

@g20landinititive

in G20 Global Land Initiative

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Our ambition:

REDUCE 50% OF GLOBAL DEGRADED LAND BY 2040

We do this by:



Showcasing success stories that benefit nature and safeguard people's lives, jobs and incomes.



Engaging the private sector in sustainable land management, land restoration and habitat conservation.



Empowering civil society and the public on land stewardship for sustainable development.



Building capacity and sharing knowledge knowledge on land conservation and restoration outcomes.

The ambition of the G20 Global Initiative on Reducing Land Degradation and Enhancing Conservation of Terrestrial Habitats (in short G20 Global Land Initiative) launched during the Saudi Arabian Presidency is to achieve a 50 per cent reduction in degraded land by 2040. To inspire all stakeholders to collectively deliver on land conservation and restoration outcomes: we showcase success stories; engage the private sector; empower civil society and the public; and share knowledge to build capacity among G20 members as well as interested non-member countries and other stakeholders.

Leaders' Declaration, G20 Riyadh Summit, 21-22 November 2020

Acronyms

BKH Art and Exhibition Hall of the Federal Republic of Germany
CAMRE Council of Arab Ministers Responsible for the Environment

CBD United Nations Convention on Biological Diversity

CI Conservation International

CIFOR-ICRAF Center for International Forestry Research-World Agroforestry Center

COP Conference of the Parties

CPD Continuing Professional Development
CTCN Center for Technology and Climate Network
EN-WWF Emirates National-World Wide Fund for Nature
ESD Education for Sustainable Development

EU European Union

FAO Food and Agriculture Organization of the United Nations

FIG International Federation of Surveyors

G20 Group of Twenty Countries

GBF Kunming-Montréal Global Biodiversity Framework
GCAP Global Changemaker Academy of Parliamentarians

GEF Global Environment Facility
GIP Gandhinagar Information Platform

GIR Gandhinagar Implementation Roadmap

GLI Global Land Initiative

GRIH Global Restoration Information Hub

ICBA International Center for Biosaline Agriculture

ICESCO Islamic World Educational, Scientific and Cultural Organization

ICO G20 Global Land Initiative Coordination Office

IIFM Indian Institute of Forest Management

ITC International Trade Center

IUCN International Union for Conservation of Nature

KMERC Karnataka Mining Environmental Restoration Corporation

LPD Land Productivity Dynamics
MENA Middle-East and North Africa
NBS Nature-Based Solutions

NGOs Non-governmental Organizations

NREGA Mahatma Gandhi National Rural Employment Guarantee Act

PGD's Post Graduate Diplomas

PGD's-FM Post Graduate Diplomas in Forest Management
PGD's-SM Post Graduate Diplomas in Sustainability Management

SDGs Sustainable Development Goals

SEEA System of Environmental Economic Accounting

SER Society for Ecological Restoration

UAE United Arab Emirates

UN United Nations

UNCCD United Nations Convention to Combat Desertification

UNCED United Nations Conference on Environment and Development

UNEP United Nations

UNEP -WCMC/BIP UNEP World Center and Monitoring Center/Biodiversity Indicators Partnership

UNFCCC United Nations Framework Convention Climate Change

WIPO World Intellectual Property Organization

WRI World Resources Institute
WWF World Wide Fund for Nature

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Director's Letter

It is with great pride that I present the second Annual Report of the G20 Global Land Initiative Coordination Office. The Global Initiative on Reducing Land Degradation and Enhancina Conservation of Terrestrial Habitats, (henceforth referred to as Global Land Initiative or GLI), which aims to prevent, halt, and reverse land degradation, was launched by the G20 Leaders during the Saudi Arabia Presidency of the G20 in November 2020. It reflects the shared ambition of the G20 Members to achieve a 50 per cent reduction of degraded land by 2040, on a voluntary basis, including through building on existing initiatives.

The G20 Global Land Initiative Coordination on Climate Change (UNFCCC). ICO also Office (ICO) was set up in April 2022 at the United Nations Convention to Combat Desertification (UNCCD). UNCCD oversees the work of ICO, and the latter receives guidance from a Steering Committee comprising representatives appointed by the G20 member, the Food and Agriculture Organization of the United Nations (FAO), UNCCD and United Nations Environment Program (UNEP).

During its first year of existence, the Global Land Initiative strategy was developed and staff recruitment commenced. ICO was represented at the Conference of Parties of the three Rio Conventions held in 2022, namely, the United Nations Convention on Biological Diversity (CBD), UNCCD and United Nations Framework Convention

degradation on the G20 Agenda in 2023, focusing on areas affected by mining

as well as forest fires. A number of side events were organized on these topics and two compendia of best practices were prepared during the Presidency, with ICO supporting and working closely with the India Presidency. The G20 Leaders' Declaration issued in September 2023 reiterates the commitment to a 50 per cent reduction in degraded land by 2040.

established its online presence through

The India Presidency kept the G20 goal

of preventing, halting and reversing land

websites and social media channels.

