

OFFICIAL INVITATION

To: The Secretariats, Executive Directors, and Governing Bodies of the World's Leading Cryosphere and Earth Observation Organizations

From: The 0.01% Solutions–Green Web–Cryosphere Convention Initiative Team

Ulaanbaatar, Mongolia

Date: August 17-28, 2026

Subject: Invitation to Support the Development of **a Convention on Planetary Hydrological Security and Cryosphere Stability** and **the 0.01% Solutions Flagship Programme**

Excellencies, Distinguished Directors, Esteemed Colleagues,

We are writing to you as an independent civil society initiative—The 0.01% Solutions–Green Web–Cryosphere Convention Initiative Team—to formally invite your esteemed organization to support the development of a Convention on Planetary Hydrological Security and Cryosphere Stability.

The scientific community has long understood what the world is only now beginning to fully recognize: the cryosphere is not a distant or passive system. Glaciers, ice sheets, snow, sea ice and permafrost are integral components of the Earth system. They store vast quantities of freshwater, regulate the planet's energy balance and climate, influence the global hydrological cycle, and sustain water resources and ecosystems upon which billions of people depend. The United Nations notes that more than 2 billion people depend on glacier and snowmelt as a crucial source of freshwater.

Yet this critical planetary system is undergoing profound and accelerating change. The World Glacier Monitoring Service (WGMS) has documented unprecedented glacier mass loss in recent years. The International Permafrost Association (IPA) and the broader permafrost research community have documented widespread permafrost warming and thaw. The World Climate Research Programme's Climate and Cryosphere (CliC) project has advanced international research into the interactions between the cryosphere, climate and hydrological systems. The Intergovernmental Panel on Climate Change (IPCC) has likewise documented major changes across the cryosphere, including glacier and ice-sheet mass loss, sea-level contributions and permafrost changes.

The international community has increasingly recognized the urgency of these changes. **The United Nations General Assembly, through Resolution 77/158**, declared 2025 the **International Year of Glaciers' Preservation** and proclaimed **21 March each year as World Day for Glaciers**, beginning in 2025.

The General Assembly subsequently adopted Resolution 78/321, proclaiming **2025–2034 the Decade of Action for Cryospheric Sciences**. The resolution calls for strengthened scientific research, monitoring and international cooperation to address challenges associated with glacier loss and changes in the cryosphere.

At the environmental governance level, **the United Nations Environment Assembly at its seventh session adopted Resolution 7/10**, “Preservation of glaciers and the broader cryosphere, particularly in mountain regions,” further demonstrating the growing recognition of cryosphere change as an issue requiring international action.

These developments represent important milestones. Yet they also reveal an important remaining challenge: the world has increasingly developed scientific knowledge, monitoring systems, declarations and policy initiatives concerning different components of the cryosphere, but there is still no comprehensive international legal instrument specifically dedicated to the cryosphere as an interconnected planetary system and to its relationship with global hydrological security.

Existing international frameworks address important parts of this challenge. The United Nations Framework Convention on Climate Change (UNFCCC) provides the principal framework for international cooperation on climate change. The United Nations Convention to Combat Desertification (UNCCD) addresses desertification, land degradation and drought. The Convention on Biological Diversity (CBD) addresses biodiversity. The UN Watercourses Convention establishes principles for the equitable and sustainable management of international watercourses. The UNECE Water Convention (Convention on the Protection and Use of Transboundary Watercourses and International Lakes) provides a framework for the protection and sustainable management of transboundary waters. The Ramsar Convention provides a framework for the conservation and wise use of wetlands.

Each contributes an essential part of the solution. But the cryosphere connects them all. Changes in glaciers and snow affect water availability; permafrost thaw affects land, ecosystems and greenhouse-gas dynamics; ice loss contributes to sea-level rise; and changes in snow and ice influence climate and hydrological processes. Cryosphere change can therefore propagate through mountain watersheds, rivers, groundwater, ecosystems, agriculture, settlements and economies—linking regions far beyond the areas where the changes originate.

Yet no existing international framework provides a comprehensive approach to the cryosphere as an interconnected system. This is the governance gap that our proposed Convention seeks to address.

The proposed Convention would build upon, complement and strengthen existing international frameworks rather than replace them, establishing a coherent, science-based framework for the protection, monitoring, stability and sustainable governance of the cryosphere and its essential role in planetary hydrological security.

