TOWARDS ENVIRONMENTAL PEACEBUILDING IN NEPAL: UNDERSTANDING VIOLENCE, ADDRESSING CONFLICTS, AND STRENGTHENING GOVERNANCE

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Towards Environmental Peacebuilding in Nepal: Understanding Violence, Addressing Conflicts, and Strengthening Governance

AUTHORS
Pratiksha Giri
Dipin Subedi
Prasansa Thapa
Prakash Bhattarai
Pawan Roy

DESIGN/PHOTOS BY
Pratima Chhetri

PUBLISHED BY
Centre for Social Change (CSC)
Gahana Pokhari Marg, Kathmandu-05, Nepal
contact@socialchange.org.np
www.socialchange.org.np

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Abbreviations And Acronyms

CBD	Convention on Biological Diversity
CBNRM	Community-based Natural Resource Management
CFUG	Community Forest User Group
EIA	Environmental Impact Assessment
FPIC	Free, Prior and Informed Consent
GESI	Gender Equality and Social Inclusion
GIZ	The Deutsche Gesellschaft für Internationale Zusammenarbeit
GLOF	Glacial Lake Outburst Floods
IDI	In-Depth Interview
IEE	Initial Environmental Examination
IOM	International Organization for Migration
IUCN	International Union for Conservation of Nature
LAPA	Local Adaptation Plans for Action
NAP	National Adaptation Plan
NDC	Nationally Determined Contributions
UN	United Nations
UNEP	United Nations Environment Programme
VRA	Vulnerability and Risk Assessment

Executive Summary

This report, *'Towards Environmental Peacebuilding in Nepal: Understanding Violence, Addressing Conflicts, and Strengthening Governance'* explores **environmental peacebuilding** as a strategy for converting shared environmental challenges into avenues for dialogue, cooperation, and trust among conflicting groups in Nepal. It analyzes how environmental violence (manifested as ecosystem degradation, resource scarcity, and exclusionary governance) intensifies conflicts, especially in the context of climate change, historic transition to federal governance system, recent youth-led political transitions, rising labor migration, and historical inequalities. Nepal's varied landscapes, spanning mountains, hills, and plains, sustain millions but are increasingly vulnerable to climate-driven risks such as irregular rainfall, floods, droughts, glacial melting, and landslides. These threats disproportionately burden marginalized communities, including indigenous groups, Dalits, women-headed households, and downstream farmers, who face displacement, pollution exposure, and restricted access to land, water, and forests. The study underscores Nepal's community-based successes, like community forestry, as exemplars for peacebuilding, while drawing attention to deficiencies in policy implementation and institutional coordination that perpetuate inequities and hinder conflict mediation. Ultimately, the report provides insights to guide government, development partners, civil society, and communities in embedding environmental cooperation within sustainable peace and development frameworks.

The research pursues three core objectives. First, assess awareness and involvement in environmental peacebuilding among state, civil society, and local actors, along with enabling or hindering factors. Second, map drivers of resource conflicts involving forests, water, land, and extractive industries, including institutional gaps, inequalities, and power imbalances. And third, identify policy-relevant entry points to integrate environmental collaboration into Nepal's broader peace and development efforts.

The study adopted a qualitative methodology. It draws on data from Kathmandu Valley and six municipalities in Sunsari, Bara, and Rupandehi districts, capturing diverse Tarai/Madhesh contexts exposed to erosion, pollution, deforestation, and water competition. Primary sources include 37 in-depth interviews with experts, officials, youth leaders, and community members; six youth workshops engaging 90 participants; and 12 intergenerational dialogues involving 360 individuals across

generations. Secondary data encompass a review of 24 legal and policy documents, alongside media monitoring of 52 articles from March to November 2025.

Key findings reveal environmental violence as both tangible livelihood disruptions (due to air and water pollution, deforestation, floods, droughts, riverbed mining, and human-wildlife conflicts) and systemic governance shortcomings (such as weak enforcement, outdated policies, and inter-tier coordination failures). Stakeholders attribute these issues to industrialization, climate stressors, inadequate waste management, and upstream-downstream power dynamics, which exacerbate transboundary tensions, particularly with India over shared rivers. Media analysis highlights reactive government responses to disasters, underscoring institutional fragmentation. Workshops and dialogues reveal the erosion of traditional knowledge and cooperative practices, diminishing community resilience amid modernization and migration. Policy assessments identify gaps, such as the unamended Water Resources Act 1992, absence of conflict-sensitive adaptation planning, and limited recognition of indigenous rights and gender inclusion, despite supportive elements in documents like the 2015 constitution and 2019 National Climate Change Policy.

In conclusion, environmental violence and conflicts are interlinked, often stemming from social inequalities, power asymmetries, and reactive governance rather than resource scarcity alone. Nepal's policies implicitly align with peacebuilding tenets but remain fragmented, fostering exclusion and latent unrest. Fair sharing of transboundary resources necessitate diplomacy, while inclusive community models offer peacebuilding promise if reformed with inclusive governance at its core. Proactive, multi-level governance is vital to avert violence, enhance resilience, and cultivate positive peace via equitable resource stewardship.

To advance environmental peacebuilding, the findings of this study suggest the need for a shift towards more preventive and anticipatory approaches to environmental governance. Priority actions should include establishing and strengthening early warning systems, promoting sustainable resource management, and integrating traditional knowledge with scientific and technological practices. Governance reforms should require updating key legal frameworks to align with federal structures, clarifying roles and responsibilities across government tiers, and reinforcing local-enforcement and conflict-mediation capacities. Environmental peacebuilding should also prioritize equity in resource governance by ensuring meaningful leadership and fair benefit-sharing for marginalized groups. In addition, strengthening transboundary cooperation, through updated water-sharing agreements and greater involvement of affected communities in cross-border advocacy, emerges as an important pathway

for conflict prevention. Finally, these measures, implemented collaboratively by government institutions, civil society, development partners, and the private sector, can help transform Nepal's environmental challenges into opportunities for sustainable peace and inclusive development.

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Introduction

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Introduction

As an emerging area of inquiry in peace and conflict studies, environmental peacebuilding explores how shared environmental challenges can serve as platforms for dialogue, cooperation, and trust-building among conflicting groups. It involves interventions at various levels in the governance of water, forests, land, minerals, and biodiversity to reduce resource conflict and promote peaceful and equitable access. This approach emphasizes not only the technical aspects of resource governance, but also the social, political, and cultural factors that shape how resources are used, contested, and perceived (Davis et al., 2023).

Environmental violence, by contrast, refers to conflicts and harms that emerge when ecosystems collapse or when resource governance becomes exclusionary, inequitable, or predatory. This includes how marginalized communities frequently shoulder an uneven impact of environmental harm (London and Bhandari, 2024; Singh and Singh, 2024): displacement from floods or landslides, deprivation of access to traditional homelands, exposure to pollution, or extraction methodologies that are unfair and/or that tend to favor the powerful actors. Moreover, environmental violence often manifests through gradual processes such as soil erosion, water scarcity, and contamination, but it can escalate into acute crises during intense climatic events. There is growing recognition that it is also a form of structural violence because it exacerbates vulnerability, perpetuates inequality, and undermines the ability of communities to find means of survival (Marcantonio et al., 2024). Hence, the dual concepts of environmental peacebuilding and environmental violence are important to understand because they show how the environment can be both a source of conflict as well as a source for peacebuilding, contingent on how societies manage competing interests in natural resources.

In this context, Nepal offers an interesting case for examining this link due to its ecological variability, recent socio-political transitions, and increasing climate

change impacts. The country's mountains, hills, and plains support a broad array of ecosystems and provide livelihood for millions. These landscapes are, however, exposed to significant climate-driven risks, including irregular rainfall patterns, extended droughts, intense flooding, glacial melting, and landslides. These climatic changes directly affect agriculture, forestry, water systems, and biodiversity, all of which are central to rural livelihoods. When resources are degraded or scarce, competition intensifies, particularly in areas dependent on farming, livestock, riverbed mining, and forest products. Competing claims to resources are further magnified in the case of transboundary resources such as rivers and shared forests.

Furthermore, historical prejudices and gaps in governance further complicate the environmental challenges in Nepal. Several marginalized communities, especially indigenous groups, Dalits, and women-headed households, are systemically denied access to land, water, and forest resources (Panday et al., 2021; Sujakhu et al., 2019; Cadman, 2023; Charmakar et al., 2024; Shrestha et al., 2020). Political transitions of the past 20 years have reshaped institutions of governance, but local bodies are deficient in maintaining the technical capacity, coordination, and accountability necessary to effectively manage sustainable use of natural resources. This has occasionally triggered conflicts between communities and government officials over issues such as sand-mining permits, water allocation, forest lines, or public land encroachment (Shrestha et al. 2024; Ahmed 2025). These can be potential sites of the most volatile forms of conflict because they tap into latent social hierarchies, economic inequalities, and political patronage networks. In such terrains of unequal development, environmental violence manifests not only in terms of physical effects but also in asymmetric processes of decision-making that exclude significant portions of the population.

Alongside this backdrop though stands a strong tradition of community-based environmental and natural resource management practices in Nepal, which provides hopeful indications for environmental peacebuilding. For example, community forestry is widely celebrated as a globally transferable success story in rehabilitating degraded landscapes, raising rural livelihoods, and building social capital. These arrangements do more than improve environmental outcomes. They also serve to create necessary spaces for negotiation, collective decision-making, and conflict mediation. Similarly, watershed management groups, user committees, and local disaster risk reduction teams also demonstrate how engagement around common environmental challenges builds trust, shared norms of cooperation and cultivate the ability to mediate differences constructively. These grassroots engagements demonstrate that environmental issues can be a unifying subject that facilitates

cooperation between conflicting groups. However, these successful forms of community cooperation can also risk entrenching social hierarchies, including elite capture. This intersection of environmental fragility and community resilience positions Nepal as a compelling case study for exploring environmental peacebuilding.

Moving forward, there are urgent factors that demand greater attention to environmental peacebuilding studies in present-day Nepal. First, environmental degradation and pollution (deforestation, soil erosion, river pollution, loss of biodiversity, climate-induced natural disasters, and unpredictable rain) is widespread and intensifying across Nepal. These environmental shocks tend to undermine livelihoods, both indirectly and directly, particularly the livelihoods of rural, indigenous, and marginalized communities that depend on natural resources for their sustenance. Also, the potential of social upheaval when communities are denied access to water, fertile land, forest products, or grazing has been recognized and addressed as such cases of environmental degradation are not just matters of geography, but of political economy and social scales of stability (Bhandari et al., 2021; Dhakal et al., 2023).

On this matter, the recent history of Nepal has demonstrated that natural resources can be a source of rivalry and contention between interest groups, communities, and local governments. Disputes over sand mining, timber harvesting, water access, and community forest management demonstrate how environmental degradation can lead to violence. It is estimated that about 40 to 60 percent of all conflicts are related to the environment, and almost one in four of the conflicts of the last decade are linked with disputes over natural resources (UNEP, 2025). And these trends are evident in Nepal too where climate-related disasters such as landslides, floods, glacial lake outburst floods, and droughts result in displacement, destroy livelihoods, and deepen poverty.

Second, environmental peacebuilding is essential as climate change acts as a threat magnifier; it exacerbates existing inequalities and further endangers at-risk populations. Those who are most disenfranchised from political power and economic stability are the first to be hit when resources shrink. Studies have long demonstrated that if power disparities and discrimination are not addressed, technical environmental solutions will not bring about true peace (Aryal et al., 2021; Davis et al., 2023; Simangan et al., 2023). Therefore, analyzing environmental peacebuilding is essential for promoting equal access, justice, and participatory governance.

Lastly, Nepal has taken steps in implementing several initiatives, such as the Chure Conservation Programme, National Adaptation Programme of Action, Terai

Arc Landscape, and community-based conservation strategies, which demonstrate the potential for resource collaboration to establish trust between citizen and state, and among communities. These programs attest to the fact that responsible environmental management can yield ecological renewal and pseacebuilding at the community scale.

Still, significant gaps remain as policies are frequently insufficient by virtue of their ambiguity, local perspectives are limited, and peacebuilding is not systematically mainstreamed in national environmental governance frameworks. To address these gaps, the study has three specific objectives:

a	b	c
To examine the extent to which state actors, civil society, and local population's awareness and engagement in environmental peacebuilding, and the conditions that facilitate or impede collaboration.	To identify and document drivers of natural resource conflict, such as forests, water, land, and extractive industries at the community level, while also identifying institutional voids, systemic inequalities, and power relations in resource distribution.	To provide policy options for mainstreaming environmental cooperation in the wider development and peacebuilding agenda in Nepal.

This study, therefore, offers empirical insights that informs research, policymaking, and practice. Its findings have applications for government institutions, development partners, civil society, and community actors in their pursuit of pathways to sustainable peace. Therefore, the importance of this study also lies in policy recommendations for climate-sensitive peacebuilding, fair resource governance, and sustained community resilience.

2

Study Design and Scope

2

Study Design and Scope

This study adopts a qualitative approach that captures various experiences, institutional responses, and local contexts and draws on five main sources of information: existing research and literature; review of laws, policies, and frameworks; news coverage collected through media monitoring; community workshops focused on environmental violence and peacebuilding; and interviews with experts, practitioners, and stakeholders. To represent both institutional and community perspectives, the study combines expert interviews in the Kathmandu Valley with field-based conversations in six municipalities across Sunsari, Bara, and Rupandehi districts. These findings were triangulated through field observations and analysis of existing documents, then manually coded and organized by themes to identify patterns both within individual responses and across different groups.

Field research was carried out in the Kathmandu Valley and six municipalities across Sunsari, Bara, and Rupandehi districts. Kathmandu Valley was selected as an expert interview site as it is the seat of the major policy institutions, environmental activist groups, and government bodies involved in national environmental governance. Fieldwork was conducted in Sunsari, Bara, and Rupandehi districts, selected for their ecological diversity, exposure to environmental hazards, and complex resource governance challenges. Collectively, these districts are illustrative of diverse Tarai/ Madhesh context of Nepal, within both urban and rural municipalities, and communities undergoing rapid environmental change exist.

- **Kathmandu**
- **Sunsari**
- **Bara**
- **Rupandehi**

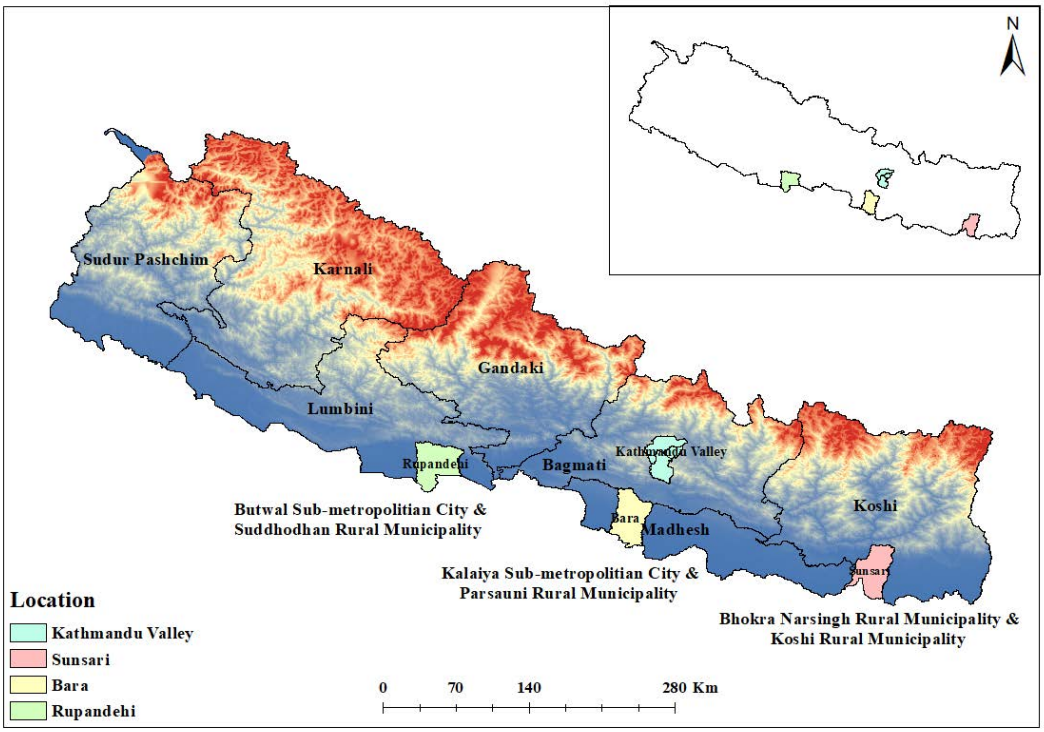


Figure 1: Study Areas

Data for this study were gathered from both primary and secondary sources (Table 1). In-depth interviews were conducted with 37 respondents, including youth leaders, local elected officials, governmental representatives, officers from agriculture and environment departments at the municipal level, older individuals, environmental experts, and activists. These individuals were purposively selected to provide a diverse range of institutional and personal perspectives on environmental conflict issues. Additionally, data were gathered through six Environmental Violence Mapping Youth Workshops organized in six local government units across the three study districts, involving 90 youth participants. The study also drew 12 Intergenerational Dialogues on Environmental Peacebuilding held in the three study districts, bringing together 360 participants from various generations to facilitate discussions on environmental peacebuilding.

