aligns with HI's mission to improve living conditions, promote dignity, and ensure fundamental rights for all, while also positioning the organization as a leader in inclusive, sustainable development-an approach increasingly recognized as essential for breaking the cycle of poverty and achieving lasting impact.

We hope this work will contribute to broader efforts to promote economic resilience that is both community-driven and inclusive, reaffirming that resilience built for everyone is resilience that lasts.

Part 1 – Introduction

In an era marked by growing climatic and socio-economic challenges, and difficulty to match foreign aid with those increasing needs, it is strategic to invest in research that aims to understand how resilience can be nurtured by communities themselves**.** Even if the study has been carried out at small-scale, it shows that resilience exists, even in highly vulnerable populations, and is rooted in local knowledge, practices and owned innovations.

In this study, we have discussed with the communities to identify practices, strategies and knowledge they use to prepare, mitigate, adapt, and recover from a disaster or from the increased impacts of climate change. This document presents the methodology, the overall findings and the main recommendations on which future inclusive economic resilience programmes could be built upon. The identified practices are detailed in a repository. They are completed and enriched by targeted practices identified in the literature review.

Building resilience from within requires a profound shift in how international organizations engage with communities. Rather than applying standardized approaches, there is a need to listen, learn, and co-create with local actors. By truly valuing traditional knowledge systems and everyday adaptive strategies, we can foster solutions that are not only more relevant but also more durable and inclusive. The practices identified through this study are not static nor revolutionary; they offer pathways for adaptation and innovation that can be shared and transferred to other communities, particularly those who might be at the early stages of building their own resilience.

This work also carries an advocacy dimension, led by HI, aimed at influencing donors and international actors to rethink the foundations of resilience programming. HI advocates for inclusive, cohesive, and sustainable approaches — approaches that are centered on the voices, knowledge, and aspirations of communities, while supporting them to strengthen and refine their practices in response to evolving climate risks. Only by embracing and enhancing what communities already know and do can we build pathways to genuine, lasting resilience.

Part 2 – Context

1. General context and perspective

Climate change and environmental stressors, such as droughts, floods, conflicts, and epidemics, disproportionately impact vulnerable populations, including persons with disabilities. These shocks undermine livelihoods—such as agriculture, livestock, markets, and transportation—hindering basic needs fulfilment and exacerbating socio-economic vulnerabilities[1].

Historically, foreign aid and development programmes have often relied on top-down approaches, risking undermining pre-existing local practices and knowledge systems. Such methods destabilized community-led resilience efforts, reduced local ownership, limited community empowerment, and resulted in unsustainable outcomes that could not be scaled up.

Current frameworks prioritize localization and recognize indigenous knowledge and traditional practices as invaluable assets to foster economic resilience in low-income countries, and particularly so in remote communities. Localization emphasizes the need to empower communities so they implement their own solutions. This approach is fully aligned with initiatives like the Grand Bargain's Workstream 2, which commits to channelling funding and decision-making authority to local actors[2]. Communities have developed sophisticated coping mechanisms and early warning systems over generations, adapting to their specific environmental and socio-economic contexts[3]. This implies bottom-up approaches focused on solutions provided by communities and systematised by humanitarian and development practitioners to serve as good practices for further projects. The current momentum in humanitarian and development sectors - also evidenced by initiatives like Early Warnings for All (EW4All[4]), which emphasizes the integration of indigenous knowledge into early warning systems - is to be seized and levered.

Humanity & Inclusion (HI) is aligned with this particular approach to development and humanitarian aid. HI promotes resilience among the most vulnerable groups by leveraging local practices and adaptation strategies. Proactively building resilience in at-risk

[1] Https://www.ipcc.ch/report/ar6/wg2/chapter/chapter-8/

[2] IFRC 2023, Innovative funding modalities, 10p.

[3] USAID, 2024, Pastoralists' Perspectives on Early Warning, Anticipatory Action, and Emergency Response, 41p.

[4] UN Global Early Warning Initiative for the Implementation of Climate Adaptation, 2022, Early Warning for All - Executive plan of action, 50p.

communities serves not only as a critical strategy to mitigate climate risks, but also as a pathway to accelerate sustainable development and reduce poverty[5].

The World Bank[6] underscores the efficacy of economic inclusion programs that embed climate resilient measures, noting their cost-effectiveness, and ability to empower individuals and communities. Such programs align with localization principles by equipping communities with abilities to manage environmental risks through context-specific strategies, rather than through imported solutions. However, challenges persist, including rigid donor requirements and timelines that conflict with Indigenous communities' holistic, intergenerational approaches to development[7].

Countries such as Nepal and Ethiopia, both classified as Least Developed Countries (with Nepal in the process of graduation), exemplify the urgency of localized resilience strategies. With limited adaptive capacities and resources to adapt to climate change, as well as low indicators of socioeconomic development, these nations face amplified climate vulnerabilities. Localization offers a pathway to bridge this gap by leveraging community-driven adaptation mechanisms, through bottom-up approaches, such as traditional agricultural practices or disaster-response networks, while aligning with global frameworks.

By shifting from exogenous to indigenous solutions, the humanitarian sector can foster sustainable resilience that respects local knowledge, strengthens community ownership, and aligns with global commitments to equitable partnerships. To do so, a deepened understanding, enhancement and recognition of existing local practices on resilience is an important exercise to carry out and value.

2. Rationale of the study

This study seeks to document and analyse how to produce / mobilise local practices for climate mitigation and adaptation across two countries, Ethiopia and Nepal. By understanding these strategies, HI aims to improve its livelihoods programming, ensuring that solutions are inclusive, sustainable, and tailored to the needs of marginalized populations. Vulnerable areas like Ethiopia and Nepal face heightened risks due to limited adaptive capacities, further emphasizing the need for localized strategies. By selecting these two very different yet similarly vulnerable countries, a variety of practices was expected to emerge and enrich key recommendations for future programming.

[5] DG ECHO, 2023, Promoting Equitable Partnerships with local responders in Humanitarian settings, 52p.

[6] WB blogs, Nov. 2024, Why economic inclusion is key to reducing poverty and empowering people,

[7] ALNAP, 2022, Localisation re-imagined: 3 dimensions of localization,

3. Scope of the study

The overall objective of the research is to strengthen HI's livelihoods/ (resilient) economic inclusion programming by a) capturing local practices and capacities (with Ethiopia and Nepal as case studies) using appropriate methodology, b) having a better understanding of those practices and their potential for replicability and, c) building on existing adaptation strategies adopted by individuals and communities affected by climate change *(through the identification of promising strategies) to foster resilience.*

To do so, the research aims to:

- **Identify and document local practice, knowledge and knowhow on climate change adaptation and mitigation strategies** adopted by vulnerable households and communities with a focus on Ethiopia and Nepal as examples.
- **Co-create recommendations for future evidence-based programming** on economic resilience for vulnerable communities.

This research has followed quite a flexible approach, adapting deliverables throughout the study. The scope was also reshaped to respond to the needs and reality of HI and its Country Programs. Three main results have been reached: the final report (this document), a live document on local practices to be enriched (the repository) and a two-pager per country to facilitate resource mobilization and to position HI as an entity attached to solid evidence-based programming. This final report explains the methodology followed to build the repository per country. It also draws on the similarities observed between the two case studies, and overarching trends and opportunities that can shape more inclusive and resilient approaches to economic development.

Part 3 – Methodology

1. Study Design

1.1. Methodological scope and choices

The selected data collection method was mixed, with a strong focus on qualitative data to get thorough insight on how communities and individuals (including Persons with Disability and women) adapt to climate change.

Literature and desk review provided crucial context, helped identify knowledge gaps, refine research questions, topics to explore, optimizing resources, and addressing ethical considerations.

Key Informant Interviews (KIIs) aimed to gather in-depth insights from individuals who have specialized knowledge or experience related to the community or specific issues being studied. In this study, informants will include HI programme staff and experts, local experts from Nepalese / Ethiopian universities and research institutes.

Semi-Structured Interviews (SSIs) have been designed and conducted to collect qualitative data while maintaining some level of structure. The goal was to explore specific topics while allowing for the emergence of new themes and insights during the conversation. A set of predetermined questions guided the interview but also allowed for exploring topics in more depth as they arose. This method balanced consistency across interviews with the flexibility to probe deeper into participant responses. In this study, SSIs were carried out with Persons with Disabilities, authorities, women and community-based organizations (especially the ones led by women and Persons with Disabilities).

Focus Group Discussions (FGD) were held with men (old/young), women (old/young)/ PwD (as possible). FGDs were an effective tool to provide rich qualitative data, foster group dynamics, to allow flexibility while being cost-effective, and to offer observational insights. Depending on data and resources already available and developed by the HI team in the community, the consultant took the FGD as an opportunity to discuss perceived and effective risks as well as to identify local practices contributing to foster resilience.

Observations and field visits provided an essential complement to other methods used for this study. They led to richer contextual understanding, more valid findings - all of which enhanced the relevance and evidence of the practices identified during the interactions with the communities.

Finally, internal discussions with HI's various departments and programmes were conducted to ensure co-creation and ownership of the catalogue as well as programme's recommendations. This will be done while respecting interest and availability of the team (not being intrusive).

1.2. From an integrated framework for inclusive economic resilience programmes to a multi-entry repository

The practices identified in this research are analysed to determine how and to what extent they contribute to the economic resilience of communities and vulnerable households. The Economic Resilience Framework presented below has been developed for HI's sustainable livelihood programs and combines analytical elements from three frameworks: a) the Sustainable Livelihood Framework[8] (and its proposed update[9]), b) Community-Based DRR frameworks[10], and c) some elements of the Economic Resilience Index used as economic resilience factors. HI's Theory of Change is also feeding the framework to guarantee a strong inclusion perspective[11].

[8] DFID, 2001, Sustainable livelihoods guidance sheets, retrieved on 12/03/2025 from Cover.

[9] A sustainable livelihoods framework for the 21st century N. Natarajana, A.Newshamb, J. Riggc, D. Suhardimand, 2022, A sustainable livelihoods framework for the 21st century in World Development - March 2022, retrieved on 12/03/ 2024, A sustainable livelihoods framewo rk for the 21st century - ScienceDirect.

[10] Compiled from IFRC Framework for Community Resilience, Oxfam, Using community-centred approaches to build resilience at scale.

[11] Humanity and Inclusion, 2018 (updated in 2022), HI-Theory-of-change_Access-to-services.pdf.

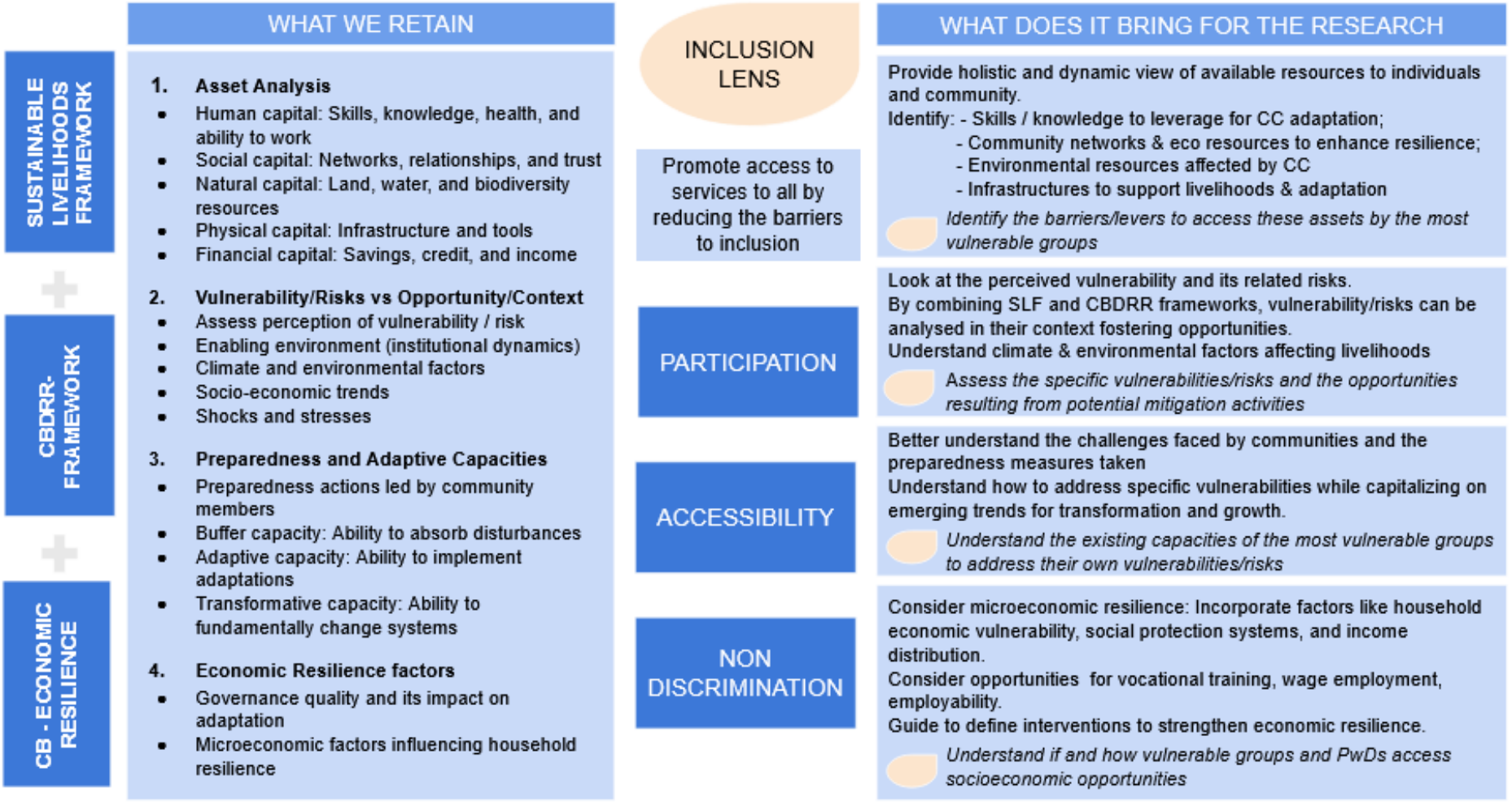

Figure 1: The conceptual research framework

The different aspects of the framework are described below:

The Asset analysis *(SLF[12] Framework)* provides a comprehensive inventory of resources available to individuals and communities. By examining human, social, natural, physical, and financial capital, existing strengths and potential areas for improvement can be identified. This analysis is crucial to understand the foundation upon which economic resilience can be built, especially within vulnerable communities. It helps pinpoint skills, networks, and resources that can be leveraged for climate adaptation and livelihood enhancement.