The objective is not to create another isolated environmental agreement. It is to connect the science, institutions and legal frameworks that already address different parts of the system—and bring them together around the planetary water cycle and the cryosphere that sustains it.

The Convention and the 0.01% Solutions: A Complete Architecture

We invite your esteemed organization to consider two interconnected proposals that together form a complementary architecture for addressing cryosphere change, planetary hydrological security and land degradation:

1. Convention on Planetary Hydrological Security and Cryosphere Stability

The proposed Convention would establish a comprehensive international legal and institutional framework for planetary hydrological security and the protection and stability of the cryosphere, recognizing the interconnectedness of water in its solid, liquid and atmospheric forms across the Earth system.

The Convention could:

- Establish internationally agreed obligations and commitments for cryosphere protection and monitoring, building on the momentum of the UN Decade of Action for Cryospheric Sciences (2025–2034) and other relevant international initiatives.
- Create permanent institutional mechanisms for scientific assessment, monitoring, cooperation and reporting, complementing—not replacing—the work of the IPCC, WMO Global Cryosphere Watch, IACS, WGMS, IPA, WCRP-CliC and other scientific and observing networks.
- Strengthen mobilization of financial and technical resources for adaptation, resilience and ecosystem protection in regions dependent on cryospheric water, particularly mountain, Arctic, high-altitude and downstream communities.
- Connect water, land, drylands and the cryosphere within a coherent governance framework, recognizing the physical and ecological connections between frozen water systems, watersheds, groundwater, rangelands, wetlands and drylands.
- Protect and strengthen the resilience of vulnerable communities, including Indigenous Peoples, pastoralists, mountain communities and downstream populations whose livelihoods, cultures and water security depend directly or indirectly on cryospheric systems.
- Strengthen international data sharing and early-warning capabilities, supporting long-term observation and assessment of glaciers, snow, permafrost, ice sheets, sea ice and associated hydrological changes.

The Convention would be designed to complement existing international agreements, not duplicate or replace their mandates.

2. The 0.01% Solutions: A Proposed Flagship Programme within the UNCCD Framework

The proposed Convention could provide a complementary legal and governance framework for the 0.01% Solutions—a proposed flagship programme for consideration within the broader framework of the United Nations Convention to Combat Desertification (UNCCD).

At its core is a simple but ambitious proposition: to strategically capture and retain an indicative 0.01% of annual global precipitation—approximately **52 billion cubic metres of water**, depending on the global precipitation estimate used—through a distributed pond systems network, together with other water-retention and ecosystem-restoration systems, across all UNCCD member states where drylands and rangelands are present.

The programme proposes distributed pond systems, small water-retention structures, restored and constructed wetlands, recharge areas, and Green Ring ecosystems, designed according to local hydrological, ecological and socio-economic conditions. These interventions would be implemented **across drylands and rangelands within UNCCD member states** where such ecosystems are present, and could, where scientifically and environmentally appropriate,

help retain seasonal rainfall, snowmelt and surface runoff; increase soil moisture; support vegetation recovery; contribute to groundwater recharge; reduce erosion and land degradation; and strengthen local hydrological resilience.

The programme is conceived as **a distributed pond systems** and ecosystem-restoration network, rather than a single infrastructure project. Individual interventions would be adapted to local conditions while contributing to a broader, landscape-scale system in which water retention, ecosystem restoration and community stewardship reinforce one another.

The programme is designed as a long-term investment and implementation platform, potentially combining public finance, international climate and environmental funds, development finance, private investment, community participation and results-based financing mechanisms, subject to appropriate national and international financial arrangements.

It is envisioned as a multi-generational undertaking extending over 75 years or more, with an indicative long-term objective of restoring more than 20 million hectares of degraded rangelands and drylands and strengthening the livelihoods and resilience of pastoralists and other land-dependent communities.

Together, the two proposals seek to connect source and landscape, cryosphere and dryland, science and governance: protecting the cryosphere and strengthening planetary hydrological security at the international level, while supporting practical restoration and water-retention action on the ground.

The 0.01% Solutions: From Hydrological Restoration to the Green Web

The 0.01% Solutions is conceived not simply as a programme for constructing ponds, but as a long-term approach to restoring hydrological function at landscape and, ultimately, transcontinental scale. The programme proposes the establishment of at least 1 million distributed pond systems, interconnected where ecologically appropriate with Green Ring ecosystems comprising grasses, shrubs, bushes and trees. Together, these interventions would form a distributed restoration network across drylands, rangelands and steppe systems, with the objectives of retaining water, improving soil moisture, supporting vegetation recovery, contributing to groundwater recharge, reducing erosion and dust, enhancing measurable ecosystem carbon storage, and strengthening the resilience of communities dependent upon these landscapes.