To contextualize the primary data, a comprehensive review of secondary sources was undertaken. This included 24 policy and legal documents relevant to environmental peacebuilding, which offered insights into institutional priorities and governance frameworks. Additionally, 52 news articles on environmental violence published between March and November 2025 were gathered through media monitoring, providing contextual evidence of emerging trends and public discourse. These news articles received nationwide coverage, with specific attention given to Bara, Sunsari, and Rupandehi districts.

Table 1 : Summary of Primary and Secondary Data Sources

Data Source	Description	Quantity	Participants
In-depth Interviews (IDIs)	Interviews with government officials, community representatives, and experts	37 IDIs	37 participants
Youth Workshops	Workshops with youth engaged with issues of environmental violence, leadership, and follow-up sessions	6 workshops	6*15 = 90 participants
Intergenerational Dialogues	Dialogues between older and younger generations to examine perspectives on environmental peacebuilding	12 dialogues	12*30 = 360 participants
Policy and legal review	Review of national policies, strategies, and laws relevant to environmental peacebuilding	24 documents	
Media monitoring	Analysis of news reports on environmental violence (Mar-Nov 2025)	52 news articles	

The study applied thematic analysis, an interpretive method, to recognize patterns in qualitative data. Manual coding was conducted to remain close to participants' narratives and preserve contextual nuance. Codes were then grouped into broader themes related to resource competition, environmental risk, governance, power relations, and conflict resolution. Cross-case analysis was undertaken to compare and contrast municipalities and identify their unique characters reflected in local expressions of environmental conflict and cooperation. To enhance analysis, results were triangulated with secondary data to ensure the interpretations were based on both empirical data and literature. This helped to draw connections between individual experience and wider trends in governance and political structures in Nepal.

Ethical considerations were integral in this study. The participants were made aware of the objectives of the study, that their participation was voluntary, and that they could withdraw at any time. Prior consent was taken for interviews and photographs. Participants' identities were anonymized, and data is kept safe to

ensure confidentiality. The study adopted a conflict-sensitive lens, being aware that resource dispute discussions could be politicized. Steps were taken to ensure that the participants were not put in harm's way through an exertion of undue tension upon them. The ethical principles guaranteed that the research process and activities treated the respondents' rights, perspectives, and dignity with respect.

While the review of policies, frameworks, and news articles encompasses nationwide coverage, and expert interviews were conducted in the Kathmandu Valley to capture broader institutional perspectives, the study largely focused on three districts within the Tarai/Madhesh region, particularly in terms of local experiences and contexts. As a result, its findings may not reflect the situation in mountain or hill communities where environmental challenges and resource governance arrangements differ significantly. The depth of engagement with participants varied due to seasonality, local accessibility, and the data collection approach, for instance, and contributions from the Environmental Violence Mapping Youth Workshops and Intergenerational Dialogues on Environmental Peacebuilding were uneven. Additionally, sensitive political issues related to resource disputes, particularly around extraction industries and land use decisions involving powerful stakeholders, limited open debate in some study areas.

These limitations highlight the need for future research in mountain and hill regions and for deeper longitudinal engagement to capture evolving conflict dynamics. Acknowledging these gaps recognizes that further exploration and interpretation will be needed to deepen understanding in this emerging field.

3

Conceptual Frameworks for Environmental Peacebuilding

3
Conceptual Frameworks for Environmental Peacebuilding

Peacebuilding has traditionally been guided by rational choice theory, which emphasizes the calculation of costs and benefits to achieve cooperation and maintain peace. However, more recently, this approach has been challenged by critical peacebuilding studies, which shift the focus toward local contexts and grassroots perspectives (Dresse et al., 2018). Among these critical approaches, environmental peacebuilding has gained increasing prominence. It explores the environment's dual role, both as a potential source of conflict and as a powerful pathway for sustainable peace.

At the center of environmental peacebuilding lies the idea of conflict transformation. This approach rests on the belief that cooperation can transform conflict into collaboration. Key to this transformation is identifying shared needs and interests. Through joint efforts to address common environmental challenges, trust is built, and mutual understanding is enhanced. This demonstrates that unity provides the strongest path to consensus (Elgoibar et al., 2016). In this context, environmental resources themselves become the tools for resolution. This forms the foundation of what is broadly referred to as environmental peacebuilding. This framework, thus, emphasizes the resolution of conflict through environmental cooperation (Maas et al., 2013).

Realizing this transformative potential, however, requires more than cooperative frameworks. The core function of environmental peacebuilding extends beyond technical solutions. It must also address the political dimensions of natural resource management. Since failure to dismantle existing power asymmetries can hinder cooperation and perpetuate conflict, environmental peacebuilding must also involve confronting governance issues and inequalities to foster inclusive and sustainable peace (Aggestam and Sundell-Eklund, 2014). As this approach expands, it provides

communities with constructive, nonviolent mechanisms for conflict resolution (Carius, 2006).

Empirical evidence shows a strong link between environmental factors and global conflict. Between 40 to 60 percent of conflicts worldwide are connected to environmental drivers such as resource scarcity, climate change, environmental degradation, and disputes over control of natural resources. In the past decade, one in four global crises was rooted in natural resource disputes (UNEP, 2025). Internationally, 40 percent of armed conflicts have been triggered by the exploitation of these resources (GIZ, 2019). This statistic indicates that environmental factors not only trigger conflicts but also exacerbate existing tensions and create conditions that make disputes harder to resolve.

Beyond triggering initial conflicts, environmental risks are increasingly recognized as threat multipliers that extend and intensify conflict. According to the United Nations Environment Program (UNEP) 2009, conflicts involving natural resources are twice as likely to relapse within the first five years of a peace agreement. Grievances over resource access, the exclusion of marginalized communities, and weak governance structures drive these persistent tensions. Environmental peacebuilding, in this regard, emerges as a strategic approach to reconcile opposing groups by addressing disputes rooted in environmental mismanagement.

In understanding environmental peacebuilding, it is important to clarify key peacebuilding concepts. 'Peace' is commonly divided into two types: 'negative peace', which is the absence of open conflict, and 'positive peace', which exists when basic human needs are fulfilled through social justice, equitable opportunities, and fair distribution of power and resources (Galtung, 1969). Peacebuilding refers to a comprehensive and transformative process that removes the root causes of conflict and builds sustainable, self-reinforcing structures that prevent a return to violence (Boulding, 1978; Galtung, 1969; Wright, 1942).

Within academic literature, environmental peacebuilding is defined in various ways. Conca and Dabelko (2002) and Bruch and Morley (2023) describe it as the integration of environmental management and cooperation into peacebuilding strategies. Politically, shared environmental concerns across borders or communities can serve as starting points for dialogue, building trust, and fostering co-benefits for both peace and sustainability (Conca and Dabelko, 2002; Carius, 2006). Overall, environmental peacebuilding supports post-conflict stability by weaving natural resource management into broader peacebuilding frameworks.

The concept of environmental peacebuilding transcends the conventional understanding of inclusion. It maintains that agents who are at high levels of risk associated with environmental change, yet politically discriminated such as women must be empowered to take on new responsibilities (Ensor et al., 2025). Ignoring their access to peacebuilding initiatives is found to worsen systemic discrimination such as gender-based violence and exploitation (United Nations, 2025). Beyond removing women-specific climate-related security risks, environmental peacebuilding ensures women's participation and leadership in climate conservation and climate-change adaptation projects. Women's participation is, therefore, attributed to the prevention of and protection from climate-induced risks and a factor to promote recovery and reconciliation (UN Women, 2025).

Besides women, environmental peacebuilding attempts at inclusion of marginalized individuals and groups on the basis of race, ethnicity, disability, etc., through the adoption of an intersectional lens. Youth are also a significant group that is conventionally ignored yet is important to harness the full potential of peacebuilding and environmental peacebuilding at large (Gaston et al., 2025).

International organizations such as the United Nations, the World Bank, and the International Union for Conservation of Nature (IUCN) support these perspectives. They define environmental peacebuilding as a process that promotes sustainable governance of natural resources to achieve long-term peace and development. These institutions emphasize inclusive dialogue, cooperative frameworks, and conflict-sensitive environmental programming as central to the success of peacebuilding efforts.

Rather than a purely technical or policy-driven approach, environmental peacebuilding prioritizes collective responses to shared environmental challenges as pathways to durable peace. At its core, this means facing shared challenges together, healing divisions through cooperation and transforming common environment concerns into a foundation for lasting peace.

3.1. Dimensions of Environmental Peacebuilding

According to Ide et al. (2021), environmental peacebuilding functions primarily along three dimensions: security, livelihood and economy, and politics and social relations. These conceptual foundations manifest in practice through distinct but interconnected dimensions.

a. Security Dimension: Managing natural resources in fair, inclusive, and sustainable manner is the key to source of stability rather than conflict. Inclusion of all voices, particularly those often marginalized, in decisions about land, water, and forests helps build trust, reducing tension, preventing exploitation, and replacing competition with cooperation. Sustainable use of resources in these contexts ensures that communities are not just surviving today but are secure for the future. In this way, environmental peacebuilding strengthens human security by turning shared resources into shared solutions.

b. Livelihood and Economic Dimension: The environment that is protected and shared fairly creates real opportunities for people to earn a living. Healthy land tends to lead to better harvests, clean water supports farming and fishing, and forests can bring income through tourism or local crafts. When people see their economic security visibly linked to the land, they have greater inventive to protect it rather than fight over it. Fair access to these resources helps reduce poverty and gives communities hope, supporting both livelihoods and a stronger, more stable economy.

c. Political and Social Relations Dimensions: Shared environmental problems like water shortages, deforestation, or pollution do not stop at borders or care about politics, they affect everyone. When groups that mistrust each other face the same threat, it opens a door for cooperation. In such cases, working together to plant trees, share water sources, or restore land can shift how people see one another and create space for dialogue. These small acts of cooperation can rebuild broken ties and grow over time, turning the environment from a shared problem into a shared purpose.

3.2. Environmental Peacebuilding as a Tool for Cooperation

Resource management across international boundaries, cooperation treaties among nations, and community-based natural resource management practices are some of the existing tools for cooperation that contribute to environmental peacebuilding.

Transboundary resource management serves as a catalyst for establishing cooperation among countries and reducing the probability of conflicts. Initiatives like the Nile Basin Initiative and Mekong River Commission bring together countries that share water resources, working toward the common goal of achieving sustainable development and cooperation among states (Zareie et al., 2021). These frameworks create platforms for dialogue and joint decision-making that help prevent disputes before they escalate. However, the need to be aware of existing power asymmetries is essential for effective resource sharing.

At the international level, cooperation treaties focus on nurturing collaboration among nations through formal agreements. Notable examples include the Amazon Cooperation Treaty, which promotes sustainable development among Amazon Basin countries, and the Southern African Developemnt Community (SADC) Protocol on Shared Watercourses, aimed at managing transboundary water resources in Southern Africa. Other significant frameworks, such as the Escazú Agreement and the Andean Community Agreement on Environmental Protection, emphasize environmental democracy and regional cooperation (Maihold and Reisch, 2021). These initiatives collectively work to enhance resource management, promote sustainability, and ultimately contribute to peace and stability in conflict-affected regions.

At the grassroots level, community-based natural resource management serves as a vehicle for peacebuilding by fostering societal engagement for protection of environmental resources for the common good (Leach et al., 1999). This engagement creates a sense of collaboration that enhances dialogue, encourages participatory approaches to solving problems, draws on indigenous knowledge, and establishes knowledge networks (Sultana et al., 2019). By ensuring inclusion of people from all walks of society together for shared benefits, community-based natural resource management ultimately helps reduce conflicts at the local level.

Additionally, various global mechanisms, policy commitments, and programs have worked to introduce and institutionalize environmental peacebuilding at multiple levels and in different ways. For instance, the UNEP has recognized the linkages between environmental deterioration and insecurity, encouraging a focus on environmental peacebuilding (Dalmer, 2021). This reflects UNEP's commitment to addressing complex, interconnected challenges in conflict settings. By utilizing the UN's peacebuilding mechanisms, UNEP's interventions integrate the environment into peacebuilding efforts. Key practices include collecting essential data on environmental impacts, analyzing this information to show its relevance to peacebuilding, and implementing initiatives for sustainable resource management. Through these efforts, UNEP plays a crucial role in enhancing collaboration among stakeholders and emphasizing the need for local engagement and sustainable practices.

Apart from organizations, several treaties and agreements play instrumental roles in the environmental peacebuilding processes. One such example is the Paris Agreement, which aims to bring countries together in fighting the impacts of climate change. It enhances environmental peacebuilding by encouraging collaborative efforts to reduce greenhouse gas emissions and build resilience, recognizing that sustainable resource management is essential for long-term peace and security. The

agreement establishes frameworks for Nationally Determined Contributions (NDCs), provides financial and technical support to vulnerable countries, and encourages international cooperation to ensure that climate actions are ambitious and inclusive. Ultimately, it links environmental well-being to global stability as environmental harm affects all corners of the world.

The other notable initiative for environmental peacebuilding can be taken as the Convention on Biological Diversity (CBD). It aims to conserve biological diversity, ensure sustainability in its use, and encourage fair sharing of benefits from genetic resources (Glowka et al., 1994). By enhancing collaboration among nations and engaging local communities, it works with local people to protect their ecosystems and livelihoods. This approach not only addresses environmental degradation but also cultivates trust and cooperation, reducing tensions over shared resources. This ultimately paves the path for generating harmony where human needs are fulfilled with the conservation of the environment.

For example, there are several initiatives toward environmental peacebuilding globally. One such program is the Middle East Water Scarcity Initiative, which brings together countries sharing transboundary water resources to extend collaboration and maintain peace in the region (Ide et al., 2018). For example, Turkey, Syria, and Iraq have worked together over the Euphrates and Tigris River basins to manage scarce water resources for mutual benefit. Similarly, Israel and Jordan have collaborated to address water scarcity by establishing a water regime, launching desalination projects, and forming a joint committee under their peace treaty. Another notable initiative is the Mekong River Initiative, which frames cooperation among Cambodia, Laos, Vietnam, and Thailand to address common ecological problems. According to the Mekong River Commission's annual report (2019), the program enhances regional cooperation in protecting major natural resources through integrated monitoring and management strategies, such as the State of the Basin Report and the Drought Management Strategy. Promoting stakeholder engagement and transparent decision-making, it empowers communities to work together in mitigating the impacts of hydropower projects and climate variability. These examples demonstrate that cooperation among countries over shared resources can be a successful approach to peacebuilding (Vink, 2018) even though power asymmetries become visible at times.

Based on the review of existing literature above, a few key insights emerge. First, there is growing recognition of environmental peacebuilding in various policy documents, frameworks, and institutional responses, though not all of them explicitly use the term ‘environmental peacebuilding’. Organizations like UNEP, the World

Bank, and IUCN have integrated environmental cooperation into their peacebuilding strategies, while treaties such as the Paris Agreement and the CBD promote collaboration on shared environmental challenges that contribute to peace and stability.

Second, sound environmental governance arrangements and formal and informal resource-sharing mechanisms and practices, both across nations and among local communities, are essential to promote environmental peacebuilding. Successful tools include transboundary resource management (like the Nile Basin Initiative and Mekong River Commission), cooperation treaties, and community-based natural resource management that brings diverse groups together. Real-world examples from the Middle East Water Scarcity Initiative and Mekong River Initiative demonstrate that cooperation over shared resources, when it involves transparent decision-making and community empowerment, can effectively contribute to peacebuilding.

Third, understanding the connections between environment, security, and livelihood is crucial to mitigating environmental conflicts and violence and advancing environmental peacebuilding. Environmental peacebuilding strengthens human security by turning shared resources into shared solutions through fair and sustainable management; it creates economic opportunities and reduces poverty by giving communities reasons to protect rather than fight over resources; and it opens doors for cooperation among groups that mistrust each other, creating space for dialogue and rebuilding broken ties. This approach must go beyond technical solutions to address power imbalances, governance issues, and the inclusion of marginalized groups, particularly women and youth to achieve genuine conflict transformation and positive peace.

