

White Paper – Building Peace through Environmental Management

Summary for Decision-Makers

This White Paper presents a strategic approach to building peace through the sustainable management of environmental resources in regions affected by conflict and chronic poverty. It argues that environmental degradation, climate change, and constrained access to resources such as water, land, and energy are key factors that significantly increase the risk of armed conflict. At the same time, well-designed environmental policies and resource-management programs can serve as a foundation for peace processes and economic development.

Key findings:

- Conflicts over environmental resources—especially water and land—are among the principal destabilizing factors in high-poverty regions.
- Climate change intensifies social tensions via droughts, floods, soil degradation, and climate-related migration.
- Traditional power structures are often in conflict with central authorities, hindering the implementation of coherent development strategies.
- Inclusion of local communities in decision-making processes (**participatory governance**) increases the legitimacy of actions and reduces the risk of violence escalation.
- **Environmental peacebuilding** programs enable two goals to be achieved simultaneously: social recovery and political stabilization, and improved ecological and economic resilience.

Strategic recommendations for decision-makers:

1. **Integrated planning** – Economic development policies must be coupled with environmental protection and climate-risk management.
2. **Strengthening local institutions** – Peacebuilding requires supporting both central authorities and traditional structures in parallel to avoid competence conflicts.

3. **Investment in climate-resilient infrastructure** – Water, energy, and agriculture should be investment priorities in regions at risk of instability.
4. **Community participation** – Participatory mechanisms should be a permanent feature of decision-making on resource management.
5. **International coordination** – External support (UN, EU, World Bank, NGOs) should **reinforce**, not replace, local initiatives.

The conclusions of this report have direct practical relevance for foreign policy, security, and development cooperation. **Environmental peacebuilding** should be treated not as a supplement to security policy, but as an integral component enabling durable peace and stability.

According to the Belvedere Declaration: A new global charter shall be established to define and protect all critical cross-border energy infrastructure—including power grids, gas pipelines, and renewable energy production facilities—against all forms of physical and cyber aggression. Attacks on such infrastructure are hereby recognized as severe acts of global destabilization, triggering immediate collective response mechanisms.

Executive Summary

The White Paper analyzes the relationship between environmental degradation, climate change, armed conflicts, and structural poverty in politically unstable regions. Drawing on field research, case studies, and a literature review, it demonstrates how natural-resource management can be used as a tool for peacebuilding.

Important technical note: This White Paper is the result of a collective effort by educators, lecturers, experts, and participants of the Summer Peace University (SPU), a global educational initiative implemented by the International Sustainable Cooperation and Peace Institute (ISCAPI). It reflects the spirit of international collaboration, intercultural dialogue, and knowledge exchange that lie at the heart of the SPU's mission.

The document brings together the insights, research, and practical experiences of contributors representing a wide range of disciplines, regions, and professional backgrounds. Participants from different continents, nations, and cultures worked side by side with academic mentors and field practitioners to explore complex global challenges related to peacebuilding, environmental sustainability, and human development. Their contributions are a testament to the

transformative power of education when it is inclusive, innovative, and grounded in real-world impact.

The Summer Peace University promotes best practices in experiential learning, interdisciplinary cooperation, and evidence-based research. Its teaching model combines academic rigor with applied problem-solving, enabling participants to translate theoretical frameworks into actionable strategies for peace and sustainable development. This White Paper thus encapsulates not only the analytical outcomes of the program but also the pedagogical innovations that define it — including collaborative research, interactive workshops, intercultural mediation exercises, and project-based learning focused on practical implementation.

Developed through shared effort and collective reflection, this publication stands as a symbol of the SPU’s commitment to fostering critical thinking, empathy, and global citizenship. It represents a bridge between academia and practice — a platform where diverse voices converge to shape new visions for peace, justice, and sustainability in the 21st century.

Historical Background and Context

Experiences from regions such as Darfur, Sahel, and Afghanistan show that environmental degradation and limited access to resources contribute to the escalation of violence. Droughts, desertification, and climate migration increase pressure on existing political and social structures. In many cases, conflicts over land and water become catalysts for protracted civil wars.

Robust quantitative syntheses indicate that climatic anomalies are statistically associated with increases in both interpersonal violence and organized conflict. Meta-analyses report that a one-standard-deviation shift toward warmer temperatures or more extreme rainfall correlates with roughly a 4% rise in interpersonal violence and meaningful increases in the risk of civil conflict—effects that are amplified where institutions and adaptive capacity are weak. Regional attribution studies (for example, the 2006–2010 Syrian drought) show that long-term drying trends made extreme drought more likely and contributed to migration, livelihood collapse, and social strain preceding instability.

The scale of climate-driven displacement that models project is policy-relevant: the World Bank’s Groundswell report estimates up to ~143 million internal climate migrants by 2050 across Sub-Saharan Africa, South Asia and Latin America (with ~86 million projected in SSA

alone under high-impact scenarios). Empirical examples from the Sahel reinforce the mechanism whereby environmental loss drives destabilisation: Lake Chad has lost an estimated c.80–90% of its historical surface area since the 1960s, removing critical water and fisheries resources for millions. Taken together with IPCC assessments framing climate change as a “risk multiplier,” these data substantiate the proposition that environmental degradation and resource scarcity can catalyse—and prolong—violent conflict in vulnerable regions.

Methodology

The analysis combines key informant interviews (KIIs), focus group discussions (FGDs), quantitative data, and a review of international literature. The methodology addresses research ethics, including respondent protection, and applies data triangulation to ensure the reliability of findings.

“There can be no sustainable peace without sustainable management of the environment.”

Main conclusions

- Environmental management in conflict regions is not only a technical task, but also a political and social challenge.
- Inclusion of local communities in decision-making promotes legitimacy and reduces tensions.
- Climate-resilient infrastructure projects can serve as a foundation for long-term development and stabilization.
- Effective policy requires parallel action at local, national, and international levels.

Case Studies

The report presents three in-depth case studies:

1. **The Sahel** – farmer–herder conflicts exacerbated by climate change.
2. **Afghanistan** – degradation of water resources and its impact on local conflict.
3. **The Nile Valley** – interdependence of economic development and water security.

Policy Options and Recommendations

A set of policy options comparing the costs and effectiveness of different actions—from short-term interventions to long-term development strategies—has been developed. Recommendations include implementing resource co-management mechanisms, supporting local peace initiatives, and promoting climate-resilient agricultural technologies.

Practical Significance

Environmental peacebuilding offers dual benefits: reducing conflict risk and improving living conditions. Integrating this approach with international development and security strategies is key to achieving lasting peace and the Sustainable Development Goals (Agenda 2030).