In its second year, the G20 Global Land **Initiative Coordination Office led the charge** for global land restoration, fostering partnerships, engaging youth, and committing to a 50 per cent reduction in degraded land by 2040— a journey marked by collaboration and a vision for a sustainable future.

Dr Muralee Thummarukudy Director, G20 Global Land Initiative **Coordination Office**

The G20 Global Land Initiative Steering Committee met twice; in July 2023 and November 2023. The Committee agreed to initiate a number of foundational studies to understand the current landscape of restoration and prepare a blueprint for the restoration initiative.

GLI started to implement its strategy in earnest in 2023. The team recruitment for ICO was completed, and now has a truly international team, a majority of whom are young people. ICO finalized more than 10 operational partnerships with the UN, universities and other non-governmental institutions. It also established partnerships with the United Nations Decade on Ecosystem Restoration (UNDER), The Global Peatland Initiative, Global Mangrove Initiative and the Partnership for Ecosystem and Disaster Risk Reduction. In addition, the Global Land Initiative was assigned to lead the activities under the "Land Challenge" of the Decade on Ecosystem Restoration.

The delivery of mandated outputs under the GLI commenced in full swing during 2023, with the launch of the Global Restoration Information Hub. The Hub brings together publicly reported information on restoration commitments, best practices, community practices, restoration actors and legislation. ICO, in collaboration with the United Nations System Staff College launched a flagship training programme for parliamentarians, the Global Changemaker Academy for Parliamentarians. ICO, in a collaboration with the Society for Ecological Restoration (SER), also launched a training program for mining industry professionals to address restoration of areas degraded by mining. A third program on the use of bio-saline agriculture for land restoration was completed with the International Center for Biosaline Agriculture (ICBA).

ICO, in collaboration with 18 other partner institutions, initiated an ambitious program to mainstream land restoration in curricula in agricultural universities around the world. Similar programs are planned in forestry, mining and urban planning.

ICO embarked on an initiative to recognize voung entrepreneurs who are using land restoration as a platform for start-ups. It collaborated with the International Trade Center (ITC) on the global competition for youth ecopreneurs, which included submissions from young people around the world with innovative Start-ups in land restoration. Three enterpreneurs were recognized during the ITCs annual conference in June in Ulaanbaatar, Mongolia.

As part of its focus on young people, ICO, partnered in October 2023 with the Global Landscape Forum to co-host a youth forum in Nairobi, Kenya.

The year concluded with enhanced participation of the ICO at the Twenty-eighth session of the Conference of Parties to the UNFCCC (COP28). For the first time in the history of the UNFCCC CoPs, a pavilion was devoted to the issues of land restoration and drought resilience. Ten side events, organized with 12 partners, focused on land restoration from different perspectives.

The year 2024 promises to be exciting for the land restoration agenda. ICO will work with the Brazil Presidency of the G20 to organize side events on Land Restoration. The World Environment Day 2024 will focus on the topic of land restoration and the G20 Global Land Initiative is working on a number of awareness-raising activities. In December 2024, Saudi Arabia will host the Sixteenth session of the Conference of Parties (COP 16) to the UN Convention to Combat Desertification, which again will put significant emphasis on land restoration.

Dr Muralee Thummarukudy Director, G20 Global Land Initiative Coordination Office

"The latest trends show that more land was lost than was restored. If we are to achieve the ambition of our leaders, our perspective needs to change. Land restoration should be seen as an opportunity – rather than a challenge."

- Ibrahim Thiaw

Under-Secretary-General and Executive Secretary of the United Nations Convention to Combat Desertification (UNCCD)



Steering Committee Meetings

The G20 Steering Committee consists of representatives from each of the G20 Members and from Food and Agriculture Organization of the United Nations (FAO), United Nations Convention to Combat Desertification (UNCCD) and United Nations Environment Programme (UNEP). The Steering Committee meets twice a year, normally in November and July, under a rotating Chair. The Steering Committee member from the sitting G20 Presidency chairs the G20 Global Land Initiative Steering Committee.

During the reporting period, two steering committee meetings took place, chaired by the Steering Committee member from India, Mr Bivash Ranjan (Additional Director General of Wildlife), Ministry of Environment, Forests and Climate Change, India. At the first meeting in July, a progress report on the ICO activities carried out from January to June was presented, along with the plan for the rest of the year.

ICO proposed a set of working papers to be developed to capture the challenges involved in operationalizing the GLI mandate of achieving a 50 per cent reduction in degraded land by 2040. Other global initiatives to achieve land restoration exist, such as the Bonn Challenge and the commitments to Land Degradation Neutrality as well as those under the Biodiversity and Climate Change conventions.