Vulnerability / Risks versus Opportunity /Context *(SLF / CB DRM frameworks)*- offers a dynamic perspective on the factors influencing livelihoods. By assessing climate and environmental factors, socio-economic trends, and potential shocks and stresses, researchers can better understand the challenges and opportunities facing communities. This context is essential for developing targeted interventions that address specific vulnerabilities while capitalizing on emerging opportunities for transformation and growth.

Preparedness and Adaptive Capacities *(CB DRM[13] frameworks)* - focuses on the community's ability to respond to emergencies and (longer-term) change. By evaluating buffer capacity, adaptive capacity, and transformative capacity, researchers can assess how well communities can absorb and accommodate disturbances, implement adaptations, and fundamentally change their systems when necessary. This understanding is crucial for developing strategies that enhance long-term resilience and sustainability in the face of climate change and other challenges.

Economic Resilience Factors *(Economic Resilience Index)* - measures the economic stability and adaptability of a household in its community. It will help identify micro-economic resilience factors and gauge the overall economic health of the community. This helps identify areas of economic vulnerability and strength, informing targeted interventions to enhance overall economic resilience.

Applying an inclusion lens *(HI Theory of Change)* will help ensure that the research and its results are accessible and beneficial to all community members, including persons with disabilities and other marginalized groups. By incorporating accessibility measures, participatory approaches, and non-discrimination policies, the research helps create more equitable and effective resilience-building efforts. It aligns the research with principles of social justice and inclusion, crucial for sustainable development.

This integrated framework for inclusive economic resilience was further reworked and operationalized so it would a) guide the data collection tools and, b) help categorise the findings in the repository in the most simplified yet detailed manner.

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[12] Sustainable Livelihood Framework

[13] Community Based Disaster Risk Management Frameworks

The three frameworks considered (above) allow for the integration of multiple levels of action. The combined CBDRR[14] framework includes the temporality/timing of actions implemented by communities. The framework underlines proactive actions, such as prevention, mitigation, and preparedness, as well as reactive actions, such as recovery efforts.

Given that the study focuses on programs related to sustainable livelihood, the response or early recovery phases (which are key components of the Disaster Risk Management (DRM) framework) are treated as an integral part of the recovery phase.

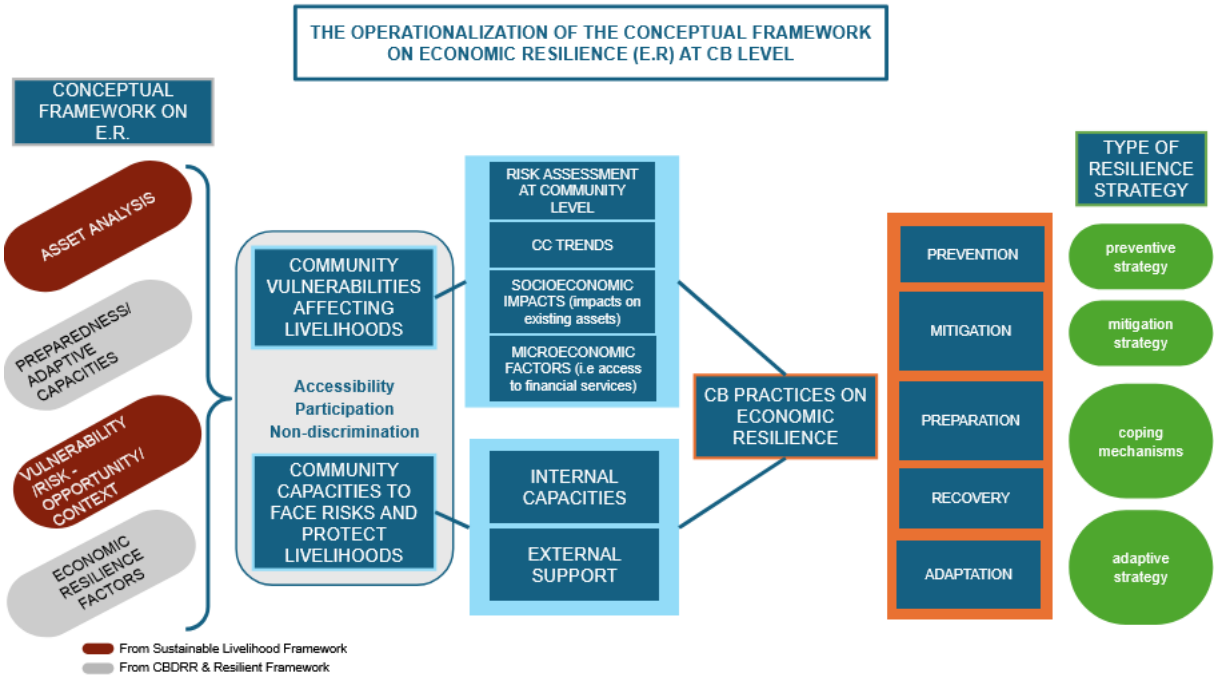

Figure 2: Operationalization of the conceptual framework

The practice can be analysed through the community's vulnerabilities, capacities, and risks. Then, it can be classified based on timeframes (following the DRM framework, shown in the orange section of the diagram) and the type of resilience strategy (highlighted in green). All of this contributes to the Economic Resilience Framework (shown on the left side of the diagram above). These different steps of analysis are part of the **repository tracking table on local resilience practices**.

[14] Community Based Disaster Risk Reduction

A local resilience practice is a regular action taken by a community or household to cope with events or long-term trends, such as climate change, and to protect or improve their basic needs and livelihoods. As part of an economic resilience strategy, this practice aims to prevent, mitigate, prepare for, and recover from challenges, based on the resources, capacities, and support available within/for the community. *(definition by the consultants)*

1.3. Guiding principles of the research

The research methodology was designed to integrate comprehensive and cross-cutting approaches, aiming to develop a nuanced, inclusive, and actionable repository of resilience practices. This framework sought to effectively inform future programming while prioritizing inclusivity, gender sensitivity, and community empowerment. To achieve this, a dual-level analysis was used, focusing on both community-level and individual/household-level resilience practices. This approach enabled the understanding of collective and personal resilience strategies, using culturally sensitive tools for data collection that ensured consistency of the research in different territories (countries).

The dual-level analysis was complemented by an inclusion lens and focus, which aimed to amplify the voices of marginalized and vulnerable groups, particularly women and persons with disabilities. This analysis relied on an extensive literature review and initial KIIs to explore gender dynamics, social determinants, and systemic inequalities. As much as possible, special attention was given to climate change adaptation and mitigation strategies initiated by women, while intersectional experiences of gender and disability in resilience-building efforts were also examined.

To ensure meaningful participation of marginalized groups, an inclusive approach was central to the study. Semi-Structured Interviews (SSIs) were conducted in safe and accessible locations that considered participants' comfort, energy levels, and potential caretaker support needs[15]. Simplified questioning techniques and flexible interview structures were used to adapt the process to participants' needs and understanding. Dedicated Focus Group Discussions (FGDs) included persons with disabilities and women, allowing them to express their unique perspectives on household and community-led approaches.

Additionally, criteria were established to assess the transferability of promising resilience practices across different contexts (refer to section 5.2). These criteria evaluated adaptability, resource requirements, and potential impact on resilience-building efforts. A systematic evaluation of identified practices was conducted to determine their potential for

[15] In Ethiopia, despite bearing these considerations in mind, it was complicated to ensure the comfort of the participants as there was no space or infrastructure within the community to accommodate the participants. Only limited perdiem and some water could be offered.

replication and scaling. This process ensured that the research findings could be effectively applied in diverse situations. The results of this analysis are available in the repository.

Finally, full accountability and community benefit principles were initially planned for this study. Some work has been done in this direction. Explanations about the research and how results would be used were provided at the beginning and at the end of any discussion (KIIs, FGDs and SSIs). Sharing the results/findings of the research transparently with community members, partners and any person interviewed would be an essential step to strengthen accountability[16]. It would also create a feedback loop that will further nurture the insights gained and potentially influence future resilience strategies. This approach would reinforce the study's commitment to meaningful participation and community empowerment.

2. Localisation of the study

Two countries (Nepal and Ethiopia) have been selected for this study.

2.1. Contextual overview by country

- **Ethiopia: Climate vulnerabilities and adaptation challenges**

Ethiopia, Africa's second-most populous country with over 112 million inhabitants, faces severe climate risks due to its reliance on rain-fed agriculture and natural resources coupled with low adaptive capacity. Recent years have seen devastating droughts—the worst in 40 years—and flooding, which have disrupted livelihoods, damaged infrastructure, and exacerbated food insecurity. Water scarcity and resource competition are anticipated to intensify conflicts and population movements[17]. Agriculture, a cornerstone of Ethiopia's economy, is particularly vulnerable; small-scale farmers depend on long-cycle crops requiring two rainy seasons, while livestock—Ethiopia boasts the largest herd in Africa—suffers from heat stress, reducing milk production and reproductive rates.

Gender disparities further exacerbate climate vulnerabilities. According to UNDP's Gender Analysis[18], traditional roles limit women's access to resources like land (only 19% of landholders are women), credit, and agricultural inputs, while cultural norms often exclude them from decision-making processes[19]. These inequalities reduce women's adaptive capacity, with female-headed households facing increased workloads and fewer opportunities for climate adaptation. Studies suggest closing the gender gap could improve

[16] At the time of writing this report, the detailed plan for sharing the results with the communities had not yet been developed.

[17] World Bank Group (2021) Climate risk profile-Ethiopia

[18] UNDP (2022) Gender Analysis for Ethiopia's Updated Nationally Determined Contribution

[19] Source: https://pastoralismjournal.springeropen.com/articles/10.1186/s13570-018-0129-1

adaptation measures by nearly 19%[20]. Similarly, persons with disabilities face systemic exclusion from climate adaptation planning, underscoring the need for inclusive policies that address their unique needs.

- **Nepal: Climate Impacts and Socioeconomic Challenges**

Nepal is experiencing significant climate impacts, including rising temperatures (projected to increase by 0.9°C by 2045) and shifting precipitation patterns—drier winters and wetter monsoons. Annual flooding could affect up to 350,000 Nepalis. With small-scale subsistence agriculture employing 69% of the workforce in 2015[21], climate change threatens agricultural productivity, road infrastructure, and energy imports during dry seasons[22]. Women face heightened challenges due to resource scarcity; their household responsibilities increase as they secure food, water, and fuel. Gender inequalities persist in education (women receive only 66.9% of the mean years of education compared to men) and economic participation (90% of women held vulnerable jobs in 2020). These disparities amplify risks of poverty, gender-based violence, and early marriage (37% of girls marry before age 18).

Persons with disabilities in Nepal also face significant barriers during climate emergencies. A survey conducted by HI revealed that while 60% were aware of climate change impacts, many reported disruptions to livelihoods due to disasters like floods and landslides. Physical barriers limit their access to aid and resources; 98% rely on family support for daily activities.

2.2. Geographical scope of the research

Identified zones for the field research met the following criteria: a) zones exposed to heavy weather phenomena, b) registered/identified households with persons with disabilities, c) accessibility and security.

The study focuses on Ethiopia's Somali region (Degehabur and Bombas districts) and Nepal's Bajura district (Badimalika municipality) - refer to maps below. These areas were selected based on exposure to extreme weather events, presence of households with persons with disabilities, accessibility, and security considerations. In Ethiopia's Degehabur district (Dumot kebele) and Bombas district (Hoden kebele), livelihoods rely on agriculture and pastoralism. Similarly, Nepal's Bajura district faces development challenges due to its remoteness; agriculture remains the primary occupation for most residents.