4

An Overview of Environment Related Laws, Policies, and Frameworks in Nepal

4

An Overview of Environment Related Laws, Policies, and Frameworks in Nepal

This section reviews Nepal's environmental governance architecture through the lens of environmental peacebuilding. Rather than assessing policies individually, the analysis examines how existing laws and frameworks collectively shape conflict sensitivity, equity in resource governance, and opportunities for cooperation across communities and government levels. The section is divided into two main sections. The first section outlines the key policies and laws that promote environmental peacebuilding in Nepal. The second section presents the existing policy gaps, overlaps, and institutional challenges within Nepal's environmental peacebuilding framework.

Nepal's environmental policies gained momentum following the democratic revolution of 1990, which prioritized governance reforms, decentralization, and sustainable development as essential components of effective environmental management. During this period, Nepal actively engaged with the international community by signing and ratifying key agreements such as the 1992 Rio Declaration on Environment and Development (adopted on 12 June 1992), the 1997 Kyoto Protocol to the United Nations Framework Convention on Climate Change (acceded to on 16 September 2005), and the 2015 Paris Agreement to the United Nations Framework Convention on Climate Change (signed on 22 April 2016 and ratified 5 on October 2016). These international commitments significantly have shaped Nepal's environmental policymaking process, which has predominantly followed a top-down approach guided by experts and aligned with global norms (Thakuri et al., 2025).

The government of Nepal initiated the formulation of specific policies, Acts, laws, and regulations aimed at environmental protection and sustainable resource

management. The legal and policy framework regarding environmental peacebuilding implicitly focuses on conflict-sensitive climate change adaptation, integrating local participation in natural resource management, and promoting sustainable livelihoods. These approaches contribute to the prevention and transformation of resource-related conflicts. While these documents do not explicitly use the term 'environmental peacebuilding', they align with its core principles by addressing resource-related conflicts, empowering marginalized groups, and promoting cooperative natural resource management, which are essential for fostering long-term social cohesion and environmental peace. The following sections examine the key policies and laws that support the advancement of environmental peacebuilding in Nepal.

4.1. Review of Laws and Policies Relevant to Environmental Peacebuilding

1. The Constitution of Nepal, 2015

The Constitution of Nepal, 2015, Article 30 enshrines the fundamental right of every citizen to live in a clean and healthy environment. In Articles 51(g) and 51(j) of the Directive Principles of the State, there is a provision towards equitable resource use, intergenerational sustainability, indigenous rights, and social inclusion. Similarly, in Article 57 and Schedule 8, local governments are granted authority over natural resources management and empowerment of grassroots stewardship. Additionally, in Article 59, there is a provision of ensuring natural resource revenues are fairly shared among the three tiers of government, which promotes environmental justice and reduces the risk of conflict in resource-sensitive area (Government of Nepal, 2015).

2. Water Resources Act, 1992

The Water Resources Act, 1992 provides the foundational legal framework for the ownership, utilization, conservation, management, and development of water resources in Nepal, recognizing all water resources as state property. The Act prioritizes water use for drinking and domestic purposes, followed by irrigation, agriculture, hydropower, industry, and other uses, while requiring licensing for most commercial and large-scale uses. It promotes collective management through the formation of Water Users Associations, regulates water allocation and dispute resolution, and empowers the government to develop, acquire, or transfer water resource projects in the public interest. The Act also incorporates environmental safeguards by prohibiting water pollution, setting quality standards, and mandating that water use should not cause substantial adverse environmental impacts such as floods, landslides, or soil erosion, thereby supporting sustainable and equitable water governance in Nepal (Government of Nepal, 1992).

3. Nepal National Biodiversity Strategy and Action Plan, (2014-2020)

The Nepal National Biodiversity Strategy and Action Plan (NBSAP) for 2014-2020 was a strategic framework to conserve Nepal's biodiversity and ensure its sustainable use for the resilient ecosystems. It aimed to translate CBD targets into national actions by promoting local livelihoods, supporting eco-friendly development, and establishing fair benefit-sharing mechanisms from biological resources. This plan was developed through extensive stakeholder consultations and served as a guide for government agencies, NGOs, and other partners in managing biological resources. The plan functioned as a guiding framework rather than legally binding instrument (Government of Nepal, 2014).

4. Local Government Operation Act, 2017

The Act defines the rights, duties, and responsibilities of federal, provincial, and local governments in disaster management provision, environmental conservation and protection, land management, and natural resource management. It also clarifies the authority of municipalities/rural municipalities to form local laws, regulations, and criteria for conservation of protected areas and species, environmental pollution and hazard control, and solid waste management. Furthermore, local governments are supported through federal environment and disaster management units to assist vulnerable communities during disasters (Government of Nepal, 2017a).

5. National Natural Resources and Fiscal Commission Act, 2017

This Act created a commission to resolve disputes over natural resource revenue between local and provincial government levels. It aims equitable distribution by mandating transparency in the allocation, taking into account social tensions due to unequal distribution, and consults experts and the local bodies. Additionally, it establishes equitable bases for the mobilization of natural resources and aims to enhance local ownership, leading to social cohesion in environmental practices (Government of Nepal, 2017b).

6. Disaster Risk Reduction and Management Regulations, 2019

The regulations operationalize the Disaster Risk Reduction and Management Act, 2017 by providing detailed procedures, standards, and institutional roles for effective disaster management implementation. It clarifies responsibilities, fund management, and coordination mechanisms among state institutions, communities, and non-state actors. By translating the Act's broad mandates into actionable rules, the regulations strengthen institutional accountability, enhance intergovernmental coordination, and support timely, transparent, and standardized disaster risk reduction and management

practices across Nepal (Government of Nepal, 2019a).

7. Environmental Protection Act, 2019

The Environment Protection Act, 2019 comprehensively emphasizes the need for a clean environment and healthy life for all living beings in Nepal. The Act provides provisions for climate change adaptation planning at national, provincial, and local levels. It also mandates public disclosure of studies on environmental risks and biodiversity impacts. Similarly, this Act also allows engagement in carbon trading with foreign governments, organizations, commercial bodies, or the private sector as established by international treaties (Government of Nepal, 2019b) that will reward the natural resource protection actions.

8. Forest Act, 2019

This Act was primarily formulated and enacted to guide the management of the various regimes of Nepal's forests. It aims to promote sustainable forest management by involving local communities and establishing legal frameworks for conservation and utilization of forest resources. It addresses challenges such as illegal logging and climate change while providing guidelines for community participation, biodiversity protection, and forest governance. Additionally, provisions of the Article 44 addresses climate change adaptation, mitigation, and carbon storage, with provisions for distribution of dividends derived from Climate Change (Government of Nepal, 2019c).

9. National Land Policy, 2019

The policy provides a base for the equitable distribution of benefits obtained from land and its resources. The primary objectives of this policy are ensuring the security of land rights, promoting sustainable agriculture, and food security, conserving the environment, minimizing the adverse effects of disasters, reducing poverty, and enhancing the living standards of rural and urban communities. It recognizes environmental preservation and climate change risk mitigation as an approach for enacting the Act (Government of Nepal, 2019d).

10. Local Adaptation Action Plans for Action (LAPA), 2019

Nepal updated its framework for Local Adaptation Plans for Action (LAPA) to integrate climate resilience into the planning and budgeting processes for local governments. The objective of this framework is to focus on development and construction at the local level to build a climate-resilient society. It emphasizes climate change adaptation and disaster risk reduction in local development and natural resource management processes. The framework promotes mainstreaming climate change considerations into local planning which support community resilience and

reducing vulnerability-driven conflict risks. (Government of Nepal, 2019e).

11. National Climate Change Policy, 2019

The objective of National Climate Change Policy 2019 is reducing the risk of climate change impacts and providing policy guidance for developing a resilient society at various levels. The policy aims to address climate-related inequalities by recognizing the systemic harm caused by the unequal impacts of disasters such as floods, landslides, and extreme weather events. It focuses on controlling climate-induced diseases through preparedness, forecasting, and response mechanisms. It emphasizes equitable access to clean drinking water, and proper waste management at business, hospital, and household level. In addition, the policy also highlights the importance of continuous climate research to inform decision-making and developing technologies to reduce carbon and other greenhouse gas emissions. Regular monitoring of rivers, wetlands, avalanches, and other sensitive ecosystems is recommended to assess risks. Furthermore, it calls for fair mobilization of domestic and international climate finance, with 80 percent of funds allocated to local-level implementation for effective and inclusive climate action. Collectively, Nepal's climate policies demonstrate strong commitments to adaptation, inclusion, and decentralization, but they largely treat environmental risks as technical challenges rather than potential drivers of social conflict (Government of Nepal, 2019f).

12. National Environment Policy, 2019

This policy aims to attain sustainable development by maintaining balance between development and environment conservation. It safeguards citizen's right to clean environment through pollution control, waste management, and promotion of green initiatives, urban green spaces, and ensuring environmental justice. Provisions include research and capacity building for environmental protection and management and equitable resource use across generations. It emphasizes collaboration among the three tiers of government, civil society, community, public and private sector, and it promotes public participation, equitable resource access, and economic sustainability (Government of Nepal, 2019g).

13. National Forest Policy, 2019

This policy envisions managing the forest, conservation areas, watersheds, biodiversity, flora, and fauna in a sustainable and participatory approach. The policy aims to strengthen community involvement, sustainable forest management, and equitable benefit sharing in light of federalism. However, the climate change is not explicitly prioritized in the policy objectives (Government of Nepal, 2019h).

14. Environment Protection Regulations, 2020

The Environment Protection Regulations were formulated under the authority granted by the Environmental Protection Act, 2076 (2019). It aims to address various environmental issues, promote sustainable development, and ensure that environmental considerations are integrated into development projects and activities. The Regulations detail the requirements for environmental impact assessment, the responsibilities of various stakeholders, and the procedures for obtaining environmental clearances. It also specifies the obligations for monitoring and reporting on environmental quality, penalties for non-compliance, and mechanisms for public participation in environmental decision-making processes (Government of Nepal, 2020a).

15. National Health Care Waste Management Standards and Operating Procedures, 2020

This document defines structured roles for federal, provincial, and local governments in managing health-care waste which promotes public-private partnerships. Additionally, it emphasizes training, capacity building, and sensitization of all staff (from managers to cleaners), and establishment of Health Care Waste Management (HCWM) Committees at all levels (Government of Nepal, 2020b).

16. National Water Resources Policy, 2020

This policy aims to provide integrated policy oversight for developing and managing all water resources in Nepal, across the three levels of government. Its long-term vision is 'economic prosperity and social transformation through multi-dimensional, equitable, sustainable development and multiple uses of water resources'. In keeping with the government of Nepal's priority of economic development, the policy has a focus on hydropower, large-scale water storage and irrigation projects, and inter-basin transfers. It includes high-level strategies to develop the capacity of institutions and people in the water resources sector needed to realize the economic development vision (Government of Nepal, 2020c). This will be the key to addressing hydropower conflicts in Nepal.

17. Nepal Foreign Policy, 2020

The fundamental objective of this policy is safeguarding sovereignty, territorial integrity, independence, and promoting economic wellbeing and prosperity of Nepal. It is also aimed at contributing to global peace, harmony, and security. It commits to promoting global peace and justice through active participation in multilateral forums, recognizing that resource and climate-related tensions must be addressed to sustain peace, especially in fragile regions. For transboundary resources, the policy enhances

cooperative and equitable relations with neighbors, encouraging joint governance of shared ecosystems like rivers and forests. It explicitly emphasizes water and climate diplomacy, with aiming to secure its national interests while fostering ecological cooperation (Government of Nepal, 2020d).

18. Second Nationally Determined Contributions (NDC), 2020

The second NDC of 2020 addressed the shortcomings of the Intended Nationally Determined Contribution (INDC) 2016 as it made specific references to inclusive climate governance and conflict-sensitive renewable energy development. It mandates gender responsive and participatory approaches, requiring Free, Prior and Informed Consent (FPIC) for affected communities in hydropower and other renewable energy and clean energy projects (Government of Nepal, 2020e). FPIC is seen as an important tool in conflict prevention during infrastructure development.

19. National Adaptation Plan 2021-2050

The aim of this plan is to integrate mitigation and adaptation programs to reduce the risk of climate change and include government policies, programs, and plans across sectors and at all three tiers of government. It sets out short-term priority actions to 2025, as well as medium-term priority programs to 2030 and long-term adaptation strategic goals to 2050. It aims to assist Nepal to better integrate actions and strategies to address climate risk and vulnerability in development planning and implementation. The adaptation plan includes agriculture and food security, forestry, ecosystem and water resource promotion, conservation, energy, climate resilient urban health, drinking water and sanitation, disaster management, research, innovation, and development. It recognizes women, indigenous peoples, and persons with disabilities as 'vulnerable to current and projected climate hazards'. The objectives reference engaging with indigenous peoples in participatory watershed conservation, indigenous knowledge-centered tourism, gender equality programs, and people-centered early warning system (Government of Nepal, 2021a).

20. National Framework on Climate Change Induced Loss and Damage (L&D), 2021

This framework provides the definition of loss and damage in context of Nepal and prioritizes the need for international finance and methodological framework and approaches to avoid climate risks. It also aims to strengthen policies aimed at reducing climate-induced loss and damage (L&D) in the country and support Nepal's second NDC and National Adaptation Plan (NAP). It intends to support policymakers in appreciating the challenges involved in the assessment process, the need for taking measures to develop a system that will help deal with the residual impacts of climate-related stressors that cannot be or have not been avoided. It quantifies

climate-induced disasters' economic losses, and psychological impacts, especially on vulnerable groups. It mandates public participation and hearing to ensure inclusive dialogue in environmental decision-making (Government of Nepal, 2021b).

21. Nepal Long Term Zero Carbon Emission Strategy, 2021

This strategy aims to achieve net-zero emissions by 2045. It emphasizes clean energy (hydropower, solar energy, and biogas, among others), sustainable agriculture, forest conservation, and international cooperation on climate change mitigation and adaptation (Government of Nepal, 2021c).

22. Vulnerability and Risk Assessments (VRAs)

Vulnerability and Risk Assessment (VRA) to help NAP was initiated to assess vulnerability and risk at the national, physiographic, provincial, municipal, and sectoral levels. It provides relevant information on social and structural vulnerabilities and risks triggered by the interaction of climate change and socio-economic, governance, political and cultural norms and practices. The framework also offers a range of adaptation options for reducing root causes of vulnerability and risk, including enhancing social inclusion and reducing gender disparity (Government of Nepal, 2021d).

23. The Sixteenth Plan, (2024/25-2028/29)

The Sixteenth Periodic Plan of Nepal (2024/25 – 2028/29) aims to address poverty, economic disparity, and social exclusion while promoting good governance and social justice. Its primary targets include increasing economic growth, reducing poverty, and improving the Human Development Index. The plan outlines strategies for economic base strengthening, financial system development, and human resource development to achieve its long-term vision of a prosperous and equitable society (Government of Nepal, 2024).

24. Nationally Determined Contributions (NDC), 2025

The revised policy document outlines higher targets to further reduce net greenhouse gas emissions as set in NDC 2020 in a business-as-usual scenario. The document includes sectoral goals for energy, land use and forestry, waste management, and adaptation and estimated cost for mitigation targets through 2035. It emphasizes the need for cooperation with both China and India for managing shared risks and implementing equitable benefit-sharing mechanisms for hydropower projects to ensure local communities' benefit (Government of Nepal, 2025).

4.2. Policy Gaps, Overlaps, and Institutional Challenges in Nepal's Environmental Peacebuilding Framework

The review of existing policy frameworks demonstrates that Nepal has made considerable progress in legislative and policy development by integrating climate adaptation, environmental protection, and community-based natural resource governance with significant focus on food security, healthcare, education, and economic and infrastructure development. Despite this robust legal and policy framework addressing environmental management, a significant gap remains: Nepal has yet to adopt a dedicated policy for advancing environmental peacebuilding and addressing environmental conflicts and violence. While existing policies such as the Constitution of Nepal, 2015, the Environment Protection Act, 2019, and the National Natural Resources and Fiscal Commission Act, 2017 incorporate elements that implicitly support environmental peacebuilding principles such as equitable resource distribution, local participation, and conflict-sensitive approaches, these provisions remain fragmented across multiple policy documents without a unified strategic vision.