However, there is a dearth of observations and documentation to assess progress not just in the land restored but towards achieving the ambitious target of a 50 per cent reduction in degraded land by 2040.

The four studies proposed to understand the key constraints to achieving such targets, which were approved by the steering committee, will focus on:

- Institutional Barriers to Large-scale Land Restoration;
- 2. Financing Gap for Restoration;
- 3. Enablers for a Restoration Economy,
- 4. Large-scale Capacity Building for Restoration Professionals.

During the second Steering Committee meeting, the secretariat presented the update on the 2022-2024 implementation work plan. The Government of India presented an update from the India G20 Presidency and its plan to launch a new Gandhinagar Implementation Roadmap Alliance to bring together countries within G20 and beyond to promote land restoration in two priority landscapes. First, the areas affected by forest fires and second, in areas affected by mining. The Government of India has also put forward a proposal to develop a Gandhinagar Information Platform to enable the partners involved in the roadmap to exchange information and publish and exchange best practices, including community practices in land restoration.

The Steering Committee also reported that the African Union is now a member of the G20 and a new steering committee member will be joining soon.

"The G20 Global Land Initiative is an important global initiative to achieve land restoration. During the India Presidency, land restoration remained on the agenda of the Environment and Climate Sustainability Working Group. In order to translate commitments to action, India is planning the **Gandhinagar Implementation** Roadmap - Gandhinagar Information Platform Alliance, to focus on the priority areas of mine restoration and the restoration of areas affected by forest fires. We expect this alliance will support and strengthen the Global Land Initiative."

Mr Bivash Ranjan, Additional Director General of Wildlife, Ministry of Environment, Forests and Climate Change, India



G20 Global Land Initiative in Intergovernmental Processes

This section highlights significant mentions of the ICO in various intergovernmental outcome documents in 2023. This report underscores the growing recognition of and commitment by global and regional bodies as well as other intergovernmental processes to achieve the objectives of the G20 Global Land Initiative and the G20 ambition to reduce land degradation by 50 per cent by 2040.

G7 Climate, Energy, and Environment Ministers' Communiqué

Under the presidency of Japan, the G7 Ministers who met on 15 – 16 April in Sapporo, Japan, in their communiqué, referred to their commitment to land degradation neutrality:

"We restate our commitment to achieving land degradation neutrality and will take action to tackle land degradation, desertification and drought, in line with SDG 15.3 and our common objective under the G20 Global Land Initiative." (Paragraph 10)

Council of Arab Ministers Responsible for the Environment (CAMRE) Endorsement

During its 34th session in Muscat, Oman, The Council of Arab Ministers Responsible for the Environment (CAMRE) formally endorsed the G20 Global Land Initiative in its decision (number 635), which marks a significant step in integrating the initiative's global goals with the specific needs of the Arab region. The decision states:

"the council of Arab Ministers Responsible for the Environment decides to welcome the G20 Global Initiative on Reducing Land Degradation and Enhancing Conservation of Terrestrial Habitats which was launched by the G20 Group in 2020 when the group was meeting under the Saudi Presidency, and decides to invite its [the CAMRE] Secretariat to collaborate with the UNCCD (the coordination office of the Initiative) as well as the specialized Arab Agencies to explore collaborating in activities related to (capacity building, monitoring land degradation in the region, awareness raising and others) (decision number 635 session 34, 26/10/2023)"

United Nations General Assembly 78th Session

General Assembly Resolution on the "Implementation of the United Nations Convention to Combat Desertification in Those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa" (21 December 2021)

During the 78th session of the United Nations General Assembly, under resolution A/RES/78/154 titled, "Implementation of the United Nations Convention to Combat Desertification in Those Countries Experiencing Serious Drought and/or Desertification, particularly in Africa," the Assembly stated:

"Recognizing the Global Initiative on Reducing Land Degradation and Enhancing Conservation of Terrestrial Habitats to prevent, halt and reverse land degradation adopted by the leaders of the Group of 20 in Riyadh in 2020, as well as the Riyadh Leader's Declaration."

G20 GLI gained recognition in the G7 communiqué, Arab Ministers' endorsement, and in the UN General Assembly.

India Presidency of the G20 and the Global Land Initiative

The Government of India on 1 December 2022 assumed the G20 presidency following Indonesia's Presidency. In 2023, ICO continued this close collaboration with the India G20 Presidency, more specifically, the Environment, Climate and Sustainability Working Group (ECSWG).

The Presidency in 2023 placed a particularly strong emphasis on land restoration and its interplay with broader environmental sustainability, and made "Arresting Land Degradation, Accelerating Ecosystem Restoration, and Enriching Biodiversity" one of the three priority topics for consideration by the Working Group.