The Importance of The BELVEDERE Declaration

The BELVEDERE Declaration provides a comprehensive framework for translating these principles into actionable global policy. By linking clean energy transition, resilient economic systems, and technological innovation with multilateral cooperation, the Declaration reinforces the notion that sustainable resource management is inseparable from international peace and stability. Its commitments to equitable energy access, protection of critical infrastructure, transparent trade, and shared technological advancement demonstrate how coordinated global action can prevent resource-driven conflicts and mitigate geopolitical tensions. In essence, the Declaration exemplifies the shift from competition to collaboration, showing that a rules-based, cooperative approach to energy, trade, and technology is essential for building a just, resilient, and universally peaceful world.

Methodological note

During the Summer Peace University program, students participated in classes focused on the application of cutting-edge technological innovations, including artificial intelligence. It should be assumed that AI tools could have been used in generating responses to questions, editing or refining texts, and preparing certain materials that contributed to the development of the White Paper.

Introduction

Building peace through environmental management—**environmental peacebuilding**—is a relatively new yet increasingly recognized field of research and international practice. Its premise is that natural resources—such as land, water, energy, and forests—play a pivotal role in shaping social, political, and economic relations. Their abundance or scarcity, and their fair or unfair distribution, can foster peace and development or lead to conflict escalation.

Historical background

The history of conflict in impoverished and unstable regions shows that environmental degradation and competition over scarce resources have repeatedly catalyzed violence:

- **Darfur (Sudan)** – The conflict that erupted in the early 2000s largely resulted from intertwined political, ethnic, and ecological drivers. Drought and desertification led to mass southward migrations of pastoralists, who began competing with farmers for land and water. The absence of effective mechanisms to manage resource disputes precipitated a brutal civil war with enormous human and material costs.

Empirical studies indicate that rainfall in Darfur declined by approximately 30–40% between the 1970s and early 2000s, accompanied by significant southward shifts of the Sahara Desert by as much as 50–100 km. This long-term aridification reduced the availability of arable land and grazing areas, pushing millions of people to migrate in search of water and pasture. According to the United Nations Environment Programme, over 1.8 million people were displaced during the early stages of the conflict, with up to 300,000 deaths linked directly or indirectly to violence and resource scarcity.

Scientific analyses further confirm that the Darfur conflict exemplifies a “climate–conflict nexus,” in which environmental degradation exacerbates existing ethnic and political divisions. Satellite-based assessments show progressive loss of vegetation cover and water resources across North Darfur, reinforcing the link between climate stress and violent competition over land. This evidence underscores how weak governance and climate pressures can interact to transform resource scarcity into systemic violence.

- **The Sahel** – including Mali, Niger, and Burkina Faso—exemplifies how climate change steadily worsens living conditions. Droughts, irregular rainfall, and soil degradation have intensified clashes between pastoralists and farmers. Extremist groups further destabilize the region by exploiting public discontent and lack of access to resources.

Empirical evidence shows that average temperatures in the Sahel have increased by about 1.5°C since 1970, a rate roughly 1.5 times higher than the global average. Rainfall patterns have become markedly erratic, with a 20–30% decline in annual precipitation compared to mid-20th century levels, interspersed with extreme rainfall events that cause flooding and crop failure.

According to UNEP, up to 80% of farmland in the Sahel is degraded, and nearly 50 million people depend directly on pastoralism—a livelihood increasingly threatened by desertification and resource scarcity. These environmental stressors have directly contributed to violent clashes: between 2000 and 2020, the number of farmer–herder conflicts in Mali, Niger, and Burkina Faso increased fivefold.

At the same time, armed extremist groups such as Jama’at Nasr al-Islam wal Muslimin (JNIM) and the Islamic State in the Greater Sahara (ISGS) have capitalized on local grievances, providing financial incentives and protection in exchange for allegiance. As a result, the Sahel now accounts for nearly half of all global terrorism-related deaths. The combination of climate-induced insecurity, poverty, and weak governance creates a self-reinforcing cycle of violence and displacement—over 3 million people are currently internally displaced across the central Sahel.

These findings confirm that the Sahel represents one of the most acute global examples of the “climate–security nexus,” where environmental stress undermines livelihoods, fuels social tensions, and provides fertile ground for violent extremism.

- **Afghanistan** – Decades of armed conflict have been compounded by serious ecological problems. Water resource degradation, soil erosion, and deforestation reduced agricultural productivity, deepened poverty, and fueled social tensions. Weak resource-management institutions exacerbated these processes, with water rivalry often becoming a local source of conflict.

Empirical data show that Afghanistan has lost over 70% of its forests since 1990, mainly due to illegal logging, conflict-related destruction, and reliance on firewood for energy. The country’s renewable internal freshwater resources per capita have fallen by more than 60% since 1960, while over 80% of the population depends on agriculture for livelihoods that are increasingly threatened by water scarcity.

Studies indicate that 60–80% of irrigation infrastructure has been damaged or poorly maintained during decades of war. As a result, around one-third of Afghans face food

insecurity, and rural communities frequently compete for dwindling water supplies. In provinces such as Herat, Helmand, and Balkh, water disputes have been directly linked to local violence—data from the Afghanistan Research and Evaluation Unit (AREU) show that over 50% of reported local conflicts in rural districts involve water allocation or land-use disputes.

Climate change further compounds these issues. Average temperatures in Afghanistan have increased by about 1.8°C since 1950, and the frequency of droughts has tripled over the past four decades. Severe droughts in 2018 and 2021 displaced more than 300,000 people and devastated agricultural output by up to 45% in some regions. These environmental shocks exacerbate fragility, weaken governance, and heighten the risk of renewed conflict, confirming Afghanistan as a clear example of how ecological degradation undermines peacebuilding and human security.

Contemporary relevance

In the 21st century, the significance of natural resources for global peace and security has become a major focus of political and academic debate. Climate change—with effects including more frequent droughts, floods, extreme weather, and climate migration—is viewed as a **threat multiplier** that can deepen existing tensions and drive conflict escalation in regions with weak institutions and chronic poverty.

“Environmental peacebuilding links ecological resilience with human security.”

Purpose of the Document

The aims of this White Paper are to:

1. Examine the links between environmental degradation, climate change, and armed conflict.
2. Present case studies illustrating the role of natural-resource management in peace processes.
3. Identify policy options and practical recommendations for building peace through environmental management.

The document is addressed to policy-makers as well as international institutions, NGOs, and researchers working on security and development.

Methodology

The methodology combines qualitative and quantitative approaches in line with the principle of triangulation, enabling a nuanced and reliable picture of the relationship between environmental degradation and the dynamics of conflict and peace processes.

Research approach

The analysis drew on:

1. Key Informant Interviews (KIIs)

- KIIs are a qualitative method for obtaining expert knowledge from individuals with particular experience or standing in the community.
- Respondents included central and local officials, traditional community leaders, NGO representatives, researchers, and journalists.
- Each interview lasted 60–90 minutes and followed a standardized open-ended questionnaire exploring experiences and opinions on resource management and local conflict-resolution mechanisms.