The 0.01% Solutions is fundamentally a global framework for restoration across drylands and rangelands within the 197 Parties to the United Nations Convention to Combat Desertification (UNCCD). It is designed to be implemented wherever land degradation, water scarcity and pastoralist vulnerability exist—from the Sahel to the Great Plains, from the steppes of Central Asia to the savannas of Africa, from the Gobi Desert to the Mediterranean, the Pampas, the Australian Outback and beyond.

The distributed pond systems and Green Ring ecosystems would be adapted to the ecological, hydrological, social and economic conditions of each region. This is not a one-size-fits-all approach. It is a flexible, modular framework that can be tailored to local conditions while maintaining a common logic: capture water where it falls, restore the land that depends on it, and strengthen the communities that steward it.

The proposed North 43°–44° Latitude Belt Corridor is one important part of this global framework. It serves as the geographical starting point and conceptual demonstration area, spanning 18 countries across Eurasia and North America. The Corridor is particularly significant because it represents an important transcontinental dryland and dust-affected system, where land degradation and atmospheric dust transport can interact with ecosystems and the cryosphere across long distances. It is therefore an important area for demonstrating the connection between dryland restoration, water security and cryosphere stability.

Demonstrating the Green Web in this Corridor can provide the evidence, experience and momentum needed to expand the framework to other drylands and rangelands worldwide.

But the Green Web is not limited to this Corridor. It is fundamentally a global framework for restoration across drylands and rangelands within the 197 Parties to the UNCCD. **The North 43°–44° Latitude Belt Corridor** is the first major expression of this vision—a transcontinental demonstration of what is possible when nations cooperate around shared ecological challenges. From this foundation, the Green Web can expand to the Sahel, the Horn of Africa, the Middle East, South America and beyond, adapting the distributed pond systems to local conditions while contributing to a global network of restoration.

Each distributed pond system would function as one node within a broader hydrological and ecological network, while each Green Ring would serve as a localized component of ecosystem restoration adapted to its surrounding landscape. Collectively, these systems would form the proposed Green Web—a global restoration framework with an initial transcontinental component along the proposed North 43°–44° Latitude Belt Corridor, connecting **18 countries across Eurasia and North America, including 6 G20 member countries**. The Green Web would then be designed to expand across other drylands and rangelands where land degradation, water scarcity and community vulnerability are present. It is therefore conceived not as a collection of isolated projects, but as a connected landscape-scale restoration system in which water retention, soil conservation, vegetation recovery, ecosystem restoration and community stewardship reinforce one another across countries, continents and ecosystems.

At the conceptual foundation of the 0.01% Solutions is the Three-State Water System: the recognition that water in its solid, liquid and atmospheric states is interconnected through the planetary hydrological cycle. The programme proposes to capture and retain an indicative 0.01% of annual global precipitation—approximately 52 billion cubic metres of water, depending on the global precipitation estimate used—through distributed pond systems and complementary water-retention and ecosystem-restoration measures. Where hydrologically, ecologically and environmentally appropriate, these interventions could increase water residence time, improve soil-moisture retention, support vegetation recovery, contribute to groundwater recharge, reduce erosion and strengthen landscape resilience.

Within this framework, the Green Web is intended to create physical and ecological connections between drylands and mountain water sources, steppes and the cryosphere, water systems and ecosystems, communities and scientific institutions, linking local restoration efforts to a broader framework for hydrological security.

The 0.01% Solutions is proposed as a flagship programme for consideration under the UNCCD, with implementation envisioned across the 197 UNCCD Parties, particularly in drylands, rangelands and steppe systems. The indicative long-term objective is to establish at least 1 million distributed pond systems and associated Green Ring ecosystems, with an

indicative ambition of contributing to the restoration of more than 20 million hectares of degraded land and the retention of approximately 52 billion cubic metres of water annually. The programme also seeks to strengthen the resilience and livelihoods of pastoralists and other land-dependent communities, including the approximately 500 million people whose livelihoods are associated with pastoralism globally, while recognizing that the exact number varies according to definitions and data sources.