The focus of the India G20 Presidency was land degradation stemming from forest fires and mining activities. The India Presidency introduced two crucial documents to strengthen land restoration under the G20 Global Land Initiative: The Gandhinagar Implementation Roadmap (GIR) and the Gandhinagar Information Platform (GIP).

The GIR aims to enhance the initiative's work on areas impacted by forest fire and mining, which aligns with the Presidency's key priority landscapes. The GIP is an information-sharing platform that will play a pivotal role in facilitating the GIR's implementation by showcasing knowledge and fostering collaboration.

ICO worked closely with officials from the Government of India to support their efforts to keep land issues on the front burner of the G20 agenda. ICO actively supported and participated in the side-events held in Bangalore and Gandhinagar, where it contributed to the compilation of best practices. An exhibition showcasing G20 Global Land Initiative activities was hosted on 27 - 29 March 2023 during the second ECSWG meeting in Gandhinagar.

Mr Ibrahim Thiaw, Executive Secretary, UNCCD, delivered a statement at the G20 Ministerial meeting in July 2023 in Chennai, India. Mr Thiaw underlined the importance of translating commitments to action and called for the increased involvement of the private sector in land restoration. He also held bilateral discussions with ministers, including from the host country, India, and with other delegations. The UNCCD delegation also made field visits to local schools, universities and restoration sites to promote land restoration.

The G20 Leaders' Declaration of 2023 issued in September, reiterates the members' support of the ambition to reduce land degradation by 50 per cent by 2040 committed under the G20 Global Land Initiative. The G20 Environment and Climate Ministers Meeting reiterated their support for the G20 Global Land Initiative and recognized its contribution to the ambition of achieving a 50 per cent reduction of degraded land by 2040, on a voluntary basis. This ambition was first announced by G20 leaders in the Riyadh Leaders' Declaration and has been reaffirmed in successive G20 Leaders' declarations.

India's G20
Presidency
prioritizes land
restoration,
introduces
crucial
documents,
and gains G20
support.



The ICO team during the second ECSWG meeting in Gandhinagar, India in March 2023

"We restate our support for the G20 Global Initiative on Reducing Land Degradation and Enhancing Conservation of Terrestrial Habitats (G20 Global Land Initiative) and recognize its contribution to the G20 ambition to achieve a 50 per cent reduction of degraded land by 2040, on a voluntary basis, building on the work of the past presidencies including Saudi Arabia, Italy, and Indonesia." (paragraph 29)

Extract from the Outcome Document and Chair's Summary of the G20 Environment and Climate Ministers' Meeting



CAMRE - 34th Council of Arab Ministers of Environment in

Engagement with the United Nations Decade on Ecosystem Restoration

The United Nations Decade on Ecosystem 1 March 2019 by resolution (73/284) of the United Nations General Assembly. Its aims are "supporting and scaling up efforts to prevent, halt and reverse the degradation of ecosystems worldwide and raise awareness of the importance of successful ecosystem restoration".

The resolution invites United Nations Environment Programme (UNEP) and the Food and Agriculture Organization of the United Nations (FAO) to lead the implementation of the Decade, in collaboration with the secretariats of the Rio conventions, other relevant multilateral environmental agreements and entities of the United Nations system, including by identifying and developing possible activities and management, climate change, forestry, existing resources, and through voluntary contributions, as appropriate.

ICO has been working with the UN Decade on Ecosystem Restoration (UNDER), participating regularly in their partners' meetings and contributing to their capacity-building and communication efforts. (Also see report under Communications Strategy). In this context, UNDER has established twelve "challenges" ranging from youth, finance, food, climate and education. Based on these challenges, the partners can come together, agree on common targets and work collectively towards resolving them.

ICO was tasked in 2023 to take the lead on the Restoration (2021-2030) was established on "Restoration Challenge on Land". Considering that commitments to restore over one billion hectares of land already exist, this group focused on bringing the actors together to work collectively on advocacy to achieve the committed restoration targets.

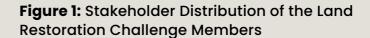
In August 2023, ICO opened a call for expressions of interest for UN Decade partners to join the Land Restoration Challenge. It received over 120 registrations from 109 organizations covering a range of stakeholder groups, including civil society organizations, the private sector, youth organizations, women's organizations, indigenous peoples and academia/research institutions (see Figure 1 on the next page). They include entities with expertise in land restoration, land use and programmes, within their mandates and agriculture, water and wetlands, technology and innovation and urban planning. To mobilize this diverse network of partners and encourage collaboration to scale up action, the ICO organized the first two meetings of the Land Restoration Challenge in October and November.