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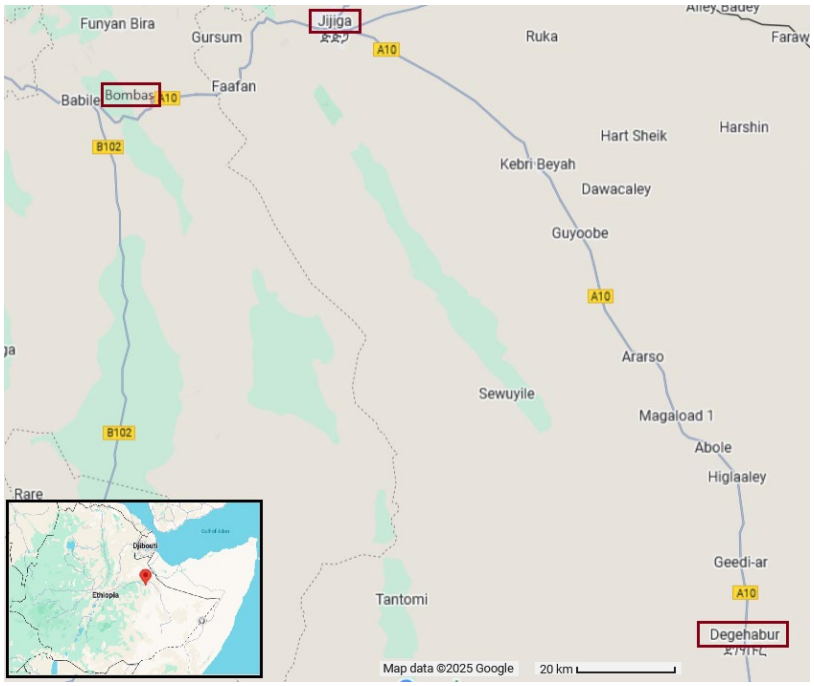
[20] Source:https://link.springer.com/article/10.1007/s10113-015-0921-z

[21] World Bank Group, Climate change knowledge portal - Nepal-Country Summary

[22] "Floods and landslides have been the most frequent hazards over the past 40 years; these events are expected to increase as climate change accelerates. While southern and urban municipalities are more likely to experience flooding and heat stress, northern regions are affected by increased erosion, landslides, water stress, and glacial lake overflow; "World Bank Group, IFC, (2022) Nepal - Country Climate and Development Report

Selected areas in Ethiopia:



Map 1: selected areas in Ethiopia

Selected area in Nepal:

Map 2: selected areas in Nepal

3. Profiles of the people interviewed

3.1. Communities and households' selection

Initially, the guiding criteria to select the participants for the research were the following:

- Exposure to different types of hazards and risks.
- Preference for administrative units (kebeles/wards) where Humanity & Inclusion (HI) has no prior activity to ensure unbiased data collection.
- Application of a similar approach in both countries to maintain consistency.
- Search for comparable units between countries (wards and kebeles)

HI country teams selected the most relevant areas and people for the study with the help of their institutional partners and their own knowledge of their country/programs. They adapted criteria to consider other constraints such as accessibility and security. Therefore the second criteria was not consistently applied, as it was easier to have partners supporting the selection of vulnerable community members, especially persons with disabilities. Regarding the fourth criteria, it was difficult to align Ethiopia and Nepal, as they have different administrative units. However the teams succeeded to select kebeles with about 3000 inhabitants in Ethiopia and wards between 1600 and 3000 residents in Nepal[23].

3.2. Profiles of people selected

The study targeted a diverse range of participants to ensure an inclusive and comprehensive understanding of resilience practices. KIIs were conducted with individuals possessing specialized knowledge, including HI program staff, local experts from Nepalese and Ethiopian ministries, UN personnel, academics, and representatives from Organizations of Persons with Disabilities (OPDs). Additional interviews included cooperatives and federal ministries covering agriculture, economy, social affairs, and livestock (only for Ethiopia).

At community level, SSIs were carried out with vulnerable groups such as persons with disabilities, elderly individuals, and women—particularly female-headed households—while FGDs engaged men, women, and persons with disabilities separately to foster collective insights into community-level resilience strategies.

Internal discussions within HI facilitated the co-creation and ownership of both the tools and the findings. The repository has been designed as a living document, open to further enrichment with additional practices from countries such as Nepal and Ethiopia, as well as from other regions.

[23] Environment and Public Health Organisation, 2022, SFD Interimate report - Badimalika, Nepal, 56p.

Focus on disability inclusion in qualitative research In both Nepal and Ethiopia, a targeted strategy was developed to gather specific practices from persons with disabilities. The aim was to collect data on personal experience at the household level, their perceived consideration, role and participation within the community and the support available to them both within and outside the community. To achieve this, the research included some dedicated FGDs with persons with disabilities, several SSIs with persons with disabilities (both men and women) and KIIs with local experts (OPDs and representatives of social affairs). Although this strategy helped consolidate data, not all types of disabilities were represented in Nepal and Ethiopia (and especially in Ethiopia). Engaging local leaders beforehand would have certainly enhanced their understanding of the diversity of disabilities, the associated barriers and opportunities, and helped us obtain an enriched variety of perspectives.

3.3. Results of the selection

The table below provides a summary of the interviews conducted and the number of individuals reached through the various tools developed for the research.

Type of tools	Ethiopia	Nepal
KII	23	22
SSI	18	14
FGD (men)	24	27
FGD (women)	24	24
FGD (people w/ disabilities)	23 (2 groups)	13 (1 group)
Total	112	100

Table 1 - Number of people involved in the research

Therefore 215 people were involved in the research. When and where it was possible, to verify and observe the local practices, observation grids were completed (2 in Ethiopia, 1 in Nepal).

4. Tools and modalities

4.1. Primary data

This study relies primarily on **mixed qualitative data** to balance structure and flexibility. Several tools were developed to collect relevant data for the research (primary and secondary data) and to ensure that the voices of the most vulnerable groups were heard.

Primary data

Primary data collection relied on Key Informant Interviews, Focus Group Discussions, Semi-structured interviews and Observation Grids.

- **Key Informant Interviews (KIIs)** elicited expert perspectives on systemic challenges and institutional frameworks, while
- **Semi Structured Interviews (SSIs)** used guided yet adaptable questioning to explore household-level practices.
- **Focus Group Discussions (FGDs)** leveraged group dynamics to map perceived climate risks, livelihood impacts, and community-led resilience strategies.
- **Observations Grids and field visits** provided an essential complement to other methods used for this study. They enriched contextual understanding, and comforted findings - all of which enhanced the relevance and evidence of the practices identified during the interactions with the communities.
- **Finally, internal discussions** with HI's various departments and programs were conducted throughout the study to ensure co-creation and ownership of the repository as well as of recommendations at program level.

Guiding questions for KII, FGDs and SSI

To operationalize the abstract concept of resilience, questions explicitly linked it to tangible actions taken before, during, or after disasters (e.g., drought mitigation) or long-term climate adaptations. This approach clarified whether practices were proactive or reactive and their temporal alignment with crises. Based on the integrated research framework (presented in section 1.1), the questions for households (SSI), communities (FGD), and local/expert KII covered the areas presented in the graph below:

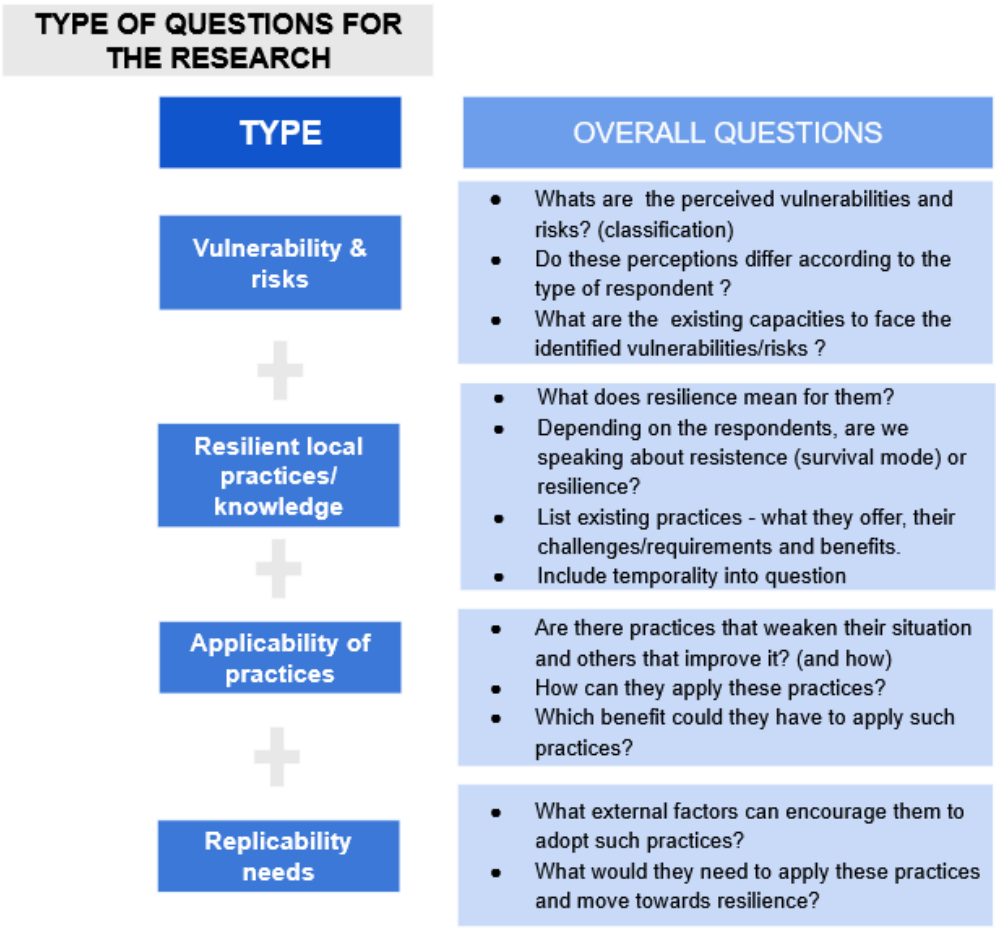


Figure 3; Type of questions for the research

This categorization enabled the research team to tailor the questions for different target groups in the data collection process. The questions were developed by the consultants and reviewed by translators and community mobilizers from Ethiopia and Nepal.

Making the concept of resilience intelligible to all: To ensure the effective development of data collection tools, it was essential to make the concept of resilience—particularly economic resilience—clear and relatable to participants. This was achieved by explicitly linking resilience to the concrete actions that communities or households undertook before, during, or after a disaster (short- and medium-term responses) or in response to the longer term impacts of climate change. To operationalize this concept, questions were designed to explore how participants prepared for, mitigated, adapted to, and recovered from specific disasters or trends (e.g., the increasing frequency and intensity of droughts). These questions helped clarify the temporal linkages between practices and events, and provided insight on whether a given practice represented a proactive (forward-looking) strategy or a reactive adjustment. This approach provided a structured yet

flexible framework to understand resilience in practical terms while capturing the nuanced behaviours and strategies adopted by communities.

4.2. Secondary data

Secondary data - included a literature review - were initially thought as a complementary tool to identify local practices in general. After the field mission, and considering the collected data, it was decided that the literature review would a) complete practices on agriculture, (semi)-pastoralism and water management, b) focus on practices led in Nepal and Ethiopia.

5. Treatment and analysis

Post-fieldwork, primary data were anonymized, organized by country, and coded according to the various key aspects of the research such as vulnerability, practices, outcomes, and transferability. Local expert inputs and literature reviews provided critical context related to CCM/CCA[24], for analysing indigenous strategies and compiling a repository of economically resilient practices, ensuring findings were both locally grounded and scalable.

5.1. Data analysis: dissecting local practices to feed the repository

The strategies identified through both primary and secondary data analysis are included in the repository. Each local practice and know-how was systematically reviewed and classified according to specific categories (as outlined in the previous section). Practices related to economic resilience were organized by country, economic sector, type of practice, timing of the practice, description of the practice, expected outcomes, and the type of resilience strategy. Special attention is given to aspects of inclusion, gender, and age.

Their potential for replication was then analysed according to a set of criteria, conditions and degree of transferability (not transferable, transferable with conditions, transferable as such).

To maintain focus and coherence, only literature review practices that complemented the ones identified in the field - within the same economic domain or addressing similar issues - were included in the repository. For instance, given the importance of water management in both Ethiopia and Nepal, several practices have been complemented or added. The same approach applies to agriculture and livestock management in response to drought or intensive rainfall.