The proposed Convention on Planetary Hydrological Security and Cryosphere Stability would provide the overarching legal and institutional framework for this broader vision. It would build upon and complement existing international frameworks and seek to strengthen international cooperation concerning cryosphere protection, planetary hydrological security, scientific monitoring, data sharing, adaptation, ecosystem resilience and the protection of communities dependent upon cryospheric and water resources.

Within this architecture, the 0.01% Solutions would provide a practical framework for translating these principles into landscape-level action, particularly across drylands and rangelands. The Green Web would provide the connecting ecological and hydrological network through which individual restoration systems could contribute to wider national, regional and transcontinental objectives.

Together, the Convention, the 0.01% Solutions and the Green Web constitute three complementary components of one proposed architecture:

The Convention provides the proposed legal and institutional foundation.

The 0.01% Solutions provides the practical framework for implementation.

The Green Web provides the connecting ecological and hydrological network.

Together, they establish a continuum from glacier to river, from river to dryland, from water to land, and from international governance to community-level action.

The ultimate objective is to restore water, restore land, restore ecosystems, strengthen communities and build resilience through sustained action. It is a long-term undertaking intended to generate measurable ecological, hydrological and social benefits and to establish a framework for restoration that can extend across generations.

Why This Convention Matters for Your Organization

For the World Meteorological Organization–Global Cryosphere Watch (WMO-GCW)

The WMO Global Cryosphere Watch is a WMO cross-cutting activity that coordinates and strengthens international capabilities for observing the cryosphere, accessing and using cryospheric data, and developing science-based analyses and indicators. It brings together observing systems, scientific and operational communities, and partners across snow, glaciers, permafrost, sea ice and other components of the cryosphere.

A dedicated international Convention could provide a stronger policy and institutional framework for translating these observations into international action. Subject to the Convention's negotiated provisions, GCW could contribute to the scientific monitoring, reporting, assessment and information architecture required to support implementation. Its

existing standards, observing requirements, data systems and CryoNet-related activities could provide an important scientific foundation for such a framework.

For the International Association of Cryospheric Sciences (IACS)

The International Association of Cryospheric Sciences is the international scientific association within the International Union of Geodesy and Geophysics dedicated to the study of the cryosphere. A Convention could strengthen recognition of cryospheric science within international decision-making and create a sustained science-policy interface through which scientific assessments, research priorities, methodologies and expert knowledge could inform implementation.

The Convention could also provide opportunities for IACS and its scientific communities to contribute expertise to scientific assessments, technical bodies, monitoring methodologies and international cooperation established under the Convention.

For the World Glacier Monitoring Service (WGMS)

The World Glacier Monitoring Service provides standardized information on changes in glaciers, including changes in mass, volume, area and length, and maintains long-term observational records that are fundamental to understanding glacier change.

A Convention could create a stronger international policy demand for consistent, long-term glacier observations and assessments. Subject to the Convention's final institutional arrangements, WGMS data and expertise could contribute to a global monitoring and reporting framework, while its network of national correspondents could help connect international assessment with national glacier-monitoring communities.

The objective would not be to replace existing scientific systems, but to ensure that the world's long-term glacier observations are systematically connected to international decision-making.

For the International Permafrost Association (IPA)

The International Permafrost Association promotes cooperation in permafrost research and supports international scientific exchange, monitoring and assessment concerning permafrost and seasonally frozen ground.

A Convention could give greater international policy recognition to permafrost as a critical component of the cryosphere and the Earth system, strengthening the connection between permafrost science, water security, ecosystems, infrastructure, carbon-cycle processes and climate change.

IPA expertise could contribute to the development of monitoring methodologies, scientific assessments, technical guidance and international cooperation on permafrost change.

For the World Climate Research Programme–Climate and Cryosphere (WCRP-CliC)

The Climate and Cryosphere project of the World Climate Research Programme (WCRP) coordinates and promotes international research on the interactions between the cryosphere and the climate system.

A Convention could create a stronger science-policy interface for this research by providing an international framework through which cryosphere–climate interactions; modelling,

projections, observations and research priorities could inform policy development and implementation.

CliC's scientific community could therefore play an important role in strengthening the evidence base underlying the Convention and its future assessments.

For the Polar and Regional Science Bodies

The International Arctic Science Committee and the Scientific Committee on Antarctic Research (SCAR) coordinate international scientific cooperation in the Arctic and Antarctic respectively.