> In September 2023, the Global Land Initiative joined UNDER's meeting of the reconstituted steering committee meeting held in Darwin, Australia, and presented the Global Land Initiative. Systematic engagement with other restoration challenges was held with a view to coordinate actions and learn from each other's experiences.

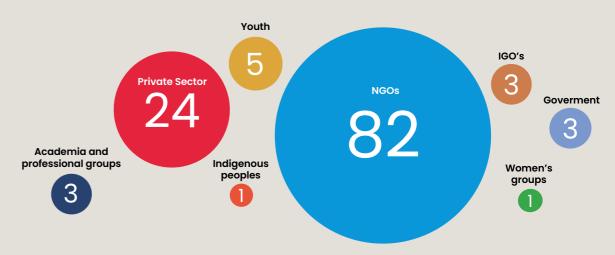


"The Global Land Initiative has been a solid and reliable partner for the UN Decade on Ecosystem Restoration. In leading the Land Restoration Challenge under the Decade's Action Plan, we are confident the Initiative can bring together key actors working on land restoration, and work towards restoring the one billion hectares of land committed for restoration by the end of the decade."

Ms Natalia Alexeeva Coordinator, UN Decade on Ecosystem Restoration, UNEP







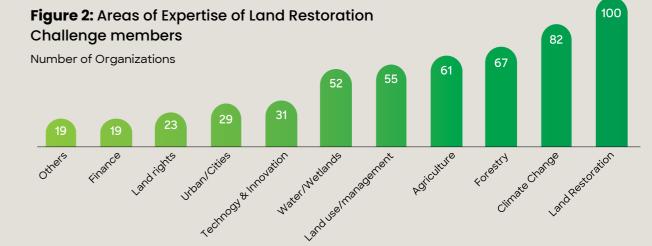
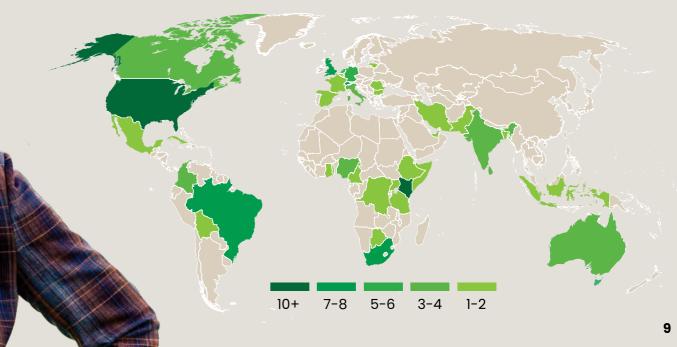


Figure 3: Number of Land Restoration Challenge Partners by Country and Headoffice





The twenty-first session of the Committee for the Review of Implementation of the UNCCD (CRIC 21) was held 13 - 17 November 2023 in Samarkhand, Uzbekistan. G20 Global Land Initiative Coordination Office (ICO), in collaboration with the government of India, organized a side event on "Global Ambition on Land Restoration".

Discussion revolved around the crucial role envisioned for the G20 Global Land Initiative (G20 GLI) in facilitating and accelerating the restoration of the committed 450 million hectares of degraded lands by 2030, a commitment explicitly outlined within the UNCCD. This event provided a unique opportunity to nurture international cooperation and strategic dialogue, addressing the urgent issue of global land degradation and restoration efforts.

Two main presentations took centre stage. The first presentation, delivered by Dr Mohamed Abd Salam EL Vilaly, ICO, was titled. "Towards a Global Ambition on Land Restoration - G20 Global Land Initiative and Associated Programmes."

The presentation offered a thorough and insightful examination of the G20 Global Land Initiative's overarching vision and its associated programs. Attendees received details of the initiative's objectives, strategies and collaborative efforts

aimed at achieving the G20's global ambition of reducing land degradation. The presentation illuminated the key components of the G20 Global Land Initiative, such as its role and impact on the international stage in addressing the challenges of land restoration.

The second presentation, delivered by Dr Sanjay Shukla, Inspector General of Forests, Ministry of Environment, Forest and Climate Change, focused on the "Gandhinagar Implementation Roadmap - Gandhinagar Information Platform." Dr Shukla gave a detailed overview of the implementation roadmap and clarified the strategies, milestones and technological aspects of the Roadmap and role of the GIR in the context of other land restoration initiatives. Dr Saniav's presentation offered valuable insights into the innovative approaches and information-sharing mechanisms integral to the success of the Gandhinagar initiative.

The event also provided an opportunity to clarify the strategic vision of the G20 GLI in the context of global land restoration, the initiative's future plans, key projects and the role it could play towards UNCCD's commitment to restore 450 million hectares of degraded land by 2030. Participants gained a deeper understanding of the challenges and opportunities associated with global land restoration.