[24] CCM/CCA: climate change mitigation / climate change adaptation

5.2. Criteria to qualify the level of transferability of local practices

Reflecting on the selection of local practices to be included in the repository, all identified strategies were documented regardless of their potential replication. This comprehensive approach was adopted for 3 main reasons : a) to gain complete understanding of the range of mechanisms implemented by communities including maladaptive or unsustainable ones, b) to identify practices that could be improved, c) to enable meaningful comparisons among practices from different countries or various data sources- (primary/secondary).

The repository serves both descriptive and analytical purposes. It describes the practice and assess its level of replicability using the following criteria, along with two contextual conditions:

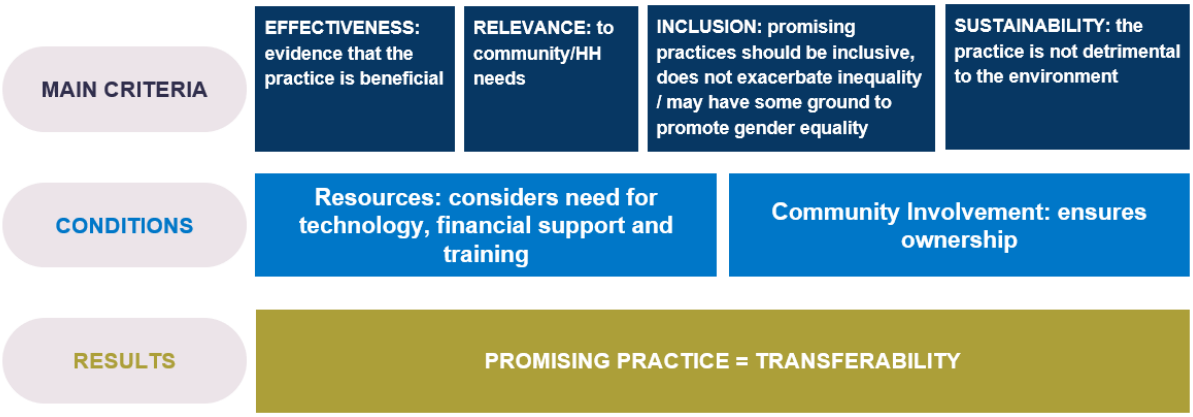


Figure 4: criteria, conditions and results.

Four main criteria were defined **to assess** the local practices: effectiveness, relevance, inclusion and sustainability (step 1):

- **RELEVANCE**: assesses whether the practice responds partially or totally to the needs of the community/HH, and particularly in terms of risk reduction, prevention and livelihood protection.
- **EFFECTIVENESS**: evaluates the tangible benefits provided to the community/HH by the practice, such as increased income, well-being, (food) security, improved governance, conflict resolution mechanisms, better access to resources....
- **INCLUSION**: examines whether the practice is, or could be, inclusive, meaning accessible to persons with disability, elderly people and women. At a minimum, this criteria considers if the practice does not exacerbate inequality (i.e by putting an additional burden on women) and has the potential to promote gender equality (by having women develop their own abilities and make their own choices freely).
- **SUSTAINABILITY**: considers the practice's potential as sustainable solution, including actions to "*protect, sustainably manage, or restore natural ecosystems that address societal challenges such as climate change, human health, food and water*

security, and disaster risk reduction effectively and adaptively"[25]. While a full IUCN on NbS[26] assessment is not conducted, an overall appraisal of sustainability and ecosystem integrity is included when relevant and information available.

[25]World Bank - Climate Explainer: Nature-Based Solutions, retrieved on 01/21/25

[26]IUCN Global Standard for Nature-based Solutions A user-friendly framework for the verification, design and scaling up of NbS - First edition, retrieved from 2020-020-En.pdf

Two contextual conditions for transferability were retained (step 2):

- **RESOURCES AND CAPACITY:** practices requiring substantial funding, technical knowledge, on-going training or (peer) support may be less replicable. Practices that do not require substantial and long training and support will be prioritized.
- **COMMUNITY INVOLVEMENT**: practices must be recognised, valued and implemented by the community. Ideally, the practices should strengthen, rather than undermine, social cohesion within the community.

Based on the initial 2 steps, the replicability is reviewed (last column of the repository - step 3):

- **TRANSFERABILITY**: Three "levels" of transferability have been defined for this study:
  - *Fully transferable* (green in the repository): the practice can be replicated as such, or with very minor changes.
  - *Transferable with conditions* (orange): the practice has potential for replicability but it needs some specific adjustments.
  - *Not transferable* (red): the practice cannot be implemented elsewhere due to fundamental limitations that cannot be overcome.

6. Ethical aspects

With all data collection and analysis activities, this assessment adheres to the ethical standards set by the organization[27]. The following chart outlines the measures taken by the team to comply with the enacted principles.

[27] HI (2015) - Promoting ethical data management

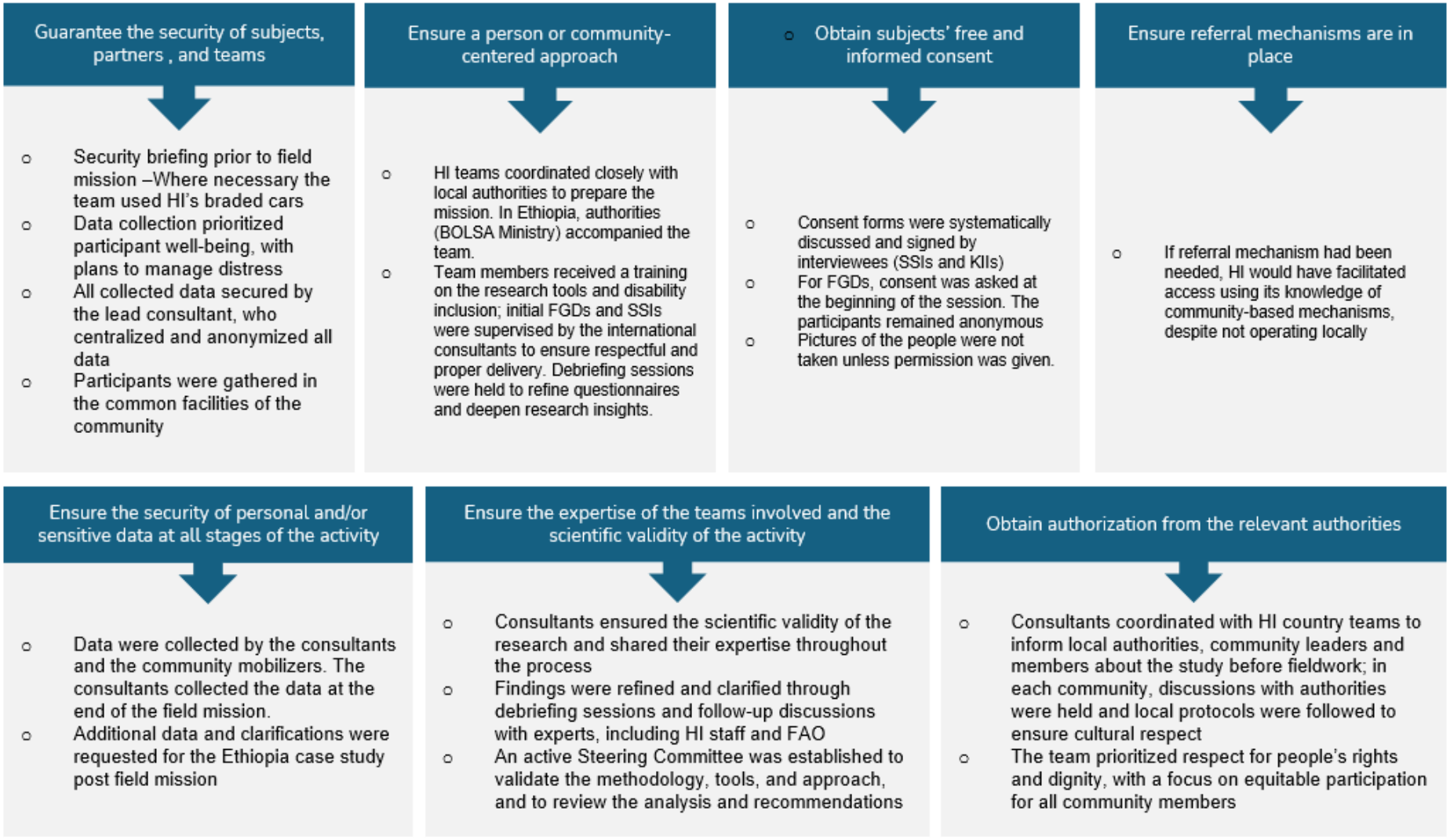


Figure 5: Ethical principles and considerations

7. Limits

The study's limitations are as follows:

- Timing - preparation time, review and validation: The field visits were conducted between late January 2025 and mid-February 2025, with the methodology being developed and initially discussed before the first mission. However, some elements of the methodology (i.e, the criteria for transferability, explained in part 3 - section 5.2.) were only finalised after completing the field visits. While this sequential approach helped fine-tune the methodology based on the realities on the ground, establishing stable criteria and agreeing on the repository format before fieldwork would have supported targeted data collection during site visits. Despite this limitation, the post-mission methodological refinement proved effective in optimizing the repository design based on available data. This process has been quite efficient thanks to regular, well-defined meetings between HI experts and the consultancy team, and a fluid sharing of information and progress in the analysis. This co-construction approach facilitated continuous methodological improvement while maintaining project momentum.
- Sampling strategy and vulnerability focus: The deliberate prioritization of the most vulnerable communities and households represented an intentional methodological choice designed to investigate economic resilience among those facing the greatest climate (?) risks. Nonetheless, their vulnerability and sometimes extreme deprivation has often led to limited capacities to cope, mitigate and adapt. By interviewing better-off people within the communities, and adding local KIIs in the primary data collection strategy, information on local practices was further enriched. The literature review also expanded the inventory of practices led at local levels in Nepal and Ethiopia, as well as relevant approaches from other global contexts, providing valuable comparative perspectives.

  This study focuses on rural areas but in both countries, the proximity with urban areas did impact some of the coping / adaptive mechanisms as the findings listed in part 4 indicate "While a reflection on the relevance of including both urban and rural areas in the study was initiated, it was decided by HI that this comparison was not necessary. Nonetheless, in both countries, the proximity with urban areas did impact some of the coping / adaptive mechanisms as the findings listed in part 4 indicate.
- Geographical Scope and Upscaling: The study's geographic scope has constituted a significant limit to generalize the findings. In Nepal, data collection was restricted to three wards within Badimalika Municipality in Bajura District of Sudurpashchim Province: MARTADI – ward 9, PINALEK / PATA – ward 6, DHAMKANE – ward 7. In Ethiopia, the study was limited to two kebeles in the Somali region: the DUMOT Kebele in Degehabour, and the HODEN Kebele in Gursum. Additional information on the location of the study is provided in Part 3, section 2. Given these narrowly

defined study locations, results won't be generalized beyond these specific contexts. Nonetheless, the study shows similarities in the recommendations (see part 5) meaning that even very different contexts can experience similar challenges. This consistency suggests that some resilience challenges and potential solutions may transcend specific local conditions. Interviews with expert KIIs (i.e experts in agriculture, livestock or DRM) and the literature review also contributed to confirming and/or expanding the relevance of the data obtained in the field. Consistency between field data and literature findings further strengthens confidence in the study's insights despite its limited geographic scope.

- Local language versus local team: Both countries used identical data collection tools which were translated into local languages and reviewed by HI teams prior to the field missions. However, budgetary constraints in Ethiopia prevented them from hiring a professional translator, leading to a less precise data collection. An HI staff member provided translation services for the consultant, while one of the two community mobilizers was in charge of translating all the verbatims. This led to some loss of information that has been partially compensated by added KIIs and deepened discussions during FGDs. In Nepal, at least 2 people were in charge of taking notes, the verbatim were recorded and coded every day to ensure minimal loss of information.

Despite this translation challenge, conducting field research alongside HI experts proved invaluable to capture contextual nuances and deepen our understanding of the identified practices. Several procedural elements helped mitigate language-related limitations: comprehensive initial training sessions for all team members, thorough multi-stakeholder review of questionnaires, and structured daily debriefing sessions enhanced data collection quality in both countries. Additionally, experience gained during the Nepal fieldwork enabled strategic adjustments to improve the data collection approach in Ethiopia, demonstrating adaptive research management despite language constraints.

Part 4 – Findings

The study highlights results that are shared by both Ethiopia and Nepal, offering valuable insights to inform broader strategic guidance and advocacy. These cross-cutting findings reveal overarching trends and opportunities that can shape more inclusive and resilient approaches to economic development. The findings will also provide initial programmatic findings that will be further explored in the recommendations section. Some of the identified practices are evoked in this section, but the complete list and detailed information on each practice are available in the repository.

1. Increased vulnerability, differentiated impact and climate change trends

In Ethiopia and Nepal, one of the first questions asked to the interviewees was to identify and then rank all the hazards they faced as a household or community.

1.1. Nepal

Nepal is exposed to a complex array of hazards that have significant and evolving impacts on people's lives and livelihoods at both the household and community levels. The country's diverse geography and climate make it particularly vulnerable to natural disasters such as landslides, floods, extended dry season, and unpredictable heavy rainfall, as well as emerging challenges like human-wildlife conflict.