A Convention could strengthen opportunities for international science cooperation, data exchange, coordinated observation and science diplomacy in polar and high-latitude regions. It could also provide a broader policy framework through which scientific knowledge from the Arctic, Antarctic, mountain and other cryospheric regions could contribute to a common understanding of planetary cryosphere change.

The Convention should complement-not duplicate-the mandates and existing legal arrangements of the Arctic and Antarctic systems.

For the Observing and Data Networks

Organizations and networks including Sustaining Arctic Observing Networks (SAON), the Arctic Data Committee, Mountain Research Initiative (MRI), Third Pole Environment (TPE), International Network for Alpine Research Catchment Hydrology (INARCH), Global Terrestrial Network for Permafrost (GTN-P), Global Terrestrial Network for Glaciers (GTN-G), and Global Terrestrial Network for Hydrology (GTN-H) represent important components of the wider observation, research and data ecosystem.

A Convention could provide an overarching policy framework for greater interoperability, coordination and accessibility of cryosphere and hydrological observations, while respecting the mandates, ownership arrangements and scientific independence of existing networks.

Rather than creating parallel monitoring systems, the Convention could help connect existing systems into a more coherent global evidence base.

For the Earth Observation and Satellite Coordination Bodies

The Global Climate Observing System (GCOS), Global Ocean Observing System (GOOS), Global Terrestrial Observing System (GTOS), Group on Earth Observations (GEO), Committee on Earth Observation Satellites (CEOS), and Coordination Group for Meteorological Satellites (CGMS) contribute to the broader global Earth-observation architecture through coordination of satellite, in-situ and other observing capabilities.

A Convention could strengthen coordination between these existing systems and the cryosphere community, helping identify observation gaps, continuity requirements, data standards and priority information needs for glaciers, ice sheets, snow, sea ice, permafrost and related hydrological processes.

This would allow the Convention to build upon existing Earth-observation infrastructure rather than establishing a parallel system, while improving the availability of scientifically robust information for international assessment and decision-making.

What the Convention Would Achieve

Establish legally binding international obligations for cryosphere protection and stability, building on growing international recognition of the cryosphere through the UN Decade of Action for Cryospheric Sciences (2025–2034), the International Year of Glaciers’ Preservation, World Day for Glaciers, the Dushanbe Glacier Declaration, and other relevant international initiatives. The Convention would seek to translate scientific knowledge and political commitments into a durable international legal framework.

Create permanent institutional mechanisms for scientific monitoring, assessment, cooperation and reporting, complementing rather than duplicating the work of the IPCC, WMO Global Cryosphere Watch, IACS, WGMS, IPA and WCRP-CliC. These mechanisms could provide a common framework for bringing together observations and assessments of glaciers, snow, permafrost, sea ice, ice sheets and related hydrological systems.

Mobilize financial and technical resources for adaptation, resilience and restoration in regions dependent on the cryosphere, particularly mountain, Arctic, Central Asian, high-altitude and downstream communities facing increasing water insecurity and climate-related risks.

Connect the cryosphere, water, land and drylands within a coherent governance framework, recognizing that changes in frozen water systems can propagate through watersheds, groundwater, ecosystems, agriculture, rangelands and human settlements. The Convention would therefore address the cryosphere–water–land–dryland nexus as an interconnected component of planetary hydrological security.

Provide a legal and institutional architecture for the 0.01% Solutions and the Green Web Initiative, subject to the Convention’s final negotiated provisions. The 0.01% Solutions is fundamentally a global framework for restoration across drylands and rangelands within the 197 Parties to the UNCCD. The distributed pond systems and Green Ring ecosystems would be adapted to the ecological, hydrological, social and economic conditions of each region—from the Sahel to the Great Plains, from the steppes of Central Asia to the savannas of Africa, from the Gobi Desert to the Mediterranean, the Pampas, the Australian Outback and beyond. The Convention would provide a framework for connecting hydrological restoration, groundwater recharge, ecosystem restoration, land degradation neutrality and cryosphere protection within a coherent glacier-to-dryland framework.

Protect vulnerable communities and strengthen their resilience, including Indigenous Peoples, pastoralists, mountain communities and downstream populations whose livelihoods, cultures, water resources and ecosystems depend directly or indirectly on cryospheric systems. The Convention would promote meaningful participation and the use of scientific, Indigenous and local knowledge, where appropriate, in decision-making.

Strengthen international cooperation and data sharing, encouraging countries and scientific institutions to improve long-term observations, data interoperability, early-warning capabilities, scientific assessment and knowledge exchange across national boundaries.