2. Focus Group Discussions (FGDs)

- FGDs were used to analyze local community perspectives.
- Groups of 6–12 participants were carefully selected by gender, age, and social status to reflect diverse views and experiences.
- Sessions were moderated by experienced researchers to elicit in-depth insights into resource conflicts, intergroup relations, and expectations toward authorities and international institutions.

3. Quantitative data analysis

- Statistical data on climate change, land use, water resources, and migration dynamics in the studied regions were used.

- Sources included UN, World Bank, FAO, and UNEP databases, as well as government reports and local monitoring systems.

4. Literature review

- Academic works, reports by international institutions, and think-tank analyses provided theoretical and comparative context for the case studies.

“Cooperation over resources transforms conflict into shared prosperity.”

Sampling

Sampling was **purposive**, selecting respondents for their knowledge, experience, and roles in the studied communities. Criteria included:

- Experience in environmental resource management;
- Participation in local conflicts and their resolution;
- Representativeness of particularly vulnerable groups (women, youth, climate migrants).

Research ethics

All research complied with international ethical standards:

- Voluntary participation with the option to withdraw at any time;
- Informed consent regarding purpose, data use, and anonymity;
- Special attention to protecting vulnerable groups and ensuring safe conditions for free expression.

Data triangulation

To enhance reliability, triangulation involved:

- Combining qualitative and quantitative data;
- Comparing views across social groups and institutions;
- Juxtaposing field findings with statistical data and the literature.

This approach reduced cognitive bias and ensured that results reflect both local perspectives and broader institutional and international contexts.

Context Analysis

Conflicts linked to natural resources and environmental degradation must be analyzed within a broad political, social, and economic context. In impoverished regions, the natural environment is not only a material resource but also a source of identity, culture, and authority structures.

Climate change as a destabilizing factor

Climate change is among the most important **risk multipliers** for peace and security. Its effects are especially severe in states with weak institutions, including:

- **Droughts and desertification** – reducing access to arable land and pasture, forcing pastoral and farming communities to compete for the same resources.
- **Floods and extreme rainfall** – destroying infrastructure, increasing epidemic risks, and driving displacement.
- **Soil degradation** – lowering agricultural productivity and deepening chronic poverty and malnutrition.

“Climate action and peacebuilding must proceed hand in hand.”

Quantitative data indicate that in Sub-Saharan Africa average temperatures have risen by over 1°C since the 1960s, while drought frequency has increased by 30%. In the Sahel, over 80% of Lake Chad’s surface area has been lost over the past 50 years, drastically reducing livelihoods.

As emphasized by **Shery Soliman, SPU Participant**, environmental degradation is not only an ecological crisis but a catalyst for geopolitical instability. When climate stress undermines food and water security, it weakens social cohesion and increases the likelihood of conflict.

Dr. Dinesh Rai Bhujju’s lecture on *Environmental Security and Multilateral Cooperation* highlighted several key insights relevant to this challenge:

1. **Environmental stability is a pillar of human security and sustainable development.**

Degradation of ecosystems directly threatens peace by creating conditions of scarcity, displacement, and competition.

2. Climate-related risks transcend borders.

No nation can achieve peace in isolation; environmental security requires global solidarity and shared responsibility.

3. Multilateral cooperation is essential.

Global frameworks such as the *Paris Climate Agreement* and UN-led environmental initiatives demonstrate that coordinated action can mitigate shared risks — but only if backed by genuine political will and mutual accountability.

4. Equity and justice must guide climate responses.

Developed countries bear both a moral and practical responsibility to assist developing nations through technology transfer, financial support, and capacity-building.

5. Education and science are strategic tools for peace.

Investing in environmental awareness and research enables societies to adopt eco-centric policies that integrate peacebuilding with sustainability.

“Safeguarding the planet is inseparable from safeguarding humanity.”

– *Shery Soliman, SPU Participant*

As stated in the Belvedere Declaration: All signatories commit to an accelerated and equitable clean energy transition, recognizing that sustainable and affordable energy access is a fundamental prerequisite for global stability and poverty reduction. We shall prioritize investments in decentralized and resilient renewable energy infrastructure, ensuring that no nation is forced to choose between energy security and climate action.

Perspective (Maryam Abouhashem, SPU Participant – Science Diplomacy: Integrating Research and Policy to Address Planetary Challenges)

Addressing climate change as a destabilizing factor requires bridging scientific research and policy through science diplomacy. This approach emphasizes the integration of evidence-based knowledge into international decision-making to promote sustainability, peace, and security. Science diplomacy operates across three

dimensions—diplomacy for science, science in diplomacy, and science for diplomacy—each reinforcing cooperation between nations in managing global environmental challenges.

By linking scientific collaboration with diplomatic initiatives, states can develop shared responses to transboundary threats such as biodiversity loss, freshwater scarcity, and climate instability. Institutions like the Intergovernmental Panel on Climate Change (IPCC) and projects such as the International Space Station illustrate how scientific engagement can transcend political divides. Ultimately, science diplomacy provides a framework for uniting knowledge and governance, ensuring that global climate action is grounded in cooperation, accountability, and ethical responsibility—key conditions for a peaceful and sustainable future.

Climate migration

Forced displacement poses an increasingly serious challenge to international security. By 2050, the number of climate migrants is estimated to reach **200–250 million**. In regions such as the Sahel and the Horn of Africa, displacement is driven primarily by environmental degradation and lack of access to safe drinking water. Influxes into urban and border areas generate social tensions, resource disputes, and overstretch local administrations.

Conclusions from SPU participant (Mariem Mahmoud Ezzat Attia – Resource Geopolitics and Environmental Security)

The phenomenon of climate migration is deeply intertwined with resource geopolitics and environmental security. Access to essential resources—such as water, food, and energy—is increasingly shaping international relations and local stability. As environmental pressures intensify, competition over these resources may exacerbate displacement, deepen social tensions, and trigger conflicts. Ensuring environmental security through sustainable development, equitable resource management, and investment in renewable energy can mitigate these risks. Case studies, such as Egypt’s SEKEM initiative, illustrate that integrating environmental, economic, and community priorities fosters long-term stability. Ultimately, global peace and resilience against forced migration depend on the strategic and cooperative management of natural

resources, making sustainability not merely a goal but a necessity for security and human well-being.

Structural poverty and weak institutions

Limited state capacity to manage environmental resources is a key driver of conflict escalation. Where there are no systems for mediating and resolving disputes over land and water, communities resort to violence to enforce their rights. Weak institutions hinder adaptation to climate impacts and obstruct long-term policy implementation.