Landslides are among the most frequent and destructive hazards mentioned by the community interviewed, especially in the hilly and mountainous regions. Triggered by intense or erratic rainfall and exacerbated by steep topography and unsustainable land use, landslides can devastate agricultural land, destroy infrastructure, and isolate communities by cutting off transportation routes. Multiple studies and recent reports show that road construction is a major driver of landslides in Nepal's hills, with a 2020 analysis across 35 districts finding that 61% of visible landslides occurred near roads, and 87% of those landslides developed after road building began[28]. In Bajura district specifically, poorly engineered road works-often undertaken without adequate consideration of the area's geographical sensitivity-have significantly increased landslide risk, endangering settlements, destroying infrastructure, and repeatedly cutting off communities from essential services and markets[29].

[28] Dixit and al. 2021, "Political economy of 2020 landslides, road construction and DRR in Nepal"

[29] SAHAS Nepal, 2015, "Feasibility study of landslide risk assessment and management"

The risk of landslides is increased by deforestation with as main drivers: forest fires, overgrazing, indiscriminate extraction of forest products, illegal trade, and especially infrastructure expansion such as road construction. This is also increasing the impact of rain as soil is not retaining water anymore, with subsequent landslides. Fertile land is being washed away by floods and landslides, which reduces agricultural productivity.

Weather-related hazards have become increasingly severe and frequent in Nepal. Erratic rainfall patterns and intensified monsoons have led to recurrent flooding, especially along river valleys, washing away homes, farmland, and vital infrastructure. For example, communities in Bajura have experienced flash floods that not only destroy crops but also isolate villages by damaging roads and bridges, making recovery and access to services extremely difficult. At the same time, prolonged dry periods and rising temperatures have become more common, leading to less snowfall, decreased crop yields, water scarcity, and heightened food insecurity. These shifts, driven by climate change, place additional stress on already vulnerable rural livelihoods, forcing households to adopt increasingly precarious coping strategies[30].

In the visited communities, human-wildlife conflict has become a growing hazard, compounding the challenges faced by rural communities. As conservation efforts have led to the recovery of wildlife populations, incidents of crop raiding by wild boar and monkeys, as well as livestock predation by leopards and other carnivores, have increased in frequency and severity. Farmers have reported repeated losses of maize and millet to wild animals, while herders have faced attacks on goats and cattle.

The following graph summarises the impact of the hazards as discussed with the community members, using the six dimensions of the Sustainable Livelihood Framework:

[30] World Bank, 2023, "Climate Risks, Exposure, Vulnerability and Resilience in Nepal".

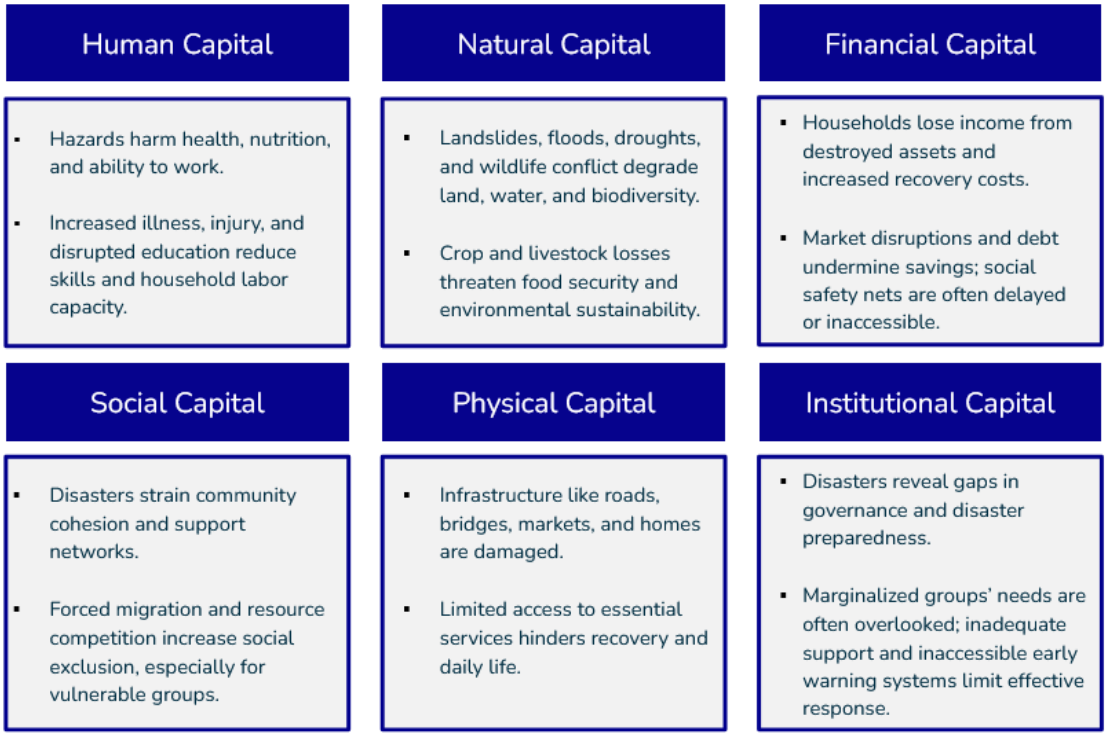


Figure 6: Impact on Nepalese community based on the six dimensions of SLF

The impacts of these hazards are profound and multifaceted. Landslides and floods can lead to the destruction of homes, schools, disrupt access to markets and essential services, and cause loss of life and injury. For farming households, the loss of crops and livestock due to both natural disasters and wildlife attacks can result in significant income loss, food insecurity, and increased indebtedness. At the community level, repeated hazards erode social cohesion and strain local resources. Women often bear a disproportionate burden, as they are typically responsible for tasks like collecting firewood or guarding fields, which increases their exposure to hazards and violence. Vulnerable groups, such as people with disabilities, face additional barriers to recovery and access to relief, particularly when assistive devices are lost or when relief efforts do not account for their specific needs.

1.2. Ethiopia

In Ethiopia, it was striking how homogeneous and consistent the lists of hazards were among all interviewees, a finding echoed in national and regional research. Drought was systematically listed as the number one hazard faced by communities, a perception strongly supported by recent studies showing that drought frequency, duration, and severity have increased markedly over the past decade, with major droughts now occurring almost every year or every other year rather than every five to ten years as in the past. This escalation in drought risk is widely recognized as being at the core of rural vulnerability, severely hampering income sources, threatening food security, and undermining family well-being.

Drought also drives labor migration and disproportionately affects land-poor households, who are least able to adapt. [31]

Human disease was consistently identified as the second or third most pressing hazard, often closely linked to water-borne illnesses such as cholera, dysentery, and diarrhea, as well as malnutrition in children. These findings are consistent with public health research indicating that over 60% of Ethiopia's communicable disease burden is associated with poor environmental conditions, unsafe water, and inadequate sanitation, especially in rural areas where more than half of households rely on unimproved water sources[32]. Limited access to health services, particularly in isolated communities like Hoden kebele, exacerbates the impacts of these diseases.

Livestock diseases were also frequently cited, though not always clearly identified. Drought conditions weaken animals, increase their concentration around scarce water sources, and facilitate the spread of contagious and vector-borne diseases, including major outbreaks like rinderpest in stressed cattle populations. The quality of water and the nutritional status of livestock are further compromised during droughts, increasing morbidity and mortality rates.

Crop diseases, often attributed to pests and insufficient rainfall, were systematically mentioned as well. The lack of effective plant protection and quarantine measures has allowed these threats to spread rapidly, further threatening rural livelihoods.

Less frequently, hazards such as floods, deforestation, soil erosion, invasive plants, and, occasionally, conflicts were mentioned. While these were not as universally prioritized as drought or disease, their cumulative impacts-such as land degradation, reduced agricultural productivity, and heightened vulnerability to future shocks-are well documented in the literature.

The table below summarises the impact across hazards in Ethiopia, by type of assets:

[31] Sisay Demeke Molla and al., 2024, "Rural household perception of drought occurrence and its influence on livelihood strategy in Northeast Ethiopia".

[32] Gete Berihun and al, 2023, "Drinking water contamination potential and associated factors among households with under-five children in rural areas of Dessie Zuria District, Northeast Ethiopia".

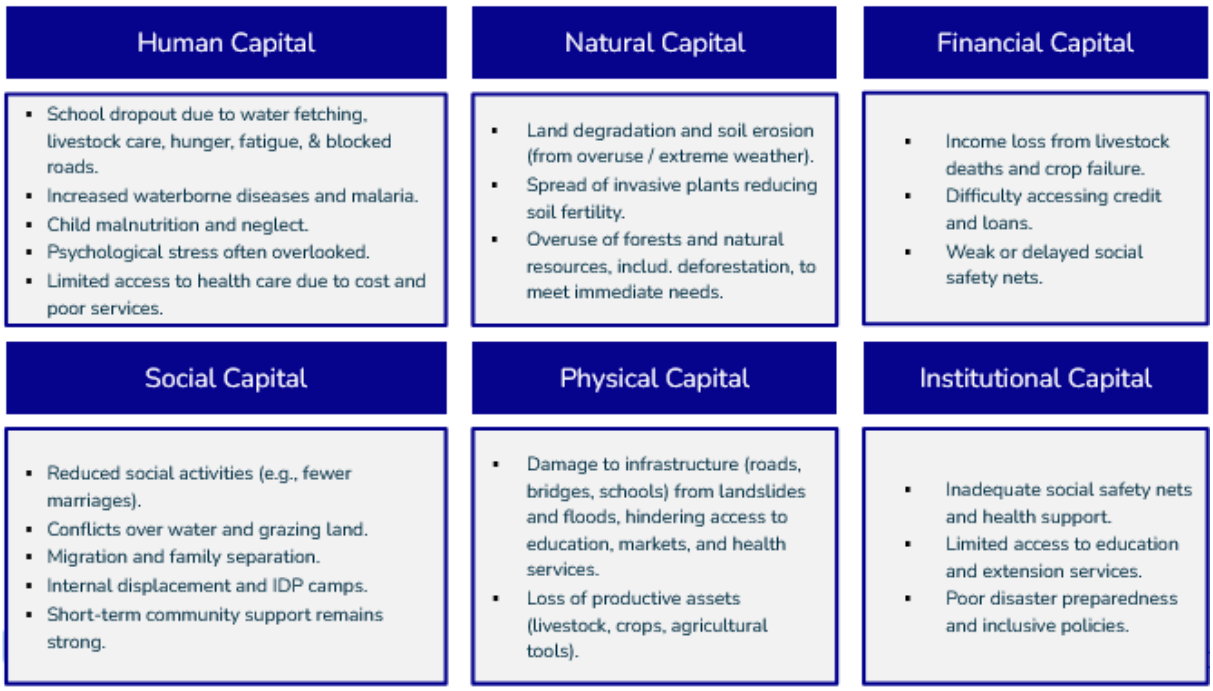


Figure 7: Impact on Ethiopian community based on the six dimensions of SLF

As the table above suggests, the impact of disasters and climate change is multi-dimensional. It affects most of the community's assets, and the role of social bonding remains essential to keep the community together in times of difficulty.

As the table below shows, the impact of hazards on vulnerable groups is major and differentiated:

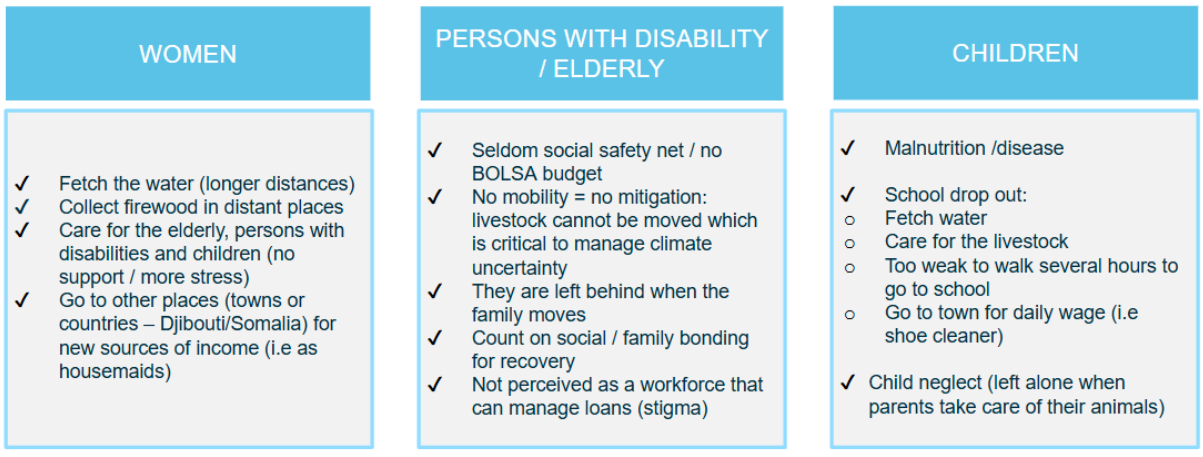


Figure 8: Different impacts depending on vulnerabilities

In both Ethiopia and Nepal, despite the differing vulnerabilities and specific challenges faced by communities, the growing impact of climate change is increasingly evident. Community members are not only aware of the phenomenon, but they can also identify its tangible consequences—such as the worsening of water-related issues, the rise in human and animal diseases, and even the negative effects on agricultural crops. This shared experience highlights how climate change is becoming a pervasive driver of risk across diverse contexts.