The absence of a dedicated environmental peacebuilding policy creates several challenges. First, the scattered nature of relevant provisions across various legal instruments makes it difficult for implementing agencies to recognize and prioritize peacebuilding dimensions in their environmental work. Second, without explicit recognition of environmental violence as a distinct challenge requiring targeted intervention, resources and attention remain inadequate for addressing the root causes of resource-based conflicts. Third, the lack of an integrated framework means that the three levels of government often operate without coordinated strategies, leading to inconsistent implementation and missed opportunities for synergy.

In contrast, an integrated legal and policy framework specifically designed for environmental peacebuilding could bridge these gaps by establishing clear institutional mandates, coordination mechanisms, and implementation guidelines across all levels of government. Such a framework would not only consolidate existing provisions but also introduce innovative approaches tailored to Nepal's unique context of environmental conflicts, particularly in areas experiencing resource scarcity, climate-induced displacement, and community tensions over land and water access. Furthermore, a dedicated policy would facilitate more effective monitoring and evaluation of peacebuilding outcomes, ensure adequate budget allocation, and strengthen accountability mechanisms.

The current policy landscape mainly reveals several critical gaps that undermine

effective environmental peacebuilding programming in Nepal:

4.2.1. Lack of Conflict-sensitive Climate Adaptation Planning

Existing climate policies overlook climate risk assessment in interventions. Both governmental and non-governmental initiatives, including infrastructure development, resettlement programs, and water management schemes, often ignore potential conflict risks, which may escalate local tensions. Without legally binding conflict-sensitive planning, climate adaptation measures may heighten social divides rather than resolve them, undermining environmental peacebuilding. In practice, the influence of bureaucratic and local elites can further shape how these policies are implemented, sometimes limiting equitable participation and benefit-sharing. Such oversights trigger resource competition in vulnerable areas. Water management schemes that ignore existing power dynamics and resource access patterns may benefit certain groups while marginalizing others, intensifying grievances and social fragmentation. Infrastructure projects, such as roads, irrigation systems, and hydropower developments, implemented without conflict analysis, can disrupt traditional resource use patterns, displace communities, or create new tensions over access and benefit-sharing. Without mandatory conflict-sensitive planning mechanisms, environmental peacebuilding practitioners have limited policy support for advocating conflict assessments and must rely on voluntary guidelines that lack enforcement.

4.2.2. Lack of Policy Support for Climate Migrants

Although the National Framework on Climate Change Induced Loss and Damage (L&D), 2021 recognizes climate-induced displacement, Nepal lacks policies or legislative provisions ensuring compensation for climate migrants or addressing their resettlement and livelihood restoration following environmental calamities such as landslides, floods, and glacial lake outbursts. Without a legal framework, this gap increases the risk of conflicts between migrant and host communities.

Climate-induced displacement creates complex social dynamics in both origin and destination communities (IOM, 2025). In origin areas, out-migration can disrupt traditional resource management systems, weaken social cohesion, and create governance vacuums that lead to resource degradation and conflicts among remaining members. In destination areas, the influx of climate migrants intensifies competition for land, water, employment, and social services, potentially triggering tensions between host and migrant populations. Without legal provisions ensuring compensation, livelihood support, and rights protection, climate migrants remain

vulnerable to exploitation, discrimination, and marginalization. Environmental peacebuilding programs addressing these dynamics face significant challenges without policy frameworks that clarify responsibilities, establish grievance mechanisms, and ensure equitable resource access for both displaced and host communities. This gap also limits practitioners' ability to advocate for preventive measures and long-term solutions to climate-induced displacement.

4.2.3. Weak Enforcement of Environmental Justice Mechanisms

While Nepal's existing legal framework acknowledges environmental rights and includes provisions for public participation and access to information, it fails to outline a clear institutional framework for addressing environmental grievances arising from unequal resource distribution, pollution impacts on marginalized communities, or exclusion from decision-making. The judiciary, though empowered to hear environmental cases, often lacks the technical capacity and resources to address complex webs of environmental conflicts that intersect with social, economic, and political dimensions (World Bank, 2019).

This enforcement gap significantly undermines environmental peacebuilding initiatives. Without strong accountability mechanisms, powerful actors such as private companies, political elites, or dominant social groups can exploit natural resources with impunity, perpetuating environmental violence and resource-based conflicts. Environmental peacebuilding programs that aim to build trust, promote dialogue, and establish cooperative resource management face significant challenges when communities perceive that violations go unpunished and grievances remain unaddressed. Weak enforcement also discourages community participation in environmental governance, as people lose faith in formal institutions and may resort to informal or confrontational approaches. Furthermore, the absence of effective enforcement mechanisms makes it difficult to ensure that peacebuilding agreements and collaborative resource management arrangements are respected and sustained over time.

4.2.4. Misallocation of Financial Mechanisms

Nepal relies heavily on international funding, including grants, loans, and technical assistance, to support its climate change initiatives from various sources. The Environment Protection Fund was established under the Environment Protection Act, 2019, designed to manage climate change and other environmental issues. However, the allocation and disbursement of funds are often dependent on government budget allocations and donor responses. The financing provisions outlined in Nepal's climate

policies and plans are not legally binding. Although these documents set targets and goals and highlight the need for financial resources, they do not establish enforceable legal obligations for the government or other stakeholders to allocate specific funds for climate interventions.

4.2.5. Insufficient Recognition of Indigenous Land and Resources Rights

Although land and natural resources are part of identity of indigenous communities of Nepal, the legal instruments regarding national parks and protected areas lack full recognition of the traditional land tenure and customary rights of indigenous peoples and local communities within these areas. While the National Land Policy, 2019 asserts that the state holds eminent domain over land as a natural resource, it also explicitly mandates the protection of land that communities have traditionally utilized in a collective manner. To support this, the policy requires local governments to maintain and update records of such communal and traditional lands. Furthermore, the policy recognizes informal land tenure, which encompasses individuals and communities who have occupied land for long periods but lacks formal evidence or legal documentation. However, normative conservation policies often conflict with these goals, as the National Land Policy, 2019 also prioritizes the protection of forest areas and stipulates that land in environmentally or historically sensitive areas cannot be diverted for other uses. This tension between state authority and the protection of forest resources often leads to grievances and conflict with authorities, despite the policy's objective to ensure the judicial distribution of benefits derived from land and natural resources.

4.2.6. Insufficient focus on Gender and Social Inclusion in Climate Policies

Significant efforts are being made to mainstream Gender Equality and Social Inclusion (GESI), marginalized, landless, indigenous, and vulnerable communities, particularly in areas such as clean energy generation, mini- and micro-hydropower, sustainable forest and national park management, and promotion of sustainable agriculture. However, climate-related policies like the National Climate Change Policy, 2019 are not informed by the specific problems, challenges, and opportunities faced by different groups in the context of climate change. Additionally, the policy's GESI chapter focuses on addressing the vulnerabilities of women and marginalized groups but does not recognize these groups as contributors and agents of change (Shrestha and Gurung 2022).

4.2.7. Fragmented Coordination between Government Levels

Laws such as the Local Government Operation Act, 2017 aim to promote decentralization but create confusion regarding governance boundaries across the three tiers of government. This poses problems in managing transboundary natural resources due to competing claims over resources made by multiple local governments. Furthermore, the Act overlooks the need for special attention to climate change risks and required adaptation intervention measures. Local governments have environment and disaster management units, but due to poor capacity, timely and effective responses for vulnerable communities during disasters remain challenging.

4.2.8. Weak Environmental Health and Safety

The provisions in the Environment Protection Act, 2019 are inadequate regarding safeguards for human health and safety in environmental contexts. It mandates environmental impact assessments, but enforcement is inconsistent. While the National Health Care Waste Management Standards and Operating Procedures, 2020 provide guidelines on environmental health and safety, the actual enforcement and consistent monitoring of compliance across all health-care facilities remain major challenges due to limited resources, trained personnel, and political will.

Based on the review of existing policies, the current policy landscape, while well-intentioned, reflects a reactive rather than proactive approach to environmental peacebuilding. Policies address environmental protection, climate adaptation, and resource management as separate technical issues without adequately recognizing their interconnections with conflict dynamics and social cohesion. This compartmentalized approach limits transformative change and prevents the development of preventive strategies that could address environmental tensions before they escalate into violent conflicts.

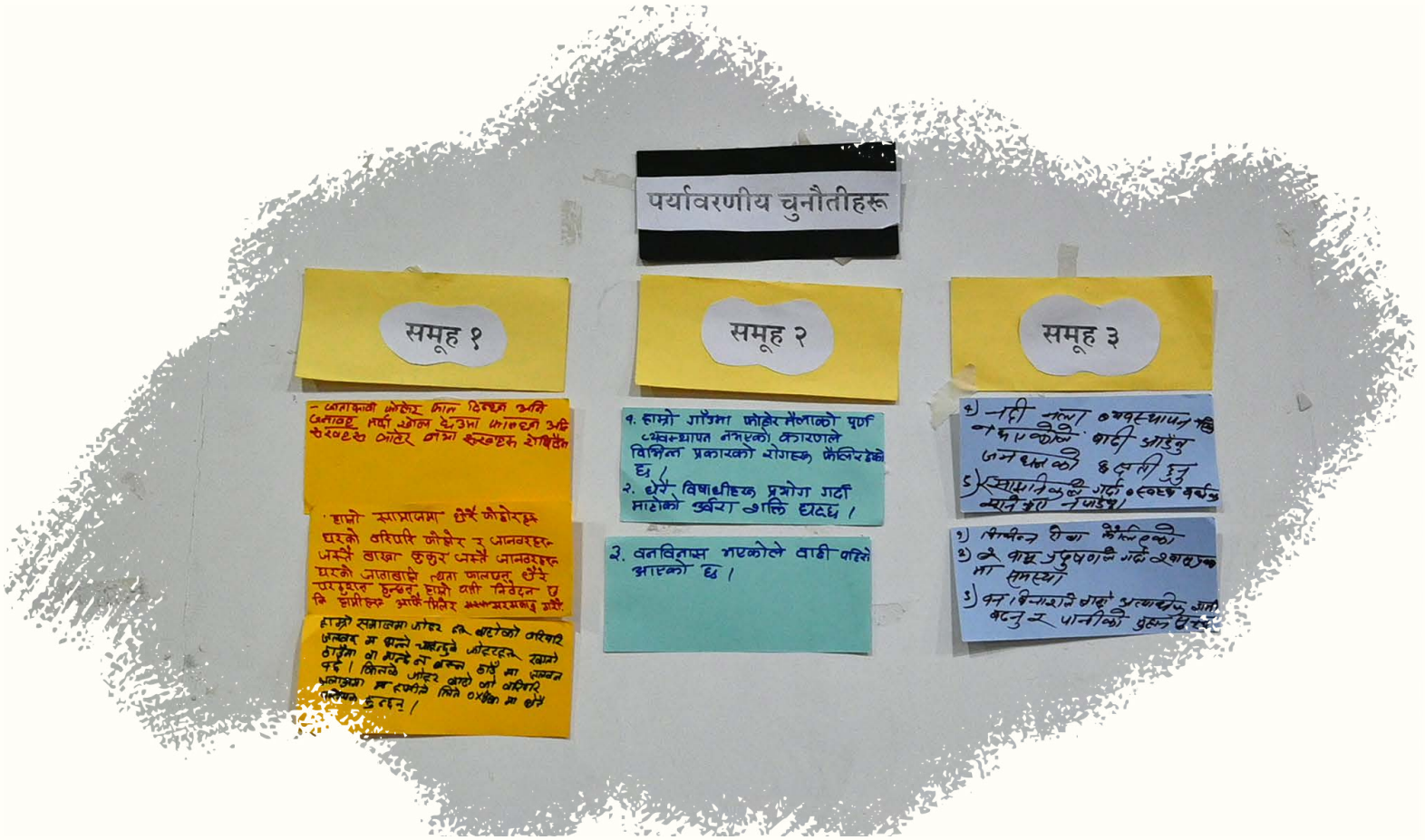
The identified gaps create a challenging environment for environmental peacebuilding programming in Nepal. Practitioners have to navigate fragmented policy frameworks, advocate for conflict-sensitive approaches without strong policy backing, address climate displacement without legal support mechanisms, and promote environmental justice without robust enforcement systems. These challenges are compounded by limited inter-agency and intergovernmental coordination, inadequate funding for peacebuilding initiatives, and insufficient recognition of environmental peacebuilding as a distinct field requiring specialized expertise.

Nepal needs a comprehensive environmental peacebuilding policy that

consolidates existing provisions and establishes a clear roadmap for building peace through environmental cooperation and justice. Such a policy should mandate conflict-sensitive planning in all environmental and climate interventions, establish legal protections and support systems for climate migrants, strengthen enforcement mechanisms for environmental justice, and create coordination structures across all government levels. Additionally, it should recognize the specific vulnerabilities of marginalized groups and ensure their meaningful participation in environmental governance and peacebuilding processes. Only through such comprehensive policy reform can Nepal effectively harness environmental peacebuilding to address resource conflicts, build community resilience, and contribute to lasting peace and sustainable development.

5

Key Findings



5

Key Findings

This section outlines key insights from media monitoring, stakeholder interviews, and youth workshops/intergenerational dialogues on environmental peacebuilding in the study sites. It analyzes how environmental hazards, governance gaps, and social inequalities intersect to shape the livelihood of communities and influence peace at local and national levels.

The section is divided into three parts. The first part highlights community perspectives and environmental experts' views on environmental violence and peacebuilding, derived from in-depth interviews and key informant interviews. The second part presents findings based on data gathered through media monitoring on this topic. The final part covers insights on environmental violence and traditional environmental violence coping mechanisms gathered through the youth workshops and intergenerational dialogues.

5.1. Stakeholders' Perspectives

Perspectives shared by local and national-level stakeholders are centered around five major themes: a) environmental violence and hazard exposure, b) social inequality in access to natural resources, c) transboundary water inequality and cross-border tensions, d) governing of resources and policy gaps, and e) community-based resource management as a peacebuilding mechanism. This section presents key findings under these themes while acknowledging that there are overlaps between these listed themes.

5.1.1. Environmental Violence and Hazard Exposure

The study identified a wide range of environmental issues that community members perceive not only as environmental threats but also as drivers of conflict,

insecurity, and social instability. Participants had a very fluid understanding of environmental violence as evidenced by the fact that across the three study locations, pollution, deforestation, flooding and drought, riverbed mining, and human-wildlife conflict emerged as the most persistent concerns (see Table 2). Participants stressed that the impact of this violence is becoming more severe and localized with every year.

Pollution, particularly air, river and soil pollution, was reported as major forms of environmental violence across all study areas. Air pollution emerged as one of the most significant environmental violence identified during the study. The pollution was mainly attributed to the smoke coming out of local factories, chimneys, and the haphazard disposal of waste in public areas. Participants, from Bara and Sunsari, emphasized the growing air pollution and its impact on health, particularly respiratory problems among local residents. One of the participants from Bara explained:

> *In Prasauni alone, there are 45 factories, and across the broader industrial corridor, over 100 industries operate. Air pollution from these industries, especially dust and smoke emissions at night, has made it difficult for residents to breathe, particularly in Simara area and nearby locations.*

Therefore, air pollution in these areas has physically affected the people that are likely to have long-term impacts on their health and families as a whole. This will eventually build to grievances and trust erosion in the governance infrastructures that might potentially lead to conflict in the future as people resist any industrial activity near their settlements.

River pollution was another pressing concern observed and experienced by the participants across the three districts. Participants mentioned contamination of the rivers like Sirsiya and Khutiya rivers in Bara and Parsa districts, Tinau river in Rupandehi district, and Sunsari river in Sunsari district caused primarily by industrial waste discharge and public negligence in waste disposal. This pollution has adversely affected communities living nearby, with foul odor from the river making daily life difficult. A respondent from Rupandehi noted:

> *Many household garbage in Butwal is collected and dumped in the Tinau river. The river used to be so pure that we could use it for various purposes like irrigation, but now we cannot rely on it due to increasing pollution.*

Similarly, a participant from Bara stated:

> *The Sirsiya river is very polluted. All the worshipping materials and flowers are also*

dumped after major festivities like Chhath. We ourselves aren't careful enough so how can we blame others?

This demonstrates that the participants are aware of their own culpability and responsibility in the ongoing environmental violence that is beginning to affect everyone.