Building on insights presented by **Amr Elsokary and Nouredin Ayman**, effective governance and institutional resilience cannot rely solely on administrative structures or external aid—they must be grounded in ethical leadership, civic education, and social justice.

Their reflections on the **Barzani Approach** to state-building highlight that overcoming structural poverty requires an internal process of renewal, combining knowledge, moral responsibility, and local identity.

Key takeaways from their contribution include:

1. **Institutional strength begins with moral vision.**

Leadership grounded in justice, coexistence, and unity ensures that governance structures serve communities rather than control them.

2. **Education and translation of knowledge are tools of empowerment.**

Sustainable institutions must act as learning systems—translating global best practices into locally relevant solutions that address poverty, environmental degradation, and inequality.

3. **Inclusive governance fosters peace.**

Institutions built on dialogue and coexistence, rather than competition for resources, can mediate disputes peacefully and support long-term adaptation strategies.

4. **Environmental stewardship as a pillar of governance.**

The integration of environmental protection into political philosophy, as demonstrated in the Barzani Approach, illustrates how ecological awareness can reinforce institutional legitimacy and public trust.

“Resilient states are not built on power alone but on knowledge, ethics, and coexistence.”

— *Amr Elsokary & Noureldin Ayman, SPU Participants*

International interdependencies

Modern conflicts over environmental resources often transcend national borders. **Transboundary waters** such as the Nile and Euphrates are subjects of political and economic dispute. Uneven economic development and investments in water infrastructure (e.g., dams) have far-reaching implications for regional stability.

As highlighted by **Mariem Mahmoud Ezzat Attia**, addressing such transboundary environmental tensions requires more than technical agreements—it demands a comprehensive framework of *cooperative diplomacy* that integrates development, governance, and peacebuilding.

Her reflections during the SPU program underscore several key points relevant to this dimension:

1. Shared resources require shared governance.

Effective management of transboundary waters, energy corridors, and ecosystems depends on inclusive regional institutions capable of balancing national interests with collective security.

2. Economic asymmetry must be managed through equitable mechanisms.

Uneven access to investment and technology often exacerbates interstate competition. Cooperative investment strategies—such as joint infrastructure funds or benefit-sharing mechanisms—can transform potential flashpoints into opportunities for co-development.

3. Diplomatic culture is essential for environmental peace.

Regional dialogue must be continuous and transparent, avoiding zero-sum approaches. Diplomacy should evolve from negotiation to *co-creation*, promoting long-term trust and stability.

4. Education and youth engagement strengthen regional cohesion.

As Mariem emphasized, peace-oriented education and cross-border youth programs foster a shared identity that can mitigate geopolitical rivalries rooted in resource competition.

“True stability begins when regional diplomacy turns competition into collaboration.”

— *Mariem Mahmoud Ezzat Attia, SPU Participant*

The Belvedere Declaration emphasizes: Signatories shall commit to renewed dialogue under transparent, rules-based institutions, particularly revitalizing the World Trade Organization (WTO), to resolve trade disputes and manage industrial policy differences. We shall work to significantly reduce the use of coercive economic measures, such as unilateral tariffs and non-transparent sanctions, that fragment global markets and contribute to regional conflict instability.

Perspective (Nataly Fady, SPU Participant – Multipolarism and New International Alliances)

Understanding global multipolarism and emerging international alliances provides valuable context for analyzing transboundary resource conflicts. As multiple centers of power—such as China, India, and Russia—gain influence, regional disputes over resources are shaped not only by local dynamics but also by broader geopolitical considerations. Alliances like BRICS and the Shanghai Cooperation Organization illustrate how new forms of cooperation can affect economic development, infrastructure investments, and diplomatic negotiations. Recognizing the interplay between multipolar global politics and local environmental challenges highlights the need for coordinated, multilateral approaches to manage shared resources and maintain regional stability.

Stakeholder Analysis

Peacebuilding through environmental management involves many stakeholder groups with often conflicting goals and interests. Thorough analysis helps understand conflict dynamics and the feasibility of proposed strategies.

- **Central governments** – Typically responsible for climate and environmental policy, but in low-income countries they often lack institutional capacity for effective implementation. Short-term political stabilization tends to take precedence over long-term environmental strategies.

As emphasized by **Marian Elbadry**, weak institutional performance is frequently the result of fragmented decision-making and the absence of strategic leadership frameworks.

Dr. Esmat’s lecture on *Strategic Decision-Making and Negotiation Leadership Techniques* provides several insights relevant to this governance gap:

1. **Strategic decision-making requires vision, coherence, and adaptability.**

Governments that operate reactively—prioritizing short-term political gain—struggle to establish consistent environmental or development policies. Effective governance must balance analytical evaluation with creativity and foresight.

2. **Leadership capacity determines institutional resilience.**

Decision-makers must integrate long-term sustainability objectives into national agendas, even under political or economic pressure. This involves cultivating leaders who are both data-driven and ethically grounded.

3. **Negotiation and collaboration are key instruments of policy success.**

Environmental governance depends on the ability of national institutions to negotiate constructively—with local communities, private actors, and international partners—turning potential conflicts into cooperative solutions.

4. **Institutional learning is as important as formal authority.**

5. Building adaptive governance structures requires continuous feedback, evaluation, and openness to innovation — qualities often absent in bureaucratic systems.

“Leadership in the 21st century is not merely about authority — it is about the ability to decide wisely and negotiate humanely.”

— *Marian Elbadry, SPU Participant*

- **Traditional authorities and local communities** – Bodies such as councils of elders or clan leaders play key roles in resource management. Their decisions are widely accepted locally, yet may conflict with statutory law, creating tensions over land tenure and water access.
 - **Perspective (Nadia Cuchero, SPU Participant – Intercultural Diplomacy and Global Ethics)**

Intercultural diplomacy offers valuable insights into managing tensions between traditional and statutory governance systems. By emphasizing dialogue, empathy, and mutual respect, it helps bridge cultural and institutional divides that often underlie disputes over land and resources. Global ethics complements this approach by providing a moral framework grounded in principles such as dignity, justice, and shared responsibility—principles that support inclusive and fair decision-making.

Applying intercultural diplomacy at the community level encourages cooperation between local leaders, governments, and external actors. It transforms cultural differences from sources of conflict into opportunities for collaboration and sustainable development. Ultimately, integrating intercultural diplomacy and global ethics into local governance strengthens trust, promotes social cohesion, and contributes to long-term peacebuilding.
- **Farmers and pastoralists** – Frequently at odds due to competition over scarce resources. Farmers need land for crops; pastoralists require pasture and water for livestock. Absent clear allocation mechanisms, violence escalates with local and regional repercussions.
- **NGOs and the international community** – International and local NGOs mediate conflicts and implement aid and development programs (capacity-building, education, and environmental protection). Their presence can also spark tensions if seen as external interference.