Establish a stronger science–policy interface for the cryosphere, ensuring that international decisions are informed by the best available scientific evidence while enabling scientists, research institutions and observing networks to contribute systematically to assessments and implementation.

Create a long-term framework for planetary hydrological security, recognizing that glaciers, snow, permafrost, precipitation, rivers, groundwater, wetlands, rangelands and drylands are interconnected components of the global water cycle.

Ultimately, move the international community from observation to coordinated action. The Convention would seek to transform decades of cryosphere science, monitoring and warnings into sustained international cooperation capable of protecting water security, ecosystems and communities for present and future generations.

The Scientific Consensus

The scientific evidence shows that the cryosphere is undergoing profound and accelerating change, with consequences extending far beyond regions where ice and snow are found. The Intergovernmental Panel on Climate Change (IPCC) has documented widespread changes in glaciers, ice sheets, snow, permafrost and other components of the cryosphere. Glacier and ice-sheet mass loss contributes to sea-level rise, while permafrost warming and thaw can release previously stored greenhouse gases, including methane, creating additional climate feedbacks.

The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) has demonstrated through its Nexus Assessment the close interconnections among biodiversity, water, food, health and climate. Biodiversity loss, water scarcity, food insecurity, pollution and climate change are interconnected global challenges that require coordinated responses. Cryosphere change can affect these systems through changes in water availability, ecosystems, land conditions and climate processes.

The Convention on Migratory Species (CMS) recognizes that climate and environmental change are affecting migratory species and the ecosystems on which they depend. For species associated with polar, mountain and cold-region environments, changes in snow, ice, water availability and habitat conditions can affect ecological connectivity and migration patterns. Changes in sea ice, tundra and permafrost can therefore have significant consequences for species that depend on these environments.

The Ramsar Convention on Wetlands recognizes the importance of wetlands for biodiversity, water regulation, climate resilience and human well-being. The Global Wetland Outlook 2025 warns of continuing global wetland loss and identifies significant risks to the ecosystem services and economic benefits provided by wetlands. Many mountain and downstream wetlands are hydrologically connected to snow, glaciers, rivers and groundwater. Changes in these water sources can therefore have consequences extending far beyond the cryosphere itself.

The scientific community has built an extensive international architecture to observe and understand these changes. The International Glaciological Society (IGS) advances research and knowledge concerning glaciers, snow and ice. The International Union of Geodesy and Geophysics (IUGG) and its International Association of Cryospheric Sciences (IACS) bring together international scientific expertise in geophysical and cryospheric sciences. IACS, established in 2007 as the eighth association of IUGG, promotes the advancement of cryospheric sciences, organizes international scientific meetings and supports international Working Groups.

The International Union of Geological Sciences (IUGS) contributes geological and Earth-system expertise relevant to understanding cryosphere change.

International observing networks provide essential evidence for understanding the changing cryosphere. The International Arctic Buoy Programme (IABP) supports observations of the Arctic sea-ice and ocean environment, while the International Programme for Antarctic Buoys (IPAB) contributes observations from the Southern Ocean and Antarctic region. The International Ice Charting Working Group (IICWG) promotes international cooperation and coordination in ice information and charting, supporting scientific research and operational needs.

These institutions and networks represent decades of scientific knowledge, observation, measurement and international cooperation. The challenge is therefore not simply whether humanity has the scientific capacity to understand cryosphere change. The challenge is how to translate this knowledge into coordinated, sustained and effective international action.

A proposed Convention on Planetary Hydrological Security and Cryosphere Stability could provide a common legal and institutional framework through which existing scientific organizations, observing systems, international agreements and national institutions can work together. It would seek to connect science with governance, observation with action, and the cryosphere with the wider planetary water system.

The 0.01% Solutions, proposed as a flagship programme for consideration under the UNCCD, could provide a practical implementation framework through distributed pond systems and Green Ring ecosystems across drylands and rangelands within the 197 Parties to the UNCCD, adapted to the ecological, hydrological, social and economic conditions of each region. The proposed North 43°–44° Latitude Belt Corridor would provide a geographical starting point and conceptual demonstration area, spanning 18 countries across Eurasia and North America, where the connections among drylands, atmospheric processes, water systems and the cryosphere can be studied and demonstrated.

The objective is not to replace the scientific institutions or international frameworks that already exist. It is to build upon them and connect their knowledge, observations and capabilities within a more coherent framework for protecting the cryosphere, strengthening planetary hydrological security, and safeguarding the communities and ecosystems that depend upon these interconnected systems.