Soil degradation due to excessive use of chemical fertilizers was also highlighted, especially in Sunsari and Bara districts. It was said that the use of chemical fertilizers has resulted in degradation of soil quality, which has affected the production of agricultural products. One participant from Sunsari shared:

> *Many farmers in the Bhokraha Narsing area use excessive chemical fertilizers, which is degrading the soil quality and affecting human health when people consume crops grown in that soil. The ward* [office] *is now providing training on natural fertilizers and organic farming to reduce dependency on chemicals, restore soil health and produce healthy organic crops.*

This shows the importance of local-level government taking proactive steps in stemming the long-term decline in soil quality that has also been identified by the participants.

Another form of environmental violence that was consistently raised across all three districts was deforestation. While most of the concerns focused on the haphazard cutting of trees in the forest, there were also some concerns on the tree-cutting around community areas to fulfill community people's own household use. Ongoing deforestation due to developmental activities such as road construction and internal migration were also said to be the reasons behind it. This, as per the participants, has resulted in landslides, desertification of land, affected the rainfall pattern, and ultimately reduction of the agricultural production along with the changing weather pattern such as extreme heat and low water table due to irregular rains in many areas. In this context, a participant from Bara expressed:

> *Madhesh Province has only about 3% forest coverage. People know how to cut trees but are not committed to planting them. Agricultural land is rapidly being converted into concrete settlements.*

Loss of forests and agricultural farm land in the Tarai is likely to exacerbate not only competition for resources but also in terms of food security overall.

Participants also reported that changing rainfall patterns have intensified both

flood and droughts in the study locations, with dry spells and flood caused by irregular rainfall. In Sunsari, participants shared that heavy rainfall often leads to overflowing rivers and damaged paddy fields. At the same time, riverbed mining in the Chure region, particularly in Rupandehi and Sunsari, were identified as a major environmental violence. Participants reported that excessive and haphazard extraction of sand and gravel has depleted water levels, dried arable land, and caused severe erosion. These practices have also contributed to tensions among communities and local government in Suddhodhan Rural Municipality over the use and control of river resources. As per the respondents, local government benefits from riverbed mining while restricting community access to the same resources, negatively affecting the local livelihood. As one of the locals in Rupandehi explained:

> *My agricultural land is near the riverbank. Due to excessive sand mining, the river has become deeper and wider. I always fear an erosion will take away my land.*

This is the fear that people have for whom land is not only source of food on the table but only the tangible wealth that can be converted into cash in times of emergencies.

Human-wildlife conflict was described as another persistent challenge in the Koshi Rural Municipality of Sunsari district. Communities living in and around the Koshi Tappu Wildlife Reserve rely heavily on the wetland ecosystem for livelihood. Despite years of co-existence, encounters between humans and wild animals continue to cause loss and damage to the community. Several participants reported frequent crop damage caused by wild animals such as wild buffaloes (arna), elephants, and wild boar that cross the reserve boundary in search of food. Elephants, in particular, have become a major source of fear and economic loss among the local people, damaging the crops and in some instances destroying homes and claiming the lives of the local people. As one male participant from Koshi Rural Municipality explained:

> *Wild animals destroy our crops every season. The most dangerous of all animals is elephants. Unlike other smaller animals, they cannot be driven away. Around 26–27 people have been killed by elephants in the area so far.*

Besides economic and loss of lives due to wild animals, lack of access to nearby forest resources within the conservation areas is also a source of discontent for people.

Despite the government's intervention such as installation of solar fence, participants stated that these measures remain largely ineffective in keeping out the

animals from the settlement. They further highlighted that the government's relief guidelines cover damage and attacks by only a limited list of animal species, leaving many households uncompensated for their loss.

The concerns raised by the participants through IDIs were also reflected in the expert interviews. While the participants focused on visible and immediate impacts of environmental violence, experts explained how such violence can trigger resource conflicts within communities. They highlighted that environmental violence and resource conflicts in Nepal emerge from various institutional, environmental, and social factors. Weak coordination among various governmental mechanisms and top-down policy approaches often excludes the voices from the ground, creates mistrust between the government and local communities. Several of them emphasized that resources conflict in Nepal stem from inequitable natural resource distribution and exclusionary governance. As one of the experts noted:

> *Most of our policies follow a top-down approach, which often excludes local and grassroots voices from the decision-making process.*

This top-down approach takes a more harmful path at local level through elite capture of resources and fostering of resentment among communities dependent on those resources.

This also directly reflects the frustration expressed by the participants in cases such as riverbed mining, haphazard waste dumping, and use of the forest, where uneven resources distribution and regulatory practices left them feeling excluded from the decisions of the local government that has an impact over resources and environment of their locality.

Table 2: Summary of Environmental Violence Issues Shared by Stakeholders

Forms of Environmental Violence	Factors Leading to Environmental Violence
Air pollution	Industrial factory emissions, chimney smoke, open waste burning, wildfires
River pollution	Industrial waste discharge, household waste, religious offerings and waste
Soil pollution	Excessive chemical fertilizer
Deforestation	Road construction, internal migration, and settlement expansion
Flood	Extreme rainfall, river overflow, and poor river management
Drought	Changing and irregular rainfall patterns

Water scarcity	Drying sources, over-extraction of sand and gravel, Chure hills degradation
Riverbank erosion/ land loss	Sand/gravel mining
Groundwater depletion	Haphazard installation of deep bore wells
Human-wildlife Encounters	Proximity to wildlife reserves, ineffective fencing, overlap of human and animal territories
Extreme heat and cold	Increasingly irregular and extreme weather patterns
Waste mismanagement	Weak municipal waste management and improper household waste disposal
Degraded agricultural land	Overuse of chemicals; soil erosion

To provide an overview, the core environmental issues, along with their root causes and impacts, are summarized in Table 3 below.

Table 3: Summary of the Core Environmental Violence Issues, Its Root Causes and Impacts

Forms of Environmental Violence	Factors Leading	Factors Leading
Air pollution	Industrial factory emissions, chimney smoke, haphazard waste disposal in public areas	Increasing respiratory illnesses, difficulty breathing (especially at night), deteriorating living conditions in industrial corridors
River pollution	Industrial waste discharge, household waste dumping, disposal of religious offerings	Foul odor, loss of river usability for irrigation and domestic purposes, declining water quality, health risks
Soil pollution/ degradation	Excessive use of chemical fertilizers	Reduced soil fertility, declining agricultural productivity, dependence on chemical inputs
Deforestation	Road construction, settlement expansion, internal migration, household fuel needs	Landslides, desertification, low water tables, reduced rainfall reliability, declining crop yields, extreme heat
Flood	Extreme rainfall, river overflow, embankments near [international] borders, deforestation	Inundation of houses and farmlands, displacement, crop destruction, loss of shelters
Riverbank mining	Haphazard and excessive sand and gravel extraction, weak regulation	River deepening and widening, erosion of farmlands, drying of nearby land, livelihood insecurity, conflict with local governments
Human-wildlife Conflict	Proximity to wildlife reserves, ineffective fencing, habitat overlap	Crop destruction, house damage, injuries and deaths, economic losses, fear and insecurity among community people

The empirical evidence presented above suggests that environmental violence in Nepal has stemmed from several interconnected factors rooted in governance failures and development pressures. First, weak environmental governance and inadequate enforcement of regulations have allowed industries and individuals to pollute air and water, dispose of waste improperly, and exploit natural resources without accountability. Second, unplanned and rapid development, including road construction, settlement expansion, and internal migration, occurs without proper environmental planning, leading to deforestation, soil degradation, and habitat destruction. Third, resource extraction and exploitation through industrial activities, riverbed mining, excessive use of chemical fertilizers, and overexploitation of forests prioritize short-term economic gains over long-term environmental sustainability. Additionally, inadequate waste management systems result in the disposal of industrial, household, and religious waste in public areas and water bodies, creating severe health risks and environmental degradation.

Climate change and natural hazards further intensify environmental stress in Nepal. Extreme rainfall, flooding, and river overflow exacerbate resource scarcity and trigger displacement, crop destruction, and conflicts over water and arable land. Socioeconomic pressures have also played a critical role, as communities dependent on natural resources for survival often lack alternative livelihood options, driving unsustainable practices like deforestation and land overuse. Human-wildlife conflict adds another layer of complexity, as expanding human settlements encroach on wildlife habitats, leading to crop destruction, livestock losses, and retaliatory actions that harm both wildlife and ecosystems. These factors are deeply interconnected where weak governance enables exploitation, development pressures increase extraction, climate impacts worsen vulnerabilities, and economic needs perpetuate harmful practices, and this ultimately is creating a cycle of environmental violence.

5.1.2. Social Inequality in Access to Natural Resources

Findings from the IDIs revealed deep disparities in access to natural resources, particularly among marginalized groups such as Dalit, women, and people with disabilities. This was especially evident in Sunsari and Bara districts, where participants reported systematic exclusion of marginalized groups from equitable access to water, land, and forest resources. As one male participant from Sunsari stated:

> *"Many communities do not have equitable access to natural resources. Marginalized groups, such as the landless, poor, or backward communities, face challenges in accessing land for cultivation and getting irrigation water on time.*

Disputes over access to and control of natural resources are frequently translated through these inequalities. The IDI findings show that conflicts intensify during the dry season, particularly over water distribution due to drying water sources. Communities in the downstream face severe challenges when upstream communities block or overuse water resources, leading to scarcity and heightened tensions between settlements. A respondent from Bara in this context said:

> *Community conflicts related to the use of water are emerging. In the upstream area of the Dudhara River, a dam has been constructed to store water, resulting in reduced recharge in downstream areas.*

As stated above, beyond social inequality, environmental conflicts in Nepal are driven by geographical power dynamics, seasonal resource scarcity, and infrastructure decisions that favor certain communities over others. The findings reveal that people with larger landholdings in upstream locations can control water access, creating structural advantages that leave downstream farmers struggling, particularly during dry seasons when resources become critically scarce. This upstream-downstream power imbalance is further institutionalized through infrastructure projects like dams that benefit some communities while directly reducing resource availability for others. These factors also intersect with social marginalization to create a complex web of resource conflicts where geographical positioning, timing, and development priorities determine who survives and who struggles. This is clearly a form structural violence with the potential for future conflict.

5.1.3. Transboundary Water Inequality and Cross-Border Tensions

Participants, especially from Bara district, raised some concerns about transboundary resource conflicts with India (see table 4). Participants reported experiencing transboundary issues in Thori Rural Municipality, where a small river, Thute Khola, changed its natural course towards India. Because of this change, people on the Nepali side were restricted from growing paddy as people on the Indian side also relied on the same water resource. As both sides depended on the river for farming, cross-border tension and conflict emerged over water use. Similarly, the embankment system constructed by India near the Gaur-Bairgania border area with India caused floods on the Nepal side, causing tensions between local communities of Nepal and India. Participants expressed a strong sense of disempowerment, as the control of usage of water became a power game between two nations, while Nepal's regulatory authorities remained too weak to intervene effectively.

These lived experiences of transboundary issues were strongly supported by experts interviewed in Kathmandu and the other study locations. They acknowledged the growing transboundary dimension of water-related conflicts and linked them to broader structural and geopolitical challenges. Experts pointed out that upstream actions in neighboring countries, such as dams and diversion projects, affect downstream water availability in Nepal, impacting irrigation and the livelihoods of communities. On the issue of transboundary rivers that originate in China and run through Nepal to India, one expert emphasized:

> *Nepal also shares transboundary rivers such as Koshi and Arun with China and India. So, Nepal should have proper water-sharing policies agreed upon by all transboundary countries, and every action should be implemented within the agreed guidelines and policies to avoid potential conflicts around water sharing with neighboring countries.*

The transboundary nature of Nepal's major river systems has created complex interdependencies that require careful diplomatic and technical coordination. Nepal, positioned between two large and powerful neighbors, China and India, faces vulnerabilities regarding upstream water management decisions. When China constructs dams or diverts water from rivers originating in Tibet, or when India builds barrages and irrigation projects on shared rivers, the upstream and downstream impacts on Nepali communities can be severe and immediate. These impacts include reduced water flow during critical agricultural seasons, altered flooding patterns that affect traditional farming practices, changes in sediment flow that influence soil fertility, and increased vulnerability during dry periods when water becomes even more scarce.

The absence of comprehensive, legally binding, and updated water-sharing agreements that reflect the changed context exacerbates these challenges. While some bilateral frameworks exist between India and Nepal, such as the Kosi Agreement (1954, amended 1966), the Gandak Agreement (1959, amended 1964), and the Mahakali Treaty (1996), they are often limited in scope and lack robust enforcement mechanisms. This creates uncertainty for Nepali communities who depend on predictable water flows for their livelihoods but have little influence over upstream (or downstream) decisions that fundamentally affect their water access. From an environmental peacebuilding perspective, this situation represents a missed opportunity for subregional cooperation that could benefit all parties. Improved collaborative water management frameworks have the potential not only prevent conflicts but also create opportunities for joint resource planning, shared early warning systems for floods and droughts, and coordinated climate adaptation strategies.

Moreover, the lack of strong transboundary water governance contributes to domestic tensions within Nepal. When communities experience water shortages or flooding that they attribute to upstream actions by neighboring countries, frustration can be directed at the Nepal government for its perceived inability to protect national interests. This erodes trust in governmental institutions and can fuel nationalist sentiments that complicate diplomatic efforts. Additionally, within Nepal itself, communities in different parts of river basins may compete for limited water resources, creating internal conflicts that are ultimately rooted in transboundary water management failures. Addressing these challenges requires not only stronger bilateral and multilateral agreements, but also transparent communication with affected communities about transboundary water issues and their inclusion in advocacy efforts for equitable water-sharing arrangements.

Table 4: Summary of Environmental Conflicts Shared by Stakeholders

Environmental Conflict	Drivers of Conflict
Upstream-downstream water disputes	Unequal control over water resources, drying and reduced water sources
Community vs local government over mining	Weak enforcement of environmental rules and regulations by the local government
Community vs industry over pollution	Health impacts on residents, declining quality of rivers and water sources
Inequitable access to natural resources	Exclusion of marginalized groups such as Dalits, women, and landless households
Seasonal conflicts during dry periods	Water scarcity; reduced irrigation flow during peak agricultural seasons
Transboundary water tensions between powerful neighbors—Nepal, China, and India as shared by the experts	Scarce water resources and competing national interests
Conflict within community resources management user groups like community forestry user groups (CFUGs)	Elite capture, unequal benefit sharing and decision-making within groups

5.1.4. Governing of Resources and Policy Gaps

Despite having policies for environmental protection and natural resource management across all three tiers of government in Nepal, poor implementation of these policies at the local level was frequently highlighted by participants in the IDIs. Participants described how disaster and natural resource management regulations,

such as Environmental Impact Assessment and Initial Environmental Examination (EIA/IEE) procedures, often remain ineffective due to weak institutional coordination, limited technical capacity, and inadequate enforcement mechanisms. A participant from Rupandehi noted:

> *While policies related to forests and rivers do exist, their implementation is poor, and oversight mechanisms are weak.*

Expert interviews further supported these community experiences. Experts emphasized that governance challenges stem from unclear mandates across the three tiers of government in Nepal, with undefined divisions of responsibilities and overlapping institutional roles creating confusion and inefficiency. They have described this as the 'three Cs' problem, a lack of coexistence, coordination, and collaboration among government levels. As one expert explained:

> *There is a problem in all 3Cs between the tiers of government: coexistence, coordination, and collaboration. They don't acknowledge each other's existence and there is no clear division of roles and duties at the policy level.*

Experts also pointed out that policy gaps have further worsened these challenges. For example, the Water Resources Act, 1992, originally formulated under Nepal's centralized government system, and has not been amended since. Following the 2015 constitution, which restructured Nepal into three tiers of government, the Act has not been updated to reflect this changed governance context. As a result, local and provincial governments are often unclear about their legal authority to implement environmental laws and regulations, creating gaps in accountability, implementation, and monitoring and evaluation. While a new Water Resources Bill was proposed in 2024 and has recently been passed by the House of Representatives, it has not been fully enacted into law[1], leaving these governance and implementation challenges unresolved.

Both IDI participants and experts highlighted that these governance gaps create confusion, weaken trust between communities and authorities, and allow harmful practices to continue unchecked. They emphasized the need for inclusive governance, clear mandates, better coordination, and meaningful community participation to address environmental violence from the grassroots level.

5.1.5. Community-based Resource Management as a Peacebuilding Mechanism

Several respondents emphasized that Community-based Natural Resource

Management (CBNRM), especially models like community forestry and local user groups, can serve as an effective mechanism to manage natural resources, promote local governance and peacebuilding, and foster cooperation while resolving resource conflicts at the grassroots level. According to experts, these models promote shared ownership and responsibility while encouraging environmental sustainability among communities. As one expert noted:

> *Community-based natural resource management models, such as the Upabhokta Samiti* [user group model], *have played a significant role in promoting local governance and peacebuilding by enabling communities to manage resources like ponds, drinking water systems, temples, and forests. These models foster local ownership and collective responsibility.*

Respondents further suggested that community-led mechanisms and local-level judiciary systems within local government provide platforms for conflict resolution and help maintain peace within communities.