- As emphasized by **Karim Fady (SPU Participant), in text: „The European Union as a Model of Regional Peacebuilding”:**

The European Union (EU) represents one of the most successful models of regional cooperation and peacebuilding in modern history. Founded in the aftermath of World War II, the EU aimed to secure lasting peace and stability through economic interdependence and political integration. Early initiatives, such as the European Coal and Steel Community, laid the foundation for transforming a war-torn continent into a community of shared interests and mutual respect. Over the decades, this cooperation expanded into broader areas including trade, education, security, and human rights, demonstrating that sustainable peace can emerge from structured collaboration and shared governance.

The EU’s success illustrates how international organizations and regional alliances can complement the work of NGOs in promoting peace and sustainable development. By prioritizing dialogue, rule of law, and collective decision-making, the EU has shown that cooperation—rather than competition—can prevent conflict and foster long-term stability. Its recognition with the 2012 Nobel Peace Prize underscores the value of multilateral engagement and the potential of regional frameworks to serve as pillars of global peacebuilding.

- As emphasized by **Kenza Abdelkhalek (SPU Participant), in text: „International Justice and Global Governance”:**

International justice and global governance are key pillars in promoting peace, equality, and sustainable development. Institutions such as the International Criminal Court (ICC), the International Court of Justice (ICJ), and the United Nations (UN) exemplify how legal accountability and collective decision-making can uphold human rights and the rule of law worldwide. Strengthening these mechanisms allows the international community—and NGOs in particular—to address global challenges such as conflict, inequality, and environmental degradation more effectively.

By ensuring that aid, development, and peacebuilding efforts operate within transparent and lawful frameworks, international justice supports the legitimacy and credibility of NGOs and global institutions. At the same time, inclusive governance that empowers both developed and developing nations promotes fairness and cooperation. Together, international justice and global governance

provide the foundation for coordinated, lawful, and equitable responses to global crises, reinforcing trust and long-term peace across nations.

- **Private sector** – Firms in agriculture, energy, and extractives affect ecosystems and communities. They can foster development, but may heighten conflict risks if benefits are distributed unfairly.

- Building on the insights provided by **Joanna Serniak**, the role of the private sector must also be understood in the context of the digital environment. Media conglomerates, social networks, and technology companies increasingly shape not only economic and political dynamics but also the very **perception of reality**. Their algorithms influence public discourse, social cohesion, and the ability of societies to exercise critical judgment.

Unchecked dominance of digital platforms can erode constructive criticism and weaken democratic resilience, particularly when misinformation and manipulative content spread faster than verified information. These dynamics contribute indirectly to social tensions, polarization, and distrust in institutions—factors that can escalate into broader conflict when combined with economic and environmental instability.

Therefore, responsible media governance, algorithmic transparency, and digital literacy should be recognized as part of **corporate environmental and social responsibility**. Companies that control information ecosystems carry a moral duty to promote awareness, inclusivity, and truthful communication.

“The ability of being aware is essential for future leaders.”

— *Joanna Serniak, SPU Participant*

- In the contemporary era, the private sector also includes powerful actors in the fields of **artificial intelligence, digital media, and data management**, whose influence extends deeply into political and social domains. As emphasized by **Nardine Ashraf Lamie Soliman**, technology can both **strengthen and threaten democracy**.

AI systems and social media platforms, when misused, can amplify misinformation, distort public opinion, and erode trust in democratic institutions. The proliferation of **deepfakes, fake news, and algorithmic manipulation** undermines electoral integrity and can intensify divisions within

and between societies. Such dynamics increase the risk of political instability and social unrest—outcomes that parallel the resource-related conflicts observed in other sectors.

The lecture highlighted that protecting democratic processes in the age of AI requires **ethical innovation, digital literacy, and multi-stakeholder cooperation**. Governments, election bodies, and private companies must jointly develop frameworks for **cybersecurity, transparency, and accountability**.

Therefore, within the broader peace and security agenda, **technology companies must be recognized as key actors** whose operations directly affect human security. Their commitment to truth, responsible communication, and the prevention of AI-driven misinformation should be integral to their corporate governance and global peacebuilding efforts.

“Maintaining electoral integrity is not just the job of institutions — it’s
a collective responsibility.”

— *Nardine Ashraf Lamie Soliman, SPU Participant*

The Belvedere Declaration provides: Signatories shall jointly fund and deploy an international Cyber Peace Corps, tasked with assisting nations in securing critical public infrastructure and actively combating coordinated state-sponsored misinformation and disinformation campaigns that fuel societal polarization and ethnic conflict.

Conflict of interests analysis

- Central governments seek power consolidation and economic growth, which may clash with customary resource-management systems.
- Local communities expect respect for customary rights, often ignored by statutory law.
- NGOs promote inclusive decision-making, while the private sector is guided by profit logic.

Understanding these tensions is essential to designing effective environmental peacebuilding programs.

Building upon the reflections of **Dr. Ana Claudia Moran**, it becomes clear that conflicts of interest are no longer confined to local or national arenas—they now extend into the global economic order. The intersection of **trade, geopolitics, and sustainability** has transformed economic diplomacy into a central battleground of competing interests and values.

Her analysis underscores several critical insights:

1. Trade as a peace instrument.

International trade, when guided by principles of fairness and sustainability, can foster cooperation rather than confrontation. However, in the current climate of tariff wars and economic fragmentation, it has increasingly become a field of strategic rivalry.

2. Geopolitical influence on business and resource access.

Business development and investment flows are now directly shaped by geopolitical alignments. The emergence of new trade blocs and the competition among major powers for critical resources amplify existing inequalities and undermine collaborative governance.

3. Neglect of regional actors.

The absence of regional perspectives—such as Latin America’s pivotal role as a global food and raw material supplier—reveals structural biases in international dialogue. Addressing these imbalances is vital to building inclusive frameworks for peace and development.

4. Need for coordinated multilateral response.

To overcome systemic competition and power asymmetry, international institutions must evolve from arenas of rivalry into platforms of shared responsibility and innovation.

“The pursuit of strategic resilience has become the world’s most costly and critical commodity—confirming that cooperation, not confrontation, must define the new global order.”

— *Dr. Ana Claudia Moran, SPU Participant*

As articulated in the Belvedere Declaration: We commit to diversifying and de-concentrating global supply chains for strategic commodities, including Critical Raw Materials (CRMs). This diversification shall be achieved through coordinated investment and multilateral risk-sharing agreements, rather than through unilateral export restrictions or protectionist measures that could harm global economic growth.