Why This Convention Is Needed Now

The cryosphere is undergoing rapid and widespread change, with consequences for water security, ecosystems, food systems, sea-level rise and climate stability. The IPCC has documented substantial changes across glaciers, ice sheets, snow and permafrost, including glacier and ice-sheet mass loss contributing to sea-level rise and permafrost thaw creating the potential for additional greenhouse-gas emissions. The cryosphere contains approximately 70% of the world's freshwater, and an estimated 2 billion people depend on water originating from mountains and the melting cryosphere, with meltwater from the Hindu Kush Himalaya alone supporting more than 1.9 billion people downstream.

The cryosphere has become a fundamental component of the Earth's system that cannot remain without dedicated governance. Yet the current governance architecture remains

fragmented and incomplete. The UNFCCC addresses climate change; the UNCCD addresses desertification, land degradation and drought; the CBD addresses biodiversity; the Ramsar Convention addresses wetlands; and international water conventions address transboundary water resources. Each provides an essential part of the response, but no single comprehensive international legal instrument specifically addresses the cryosphere as an interconnected component of the planetary hydrological system. This fragmented governance leaves the cryosphere without a dedicated legal framework, creating a significant gap in global governance.

The UN Decade of Action for Cryospheric Sciences (2025–2034) has created important scientific momentum. The Dushanbe Glacier Declaration has strengthened international political attention to glacier preservation. The 2026 UN Water Conference in the United Arab Emirates provides an important opportunity to advance international cooperation on water and related challenges. Together, these developments create a timely opportunity to consider how scientific knowledge and political commitments can be translated into a more permanent and coherent governance framework. The time has come to move from recognition to coordinated action.

A new Convention could provide a common legal and institutional framework for addressing the cryosphere in connection with water security, climate, ecosystems, land degradation and human resilience, while complementing existing international agreements rather than duplicating them. To support its implementation, the 0.01% Solutions—a proposed flagship programme for consideration under the UNCCD—offers a practical mechanism to capture an indicative 0.01% of annual global precipitation through distributed pond systems and Green Ring ecosystems, restoring degraded landscapes across drylands, rangelands and steppe systems within **the 197 Parties to the UNCCD, while connecting the cryosphere to drylands through a coherent glacier-to-dryland framework**. Without such a framework, the cryosphere—a critical component of the Earth system and an important source of water for billions of people—will remain without the dedicated governance framework it urgently requires.

The time has come to move from recognition to coordinated action!

A new Convention could provide a common legal and institutional framework for addressing the cryosphere in connection with water security, climate, ecosystems, land degradation and human resilience, while complementing existing international agreements rather than duplicating them.

The 0.01% Solutions: A Mechanism to Implement the Convention

The proposed Convention is intended to provide a potential legal and governance framework for the 0.01% Solutions—a proposed flagship programme for consideration within the broader framework of the United Nations Convention to Combat Desertification (UNCCD).

At its core is a simple but ambitious proposition: to strategically capture and retain 0.01% of annual global precipitation—an indicative volume of approximately 52 billion cubic metres of water per year—through distributed water-retention and ecosystem-restoration systems across the 197 Parties to the UNCCD, particularly in drylands, rangelands and steppe systems.

The programme proposes a network of distributed pond systems, small reservoirs, restored and constructed wetlands, water-retention landscapes, groundwater-recharge areas and Green Ring ecosystems, designed and adapted to local ecological, hydrological and socio-economic conditions. Rather than relying on a single large infrastructure system, the approach

emphasizes distributed interventions that collectively increase water residence time, improve soil moisture, support groundwater recharge, reduce land degradation and strengthen ecosystem resilience.

The 0.01% Solutions is conceived as a long-term investment and implementation platform that could combine public finance, international climate and environmental funds, development finance, private investment, community participation and results-based financing mechanisms, subject to appropriate financial and institutional arrangements.

It is envisioned as a multi-generational undertaking extending over 75 years or more, with an indicative long-term objective of establishing at least 1 million distributed pond systems and contributing to the restoration of more than 20 million hectares of degraded rangelands and drylands. This scale is intended to complement and contribute to existing international restoration commitments, including those associated with the G20 Global Land Initiative (G20 GLI).