2. Main practices based on DRM cycle

In each country, practices across the Disaster Risk Management (DRM) cycle have been documented. A comprehensive review of these practices, including an assessment of their transferability, is available in the dedicated repository. This section provides a synthesis of overarching trends, along with a snapshot of all locally identified practices.

2.1. Nepal

Community-level disaster management practices in Nepal are central to building resilience and protecting livelihoods in the face of frequent natural hazards. Across the country, local communities have taken proactive roles in prevention, mitigation, preparedness, recovery, and adaptation, often using locally available resources and indigenous knowledge to tailor solutions to their specific risks and vulnerabilities. These efforts are not only practical but have proven effective in reducing losses and speeding recovery, as demonstrated in numerous districts through community-based disaster risk management initiatives.

PREVENTION	MITIGATION	PREPAREDNESS	RECOVERY	ADAPTATION
Inclusion & awareness: - Awareness programmes for families and community - Promoting family responsibility for inclusion.	**Physical infrastructure:** - Regular road clearance - Construction of gabion walls, embankments, and retaining walls - Reinforcing roofs - Installing safety nets and building local bridges for flood protection.	**Community-driven initiatives & traditional practices:** - Collective fundraising Community-managed funds for immediate and long-term recovery (housing, support for displaced), - Safety zones / Self-help, Pre-identification of safe zones, pre-packed essentials, local relief distribution.	**Community led recovery:** - Neighbors help evacuate, provide temporary shelter, share food, and basic needs to those affected. - Community helps to rebuild houses. - Community members clear debris and repair roads after disasters. - Community alerts local government and disaster management teams for coordinated recovery support. Complementary initiatives: - Community seeks additional financial/material support from officials and relief committees. - Distribution of food aid, relief materials and targeted livelihood support by government and NGOs.	**Food security:** - Adaptation of food preservation. - Adaptation of eco-friendly methods. - Non seasonal farming. - Crop diversification. - Shift in crops timing.
	Agricultural practices for DRR: - Soil and landslide protection. Tree plantation (e.g., rhododendron, uttis) - "Cut 1, plant 4" reforestation - Fruit trees in landslide-prone areas - Practice agroforestry	**EWS and Disaster Management Committee:** (developed within the first preparedness practice in the repository) - Community-based EWS, mobile alerts, training, and linkage with local authorities. - Formation of local committees and sub-committees (first aid, rescue, EWS, rehabilitation). - Monthly disaster preparedness training (first aid, search and rescue, EWS, relief coordination). - Partnerships for funding, infrastructure, and technical support		**Economic diversification of livelihoods:** - Seasonal migrations. - Low-cost building techniques. - Livestock farming for farmers. - Daily wage labor. - Running small business. - Reviving and adapting traditional crops and farming methods to current challenges.
Animal threat management: - Exploring alternatives to dogs for monkey deterrence - Enclosing young plants to prevent animal damage	**Water management system:** - Rain Water Harvesting (RWH) - Reforestation and watershed management - Temporary water diversion canals - Community maintenance of drains			

Table 2: Type of practices according to the DRM cycle – NEPAL

Key drivers of resilience at the community level include strong local leadership, inclusive participation, and the use of indigenous knowledge. The ability to mobilize collective action, maintain social cohesion, and innovate with limited resources allows communities to respond flexibly to evolving risks. Partnerships with local government and external agencies provide technical and financial support, while ongoing training and awareness programmes ensure that resilience is not a one-time achievement but a continuous process. Ultimately, it is this combination of local ownership, inclusivity, and adaptability that underpins the growing resilience of Nepal's communities in the face of disaster.

2.2. Ethiopia

With the increasing frequency and severity of droughts, communities included in the study in Ethiopia have demonstrated a growing level of preparedness. While awareness of government-led early warning systems remains limited, most communities rely on indigenous knowledge to anticipate risks and take precautionary measures. Small-scale adaptation practices are being implemented, particularly in the selection of drought-resistant livestock and crops, as well as through the diversification of livelihoods. In terms of prevention, traditional conflict management remains central in solving disputes while preserving social cohesion in the community.

However, for the agro pastoralist communities, mobility remains at the core of their adaptive strategies—a practice that is often inaccessible to persons with disabilities, thus exacerbating their vulnerability. The most commonly observed responses during the field visit were coping mechanisms and mitigation efforts, rather than long-term resilience-building interventions. Recovery is increasingly elusive for vulnerable populations, as they are often unable to restore pre-crisis levels of income and productivity before another shock occurs. Also, because agriculture is the main source for recovery in the visited communities, there is a risk for a double loss as agriculture there is rain-fed and highly vulnerable to the effects of climate change (no fertilizers, no pesticides, no dripping system used).

PREVENTION	MITIGATION	PREPAREDNESS	RECOVERY	ADAPTATION
Conflict management when tensions rise over land dispute or use of natural resources: the elderly are the trusted agent to solve the conflict peacefully Ext. support: the local administration relies on traditional mechanisms to solve disputes.	**Livestock Management:** - **Displacement of animals** (all/ part of them depending on the situation) - **Stocking/ Destocking of animals** (timeline is key to sell at a correct price), - **Disease control:** vaccination, injections, protection of the weaker animals (safe places), Isolation of the sick animals Ext. support: FAO and Gov. programmes for vaccination, local Vet post	**Traditional Early Warning Indicators**: the community prepares based on its own EW indicators (astrological, biological, meteorological signs) Official information does not reach them (SSI/FGD) Ext. Support: DRM bureaus send information (to kebele administrators and agents, radio) but reach communities with difficulty. They combine traditional and scientific indicators for forecasting.	**Community support and collaboration- LIVESTOCK** with(in) the community/relatives/ diaspora: - **Animal lending**: for reproduction or milk - **Animal donation**: gift of livestocks to recapitalize families whose livestock has been decimated, - **Animal seling** (last resort) - **FInancial support** from the diaspora/extended family: to buy new animals, - Ext. support: social safety net (PSPN) - and INGO support to restock // GOv. support for tools and seeds.	**Economic diversification of livelihoods:** - Collection of **firewood and charcoal** production - **Local daily wage** (i.e stone carving or shoe cleaning - **Job migration** (in-country/outside) - **IDP Camps** - **Smuggling** at the border - **Rare business activity** Ext. support: the government is shaping a strategy to find alternatives to wood collection, and to create new sources of livelihoods (poultry, bee hives, etc.) so members can stay and thrive in their own community.
	Soil and landslide protection: - **Rock tranches** to limit soil erosion (gully), - Temporary diversion of water systems (**canals**)	**Water management systems:** - Community-based covered and uncovered ponds, private birkas are maintained by the community and families.	**Community support and collaboration - AGRICULTURE** - **Joint agricultural activities:** to plant seeds and harvest on larger fields - **Cash crops** in places where there is regular access to	**More resilient livestock management:** - Progressive **selection of more resistant breeds** (camels and goats instead of cattle and sheep) - Production and storage of **animal fodder** - **New feeding techniques** (not

PREVENTION	MITIGATION	PREPAREDNESS	RECOVERY	ADAPTATION
			water - **Transformation of products**: butter/yogurt (sold in towns) – only to recover. Ext. support: seeds/tool provided by Gov. // restocking by INGO/FAO (decreasing support)	observed)
	Resilient agriculture (rain-fed agriculture): - **Pest control** (smoke against insects) - **Pits and trenches** around farmlands (to divert the water in case of heavy rain)	**Community Solidarity to prepare:** - Collective farming and storage (food and animal fodder) - Water access preparation - Preparation/rehabilitation of houses Ext. support: social safety net programme by the Gov.		**More resilient agricultural practices:** - Use of resilient seeds (but no diversification): maize and sorghum
	Health: vaccination, local remedies (to fight against human disease and animal disease)	**Savings** to the Bank (new practice) to prepare.	**Community support and collaboration** - **ZAKAH** (in-kind gifts like meals) - **Spirituality:** prayers by the community to recover (also for livestock)	**Community solidarity to adapt:** - collective production and storage of food and animal fodder - collective rehabilitation of water points - Community support to restore houses (Dumot kebele)
				Behavioral adaptation: jump meals (coping mechanism)

Table 3: Type of practices according to the DRM Cycle – ETHIOPIA

3. Diversification of livelihoods as a means to adapt

Economic diversification serves as a cornerstone for enhancing the resilience of vulnerable communities by creating multiple income streams, thereby stabilizing financial foundations. In Nepal and Ethiopia, where climate shocks and economic instability threaten livelihoods, diversification reduces reliance on single sectors. For example, households combining agriculture with small-scale trade or (un)skilled labour are better shielded from crop failures or market downturns. This approach not only mitigates risk but also fosters adaptability, enabling communities to pivot toward emerging opportunities in response to changing conditions.

Strengthening local skills through diversification further amplifies its benefits, transforming individual expertise into collective progress. Skills such as stone carving or small-scale construction work, when nurtured through training and resources access, can address community-specific challenges. For instance, Ethiopian communities have leveraged masonry expertise applied to construct riverbank protection, erosion control, safeguarding homes and fields, or rehabilitating water systems. In the considered zones, only rehabilitation of water systems had been carried out. In Dumot kebele, masonry activities would be useful to protect the community from soil erosion (using stone bunds for instance[33]). Similarly in Nepal, some safety nets are installed on riverbanks to prevent flood damage, construction of protective infrastructure like gabion walls and river embankments are done by the communities themselves with limited external support. These activities not only generate income but also create infrastructure that enhances long-term resilience, demonstrating how localized skills can drive sustainable development. These activities possess a double added value: they not only facilitate income diversification but also serve mitigation objectives. Moreover, they generate a ripple effect, thereby amplifying their positive impact.

However, diversification initiatives must be carefully designed and weighed by communities and households to avoid unintended social consequences. Without safeguards, new economic activities may disrupt family cohesion, expose vulnerable groups to exploitation, or contribute to children leaving school to work. For instance, unregulated migration in Nepal and Ethiopia has, in some cases, increased risks of human trafficking and family separation. To prevent such outcomes, programs should integrate social protections-such as childcare cooperatives, education stipends, or safe labour guidelines-alongside economic opportunities.

[33]Wakolbinger S., Klik A., Obereder E.M. , Strohmeier S., Melaku N. D., (2025) , Impacts of Stone Bunds on Soil Loss and Surface Runoff: A Case Study from Gumara Maksegnit Watershed, Northern Ethiopia viewcontent.cgi, retrieved May 5, 2025.

When managed thoughtfully, diversification becomes a dual force: it builds financial stability while strengthening social bounds, empowering communities to adapt and thrive amid adversity.

Testimony - Case Study - Inclusive livelihood diversification In several rural communities in Nepal, households have successfully adapted to climate change by integrating agroforestry with the cultivation of native medicinal and aromatic plants (MAPs). Farmers practice the domestication and integration of high-value MAPs into existing agroforestry and farming systems in the mid-hills and mountain regions of Nepal. They combine trees with food crops and medicinal herbs, creating a diverse portfolio of products for home use and sale. Community organizations, often led by women, process these plants into marketable goods such as teas, oils, and soaps, providing new income streams and reducing reliance on a single crop or activity. This approach is inclusive -women and marginalized groups are actively involved in both production and decision-making- and adaptable to different local contexts. The result is greater food security, higher and more stable incomes, and improved resilience to climate shocks, demonstrating the broad benefits of livelihood diversification for climate adaptation[34].

4. Access to resilient water management systems

Water management stands as the backbone of community resilience, essential not only for human consumption but also for the survival of livestock and agricultural systems. In countries like Nepal, effective water management is critical for irrigating crops and maintaining household gardens, while in Ethiopia, reliable water sources are essential for sustaining livestock - an essential pillar of rural livelihoods. Access to water is thus fundamental to the daily survival, economic stability, and health of both people and their animals in vulnerable communities.

However, the impacts of climate change are increasingly disrupting traditional water sources and systems, reducing the availability and reliability of both (potable) water and supplies for farming and livestock. Inadequate access to clean water directly threatens public health and the wellbeing of livestock, further undermining livelihoods.

In Nepal, erratic rainfall and prolonged dry spells have made traditional water sources less dependable, prompting communities to adopt innovative solutions such as rainwater harvesting (RWH). Research has shown that RWH systems, when designed and managed inclusively, can significantly improve water security for both domestic and agricultural uses. These systems not only reduce the burden of water collection-especially for women and

[34] Kathmandu Forestry College, 2011, Biodiversity Conservation through Domestication of High Value Medicinal Plants in Mountain Ecological Landscapes of Nepal, Case study

children-but also support kitchen gardens and small-scale irrigation, thereby enhancing food security and household income. In Ethiopia, water management practices have focused on supporting livestock, which are highly vulnerable to water scarcity during droughts. Community-led initiatives to improve water access-such as the construction of communal wells, small reservoirs (*birka*), and the regular rehabilitation of water points-have helped reduce livestock mortality and maintain milk production, which is crucial for nutrition and income. These interventions have also fostered cooperation among pastoralist groups, strengthening social cohesion and collective action in the face of environmental challenges.