**Participant perspective (SPU – Economic Diplomacy and International Trade):
Ramez Soliman**

From the perspective of economic diplomacy and international trade, managing conflicts of interest requires strategic negotiation and cooperative frameworks. As highlighted in the lecture by Professor Massimiliano Bencardino, economic diplomacy extends beyond formal negotiations to fostering partnerships that balance national growth with equitable resource use. By applying these principles, governments can align economic objectives with local and environmental interests, while private sector actors and NGOs can collaborate on trade and investment strategies that respect customary rights. Integrating international trade considerations, sustainable investment, and multilateral cooperation can therefore reduce tensions, support inclusive development, and strengthen long-term stability in resource-sensitive regions.

Case Studies

To demonstrate the practical importance of environmental management in peace processes, three case studies document diverse ecological, social, and political conditions.

Case 1: The Sahel

Historical background

The Sahel—Mali, Niger, Burkina Faso, Chad—has grappled for decades with adverse climate conditions and chronic poverty. As a transition zone between the Sahara and Sub-Saharan Africa, it experiences highly variable rainfall. In the late 20th century it suffered some of Africa’s most severe droughts, triggering major humanitarian crises.

Quantitative data

- Since the 1970s, average annual rainfall has declined by roughly **20–30%**.
- Over **80%** of the population relies on agriculture and pastoralism.
- Due to soil degradation, the Sahel loses **hundreds of thousands of hectares** of arable land annually.

Conflict dynamics

- **Farmer–herder conflicts** – southward movements of pastoralists in search of pasture lead to clashes with farmers over land and water.
- **Armed extremism** – jihadist groups exploit local discontent and food insecurity to recruit.
- **Climate migration** – internal displacement overloads administrations and raises the risk of ethnic conflict.

Community responses

Local mechanisms include shared land use, rotational pasture access, and community peace pacts, but these are insufficient without state and international support.

Case 2: Afghanistan

Historical background

Conflict-ridden since the late 1970s, Afghanistan illustrates how environmental degradation and weak state institutions entrench violence. Agriculture employs about **60%** of the population, yet climate change and over-exploitation have deepened economic and social crises.

Quantitative data

- About **80%** of local conflicts are linked to water—its availability, quality, or allocation.
- Over the last 50 years, average precipitation has declined by **15%+**.
- **UNEP** reports that over **75%** of farmland is exposed to erosion and degradation.

Conflict dynamics

- **Water as a flashpoint** – competition over irrigation systems is a major source of local disputes.

- **Poppy cultivation** – the decline of legal agriculture has fueled poppy expansion, financing armed groups and destabilizing the state.
- **Institutional vacuum** – the state lacks effective resource-management mechanisms.

Community responses

Some regions have local water-sharing agreements based on custom and elder mediation. Their reach is limited and, under intensifying climate stress, they require institutional reinforcement.

Case 3: The Nile Valley

Historical background

The Nile, the world's longest river, supplies 11 countries including Egypt, Sudan, and Ethiopia. Historically, water disputes were addressed through bilateral and regional agreements, but rising demand, fast demographic growth, and infrastructure projects have heightened tensions.

Quantitative data

- The Nile provides water to **250+ million** people.
- The basin's population has doubled in 40 years and may reach **600 million** by mid-century.
- Filling Ethiopia's **Grand Ethiopian Renaissance Dam (GERD)** could reduce flows to Egypt by **20–30%** during impoundment periods.

Conflict dynamics

- **Egypt–Ethiopia dispute** – Egypt, over 90% dependent on Nile waters, opposes rapid reservoir filling as a threat to water security.
- **Sudan** – adopts an intermediate position, seeing both risks and potential benefits from flow regulation.
- **International context** – the dispute involves the AU, UN, and third-party states, becoming a matter of global security.

Community responses

Local communities increasingly feel the effects of irregular water supply, lowering agricultural output and raising food prices. Cross-border cooperation initiatives exist but need further support and stable international mediation mechanisms.

Lessons from the Case Studies

These examples show that conflicts over environmental resources are systemic, not incidental.

Three factors recur:

1. Climate change as a catalyst for tensions.
2. Weak or ineffective resource-management institutions.
3. Absence of peaceful dispute-resolution mechanisms.

At the same time, communities devise adaptation strategies that can underpin long-term environmental peacebuilding—provided they are supported by states and the international community.

Policy Options

Building peace through environmental management requires realistic policy options at local, national, and international levels. Each option differs in scope, cost, time horizon, and potential effectiveness in reducing conflict risk and supporting development.

Option 1: Short-Term Interventions (Humanitarian and Stabilization)

Characteristics

Focus on immediate basic needs in communities affected by conflict and environmental degradation, including:

- Supply of drinking water and food;
- Emergency repairs to water and energy infrastructure;
- **Cash-for-work** programs engaging locals in reconstruction.

Costs & effectiveness

- **Costs** – relatively low per unit, but high if prolonged (risk of aid dependency).
- **Effectiveness** – high for crisis stabilization; low for long-term development.

Option 2: Medium-Term Investment in Climate-Resilient Infrastructure

Characteristics

Construction/modernization enabling adaptation and reducing resource pressure, e.g.:

- Irrigation systems;
- Retention reservoirs and appropriately scaled dams;
- Micro-energy installations (solar, wind);
- Reforestation and soil-restoration projects.

Costs & effectiveness

- **Costs** – medium to high; requires external finance (e.g., World Bank, Green Climate Fund).
- **Effectiveness** – medium to high; improves resilience to climate shocks and reduces climate-migration risks.

Option 3: Strengthening Institutions and Resource-Governance Mechanisms

Characteristics

Effective peace policy needs capable institutions for dispute resolution and rule enforcement, including:

- Local mediation systems;
- Integration of customary and statutory law;
- Administrative training in environmental management;
- Transparent allocation mechanisms (land registries, water-allocation systems).

Costs & effectiveness

- **Costs** – moderate, depending on the scope of institutional reform.
- **Effectiveness** – very high over the long term, but requires time, political commitment, and trust-building.

Option 4: Long-Term Development Strategies and Regional Cooperation

Characteristics

The most ambitious option, including:

- Regional agreements on shared management of transboundary waters;
- Integration of climate and economic policies within regional blocs (e.g., African Union);
- Transformation of agriculture towards climate-resilient technologies;
- Investment in education, social capital, and technological innovation.

As highlighted in the Belvedere Declaration: We commit to a policy of proactive Innovation Diplomacy, prioritizing the ethical and transparent transfer of peaceful technologies especially in digital health, climate resilience, and sustainable agriculture to the Global South. This initiative aims to close the digital divide, ensuring that technological progress serves as an engine for inclusive growth, not a source of further inequality.

Costs & effectiveness

- **Costs** – very high; requires substantial finance, international coordination, and long time horizons.
- **Effectiveness** – very high; enables systemic transformation and sustained conflict-risk reduction.