G20 GLI discussed restoring 450 million hectares at **CRIC 21.**



Participants at the ICO event at

Global Land Initiative at COP28

The Twenty-eighth session of the Conference of Parties to the United Nations organized with or by other partners, Framework Convention on Climate Change (COP28) took place from 30 November to 12 December in Dubai, United Arab Emirates. COP28 was a moment to take stock of the progress worldwide in the implementation of the Paris Agreement, which was adopted in 2015.

The global stock take, a "party-driven process conducted in a transparent manner and with the participation of non-party stakeholders," was to enable countries and other stakeholders to identify where they are collectively making progress towards meeting the goals of the Paris Agreement - and where they are not.

Nature-based solutions have been identified as an integral part of the suite of solutions to meet the Paris Commitments, as a result, "nature" received increased attention at COP28. There was an entire block of pavilions dedicated to nature, with representatives of all major international agencies, including UNEP and IUCN, which are working on nature-based solutions. The G20 Global Land Initiative Coordination Office and the UNCCD secretariat cohosted a pavilion at COP28, where the Initiative, among other issues, was presented to the visitors.

The G20 Global Land Initiative and its partners organized a series of events at the Pavilion, including six major events titled:

- 1. Getting to one billion Scaling up Land Restoration Initiatives
- 2. Unlocking Investments for Land Restoration
- 3. Private Sector Participation in Global Mine Restoration Activities
- 4. Nurturing Roots The Importance of Integrating Land Restoration in Schools
- 5. Empowering Ecopreneurs for Gender Inclusive Land Restoration
- 6. Indigenous Perspectives on Land Restoration, Conservation, and Rights

In addition, ICO participated in events

- 1. Side event on Gandhinagar Implementation Roadmap -Gandhinagar Information Platform Alliance for Land Restoration and the Indian Pavilion, organized by the Government of India
- 2. Tackling climate change through reducing land degradation and combatting desertification, at the Mongolia Pavilion, organized by the Government of Mongolia
- 3. Strategic Pathways for Land Restoration & Conservation: Multistakeholder Deliverables & Actions towards 2030 Breakthroughs at the Women's Pavilion organized by the COP28 Presidency
- 4. Soil Climate Change Solution Not a victim, at the "Save Soil Foundation", organized by the Isha Foundation
- 5. Innovation and technology in climate change mitigation and land restoration: Identifying solutions for accelerated uptake, organised jointly by World Intellectual Property Organization (WIPO), UNCCD, and Climate Technology Center and Network (CTCN).
- 6. Road to UNCCD COP16 -Strengthening Global Efforts in Land Restoration and Drought Resilience at the Saudi Pavilion organized by the Government of Saudi Arabia
- 7. How to Mobilise Your Faith Community Towards Land Restoration organized in collaboration with UNEP
- 8. "Enabling the triple win for tropical peatland countries - advancing water, biodiversity and carbon measurements" co-organized with the International Tropical Peatland Center (ITPC) and Global Peatlands Initiative



Resilience Pavilion







The G20 Global Land Initiative and its partners during the events at the Land and Drought Pavilion at COP28 in Dubai



Engagement with Regional Organizations

In 2023, the G20 Global Land Initiative embraced a strategic approach to achieve an expanded global outreach by initiating engagement with the different regions. The approach recognizes the nuanced diversity of land-related challenges across different geographies. Thus, the initiative sought to collaborate closely with regional bodies, with the understanding that global solutions are most effective when they resonate with local realities and needs.

Collaboration with the Arab Region

This year marked a significant leap in this direction, particularly in collaborating with the Arab region, which has 22 countries.

The Council of Arab Ministers Responsible for the Environment (CAMRE) on 26

October officially welcomed the G20 Global Land Initiative in a decision taken at its

Thirty-fourth session held in Muscat, Oman.

The endorsement by CAMRE is more than a ceremonial nod. The CAMRE decision requests its Secretariat at the League of Arab States to collaborate with the coordination office of the G20 Global Land Initiative in very specific areas – capacity building, awareness raising and support in monitoring land degradation across the arid region dealing with the challenges specific to arid and hyper-arid areas.

ICO is currently working with the League of Arab States and its specialized agencies on

a needs assessment for the region and a detailed program aimed at operationalizing the results of this needs assessment, ensuring that the initiative is both relevant and impactful in the regional context.

MENA

Climate Week

highlights the

crucial role of

Nature-Based

Solutions in

resilience.

The work with Arab countries through CAMRE demonstrates the Initiative's adaptability to regional nuances and sets a precedent for its ongoing commitment to global outreach through regional engagement.