The sustainability and transferability of these water management practices depend on several key factors. First, community involvement in the planning, implementation, and maintenance of water systems is essential to ensure that solutions are tailored to local needs and capacities. Inclusive participation-particularly of women, youth, and marginalized groups-enhances ownership and long-term viability. Second, building local technical skills and establishing clear management structures help communities maintain and adapt water systems as conditions change. Finally, integrating traditional knowledge with appropriate technologies, such as combining indigenous water conservation practices with modern RWH systems, increases the adaptability of these approaches across diverse regions.

By prioritizing equitable access, fostering community ownership and promoting adaptive management, the water management practices highlighted in the repository can become sustainable models. If implemented wisely, these practices strengthen the foundations of local economies, protect the health of vulnerable populations and their livestock, and enhance the ability of communities to adapt to environmental stresses, thus playing a central role in building long-term economic resilience.

5. Social innovation and safety nets

Adopting a systemic and holistic approach to sustainable livelihoods, deeply grounded in existing practices and the local context, has proven to be effective for promoting economic resilience and social inclusion. This method ensures that economic opportunities are expanded without sacrificing social protection or the participation of the most vulnerable groups, including children, women, and people with disabilities. Evidence from Nepal demonstrates that such an approach not only strengthens community well-being but also supports long-term adaptability in the face of environmental and economic shocks (refer to repository for examples). This approach, and solid evidence from Ethiopia, emphasizes the value of community cohesion and mutual support, recognizing that working with one aspect of a community's well-being should not undermine others.

Beyond agricultural interventions, small businesses and retail shops have become vital avenues for livelihood diversification. In Nepal, for example, the establishment of small grocery shops and tailoring businesses-often initiated with microcredit and community support-has enabled households to supplement their income, reduce dependence on

seasonal agriculture, and improve food security[35]. In Ethiopia, urban and peri-urban households have diversified through petty trade, small kiosks, and service-based microenterprises, which are accessible to women, youth, and landless individuals[36]. These enterprises frequently rely on low-cost, low-tech solutions, such as using recycled materials for shop construction or leveraging traditional skills in food preparation and handicrafts, which not only lower barriers to entry but also foster local ownership and innovation. In the Dumot kebele, one shop selling fruits and vegetables, one activity with solar panels to charge phones, and several private birkas (type of water tank) filled by water trucks (with the water sold to community members) were observed there and considered as the early stages of economic diversification.

A key factor in the success of these initiatives is the integration of traditional knowledge with affordable, accessible technology. For instance, in both Nepal and Ethiopia (to a lesser extent as the practice to store food and animal fodder is rather recent), local community members have adapted traditional food preservation and storage methods to extend the shelf life of goods sold in small shops, thereby reducing waste and increasing profits. Community-based training in storekeeping, bookkeeping, marketing, and product diversification-often delivered through local cooperatives or NGOs-further enhances the sustainability of these businesses. Working on water management and conservation is essential in Ethiopia and technologies like the Warka water concept (which transforms fresh air into water through nets systems), and similar practices look promising[37].

However, this approach is demanding, as it requires time and effort to engage with communities, understand their needs, assess current practices, and identify both internal opportunities within the community and external resources that can provide support. It is a time-consuming and evolving process, as it must adapt over time in response to the challenges faced by communities. Yet, it remains the most relevant method for enabling adaptation to changing circumstances and unexpected shocks.

[35] South Asian Journal of Social Science and Humanities, 2021, The Role of Livelihood Diversification and Social Capital in the Movement of Households: A Case Study from Central Nepal.

[36] Bosena Yirga, Wiley online library, 2020, The livelihood of urban poor households: A sustainable livelihood approach in urbanizing Ethiopia. The case of Gondar City, Amhara National State.

[37] Warka Water – Every Drop Counts

6. Inclusive action: empowering vulnerable groups for sustainable change

As many international development actors underline, inclusion of the most vulnerable individuals should not be limited to their mere consideration in social protection plans or programmes (like in DRR plans as beneficiaries). HI defines inclusion as ensuring that vulnerable groups-particularly people with disabilities-are actively involved in decision-making processes and have equitable access to humanitarian aid, economic opportunities, and social protections. This approach, rooted in Article 11 of the Convention on the Rights of Persons with Disabilities (CRPD), emphasizes reducing systemic discrimination and dismantling barriers to participation in crises and development contexts. HI's work integrates disability inclusion into policy and practice, advocating for the rights of marginalized groups to shape programs that affect their lives.

Inclusive economic programming is critical for empowering people with disabilities, yet systemic gaps persist. Ensuring socio-economic opportunities to people with disability, directly affects their own capacity to resist and adapt to shocks. In Nepal, HI's *Livelihoods Improvement for Persons with Disabilities* (LIPP) project in Palpa[38] district demonstrates the benefits of vocational training in tailoring, agriculture, and small business management. Participants reported a 40% increase in income, challenging stereotypes about their productivity. However, challenges such as social stigma, limited access to credit, and physical barriers to marketplaces remain significant hurdles. For instance, only 15% of Nepali women with disabilities have access to formal financial services, perpetuating cycles of poverty[39]. Addressing these barriers requires targeted policies, such as subsidized loans and disability-friendly infrastructure, to unlock economic potential.

Caregivers of people with disabilities, often women, face compounded vulnerabilities. Effective programmes must recognize caregivers' dual roles by providing psychosocial support, childcare cooperatives, and income-generating opportunities. This holistic approach reduces burnout and enhances household resilience.

[38] Livelihood Improvement for Persons with Disabilities, Marginalized and Poor in Palpa; project 2024-2028.

[39] BWAN Project; Promoting economic justice of women with disabilities through financial inclusion.

Testimony from a female caretaker in Hoden kebele, Ethiopia:

"Sometimes we don't even have the right food to give to the person with disability we are taking care of. This causes us a lot of stress." (FGD with persons with disabilities and their caretakers). This testimony reinforces the importance of designing livelihood interventions that are both sustainable and truly inclusive, ensuring that the needs of the most vulnerable-such as persons with disabilities and their caretakers-are explicitly addressed. It also serves as a reminder that effective livelihood programs must go beyond economic measures to encompass social, nutritional, and emotional well-being. Taking into account the overall psychological impact of increased stress and distress is also an important aspect of programming that should not be discarded.

In Nepal, NFDN (National Federation of the Disables in Nepal) initiative advocates for financial inclusion through policy reforms and accessibility audits, enabling women to access loans and start businesses. Similarly, in Ethiopia, HI's inclusive livelihood programs prioritize women-led cooperatives in agro-processing and livestock management, increasing their income by 30%. These efforts challenge gender norms and reduce dependency on informal care roles. For instance, Ethiopian women in pastoralist communities now lead milk-processing enterprises, leveraging traditional skills for economic gain[40]. Scaling such models requires addressing intersecting barriers like caste, ethnicity, and disability through participatory design and cross-sector partnerships.

7. Bridging the preparedness gap: from reactive to proactive adaptation for vulnerable groups

Despite growing awareness and the adoption of diverse adaptation strategies in Nepal and Ethiopia, people with disabilities and other vulnerable groups still face a significant lack of accessible advanced information and tailored support. As a result, these groups are often forced to react to hazards as they arise, rather than proactively planning for climate adaptation. This reactive approach further limits their resilience and highlights the urgent need for more inclusive, forward-looking information systems and programming that ensure no one is left behind. For instance, in the visited areas of Ethiopia, semi-pastoralists with a handicap relied on the community to manage their cattle (and bring them to water points and rangelands). They depend on the social bond existing within the community and thereby on the community's capacity to prepare. As such, it is important to include persons with disabilities in community based preparedness activities so they can voice their concerns and needs for a better planification at community level.

[40] UNDP-HI partnership - 2018

Part 5 – Recommendations

1. Recommendation 1 - Consider the Community as an ecosystem

Treating the **community as an ecosystem is a foundation to effective localization** of development and humanitarian programmes, even in the face of funding constraints. The Grand Bargain and related localization frameworks provide a roadmap, but success depends on genuine partnership, direct investment, and a commitment to shifting power to local actors. The shift proposed under the Grand Bargain, is not only about funding, but about transforming the humanitarian system to be more participatory, context-driven, and accountable to affected populations. Localized action then, refers to shifting power, resources, and leadership to local actors and communities, ensuring that aid is more responsive, sustainable, and effective[41].

This approach **places local knowledge, networks, and capacities at the heart of programmes, enabling communities to self-organize, prioritize, and innovate with limited resources**[42]. It also ensures that interventions are contextually relevant, inclusive, and able to adapt as needs evolve. An ecosystem approach inherently rejects siloed interventions, instead promoting holistic, cross-sectoral strategies that reflect the interconnected needs and capacities of the community[43].

Testimony, KII, Gursum, Ethiopia:

"How to build eco resilience? I think there is a need for a holistic approach, meaning a bottom-up approach where the specific needs of the communities are taken into account… Right now, the budget is allocated on the 5 big sectors, including health and education, but there are no linkages with the community level."

[41] Alliance for Empowering Partnership, April 2025, "From Crisis to Reckoning: Decolonize Aid, Localize Power, Restore Justice".

[42] IASC, 2024, "Localisation - An Unfinished Agenda Beyond 2026"

[43] Center for Global Development, 2020, "Inclusive coordination; Building an Area-Based Humanitarian Coordination Model".

To operationalize this, **HI must prioritize coordination and collaboration across sectors, engaging local partners and affected populations in joint planning and implementation**. Area-based and collective approaches, such as those piloted in Nepal after the 2015 earthquake[44], have demonstrated the value of aggregating feedback and aligning interventions to local priorities, thus enhancing both effectiveness and accountability. One of the key challenges remains the entrenched sectoral structure of humanitarian funding and coordination, which often perpetuates siloed programming. Overcoming this requires deliberate investment in integrated analysis, shared platforms for decision-making, and flexible funding mechanisms that support collective action and localization.

2. Recommendation 2 - Place inclusion at the center of the ecosystem's interactions and programming

In the visited areas of Ethiopia, persons with disabilities received very scarce support from local or federal authorities (even though social safety nets programmes are quite developed in the country, the communities we met had not received any support over the last months, and only 1 person in the Hoden kebele was a beneficiary from the government's programme). Local and international NGOs also dramatically reduced their support due to a lack of funding. Similarly, in Nepal, people with disabilities were receiving support only based on their disability cards, which were missing or expired for several people encountered (due to administrative challenges in getting those cards). This lack of systematic institutional support left people with disabilities dependent on their families or communities for survival. In Ethiopia, during drought, several reported skipping meals, highlighting their heightened vulnerability in times of crisis.

Testimony from a KII, Jigjija, Ethiopia:

"Persons with disabilities have no education, they don't go to school. The children have no access to education either (they are neglected). Because there is no accessibility or they may face stigma and discrimination. Even the roads are not accessible for Persons with disabilities." (…) "In the region, there is a lack of knowledge on how to assist Persons with disabilities: people would just give some pocket money. They don't think people with disabilities can work or run a business. This is linked to attitudes: if the community comes together, they would help them, but they don't know they could also work with them. As a consequence, there are only a few partners and not much money to implement relevant initiatives."

[44] CDAC Network, 2019, "Collective Communication and Community Engagement in humanitarian action ", case study on Nepal page 16.

The following graph explores different approaches to inclusion:

- **Inclusion as a means**: where interventions begin with the community and attempt to reach persons with disabilities;
- **Inclusion as an objective**: where programming starts by addressing the specific needs of persons with disabilities and then expands to the wider community;
- **Inclusion as an integrated approach** (HI Theory of Change): that simultaneously focuses on persons with disabilities while engaging the broader community.

➔ Interventions start with the community and aim to include persons with disabilities. ➔ Persons with disabilities are prioritized as beneficiaries in community programs. ➔ Inclusion is a cross-cutting strategy to ensure no one is left behind. ➔ Community-based actions actively involve people with disabilities. ➔ Advocacy efforts encourage other actions to prioritise persons with disabilities.	➔ Programming begins by addressing the specific needs of persons with disabilities and then expands to the wider community. ➔ Persons with disabilities are recognized as agents of change. ➔ Inclusion is the central objective of these programs. ➔ Community-based actions are designed to serve persons with disabilities, which in turn reduces overall community vulnerability. ➔ External interventions specifically target persons with disabilities.	➔ Inclusion as an integrated approach centers persons with disabilities while engaging the broader community. ➔ Community-based programs address the needs of people with disabilities to benefit the entire community. ➔ Providing socioeconomic opportunities to the most vulnerable strengthens overall community resilience. ➔ External interventions complement HI's efforts and help protect and reinforce social bond.