Comparative Overview (descriptive)

Option	Costs	Time Horizon	Short-Term Effectiveness	Long-Term Effectiveness
Short-term interventions	low–medium	weeks/months	very high	low

Infrastructure investments	medium–high	2–5 years	medium	high
Institution-building	moderate	3–10 years	low	very high
Long-term strategies & cooperation	very high	10–30 years	low	very high

Conclusion: No single option is self-sufficient. Effective policy blends short- and long-term actions to meet immediate humanitarian needs while investing in environmental resilience and institutional strength.

Strategic Recommendations

Based on the analysis and case studies, the following recommendations outline complementary scenarios for sequencing actions, required resources, and expected outcomes.

Recommendation 1: Integrate Humanitarian and Environmental Actions

Rationale

Humanitarian responses are essential but, without an environmental lens, remain short-term and do not build resilience.

Implementation scenario

1. **Preparation** – identify high-risk areas; map local resources and needs.
2. **Intervention** – pair humanitarian supplies (e.g., water) with adaptation measures (e.g., wells, irrigation repair).
3. **Consolidation** – train communities in infrastructure maintenance; establish local resource-management committees.

Recommendation 2: Strengthen Local Mediation and Customary Law

Rationale

Resource conflicts are primarily local; traditional mediation remains vital. Incorporating customary law into institutional frameworks increases legitimacy and effectiveness.

Implementation scenario

1. Diagnose local mediation practices (councils of elders, mediators, procedures).
2. Integrate legal mechanisms enabling cooperation between customary and statutory systems.
3. Provide training and technical/financial support to mediators and administrations.

Recommendation 3: Develop Climate-Resilient Infrastructure

Rationale

Climate change is a conflict catalyst; infrastructure investments enhance security and limit migration risk.

Implementation scenario

1. Plan based on climate and demographic data to target the most exposed regions.
2. Build projects (wells, reservoirs, renewable energy) via public–private partnerships.
3. Ensure operation & maintenance with community monitoring and long-term technical support.

Recommendation 4: Regional Agreements on Transboundary Resources

Rationale

Resource conflicts rarely stop at borders; cooperation frameworks provide predictability and transparency.

Implementation scenario

1. Launch regional dialogues under AU/UN/World Bank auspices.
2. Negotiate agreements on allocation and joint management.
3. Institutionalize with joint monitoring and arbitration bodies.

Recommendation 5: Education and Inclusion of Youth and Women

Rationale

Women and youth are most exposed to conflict and environmental stress yet underrepresented in decisions; their inclusion improves durability of peace.

Implementation scenario

1. Pilot education on environment and peace in schools/community centers.
2. Form local youth and women’s groups participating in mediation and resource management.
3. Provide financing and mentoring for community-led initiatives.

Recommendation 6: Strengthen Monitoring and Early Warning

Rationale

Resource conflicts often build gradually; early warning can detect rising tensions and enable pre-emptive action.

Implementation scenario

1. Build information systems integrating climate, hydrological, and demographic data on one platform.
2. Train communities to report local incidents and tensions.
3. Create regional risk-analysis centers informing governments and international actors.

The Belvedere Declaration further commits: We commit to developing and utilizing shared, open-source data platforms that integrate climate risk modeling, resource scarcity indicators (water, food, energy), and conflict analytics. This integrated approach shall inform early-warning mechanisms and proactively trigger multilateral mediation efforts to prevent resource-driven disputes from escalating into armed conflict.

Summary of recommendations

Recommendations should be implemented **complementarily**. Integrating short-term (humanitarian), medium-term (infrastructure, mediation), and long-term (regional cooperation, education, institutions) actions is the only way to build lasting peace in regions affected by environmental resource conflicts.

Implementation Plan

Effective implementation requires a detailed plan covering time (timeline) and institutions (roles and responsibilities), alongside accountability and monitoring mechanisms for transparency and effectiveness.

1. Timeline

Three stages:

Stage I – Urgent Actions (0–2 years)

- Rapid humanitarian/stabilization interventions;
- Integrating aid with initial environmental initiatives;
- Launching pilot local-mediation programs;
- Deploying rapid-response systems for climate and environmental crises.

Stage II – Consolidation and Investment (3–7 years)

- Expanding climate-resilient infrastructure (water systems, renewables, soil restoration);
- Formalizing integration of customary and statutory law;
- Education and training for administrations and communities;
- Implementing local and regional risk-monitoring systems.

Stage III – Systemic Transformation (8–20 years)

- Long-term development strategies and regional resource-governance agreements;
- Scaled sustainable agriculture and energy;
- Full institutionalization of dispute-resolution mechanisms;

- Integration with global initiatives such as Agenda 2030 and the SDGs.

2. Roles and Responsibilities

Central governments – legal and policy frameworks; coordination of public institutions; provision of security and basic services.

Local and traditional authorities – mediation in resource disputes; local adaptation programs; community mobilization and trust-building.

NGOs – training and education; monitoring local tensions and conflicts; support for community environmental projects.

International community (UN, AU, World Bank, EU) – financing infrastructure and institution-building; mediation and support for transboundary agreements; early-warning systems and information exchange.

Private sector – investment in infrastructure and sustainable-development projects; CSR standards; partnership with local communities.

3. Accountability and Transparency Mechanisms

- **Periodic reporting** – quarterly and annual reports by implementing institutions.
- **Independent audits** – annual financial and performance audits by independent entities.
- **Participatory monitoring** – community involvement in progress reviews via consultations and surveys.
- **Grievance mechanisms** – accessible channels to report abuses and irregularities (e.g., corruption, discrimination).

4. Success Indicators

- Number of local resource conflicts resolved through mediation;
- Share of communities with access to safe water and energy;
- Degree of implementation of regional transboundary-resource strategies;
- Participation levels of women and youth in decision-making;

- Reduction in the number of climate-displaced persons in target regions.

Summary

The implementation plan follows a sequential approach blending immediate, medium-term, and long-term actions. Success depends on multi-level coordination—from local communities to international organizations—and robust transparency and accountability mechanisms.

Monitoring, Evaluation, and Learning (MEL)

A well-designed **MEL** system is crucial for effective delivery. It enables ongoing performance assessment and supports decision-making by adapting programs to evolving social and environmental conditions.

1. MEL Objectives

- **Effectiveness measurement** – assess goal attainment (e.g., fewer local conflicts, improved water access).
- **Accountability** – provide transparent information to stakeholders (communities, governments, donors).
- **Learning and adaptation** – adjust programs to new challenges through systematic data collection and analysis.

2. Methodology

Mixed-methods approach combining quantitative and qualitative research.

- **Quantitative** – household surveys, hydrological measurements, displacement statistics.
- **Qualitative** – KIIs, FGDs, participant observation.

Participatory research – **Participatory Rural Appraisal (PRA)** engages communities directly in monitoring, increasing legitimacy and contextual accuracy.

Data triangulation – combining multiple sources and techniques to verify information and minimize misinterpretation.