Middle East and North Africa Climate Week

A pivotal moment in our engagement with the Arab region was the Middle East and North Africa (MENA) Climate Week held 8-12 October 2023, in Riyadh, Saudi Arabia. A panel discussion titled, "Understanding the Value and Limits of NBS in MENA: Harnessing Social-Ecological Resilience in a Warming World," jointly organized by High-level Climate Champions, the COP28 Presidency (Nature team), the G20 Global Land Initiative Coordination Office, UNEP and Emirates Nature-WWF, brought to the fore the critical role of Nature-Based Solutions (NBS) in the MENA region. This event served as a platform for discussing the multi-dimensional benefits and limitations of NBS as a strategy in response to the climate change challenges in the MENA region.



UNCCD Delegation of staff from secretariat and ICO attending CAMRE Partnership talks aim to leverage ICESCO for global land degradation reduction by 2040.



Engagement with the Islamic World

ICO presence on 19 October 2023 at the Ninth Conference of Environment Ministers of the Islamic World marked an important expansion in outreach to Islamic countries. This engagement set the stage for discussions of a partnership with the 54 member states that make up the Islamic World Educational, Scientific and Cultural Organization (ICESCO).

The emerging partnership, which is currently under discussion, will explore areas of mutual interest, and how ICESCO's membership can be leveraged to further the Initiative's ambition of halving land degradation on a global scale by 2040.

Looking ahead to 2024

As we look towards 2024, the G20 Global Land Initiative Coordination Office will build on this momentum to initiate and strengthen collaboration with other regions. This ongoing effort is vital in the Initiative's mission of fostering a global partnership to combat land degradation and promote sustainable land management practices worldwide. The experiences in 2023 serve as a foundation for these future endeavours, ensuring that our collective efforts are both globally informed and regionally tailored for maximum impact.





"Land degradation, though a global concern, requires nuanced approaches tailored to the realities of each region. Our partnerships with regional bodies ensure that the initiative's activities are globally informed yet customized to the unique environmental challenges of each region. This is the essence of working together towards an impact that is both universally effective and regionally attuned."

Salma AlSayyad

Policy Officer, G20 Global Land Initiative Coordination Office





The G20 Ministerial Communiqué of September 2020, which set out the G20 Global Land Initiative mandate, states that:

"the initiative will establish a website that showcases publicly available information on degraded lands, national and international commitments on land conservation and restoration, best practices, and success stories on land restoration, progress-made, results achieved, and lessons learned. The website will serve as an information sharing hub to provide easier access to information on land degradation, conservation, sustainable management, and restoration and foster collaboration and broader engagement of various stakeholders in land conservation and restoration efforts. The information gathered by the website will be compiled from information and data shared on voluntary basis by participating countries and organizations and will cite attribution of information sources where possible."

During the design of the website, ICO conducted a global scan of all publicly available websites dealing with land or ecosystem restoration and found 42 separate databases and websites hosted mostly by the United Nations (UN), international non-governmental organizations and universities. ICO fulfilled its mandate under the Global Land Initiative, to design a Global Restoration Information Hub (GRIH), following a careful analysis of the content on these websites and databases.

GRIH is a public platform that gives increased visibility to existing information. It not only provides easier access to information on land degradation, conservation, restoration and sustainable land management, but also promotes the institutions currently compiling such information. Increased visibility is expected to foster collaboration and broader engagement among stakeholders pursuing land conservation and restoration.

GRIH brings together existing information on publicly reported data on land restoration from the Bonn Challenge, UNCCD's Land Degradation Neutrality, CBDs National Biodiversity Strategies and Action Plans and UNFCCC's Nationally Determined Contributions. In addition, it presents the best practices on sustainable land management for the restoration of

agricultural lands compiled by the World Overview of the Conservation Approaches and Technologies (WOCAT). It also provides links to restoration cases study videos and community practices on land restoration from around the world. G20 GLI fulfills

with the Global

Hub, promoting

collaboration

and visibility.

its mandate

Restoration

Information

Working with the Decade on Ecosystem Restoration, it presents the details of major restoration actors who are working globally on the topic of land restoration. A number of these actors are part of the Land Restoration Challenge under the Decade on Ecosystem Restoration.

The other interesting features of GRIH are the global training programmes on land and ecosystem restoration available around the world. Lastly, and most importantly, GRIH provides a listing of all other existing databases on land and ecosystem restoration. In presenting and promoting other restoration-linked websites, we ensure that restoration-related information is available to all potential stakeholders.

"In Designing and developing the Global Restoration Information Hub, we wanted to ensure that we complement efforts of other restoration actors and promote all the websites providing useful information on land habitats and ecosystem restoration. In the coming years, we plan to bring together the key restoration geodatabases and website administrators to improve interoperability and promote a data-sharing culture."

Mohamed Abd Salam El Vilaly, Information Management Officer, G20 Global Land Initiative Coordination Office



A Citizen Science Approach to Data Gathering

The lack of coverage of the data from many parts of the world is one of the key drawbacks ICO uncovered when reviewing existing databases to prepare and set up the GRIH. This is partly because most databases pick up information only from Englishspeaking domains.