The G20 Global Land Initiative, launched under the G20 in 2020, established the ambition of reducing degraded land by 50% by 2040. International restoration commitments have also reached significant scales, including commitments by countries to restore more than 10 million hectares each. The 20 million-hectare indicative objective of the 0.01% Solutions is therefore designed to operate at a scale comparable with major national restoration commitments while providing a distributed mechanism that can be implemented across multiple countries and ecosystems. The programme could help connect international restoration ambitions with practical, landscape-level implementation.

The programme would also seek to strengthen the livelihoods and resilience of pastoralists and other land-dependent communities by establishing measurable connections between water retention, land restoration, biodiversity, carbon storage, groundwater recharge and community resilience, creating opportunities for appropriate ecosystem-service and results-based financing mechanisms where scientifically and legally justified.

The proposed North 43°–44° Latitude Belt Corridor, connecting 18 countries across Eurasia and North America, including 6 G20 members, would provide an important transcontinental demonstration area within the broader global framework. Experience from the Corridor could help inform implementation in other drylands and rangelands across the 197 UNCCD Parties.

The proposed Convention could provide an overarching governance framework for connecting cryosphere protection, hydrological security and dryland restoration, recognizing that water from glaciers and snow contributes to rivers, wetlands, groundwater systems, rangelands and drylands. Protecting water sources and restoring downstream landscapes should therefore be understood as interconnected components of the planetary water system.

Excellencies, Distinguished Directors, Esteemed Colleagues,

We are writing to you as an independent civil society initiative—the 0.01% Solutions—Green Web—Cryosphere Convention Initiative Team—to formally invite your esteemed organization to support consideration of a Convention on Planetary Hydrological Security and Cryosphere Stability, alongside the 0.01% Solutions, a proposed flagship programme for

consideration under the broader framework of the United Nations Convention to Combat Desertification (UNCCD).

THE INVITATION

We respectfully invite your esteemed organization to:

Consider this proposal and its potential contribution to addressing important gaps in international cryosphere and planetary hydrological governance.

Engage in dialogue with relevant scientific organizations, international institutions, governments, Indigenous Peoples, communities and other stakeholders concerning the potential need for a dedicated international framework for cryosphere protection and planetary hydrological security.

Consider this issue within relevant agendas, meetings and conferences, particularly those addressing cryosphere science, water security, climate change, land degradation, biodiversity and sustainable development.

Support consideration of an intergovernmental process through which States could examine the feasibility, scope and potential elements of a Convention on Planetary Hydrological Security and Cryosphere Stability.

Provide scientific and technical expertise to help ensure that any future Convention is grounded in the best available science, established observation systems, Indigenous and local knowledge where appropriate, and internationally recognized principles and standards.

The 0.01% Solutions, proposed as a potential flagship programme within the broader UNCCD framework, offers one practical pathway for translating the principles of hydrological security into landscape-level action. By strategically retaining a small fraction of annual precipitation and restoring degraded landscapes across drylands, rangelands and steppe systems, the initiative seeks to demonstrate how water retention, land restoration, ecosystem recovery and community resilience can be addressed together.

The G20 Global Land Initiative has established an ambition to reduce land degradation and promote large-scale land restoration. The 0.01% Solutions is designed to contribute to this broader global effort through an indicative objective of establishing 1 million distributed pond systems and contributing to the restoration of more than 20 million hectares of degraded rangelands and drylands. By providing a practical and scalable implementation framework, the initiative seeks to help connect international restoration commitments with action on the ground.

The cryosphere–water–dryland nexus deserves greater recognition within international governance. The proposed Convention seeks to create a framework through which the protection of cryospheric systems and the restoration of downstream landscapes can be understood as interconnected elements of planetary hydrological security.

Let us connect our nations through shared solutions.

During this moment of UNCCD COP17 ongoing high-level discussions in Ulaanbaatar, Mongolia, we invite you to join us in advancing this historic undertaking. On behalf of the 0.01% Solutions–Green Web–Cryosphere Convention Initiative Team, an independent civil society initiative dedicated to ecological restoration and planetary hydrological

security, we extend this invitation with profound respect and a shared commitment to the future of humanity and Mother Earth.

Restoring LAND. Restoring HOPE. Restoring WATER. Building PEACE.

The 0.01% Solutions–Green Web–Cryosphere Convention Initiative Team

An independent, civil society initiative

In alignment with the Steppe Action Agenda under Mongolia's UNCCD COP17 Presidency

At the UNCCD COP17

Ulaanbaatar, Mongolia

August 17-28, 2026