3. MEL Structure

1. **Local level** – communities, councils of elders, and local NGOs monitor and report tensions and conflicts.
2. **National level** – state and research institutions analyze data and coordinate evaluations.
3. **Regional/international level** – international organizations integrate data, produce comparative reports, and facilitate cross-country learning.

4. Monitoring Indicators

Quantitative

- Number of local conflicts resolved through mediation;
- Number of people with access to clean water and energy;
- Decrease in the proportion of climate-displaced persons;
- Area of rehabilitated farmland.

Qualitative

- Inter-community trust (interviews/surveys);
- Degree of women's and youths' engagement in decision-making;
- Perceptions of transparency and fairness in resource allocation.

5. Evaluation Process

- **Baseline** – before interventions to establish reference points.
- **Midline** – every 2–3 years to assess progress and recalibrate.
- **Endline** – at project completion to evaluate effectiveness and sustainability.
- **Ex-post** – several years later to assess long-term impacts.

6. Learning Mechanisms

- Reflective workshops with all stakeholders to discuss monitoring results;
- Knowledge repositories of good practices and case studies;
- Adaptive management procedures allowing program changes based on evaluation findings.

7. Community Accountability

MEL should serve donors and governments **and** local communities by:

- Publishing reports in local languages;
- Using visual/oral communication (meetings, infographics);
- Involving communities in assessment and recommending changes.

Summary

MEL underpins successful environmental peacebuilding by combining rigorous research with participatory practice. A transparent, multi-level system of monitoring and evaluation boosts both effectiveness and legitimacy, enabling long-term sustainability.

Conclusions

Building peace through environmental management is one of today's most important challenges. The analyses presented here show that natural resource degradation and climate change are not merely ecological problems; they are major drivers of social and political conflict escalation. In regions with weak institutions, demographic pressure, and chronic poverty, environmental resources become objects of competition that can erupt into open violence.

At the same time, research demonstrates that well-designed environmental governance strategies can form the foundation of durable peace. Local mediation mechanisms, investment in climate-resilient infrastructure, education of youth and women, and regional cooperation on transboundary resources offer real opportunities to transform conflicts into sustained peace processes.

Normative Reflection

Peace through environmental protection should not be framed purely in pragmatic terms; it also has a normative and ethical dimension. Natural resources are a common good of humanity, and their fair and sustainable use is a moral obligation to current and future generations. Political and social responsibility therefore extends beyond national borders, requiring international solidarity and joint action for the common good.

Link to Agenda 2030 and the SDGs

Implementing the recommendations aligns with **Agenda 2030** and directly advances several **Sustainable Development Goals (SDGs)**, including:

- **SDG 6 – Clean Water and Sanitation:** ensure access to drinking water and WASH infrastructure; reduce tensions around water resources.
- **SDG 13 – Climate Action:** adapt to climate change via infrastructure and early-warning systems.
- **SDG 15 – Life on Land:** protect ecosystems, rehabilitate degraded soils, and manage forests sustainably.
- **SDG 16 – Peace, Justice and Strong Institutions:** strengthen conflict-resolution mechanisms and build transparent, fair institutions.
- **SDG 17 – Partnerships for the Goals:** foster regional and global cooperation, and partnerships among states, international organizations, NGOs, and the private sector.

Final Conclusions

There can be **no lasting peace** without **sustainable environmental resource management**. Implementing the proposed actions demands long-term political vision, adequate financing, and a willingness to cooperate among local communities, states, and international organizations.

Core message: Peace and the environment are inseparable. Treating environmental protection as an integral part of security and development policy is not only necessary but offers a unique opportunity to build a fairer, more stable, and more sustainable world.

Annexes

Annex 1. Structure of the Key Informant Interview (KII) Questionnaire

Designed flexibly to adapt to regional specifics and conflict contexts, combining closed and open questions to elicit expert and practical perspectives.

Example topic blocks:

1. Respondent profile (role, experience, community position).
2. Main sources of resource conflict in the study area.
3. Perceptions of climate change and impacts on resource availability.
4. Effectiveness of past peace and environmental interventions.
5. Assessment of local institutional capacity for conflict management.
6. Recommendations for policies and development programs.

Annex 2. Structure of Focus Group Discussions (FGDs)

FGDs capture the perspectives of diverse social groups, including women, youth, farmers, pastoralists, and religious leaders.

Session elements:

- Participants: 6–12; Duration: 1.5–2 hours; Moderated by trained researchers.
- Ethical principles: voluntariness, anonymity, equal voice.

Sample questions:

1. What are the most common causes of resource disputes in your community?
2. How does climate change affect your daily life?
3. Are dispute-resolution mechanisms accessible and effective?
4. Which solutions are most realistic in your region?

Annex 3. Sample Questions for Quantitative Surveys (Household)

Topic blocks:

1. Household structure (size, income sources).
2. Access to resources (water, land, energy).
3. Experiences with resource-related conflicts.
4. Coping strategies (migration, livelihood changes).
5. Perceptions of government and international responses.

Sample indicators:

- % of households with access to safe drinking water;
- Average distance to the nearest water source;
- Number of conflict incidents reported in the last 12 months.

Annex 4. Stakeholder Analysis Matrix

A tool to systematically organize information on actors involved in conflicts and peace processes.

Stakeholder	Influence	Interests	Potential Conflicts	Possible Roles in Peacebuilding
Central government	high	resource control, stability	local distrust	legal frameworks, institutions
Local & traditional authorities	medium–high	community protection, status	rivalry with central gov't	mediation, legitimacy
Local communities	medium	resource access, security	land & water disputes	active role in mediation

NGOs	medium	program delivery	donor dependency	training, monitoring, support
International organizations	high	regional stability	perceived external interference	financing, mediation
Private sector	medium	economic returns	resource exploitation	investment in sustainable development

Annex 5. Sample Logical Framework (LogFrame)

Overall objective: Lasting peace through sustainable environmental resource management

Specific objective: Reduce local conflicts over water and land in target regions

Results:

1. Strengthened local mediation mechanisms
2. Built water infrastructure
3. Increased participation of women and youth

Activities: mediator training; construction of wells/reservoirs; education programs

Indicators: successful mediations; % population with water access; women’s share in mediations

Verification sources: project reports; statistics; local surveys

Assumptions: political stability; no regional conflict escalation

Annex 6. Participatory Monitoring Tools

Examples:

- **Resource mapping** – communities co-produce maps of local resources and conflict hotspots.
- **Seasonal calendars** – track variability in resource availability (water, yields).

- **Priority ranking** – jointly identify key problems and needs.
- **Conflict diaries** – community groups document resource-related incidents for early detection of tensions.

Summary of Annexes

The annexes provide practical research and analytical tools for diagnosing, implementing, and monitoring environmental peacebuilding programs—enhancing transparency, rigor, and participation.

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