However, the effectiveness and success of these local mechanisms, as experts point out, depend heavily on their inclusive practices. Many existing community-based resource management systems are inclusive in technical terms due to mandatory provisions adopted by the government, but in practical terms, marginalized groups are often excluded from taking important leadership roles and securing concrete benefits from local natural resources. Such practices not only perpetuate existing inequalities but also limit the community's potential to build societal peace through fair management of shared natural resources. As one expert observed:

> *Many groups lack inclusivity, and internal power hierarchies often lead to disputes and competition for leadership positions.*

This observation reveals a significant gap between the idealized vision of CBNRM and its actual practice in Nepal. While community forestry and user groups are often celebrated as successful examples of participatory resource governance, their implementation frequently reflects and reinforces existing social hierarchies. In many cases, leadership positions and decision-making authority are dominated by members of higher castes, wealthier households, or male community members, while women, Dalits, indigenous groups, and economically marginalized individuals are systematically excluded or relegated to passive roles. When these marginalized groups attempt to assert their rights or challenge existing power structures within resource management institutions, conflicts emerge that undermine the peacebuilding potential of these models. Furthermore, when benefits from community resources such as timber sales from community forests or income from eco-tourism are

distributed inequitably, resentment builds among excluded groups, creating tensions that spill over into broader community relations. Therefore, while CBNRM models hold significant promise for environmental peacebuilding, their success depends critically on genuine inclusivity, transparent governance, and mechanisms that actively challenge rather than reproduce existing inequalities.

5.2 Coverage of Environmental Violence Issues in Nepali Media

This section presents an analysis of media coverage on emerging environmental issues in Nepal between March and November 2024. A total of 52 news articles were collected from a range of national and provincial newspapers, including The Himalayan Times, The Kathmandu Post, eKantipur, MyRepublica, Rising Nepal, Nepal News, Khabarhub, and Butwal Today. These newspapers were selected to capture diverse perspectives on environmental violence across the country. While the selection of news portals was not based on a formal sampling framework, analyzing multiple media sources allows for a comprehensive understanding of how environmental issues are framed, prioritized, and disseminated nationally. The following themes emerged as the most recurring in media coverage (see also Table 5 for a summary).

5.2.1. Climate-Induced Disasters and Disaster Response Cycle

Climate-induced disasters such as floods and landslides are found as the most frequently reported environmental issues across the reviewed new portals. The media coverages show that monsoon- related hazards, especially floods and landslides, have been frequently experienced in Nepal. The articles emphasized the loss of lives, displacement of families, destruction of agricultural land and damage of public infrastructure like roads and bridges, across the country. For instance, Butwal Today published a news article on 1 September reported flooding and inundation in Kanchanpur, in the far-west Nepal, caused by continuous rainfall.[2]The article stated that 45 houses were inundated and around 70 people were displaced, who were later sheltered in a nearby school. Similarly, another news article published on ekantipur highlighted that continuous rainfall triggered a landslide that destroyed the Bagkhor settlement of Hupsekot in Nawalpur, displacing 18 families.[3] The article further reported that these families have been living in temporary huts for the past three years and also highlighted the drying up of water resources in the Chure region. Some articles additionally reported prolonged dry spells during monsoon and rising temperatures leading to school closures in Sunsari district.[4] Additionally, articles also warned about the growing risks of Glacial Lake Outburst Floods (GLOF) due to rising temperatures.[5]

A notable pattern identified across this media coverage is the government's reactive response. The news sources reveal that the government's disaster response has largely focused on immediate relief and rescue such as deploying water tankers in response to drought and water scarcity, using excavators to remove road blockages from landslides, deploying security forces for rescue and relief, issuing alerts, and declaring disaster zones. While such measures are essential for providing immediate relief, other important interventions such as preventive planning, establishing early warning systems, and implementing community-based disaster preparedness remain limited. This gap poses significant challenges. Responding only after crises arise not only increases vulnerability but can also intensify competition over scarce resources, which may further exacerbate local conflicts. Hence, it is important to plan ahead and involve local communities in disaster management decision-making processes.

5.2.2. Pollution and Waste Management Failures

Waste and pollution emerge as another significant and persistent issue, particularly in Kathmandu, Birgunj, Biratnagar, Janakpur, and other major cities. Several news articles described urban areas in Nepal struggling with uncollected garbage, open dumping, and poor sanitation. Other news coverages also highlight worsening air pollution in winter due to industrial smoke, vehicle emissions, and waste burning.

Plastic waste was another major issue. News articles reported that Nepal produces nearly 1,000 tons of plastic waste daily,[6] much of which are dumped into the rivers due to poor regulations, weak law enforcement, lack of awareness, and reliance on low-cost plastic packaging. Although there are some initiatives like Koshi Province's solid waste management project and trash boom (floating barriers to contain and capture floating solid waste) in Balkhu river, in Kathmandu Valley, offers some efforts and improvements, these are small fixes but not long-term solutions.

Furthermore, industrial pollution also persists as a major concern, especially along the Parsa-Bara industrial corridor. Media reports showed wastage from factories being directly discharged into nearby rivers such as the Sirsiya river, posing health risks to the locals and harming the cultural values. This has also come across repeatedly in the in-depth interviews, where participants from Bara and Sunsari reported locals experiencing health impacts like respiratory problems due to the air and river pollution in their areas.

Overall, media coverage suggests that Nepal's pollution and waste management challenges stem not only from increasing waste generation, but also from poor enforcement of environmental regulations and uncoordinated institutional

responses. The polluters, especially industrial polluters, are rarely held accountable, and institutional responses remain weak and inadequate. From a peacebuilding perspective, such environmental problems create tensions between industries and the communities affected by pollution, harm the overall harmony of the community, and erode trust in regulatory institutions.

These tensions manifest in multiple ways across Nepal's industrial zones. In several locations of Bara, participants reported that communities already find themselves in active conflict with local industries over pollution-related grievances (see Table 6). They have organized protests, filed complaints with local authorities, and in some cases blocked factory operations to demand accountability. However, these community actions often go unaddressed or receive only perfunctory responses from the authorities, further deepening the sense of injustice and abandonment. The lack of effective grievance redressal mechanisms at all levels means that pollution victims have limited avenues for seeking compensation or remediation, forcing them to resort to confrontational approaches that can escalate into violence.

Moreover, the unequal power dynamics between industrial actors and affected communities exacerbate these conflicts. Industries often have political connections and economic leverage that enable them to continue polluting activities with minimal consequences, while marginalized communities lack resources and influence to effectively advocate for their rights. When communities witness industries violating environmental standards without facing penalties, their faith in governmental institutions diminishes, creating fertile ground for social unrest and undermining the legitimacy of the state. These dynamics not only threaten local peace and stability but also hinder broader environmental peacebuilding efforts, as communities lose confidence in formal institutions and collaborative approaches to environmental governance.

5.2.3. Water Scarcity and Resource Depletion

Water scarcity, especially in Madhesh province, appears in multiple news articles. According to media coverage, local communities face water shortages for household needs and irrigation and lack access to water tankers. Media sources report inadequate water supply systems. Articles also describe dying springs, reduced river flows, and groundwater depletion due to deforestation, construction activities, and Chure degradation, including illegal mining, landslides, and forest fires, which further impair recharge and reduce groundwater availability, worsening water scarcity in downstream plains like Madhesh. Such scarcity affects daily life, agriculture, and community well-being, signaling a deeper challenge in water governance. These

media narratives align with field findings from Bara, where participants described how downstream community experience water scarcity due to water blockage and over-consumption by upstream resource-using communities.

The noteworthy aspect is that most media coverage highlighted short-term and immediate responses rather than long-term planning by the government. This pattern demonstrates deeper governance gaps where environmental issues are treated as reactions to crises rather than as continuous and coordinated long-term processes. The lack of long-term measures, such as sustainable groundwater management, rainwater harvesting, and community-based resource management, represents, from an environmental peacebuilding perspective, missed opportunities for cooperation, minimizing resource-related tensions, and managing shared resources more effectively.

5.2.4 Other Environmental Issues

Apart from the high-impact issues above, a few news articles also highlighted human-wildlife conflict and haphazard infrastructural development. Although these issues are reported less frequently compared to other environmental concerns, they reveal the wide range of environmental challenges affecting Nepal and underscore the need for greater attention to these growing threats.

The media monitoring reveals that environmental risks in Nepal are interconnected and intensifying due to multiple pressures including climate change, rapid urbanization, and haphazard industrial practices. For instance, deforestation exacerbates flood risks, poor waste management worsens pollution, and water scarcity affects both households and agriculture. These conditions have the potential to escalate into multifaceted and protracted conflicts over essential resources.

The media coverage predominantly highlights reactive governance in the form of fragmented responses that reflect structural weaknesses in Nepal's environmental governance system, including weak inter-agency coordination, lack of technical capacity at the local level, and unclear roles across the three tiers of government. Responding to crises rather than preventing them worsens environmental problems, increases the likelihood of resource conflicts, and erodes public trust, making both environmental sustainability and peacebuilding more difficult.

Despite these challenges, some articles highlight positive initiatives like solid waste management projects and the trash boom in Balkhu river, Kathmandu Valley. These examples demonstrate that institutional and local efforts are possible, even at

small scales. Greater collaboration between institutions, participatory governance, accountability, and preventive planning can help such initiatives expand, reduce environmental risks, and build cooperation and peace within communities and across the nation.

Table 5: Summary of Environmental Violence Issues and Factors Leading to Environmental Violence Highlighted in Media Coverage

Forms of Environmental Violence	Factors Leading to Environmental Violence
Floods and landslides	Continuous heavy rainfall, river overflow, weakened land in hilly areas
GLOF risks	Rising temperatures, climate-induced melting of glaciers
Prolonged dry spells during monsoon	Irregular rainfall, rising temperatures
Extreme heat causing school closures	Rising temperatures
Air pollution	Industrial smoke, vehicle emissions, waste burning
Water pollution (rivers)	Industrial waste discharge
Plastic pollution	High levels of daily plastic waste generation, poor regulations, weak enforcement, reliance on plastic packaging
Waste mismanagement	Uncollected garbage, open (unmanaged) dumping, poor sanitation, weak municipal garbage management systems
Water scarcity	Dying springs, reduced river flows, groundwater depletion, deforestation, Chure degradation (illegal mining, landslides, forest fires)
Human–wildlife conflict	Proximity to wildlife reserves, ineffective fencing, habitat overlap

Table 6: Summary of Environmental Conflict and Drivers of Conflict Highlighted in Media Coverage

Environmental Conflict	Drivers of Conflict
Community–industry conflict over pollution	Industrial waste discharged into rivers causing health risks and harming cultural values
Community protests, complaints, and blockades	Communities organizing protests, filing complaints, and blocking factory operations due to unresolved pollution grievances
Tensions between industries and communities	Power imbalance, industries' political connections, weak enforcement of environmental rules

Competition over water resources	Drying springs, reduced river flows, groundwater depletion, Chure degradation affecting water availability
Increased tension after disasters	Government's reactive response focused on immediate relief rather than prevention

5.3 Insights from the Environmental Violence Mapping Youth Workshops and Intergenerational Dialogues on Environmental Peacebuilding

During the Environmental Violence Mapping Youth Workshops and the Intergenerational Dialogues on Environmental Peacebuilding, the participants identified a range of environmental violence issues directly impacting their daily lives and communities. These issues were not abstract concerns, but problems they were personally experiencing and/or witnessing in their local contexts. The key concerns raised by them can be summarized as follows (Table 7 and 8):

Table 7: Environmental Violence Issues Emerged Through Youth Workshops and Intergenerational Dialogues

Forms of Environmental Violence	Factors Leading to Environmental Violence
Water pollution	Improper waste disposal, industrial discharge
Air pollution	Emissions from factories and vehicles, open waste burning
Soil pollution/soil infertility	Excessive and unmanaged use of chemical fertilizers
Land degradation	Haphazard urban development, unregulated sand/ gravel mining
Flood	Extreme rainfall, river overflow
Drought	Irregular rainfall patterns
Water scarcity/dried sources	Groundwater over-extraction, impacts of riverbed mining on recharge
Extreme heat waves/cold waves	Irregular weather patterns
Wildfires	Hot/dry climatic conditions, forest degradation
Deforestation/illegal logging	Unsustainable harvesting, settlement expansion
Noise pollution	Factories nearby residential areas
Poor drainage	Unplanned urban expansion, inadequate planning of drainage systems
Haphazard infrastructure development	Weak enforcement of regulations and environmental standards

Table 8: Environmental Conflict Issues Emerged Through Youth Workshops and Intergenerational Dialogues

Environmental Conflict	Drivers of Conflict
Irrigation problems	Riverbed mining reducing water flow and disrupting irrigation channels
Competition over water	Drying water sources and low groundwater recharge leading to scarcity

Interestingly, many of the issues raised by workshop participants closely aligned with the findings from IDIs. Similar to the IDIs, pollution, particularly air, water, and soil pollution, emerged as a significant form of environmental violence. Participants, like those in the IDIs, identified factory emissions, poor waste management by both communities and local governments, and excessive use of chemicals as the main causes of pollution. In addition, some participants reported experiencing droughts and floods, expressing that extreme rainfall at times causes river water levels to rise, flooding nearby settlements and damaging crops planted in paddy fields.

Reflecting on historical practices, older participants from the Intergenerational Dialogues shared that in the past, they used to live in close harmony with nature. They described rivers, streams, and lakes as much cleaner and central to daily life. Communities relied on these resources for meeting basic needs such as drinking water, washing clothes and dishes, bathing, and irrigation. People worked collectively to protect and maintain these resources, and waste generation was minimal. Plastic waste was virtually absent, and protecting these resources was seen as a shared responsibility. However, population growth, industrialization, and improper waste management have gradually led to severe water pollution. With limited space for waste disposal, industries and community members began dumping waste directly into water bodies. As one participant from Sunsari remarked:

> *Rivers and rivulets used to be much cleaner, but household waste and industrial exploitation have led to massive pollution of water resources.*

This situation is particularly evident in Bara and Rupandehi districts, where industrial discharge and household waste have been polluting water resources for years.

Participants also shared traditional environmental practices that communities once relied on for sustainable living. These included purifying water using alum (fitkari), cleaning water resources like wells with lime (chun), applying organic fertilizers such as cow dung, and using natural pest repellents made from cow and buffalo urine in agricultural production. As one participant from Bara district recalled:

> *In the past, many households had their own well. We used the same well water for drinking, washing clothes, and even for our cattle. When it was time to clean the well, we would empty out the water using buckets and use chun to clean it.*

Similarly, another participant explained how water was traditionally purified:

> *Nowadays, people use different chemicals and filters to purify water. We didn't have any such options in the past. We relied on fitkari (alum) to purify our drinking water.*

These practices were based on local indigenous knowledge passed down through generations that preserved soil fertility, protected the environment, and did not rely on industrial chemicals. Participants lamented that such knowledge and practices are being lost over time and replaced by chemical fertilizers and unsustainable farming methods. However, limitations/exclusion of traditional methods have to be acknowledged in terms of externally mediated modernization and development of farming practices.

Participants further expressed concern over the environmental degradation they have observed over the years, mentioning problems like water scarcity, deforestation, soil infertility, exacerbated by irregular weather patterns. Their reflections reveal how environmental issues are linked to changes in social behavior. In the past, people collectively cared for natural resources and made efforts to conserve them. Today, however, these communal values and practices are fading, diminishing the community's ability to manage resources sustainably and maintain local peace. For instance, older participants recalled that during paddy cultivation, if water was scarce, they would allow others to use water through raised beds in their fields so everyone could plant their crops. This practice promoted cooperation, prevented disputes, and ensured equitable access to resources. Nowadays, as these cooperative values fade, people fight over irrigation water and prioritize their own needs over helping one another.

The traditional knowledge and practices employed in earlier times were not merely local solutions to environmental problems; they represented a culture of cooperation, shared responsibility, and community solidarity. This collaborative approach to

resource management sustained communities through generations. However, the erosion of traditional knowledge represents a critical loss of peacebuilding capacity in local communities. With diminishing ability to protect and manage resources collectively, the community spirit that once held people together is fading, and so too is the capacity for self-governance over natural resources.