Figure 9: The three approaches to inclusion

This comparison shows how different starting points and strategies can affect outcomes for both individuals and the community as a whole. Field observations confirmed that persons with disabilities were rarely included or even considered[45] for socioeconomic opportunities or activities, reinforcing their dependency on family or community networks. Social bonds were essential but not sufficient for overcoming the barriers they faced.

It is part of HI's mandate to ensure that persons with disabilities are supported and empowered to thrive, and that the obstacles they encounter are systematically addressed. Prioritizing their inclusion serves as a powerful catalyst for building lasting resilience, as persons with disabilities are often among the most stigmatized, marginalized groups, and also the most impacted by climate change. By focusing on their needs first, programmes can set higher standards for community resilience and foster environments where everyone can contribute and feel valued.

Ultimately, while initial interventions should prioritize persons with disabilities and their caregivers, these efforts must be complemented by broader community engagement. This ensures that social cohesion is strengthened and that the benefits of inclusion extend to all, creating an ecosystem where persons with disabilities remain at the center but are fully integrated into the life and resilience of the entire community.

In terms of specific livelihoods interventions, inclusion should be at the center of the program design: Programs must prioritize the needs of marginalized groups to prevent perpetuating inequalities, especially for persons with disabilities who face significant barriers in Nepal due to inaccessible infrastructure, social stigma, and weak enforcement of policies like the 5% employment quota in public service. Although the government has reserved quotas and anti-discrimination laws exist, actual inclusion remains limited, with persons with disabilities comprising less than 1% of civil service employees despite quota provisions[46]. Successful examples from Ethiopia show that involving women and youth in diversified livelihood activities, supported by skills training and microloans, can gain financial independence, and become active contributors to household and community resilience. This highlights the importance of co-designing initiatives with vulnerable groups to ensure they have access to vocational training, financial resources, and representation in decision-making processes.

Action: Co-design livelihood programs with persons with disabilities and other marginalized groups, ensuring inclusive access to vocational training, microloans, and leadership roles to enhance equitable participation and sustainable economic resilience. In addition, actively document and publish success stories of people with disabilities engaged in socio-economic

[45] In Hoden kebele, Ethiopia, persons with disabilities told us that it was the first time that they were consulted. BOLSA representatives in both zones confirmed that they had no budget to directly support persons with disabilities. All they could do was to advocate for their needs and rights so local authorities and humanitarian/development actors would consider them as priority recipients of aid.

[46] NFDN, 2017, "Employment for persons with disabilities: a discussion on barriers, achievements and opportunities".

activities to challenge stigma, inspire communities, and inform policy and practice on disability inclusion.

3. Recommendation 3 - Promote dignified[47] livelihood's diversification strategies

This recommendation outlines principles for fostering self-reliant economic resilience in vulnerable communities, emphasizing diversification, sustainability, and inclusion, supported by field findings and literature review.

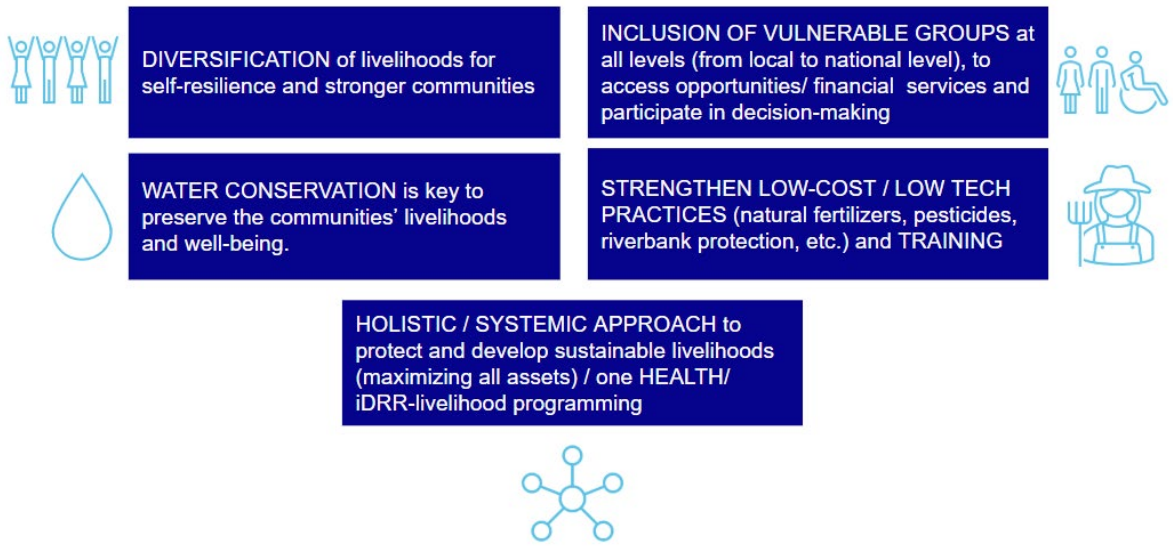


Figure 10: Key recommendations on economic resilience

❖ Promote more decent, diversified and inclusive economic activities

Economic diversification is critical for reducing dependency on single income sources, yet strategies must prioritize sustainability and equity. As mentioned earlier, some livelihood, in addition to income diversification, also contribute directly to mitigation/ adaptation/ preparedness and therefore should be strongly promoted In Nepal, livelihood diversification (e.g., combining agriculture, livestock, and small businesses) correlates with improved household well-being in mountain districts. However, specialization in cash crops (e.g., vegetables) and non-farm activities (e.g., masonry) has proven more resilient than over-reliance on migration, which risks exploitation and human trafficking[48]. In Ethiopia, charcoal production, while providing short-term income, exacerbates deforestation and CO_2 emissions. Practices like diversifying crops, transforming products (milk into butter and yogurt), masonry, and small businesses are better as they create additional value, capacities

[47] Used for emphasis on respect and human value.

[48] Saroj Pokharel and al., 2021," The role of livelihood diversification and social capital in the movement of households: a case study from Central Nepal".

and sometimes local market activities. In Nepal, tailored programmes for persons with disabilities (e.g., knitting, small businesses) improved participation, though inaccessible markets and policies hindered long-term success. In Ethiopia, a successful initiative was led by an Organization of Persons with Disabilities (OPD) to facilitate access to credit for persons with disabilities in Jigjiga. The kebele administration acted as a guarantor to the bank, playing a crucial role in establishing trust between stakeholders. This intermediation enabled beneficiaries to access credit and expand their businesses, demonstrating the power of local leadership in fostering inclusive economic opportunities.

Action: Promote diversification into value-adding sectors (like agro-processing, eco-tourism, and small businesses) while phasing out harmful practices and ensure inclusion by offering vocational training that equips women, youth, and persons with disabilities with the skills needed to access these new opportunities. Finally, create inclusive financial mechanisms for the most vulnerable groups, using trusted guarantors from the community.

❖ Invest in resilient water management systems to maintain and develop livelihoods

Reliable water access is fundamental to the health, agricultural productivity and diversification, pastoralism, and economic resilience of vulnerable communities. Evidence from Ethiopia shows that the introduction of drip irrigation and water-harvesting technologies in areas such as Dugda District has enabled smallholder farmers to cultivate high-value crops like papaya and onions, resulting in income increases of up to 40%[49]. In Nepal, community-led solutions-such as farmer-managed irrigation systems and rainwater harvesting-have reduced soil erosion, improved crop yields, and supported a shift toward market-oriented agriculture. Central to the success of these approaches is the role of local water management committees, which oversee system maintenance, ensure equitable access, and coordinate with authorities and technical experts. Resilience water management systems are even more vital in climate change adaptation context.

Action: Scale up low-cost, community-owned water management solutions (such as plastic-lined ponds and drip irrigation kits), provide practical training for their use and maintenance, and strengthen inclusive water management committees to ensure effective governance, sustainability, and equitable access for all community members. By being more inclusive, these committees play a major role in guaranteeing the well-being of the most marginalized and offer socioeconomic opportunities.

[49] International Water Management Institute, 2022, "Bundling crop, irrigation and finance support boosts livelihoods for Ethiopia's farmers".

❖ Build on existing needs and capacities

Resilience programs are most effective when they strengthen community autonomy and build on local strengths, rather than when they create dependency on external aid. Participatory needs assessments, such as those outlined in the Red Cross's Community Resilience Toolkit, help communities identify their own assets-like traditional knowledge, social networks, and mutual aid practices-as well as gaps in infrastructure or resources that need to be addressed. In both countries, the positive impact of diaspora engagement is evident: remittances have not only supported basic needs but have also enabled investments in safer housing and community priorities, such as irrigation and cooperatives, especially when migrants are informed about resilient construction and local development opportunities. These investments have contributed to stabilizing local economies and strengthening social cohesion, particularly in rural areas where economic opportunities are limited.

Action: Use participatory frameworks to design interventions that align with existing community practices and capacities - such as seed preservation, livestock management, mutual aid networks, and remittance-fueled projects-while avoiding externally driven solutions that risk undermining local ownership and long-term self-reliance. This could be done using Climate VCA for adaptation to be more systematically used to develop livelihood, adaptation, mitigation plans, and interventions.

❖ Adopt a holistic, multisectoral approach

Building resilience in vulnerable communities requires addressing interconnected risks through coordinated, multi-sectoral action. In Nepal, integrated models that combine water management, agroforestry, and financial services within hill ecosystems have demonstrated significant improvements in both ecological stability and economic outcomes, enabling households to diversify their livelihoods and better withstand shocks. Social capital also plays a crucial role: households in central Nepal with strong social networks have been more successful in leveraging collective action and trust to pursue new income opportunities and recover from crises. A similar approach has proven effective in Ethiopia, where initiatives have bundled emergency livelihoods interventions, livestock feed provision, cash transfers, and early warning dissemination to address the multifaceted impacts of drought and floods.[50] These integrated efforts have improved food security, protected community assets, and increased access to essential services for thousands of pastoralist and farming households. By combining sectors such as water, agriculture, and finance, and by actively leveraging social capital and community networks, programmes can create powerful synergies-for example, pairing watershed restoration with cash-crop training or linking livestock support with microfinance and extension services.

[50] FAO, 2024, "Resilience building in Ethiopia", FAO programme review (2024)

Action: Promote integrated, multi-sectoral resilience programming that combines interventions across water, agriculture, livestock, finance, and social protection, and intentionally harnesses local social capital to create synergies and maximize the impact of resilience-building efforts.

Part 6 – Conclusion

Resilience, at its core, is about empowering communities to adapt and thrive autonomously in the face of adversity. Field evidence from Nepal and Ethiopia demonstrates that even the most vulnerable communities possess local knowledge and practices that help them withstand shocks, conflict, and even climate change. However, as climate events and crises become more frequent and severe, these mechanisms are increasingly stretched, often offering detrimental coping mechanisms that fragilize communities and increase vulnerabilities rather than robust, sustainable solutions to protect livelihoods and the overall community's well-being.

To meaningfully support adaptation and amplify resilience is to search for a transformational impact, even at a small scale. Change (as a goal and as a process) can only be obtained and maintained through multi-sectoral, integrated programming that addresses interconnected risks and fosters collaboration and inclusion. For example, pairing water management infrastructures (and inclusive governance) with agricultural training and access to microfinance for instance, could support communities to recover faster and more equitably. Solid preparatory work guided by the community's needs and priorities, focused on the most vulnerable, and ingrained in the local knowledge, value/belief system and practices, is a crucial step that should not be neglected nor under-budgeted in project design and initiation because it nurtures programs that are owned, relevant, inclusive and focused on the entry points (such as water management) and levers (i.e education) that will improve the entire ecosystem (with all the interactions and units it entails).

Yet, the effectiveness and sustainability of these efforts hinge on a fundamental paradigm shift in humanitarian and development practice. Rather than being influenced by external mandates or internal priorities, the needs and priorities should emanate primarily and fundamentally from the community itself. HI is well-positioned to lead this advocacy line in its humanitarian and development network and support the design of projects that start from the most vulnerable to reach and benefit the community as a whole.

In the current global context of shrinking international aid and rising geopolitical uncertainty, this shift is more urgent than ever. Financial independence and localization must become central to humanitarian and development strategies. By rooting external support in local knowledge, inclusive governance, and community financial autonomy, development efforts can transcend short-term relief and lay the groundwork for sustainable, equitable, and climate-resilient futures in Nepal, Ethiopia, and beyond.

Community-based solutions for economic resilience: Building on local knowledge and know-how to respond to climate change challenges (Nepal and Ethiopia)

This study aims to document local climate mitigation and adaptation practices in Ethiopia and Nepal. By capturing these community-driven strategies, HI seeks to strengthen its livelihoods programming to ensure that interventions are inclusive, sustainable, and responsive to the needs of marginalized groups. Both Ethiopia and Nepal, despite their distinct contexts, face significant climate risks compounded by limited adaptive capacities, underscoring the importance of localized solutions. The selection of these two diverse yet similarly vulnerable countries was intended to reveal a broad range of practices that can inform and enrich future programming and recommendations.

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