In Nepal, rapid modernization, youth out-migration, and weakening traditional governance institutions have disrupted intergenerational knowledge transfer. Traditional systems of resource sharing, such as community forest management, water allocation through local committees and user groups, and collective decision-making by village elders, are increasingly being replaced by formal, bureaucratic processes that often lack local legitimacy and fail to account for community-specific needs. As these traditional mechanisms weaken, communities become more vulnerable to environmental hazards that are intensifying due to climate change impacts such as erratic rainfall, flooding, and landslides. Without the collective resilience that traditional knowledge systems provided, communities find themselves less equipped to respond to environmental shocks and more prone to conflicts over increasingly scarce resources. Therefore, such erosions of traditional, indigenous knowledge systems and practices risks conflicts while weakening peacebuilding capacity.

6

Key Observations

6

Key Observations

This section summarizes key findings and observations on how environmental violence and conflicts are understood differently by different stakeholders, the actors involved, and the scales at which these processes operate. The analysis also examines the scope and scale of environmental violence across local, provincial, national, and transnational levels; differentiates environmental violence and environmental conflicts as distinct yet interconnected concepts; and reveals how their forms and triggering factors, though separate, are mutually reinforcing. Finally, it traces pathways to environmental peacebuilding through robust environmental governance, efforts to redress social inequality and power asymmetries, and the safeguarding of traditional knowledge and cooperative practices, all vital for transforming environmental challenges into opportunities for cooperation and lasting peace.

6.1 Interpretation of Environmental Violence and Conflict Issues by Different Stakeholders

The data indicate two dominant interpretive frames: environmental violence as a material disruption of livelihood among communities and as governance failures among experts. The community members interpret environmental violence directly through their lived experiences and everyday impacts. They understand environmental violence in terms of visible harm such as declining health due to air pollution, physical insecurity caused by floods and wildlife attacks, decreasing agricultural productivity due to erratic rainfall and degradation, and land loss due to haphazard mining and riverbank erosion. Communities view environmental violence not as a long-term ecological issue but as an ongoing disruption to their livelihoods, safety, and access to basic needs such as land and water. Youth workshop participants similarly expressed environmental violence issues such as pollution, river mining, water scarcity as everyday realities that increase environmental risks. Older participants, in the Intergenerational Dialogues, offered historical perspective and interpreted environmental violence through the loss of traditional practices but emphasizes the community's collective responsibility to preserve resources.

In contrast, experts interpret environmental violence primarily as governance and institutional gaps and weaknesses. They highlight weak coordination among government tiers, exclusionary governance, outdated legal frameworks, and inequitable distribution of natural resources. They consistently link environmental violence to structural factors like top-down policy approaches, poor implementation of laws, and weak accountability mechanisms. This difference reflects a common pattern in environmental governance studies, where communities tend to interpret environmental problems as threats to their livelihoods, while policy actors view them through institutional and structural frameworks (Upreti, 2004; Ojha et al., 2016). This dual interpretation demonstrates that environmental violence is understood as both a governance problem and a material crisis. The linkage between environmental degradation and social mistrust identified by experts also aligns with environmental justice research, where scholars argue that environmental harm becomes contentious when resources, risks, and decision-making power are distributed unfairly (Schlosberg, 2007; Martinez-Alier, 2002).

6.2 A Complex Web of Relationships between Environmental Violence Issues and Their Underlying Causes

The analysis reveals a complex web of relationships between environmental violence issues and their underlying causes, indicating that multiple factors often contribute to a single form of environmental violence, while some root causes simultaneously drive multiple manifestations of violence. This interconnectedness suggests important implications for intervention strategies: addressing one root cause can potentially solve multiple forms of environmental violence. For instance, weak environmental governance and poor enforcement of regulations, a single underlying factor, contributes to air pollution from industrial emissions, water pollution from unregulated discharge, illegal riverbed mining, and deforestation. Similarly, unplanned and rapid development without environmental safeguards simultaneously produces air and water pollution, deforestation, soil degradation, and haphazard infrastructure development. Climate change intensifying natural hazards acts as a threat to multiplier, exacerbating floods, droughts, irregular weather patterns, and water scarcity. Likewise, inadequate waste management systems generate both air pollution (from waste burning) and water pollution (from improper disposal).

Conversely, single forms of environmental violence often emerge from multiple interacting factors. Air pollution, for example, reflects weak governance, industrialization without proper control, inadequate waste management, and

population growth. Deforestation is driven by unplanned development, resource extraction prioritizing short-term gains, population growth and internal migration, socioeconomic pressures, and erosion of traditional resource management practices. Water scarcity results from climate change, deforestation, excessive groundwater extraction, and poor water resource management.

The study identifies critical leverage points where targeted interventions appear capable of yielding cascading benefits. Strengthening environmental governance and enforcement mechanisms demonstrates the potential to simultaneously address air pollution, water pollution, illegal mining, and deforestation. Proper waste management infrastructure reduces both air and water pollution while improving public health. Planned development with environmental safeguards can prevent multiple forms of degradation across air, water, soil, and forest resources. Efforts at addressing Chure degradation through reforestation and mining regulation would simultaneously mitigate floods, landslides, water scarcity, and soil erosion in the Madhesh region of Nepal.

This interconnected nature suggests that environmental violence cannot be addressed through isolated and sector-specific interventions. Instead, the evidence points towards integrated, multi-sectoral approaches that recognize how different forms of violence and their underlying causes interact and reinforce one another. Addressing root causes such as governance failures, inadequate planning systems, and erosion of traditional knowledge has potential to contribute to transformative change that can simultaneously reduce multiple forms of environmental violence, thereby creating conditions conducive to environmental peacebuilding and community resilience.

Table 9: Environmental Violence Issues and Triggering Factors

Environmental Violence Issues	Factors Leading to Environmental Violence
Air pollution (industrial emissions, chimney smoke, haphazard waste burning)	Weak environmental governance and poor enforcement of regulations
Water/river pollution (industrial discharge and household waste disposal)	Chure degradation (illegal mining, landslides, and forest fires)
Soil pollution and degradation (excessive chemical fertilizers)	Unplanned and rapid development without environmental safeguards
Deforestation (tree-cutting for household use, road construction, and settlement expansion)	Haphazard infrastructure development (roads, settlements, and dams)
Floods (extreme rainfall and river overflow)	Resource extraction prioritizing short-term economic gains
Droughts and water scarcity (dried springs, reduced river flows, and groundwater depletion)	Inadequate waste management systems and infrastructure
Riverbed mining (sand and gravel extraction)	Population growth and internal migration
Human-wildlife conflict (crop destruction, property damage, and human casualties)	Industrialization without proper environmental controls
Land degradation and desertification	Climate change intensifying natural hazards
Wildfire	Socioeconomic pressures driving unsustainable practices
Irregular weather patterns (extreme heat waves and cold waves)	Excessive use of chemical fertilizers and unsustainable farming methods
	Erosion of traditional knowledge and cooperative resource management practices

6.3 Actors Engaged and Impacted by Environmental Violence and Conflict

This study has identified a range of actors associated with environmental conflicts and violence in the study areas. Table 10 below provides an overview of key primary and contributing actors responsible for environmental conflicts, while Table 11 next highlights direct and indirect contributors as well as affected actors who may perpetuate environmental violence.

Table 10: Key Actors Responsible for Environmental Conflicts

Primary Actors	Contributing Actors
Upstream communities and large landholders (controlling water access)	Government institutions across three tiers (federal, provincial, and local) with coordination failures
Elite members within community-based resource management groups (CFUGs, water user groups)	Private sector actors in extractive industries
Male community members excluding women and marginalized groups from decision-making	Industrial corridor operators creating pollution without accountability
Local government authorities (making exclusionary decisions on resource allocation)	
State institutions (weak enforcement, unclear mandates, and poor	
Neighboring countries (India and China) making upstream and downstream water-management	
Politically connected individuals capturing community governance structures	

Table 11: Key Actors and Their Roles in Environmental Violence in Nepal

Direct Contributors	Indirect Contributors/ Enablers	Affected Actors with Violence Potential
Industrial factories	Government institutions with weak policy enforcement	Communities forced into unsustainable practices due to lack of alternatives
Manufacturing facilities in industrial corridor	Regulatory bodies failing to hold polluters accountable	Farmers using excessive chemical fertilizers due to soil degradation
Riverbed mining operators (haphazard sand and gravel extraction)	Local governments with inadequate waste management infrastructure	Households dumping waste due to absence of proper disposal systems
Local governments engaged in commercial river mining	Development agencies implementing projects without proper EIA/IEE	People cutting trees for household fuel needs due to energy poverty
Industries discharging waste into rivers	Agricultural extension services promoting chemical-intensive farming	
Corporate actors responsible for air and water pollution	Urban municipalities with poor sanitation systems	
Communities practicing poor waste disposal (household garbage)		

Previous research has demonstrated that the impacts of environmental issues and climate change are experienced disproportionately by women and marginalized and vulnerable groups (Rai et al., 2021). The evidence from this study clearly supports this argument. Marginalized groups, particularly Dalits, women, persons with disabilities, landless households, and small downstream farmers, exhibit disproportionate vulnerability to environmental violence. Their exclusion from resource access and decision-making positions them especially vulnerable to water scarcity, landslides, and pollution.

The findings indicate that community-based resource management groups, primarily positioned as potential mechanisms for local peacebuilding, often reproduce existing social inequalities. The study data show that they often exclude certain people from leadership and distribute benefits unevenly. This aligns with Thoms'

(2008) study that found that leadership in Community Forest User Groups (CFUGs) is dominated by higher-caste, wealthier households, and politically connected individuals, while poor households, women, and Dalits participate only nominally in decision-making and are largely excluded from executive roles with limited access to timber and income from community forests. Similarly, while Pokharel et al. (2007) highlight the overall positive impacts of Nepal's community forestry, they also note persistent issues including elite capture of leadership, unequal benefit-sharing, and symbolic inclusion of women and marginalized groups in CFUGs. These dynamics diminish the ability of such institutions to address environmental violence and prevent conflicts effectively. When key groups are excluded, resource management becomes inequitable, creating grievances that can escalate into local tensions or conflicts over environmental resources.

6.4 Scope and Scale of Environmental Violence

This study demonstrates that environmental violence in Nepal operates across local, provincial, national, as well as transnational levels and it impacts communities in multiple interconnected ways. The study data show localized issues like river pollution and human-wildlife conflict disproportionately affects marginalized groups and women, who are often excluded from decision-making and fair access to resources. At the provincial and national level, recurring events like flood, droughts, and industrial pollution challenges the capacity of governance system, reduce economic productivity, and obstruct public service delivery (Ghimire, 2020; Ehlers et. al., 2025). Similarly, evidence from Thute Khola case illustrates how cross-border water-issues introduces risks that are beyond local communities' ability to solve on their own. In a broader aspect, transboundary issues like shared river management can create political tensions between countries and make governance more complex, with cooperation depending majorly social motives, power status, and institutional capacity (Wei et al., 2022).

6.5 Environmental Violence and Environmental Conflicts: Distinct but Interconnected Concepts

This study suggests that environmental violence and environmental conflicts must be understood separately, and while closely related, that require district analytical frameworks. Environmental violence refers to the degradation, exploitation, and destruction of natural resources and ecosystems such as pollution, deforestation, soil degradation, and water contamination that cause drastic and long-term damage to the socio-economic and ecological cycles of society. However, environmental violence does not necessarily lead to conflict unless people begin to experience

resource scarcity that threatens their livelihoods and survival.

In contrast, environmental conflicts arise when competition emerges over the use, access, control, and exploitation of natural resources. These conflicts can occur among communities (such as upstream-downstream water disputes), between the state and communities (such as disputes over extraction industries or land-use decisions), and among the state, communities, and private sector actors (such as extraction of raw materials from traditional communal lands). Environmental conflicts may be a by-product of environmental violence, for example, when pollution reduces water availability and triggers disputes over remaining resources, or they may stem from unequal distribution and governance failures even when resources are not yet critically scarce. The findings from this study demonstrates two pathways: some conflicts emerged from the cumulative effects of environmental degradation (such as dried springs and reduced river flows leading to irrigation disputes), while others arose from inequitable access and exclusion of marginalized groups even before resources became critically scarce.

6.6 Forms of Environmental Violence and Their Triggering Factors: Separate but Interconnected Elements

It is crucial to distinguish between the forms or manifestations of environmental violence and the root causes or factors that trigger such violence. Forms of environmental violence observed in this study include air pollution, water pollution, soil degradation, deforestation, floods, droughts, riverbed mining, and human-wildlife conflict. These are the visible symptoms or outcomes of deeper systemic problems.

The factors leading to environmental violence, however, are the underlying drivers that create these conditions. Based on the study findings, these triggering factors include: weak environmental governance and poor enforcement of regulations, unplanned and rapid development without environmental safeguards, resource extraction and exploitation prioritizing short-term economic gains, climate change and natural hazards that intensify environmental stress, socioeconomic pressures and livelihood needs that drive unsustainable practices, inadequate waste management infrastructure, geographical power dynamics where upstream actors control downstream access, and the erosion of traditional knowledge and cooperative resource management practices. Understanding this distinction holds significant implications as addressing only the forms of environmental violence without tackling their underlying causal factors will have temporary impacts rather than sustained outcomes.

6.7 Environmental Peacebuilding: Preventing Both Environmental Violence and Environmental Conflicts

Another striking finding of this study is that environmental peacebuilding can be achieved when both environmental violence and environmental conflicts are addressed simultaneously. Environmental peacebuilding operates on two interconnected fronts. First, it seeks to prevent or minimize the risk of environmental violence by adopting precautionary measures such as sustainable resource management, pollution control, climate adaptation strategies, ecosystem restoration, and enforcement of environmental regulations. This preventive dimension focuses on protecting the environment from degradation before it reaches crisis levels. The study revealed significant gaps in Nepal's preventive capacity, with governance responses being predominantly reactive rather than proactive, such as deploying water tankers after droughts occur, using excavators after landslides block roads, and issuing alerts after disasters strike, rather than investing in early warning systems, community-based disaster preparedness, and preventive planning.

Second, environmental peacebuilding focuses on preventing or minimizing environmental conflicts by addressing the social, political, and economic dimensions of resource management. This includes ensuring equitable access to resources, promoting inclusive decision-making, building trust among competing groups, establishing transparent governance mechanisms, and creating platforms for dialogue and cooperation. The study found that even well-intentioned community-based natural resource management models in Nepal, such as community forestry and user groups, often fail to achieve their peacebuilding potential because they reproduce existing power hierarchies, exclude marginalized groups from leadership and benefits, and lack genuine inclusivity. The evidence suggests that effective environmental peacebuilding requires concurrent engagement with environmental degradation and social inequalities that mediate resource scarcity into violent conflict.

6.8 Multi-level Quality Environmental Governance as Prerequisite for Environmental Peacebuilding

This study suggests quality environmental governance as the basis for preventing both environmental violence and conflicts and ensuring effective environmental peacebuilding. However, governance mechanisms will need to be appropriately designed and coordinated across local, national, and international levels to address environmental challenges effectively at their respective scales.

The local-level governance is the correct body to facilitate the prevention and resolution of environmental violence and conflicts observed within communities, ensuring fair and equitable community-based natural resource management practices in community organizations such as community forestry, water user groups, and local resource committees. Since Nepal has already many different established community-based natural resource management mechanisms, their effectiveness depends critically on genuine inclusivity, transparent decision-making, and active participation of marginalized groups including women, Dalits, indigenous communities, and youth. When these local governance structures are captured by elite interests or reproduce existing social hierarchies, they not only fail to prevent conflicts but may actually generate new tensions. Therefore, strengthening of local governance with capacity building, resources, and mechanisms will ensure equitable representation and benefit-sharing.

The national-level governance functions as the central entity to facilitate intergovernmental coordination across the three tiers of government (federal, provincial, and local), promote public-private partnerships for sustainable development, and ensure inclusive citizen participation in natural resource management processes. National governance demonstrates effectiveness when designing and implementing environmentally-friendly development models, reducing environmental damages across all country, private sector, and community activities, and establishing clear mandates and accountability mechanisms. The study identified critical gaps in Nepal's national governance, including the lack of coexistence, coordination, and collaboration among government tiers, as well as outdated policies like the Water Resources Act, 1992 that have not been amended to reflect the federal structure established by the 2015 constitution. The analysis indicates governance gaps point to the need for policy reforms, institutional strengthening, and mechanisms that bridge coordination failures, which are currently hindering effective environmental management.

Transnational or international-level governance operates to facilitate cooperation on issues that transcend national boundaries, including transboundary water resource management (such as the Arun and Koshi rivers shared with China and India), cross-country forest management, addressing multiple climate threats at global, regional, and sub-regional levels, and ensuring shared responsibilities among all signatory parties to protect natural resources. The study found that while Nepal has some bilateral frameworks like the Koshi Agreement and Mahakali Treaty, these demonstrate limited scope, lack robust enforcement mechanisms, and have not been updated to reflect changed contexts. Evidence suggests that transnational governance through

comprehensive, legally binding, and regularly updated agreements shows potential to transform potential sources of conflict into opportunities for cooperation, joint resource planning, shared early warning systems, and coordinated climate adaptation strategies.

6.9 Social Inequality and Power Asymmetries as Root Causes of Environmental Conflicts

A critical finding from this study is that environmental conflicts in Nepal appear fundamentally shaped by social inequality and power asymmetries rather than resource scarcity alone. The research identified systematic exclusion of marginalized groups from equitable access to land, water, forests, and other natural resources. These inequalities are intensified by geographical power dynamics where upstream communities with larger landholdings control water access, leaving downstream farmers struggling, particularly during dry seasons. Infrastructure decisions such as dam construction that benefit upstream areas while reducing downstream water availability appear to institutionalize these inequalities into physical systems that are difficult to challenge.

Moreover, even when community-based resource management institutions exist, they often reflect and reinforce existing social hierarchies, with leadership positions and decision-making authority dominated by elite and privileged community members. This finding suggests that environmental peacebuilding in Nepal appears unlikely to succeed through technical solutions alone, it correlates with the need to confront and dismantle the social, political, and economic structures that create unequal access and perpetuate marginalization. Without addressing these root inequalities, evidence suggests that efforts to manage resources sustainably or build cooperation tend to fail or even exacerbate existing tensions.

6.10 The Erosion of Traditional Knowledge and Cooperative and Community Resilience Decline

An important but often overlooked dimension identified by this study is the observed relationship between traditional knowledge and cooperative practices in environmental peacebuilding, and alongside evidence of their erosion. Older participants from the Intergenerational Dialogues reported how communities historically integrated environmental management into social practices, engaging in collective water source sources, agricultural practices utilizing organic fertilizers and natural pest repellents, traditional water purification methods, and resource-sharing arrangements during times of scarcity, such as allowing neighbors to use

water through raised beds during paddy cultivation. However, rapid modernization, youth out-migration, weakening of traditional governance institutions, and the introduction of chemical-intensive farming and industrial practices have disrupted intergenerational knowledge transfer and eroded these cooperative values. As communal practices fade, people will increasingly prioritize individual needs over collective welfare, fighting over irrigation water rather than sharing it, and losing the capacity for self-governance over natural resources.

This erosion appears particularly significant in the context of intensifying climate change impacts which will require precisely the kind of collective resilience and adaptive capacity that traditional knowledge systems historically demonstrated. Without the community cohesion and cooperative mechanisms that previously facilitative collective action, communities are likely to find themselves less equipped to respond to environmental shocks and more prone to conflicts over increasingly scarce resources. Evidence suggests environmental peacebuilding in Nepal may benefit from efforts to document, revive, and integrate traditional knowledge and cooperative practices with modern approaches, ensuring that historical resource management practices inform current and future resource management strategies.

6.11 Reactive Governance: Perpetuation of Environmental Violence and Missed Peacebuilding Opportunities

A pervasive pattern identified across interviews, media analysis, and workshop discussions is the predominantly reactive nature of Nepal's environmental governance. Rather than investing in preventive planning, early warning systems, sustainable resource management, and community-based preparedness, government responses focus almost exclusively on immediate relief and rescue after crises emerge, deploying water tankers after droughts, using excavators after landslides, and issuing alerts after disasters strike.

This reactive approach not only fails to prevent environmental violence but actually worsens it by allowing degradation to continue unchecked until it reaches crisis levels. It also increases vulnerability and can intensify competition over scarce resources, further exacerbating local conflicts. From an environmental peacebuilding perspective, reactive governance represents a profound missed opportunity. Sustainable measures such as sustainable groundwater management, rainwater harvesting, reforestation programs, community-based disaster preparedness, and inclusive resource planning serve dual purposes, protecting the environment while simultaneously building cooperation, trust, and shared ownership among diverse

community groups.

This reactive pattern suggests deeper structural weaknesses, including weak inter-agency coordination, lack of technical capacity at local levels, unclear roles and responsibilities across the three government tiers, and policy gaps such as outdated laws that have not been updated to reflect Nepal's federal structure. The findings strongly indicate a need for a fundamental shift in governance approach, from crisis response to prevention, from top-down directives to participatory planning, and from fragmented interventions to coordinated long-term strategies. In the absence of such transformation, Nepal will tend towards cycles of environmental degradation and conflict that undermine both ecological sustainability and social peace.

The dynamic relationship between proactive governance and preventive governance, on the other hand, plays a transformative role in environmental peacebuilding. Preventive governance creates predictable, just, and trust-enhancing foundations upon which proactive governance can penetrate deep-seated vulnerabilities. If preventive governance is about cutting communities' exposure to environmental hazards, proactive governance is about transforming the systems that create those hazards. While preventive governance seeks to remove the immediate vulnerabilities, proactive governance supports actions that reform driving forces of long-term environmental conflict, such as unequal land use, extractive politics, climate impacts, and institutional weaknesses.

Preventive governance also enhances trust and cooperation by setting predictable rules and by undermining elite capture through better monitoring and enforcement. Proactive governance, then, formalizes cooperative mechanisms by broadening participation by maintaining social inclusivity in budgeting, planning, and implementation. As a result, the cultivation of shared resource management is promoted where the state and communities work together. Over time, the collaboration gradually repairs the damage of historical exclusion and environmental neglect.

To invite comparison, three different forms of governance, their approach towards environmental violence and conflicts, and their contributions to environmental peacebuilding are summarized in Table 12 below.

Table 12 : Reactive vs Proactive Governance for Environmental Peacebuilding

Governance Approach	Approach towards Environmental Violence/ConflictsEnablers	Contributions to Environmental Peacebuilding
Reactive	– Expends resources on palliative measures – Creates reliance in relief in favor of sustainable solutions – Ignores early warning signs – Aids structural violence by ignoring gradual harms done to the environment whose effect appear negligible in isolation – Provides no incentives for risk reduction	– No significant contribution is made by this form of governance, which deals with *fait accompli* and uses it for politically influenced resource grabs
Preventive	– Addresses environmental risks pre-disasters – Marginalized groups are shielded from exposure to further environmental hazards – Through compliance and monitoring systems, elite capture is prevented – Strengthens early warning systems – Enforces environmental regulations – Works towards equitable resource distribution – Preserves traditional knowledge and cooperative practices	– By focusing on community resilience and building trust between communities and the state is strengthened – Through the creation of predictable and just governance systems, source access is stabilized, along with reduced grievances – Creates sustainable infrastructures to deter avoidable disasters
Proactive	– Halts the escalation of grievances into violence by monitoring emerging pressure points – No cues are necessary for this form of governance to address resource scarcity and climate impacts – Works to break the cycle of institutional mistrust and environmental degradation – Training and use of technology for building local and community adaptive capacity – Partners with communities to create solutions – Integrates social inclusion in periodic plans and budget allocations – Legal and institutional reforms	– Creates sustainable and inclusive planning, implementing, and monitoring mechanisms that strengthens social cohesion, innovation, and resilience – Environmental justice through equal access to natural resources strengthens environmental peacebuilding – Institutionalization of cooperative mechanisms – Environmental literacy and information flow become foundations of environmental peacebuilding – Elite capture through unaccountable and transparent political maneuvers becomes obsolete

7

Conclusions and Recommendations

7

Conclusions and Recommendations

This section presents the study's conclusions and recommendations, drawing on empirical findings from policy review, stakeholder interviews, and participatory dialogues, as well as media monitoring. It synthesizes key insights on how environmental governance failures, socioeconomic inequalities, and climate pressures interact to shape environmental violence, conflict, and cooperation in Nepal. Based on these findings, the section offers actionable recommendations organized around prevention measures, governance reforms, and targeted interventions across multiple governance levels to advance environmental peacebuilding in Nepal.

The study's empirical findings and policy review demonstrate that governance failures, social, political, and economic inequalities, and environmental pressures interact to shape environmental violence, conflict, and cooperation in Nepal. The study clearly demonstrates that environmental peacebuilding should simultaneously address both environmental violence and conflicts. Viewed through the lens of environmental peacebuilding, the analysis highlights that technical solutions alone are insufficient and that achieving environmental peacebuilding requires addressing the structural conditions that create unequal access, perpetuates marginalization, and turn resource scarcity into violent conflict. Environmental peacebuilding is, therefore, a shared responsibility among the state, citizens, and the private sector, with each actor performing their respective roles aligned with their capacity. In transboundary contexts, especially water cooperation, sustained dialogue, negotiation, bilateral or multilateral cooperation, and institutional arrangements among nations at global, regional, and sub-regional levels are central to transforming resource conflicts into pathways for cooperation.

This study also suggests that prevention measures and governance reforms are the two most foundational elements for ensuring environmental peacebuilding. Regarding prevention measures, promoting preventive planning over reactive crisis

responses is a key element to consider. In this regard, natural resources should be managed sustainably for the long-term through effective controls on pollution and enforced compliance with other environmental regulations. Likewise, communities need adequate and timely preparation for climate change impacts and support for ecosystem restoration. Early warning systems for floods, droughts, and other disasters are crucial, along with community-based disaster preparedness programs that act before emergencies strike. Planning ahead rather than reacting to crises is essential. Additionally, proper waste management systems, strong oversight of mining and extraction industries, and support for farmers transitioning from chemical-intensive to more organic methods are necessary. The environmental knowledge passed down through generations must be documented and integrated into current practice.

Regarding governance reforms, one of the fundamental priorities is updating outdated laws to reflect the country's changed governance context. Laws such as the Water Resources Act, 1992 no longer match Nepal's federal system and require urgent revision. Clear delineation of powers across the three government tiers and improved intergovernmental coordination are crucial for adequate environmental governance. Currently, confusion and overlap between agencies undermine effectiveness, making improved coordination essential. Local governments need enhanced training, technical capacity, adequate resources for monitoring, and authority to enforce regulations effectively. Without these reforms, environmental governance will continue to fail communities and perpetuate the conditions that generate both environmental violence and conflict.

Table 13 summarizes prevention and governance reform measures repeatedly underscored across interviews, workshops, and policy review.

Table 13: Prevention Measures and Governance Reforms

Prevention Measures	Governance Reforms
Adopt sustainable resource management practices	Update outdated laws (Water Resources Act 1992) to reflect federal structure
Implement pollution control measures and enforce environmental standards	Clarify mandates and responsibilities across three government tiers
Develop climate adaptation and ecosystem restoration strategies	Strengthen intergovernmental as well as inter-agency coordination

Establish early warning systems for floods, droughts, and disasters

Invest in community-based disaster preparedness programs

Implement proper waste management infrastructure

Regulate extraction industries with robust enforcement mechanisms

Support transition from chemical-intensive to organic farming

Document and revive traditional environmental knowledge and practices

Build technical capacity at local government levels

Ensure adequate resources for environmental monitoring and enforcement

Implement effective EIA/IEE procedures with genuine oversight

This study also suggests targeted actions for addressing environmental conflicts, including promoting equity and inclusion, ensuring participatory governance, implementing resource management reforms, strengthening transboundary cooperation, and building collective resilience. The findings point to multi-level governance coordination across local, national, and international scales as essential to transforming environmental conflicts.

Regarding the promotion of equity and inclusion, ensuring genuine inclusivity in community-based resource management is crucial. This involves dismantling power hierarchies in local user groups and guaranteeing equitable representation, leadership opportunities, and decision-making roles for marginalized groups such as women, Dalits, indigenous communities, youth, and people with disabilities. The study further emphasizes the importance of fair benefit-sharing from community resources such as timber and eco-tourism income. Moreover, securing land tenure rights for landless and marginalized communities is central to addressing environmental conflicts through equity and inclusion.

Regarding participatory governance, the study suggests a crucial shift from top-down to participatory policy approaches. This includes incorporating local and grassroots voices in decision-making processes and infrastructure planning for dams, roads, and extraction projects. Establishing transparent and accountable governance mechanisms, creating platforms for dialogue and cooperation among competing groups, developing grievance redressal mechanisms accessible to marginalized groups, and supporting community-led conflict resolution through local judiciary systems are equally important, as this study demonstrates.

The study also emphasizes several interventions regarding resource management reforms, including ensuring equitable access to water, land, and forest resources that benefit all stakeholders, particularly marginalized communities. Other crucial resource management reform initiatives include regulating infrastructure projects to prevent inequitable impacts, promoting cooperative practices to meet community needs, establishing clear and fair rules for resource extraction with community consent, and creating benefit-sharing mechanisms for extraction revenues. These reforms should be implemented by both the central and local governments in consultation with concerned stakeholders.

Transboundary cooperation is another important area for improvement suggested by this study, including several recommendations by concerned stakeholders. One critical element includes effective high-level political negotiations to develop comprehensive and legally binding water-sharing agreements with India and China. This also involves updating existing water-sharing treaties (Kosi, Gandak, Mahakali, and many more) to reflect changed contexts, establishing robust enforcement mechanisms for transboundary agreements, and implementing shared early warning systems for floods and droughts. Other important interventions include establishing transparent communication mechanisms with affected communities about transboundary issues and ensuring local community participation in advocacy for equitable transboundary arrangements.

Building collective resilience, as suggested by this study, requires integrating traditional knowledge with modern resource management approaches. Other timely interventions include reinforcing cooperative values and shared responsibility practices, promoting intergenerational knowledge transfer, strengthening traditional governance institutions alongside formal mechanisms, and prioritizing community cohesion over individual competition. Moreover, building trust through collaborative environmental initiatives and creating economic opportunities through sustainable environmental practices are essential additional interventions for collective resilience.

Last but not least, multi-level governance coordination is key to addressing environmental conflicts. At the local level, governance coordination should strengthen community-based natural resource management with equitable representation and fair benefit-sharing mechanisms. It must also build capacity for participatory planning and decision-making while supporting the establishment and strengthening of local conflict resolution platforms.

At the national level, governance arrangements should facilitate coordination across federal, provincial, and local governments, promote public-private partnerships for sustainable development, and establish clear accountability mechanisms. The federal government should prioritize designing and implementing environmentally friendly development models and reforming policies to eliminate exclusionary practices, thereby transforming environmental conflicts into cooperation.

At the international level, governance coordination should facilitate transboundary resource cooperation and address climate threats through regional, sub-regional, and cross-country collaboration. This approach ensures shared responsibilities for resource protection and transforms potential conflict sources into cooperation opportunities.

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Endnotes

[1] National Assembly Endorses Water Resources Bill, https://myrepublica.nagariknetwork.com/index.php/news/national-assembly-endorses-water-resources-bill-30-90.html

[2] अविरल वर्षाले कञ्चनपुरमा ४५ घर डुबानमा, अविरल वर्षाले कञ्चनपुरमा ४५ घर डुबानमा - Butwal Today Butwal Today

[3] चुरेको जोखिम : पानीका स्रोत सुक्न थाले, १८ परिवार विस्थापित, चुरेको जोखिम : पानीका स्रोत सुक्न थाले, १८ परिवार विस्थापित- न्युज फोल्डर - कान्तिपुर समाचार

[4] Extreme heat prompts school closure in Sunsari, Extreme heat prompts school closure in Sunsari - myRepublica - The New York Times Partner, Latest news of Nepal in English, Latest News Articles | Republica

[5] Floods, landslides, and GLOFs threats push Koshi Province into disaster 'red zone, Floods, landslides, and GLOFs threats push Koshi Province into disaster 'red zone' « Khabarhub

[6] Plastic Pollution Persists in Nepal Amid Low Awareness and Enforcement Struggles,https://thehimalayantimes.com/environment/plastic-pollution-persists-in-nepal-amid-low-awareness-and-enforcement-struggles

About CSC

Centre for Social Change (CSC) is a non-profit making social think-tank based in Kathmandu, Nepal. Since its establishment in 2015, CSC has been actively working to bring positive transformation in the socio-political dynamics of Nepali society through involvements in the fields of research, development practice, education, advocacy, and community mobilization. CSC's current works are focused on issues surround conflict transformation, peacebuilding, democracy and governance, migration, labor and employment, civic space, civil society development, public policy, climate change, and social development.

Gahanapokhari Marg-5, Kathmandu

contact@socialchange.org.np

www.socialchange.org.np