ICO developed a strategy to increase the global coverage of information presented in the GRIH by working with online volunteers from around the world to gather the data. This was done in coordination with the United Nations Volunteers (UNV), which is also based in Bonn, Germany.

The data-gathering exercise was divided into a coherent group of activities to enable the volunteers to collect information in a systematic manner. The first cohort of volunteers, working in multiple languages, collected data about the documentaries

"It's a great feeling to be part of a community of people. This experience was unique in that it always felt collaborative everyone is there to contribute as much as they can."

- Nicole Lantz, Volunteer, 47 yrs, Canada

on land and ecosystem restoration available worldwide. The second group of volunteers compiled best practices on land restoration, in particular in languages other than English. The third group collected data on indigenous knowledge and community practices. And the fourth group worked on educational programs linked to land and ecosystem restoration.

In total, 126 online volunteers from 124 countries representing all regions and major languages participated in the exercise. Each cohort received training in smart searching, misinformation and other tools used to compile information efficiently and reliably. The initial information prepared by the volunteers was reviewed by senior ICO experts and consultants.

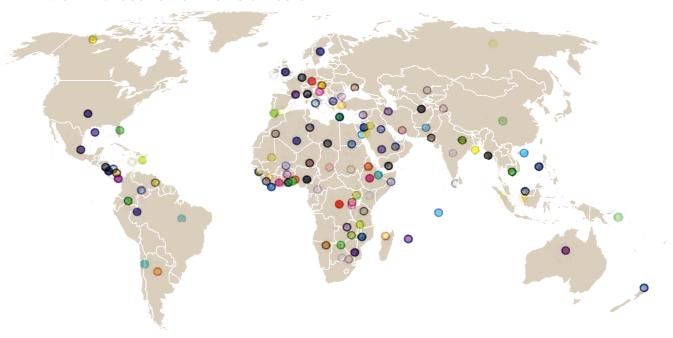
The 114 volunteers from 123 different countries gathered over 3120 data sets within approximately four months. The facts about the online volunteer-based approach are presented in the graphics below.

United Nations Volunteers considered the use of citizen scientists as a unique partnership and success story, and featured it on the UNV website. In the coming years, ICO plans to expand the use of citizen scientists to increase the coverage of its work and give more opportunities to young people to contribute to the cause of land restoration.

ICO addresses data coverage gaps by engaging 126 global online volunteers in a strategic approach.



FIGURE 4: Location of the volunteers





Awareness and Outreach

As a part of the G20 Global Land Initiative's capacity building, the Initiative Coordination Office launched its bimonthly webinar "Let's Talk Land". Experts working on land restoration presented various aspects of land degradation, the opportunities for land restoration and case studies of successful land restoration.

The initiative organized five "Let's Talk Land" webinar series during the year. The speakers came from governmental bodies, such as the United States White House Office of Science and Technology Policy and the German Federal Ministry for the Environment, academia and the private sector as well as researchers and practitioners. A total of 6,472 people registered, with 2,520 attending the webinars via Zoom. All webinars were livestreamed on the G20 Global Land Initiative's YouTube channel. The livestream garnered an additional over 5,000 views of the webinars.

ICO also launched a hybrid talk series, dubbed "Building Bridges for Land" or BBL. BBLs enable experts visiting the ICO and its partners at the UN Bonn campus to speak

about their work on land restoration and how collaboration and opportunities in this field can be harnessed.

In-person attendees include participants from the UN agencies on the Bonn campus and participants invited from local universities and national and international agencies located in Bonn. The sessions are often organized in collaboration with some of these agencies. The sessions are open to online participants from around the world.

In 2023, the G20 GLI organized seven BBLs with about 3,000 registrants and 1136 online attendees and approximately 336 in-person attendees. These live-streamed sessions have attracted approximately 5,000+ views.

"I've attended G20 Global Land Initiative's online training for a year. Impressive topics and expert speakers benefit individuals like me."

- Shiksha Khanal, 24 yrs, Kathmandu Forestry College, Nepal



Communication Strategy

Communicating about land restoration is at the heart of the G20 Global Land Initiative. Keeping this in mind, the GLI developed its Communications Strategy, which includes a brand guide, the target audiences and their personas and the 2023-2024 work plan. The messaging framework for each audience, including related calls to action will be completed in 2024.

The development of country profiles that provide an overview of the media and communications landscapes of the member countries began in 2023 and will be completed in 2024. The profiles clarify the avenues that will enable the Initiative to reach its target audiences effectively and efficiently, for instance, ensuring women and young people are not left out. The Communications Strategy is a living document that is being reviewed and revised continually as the Initiative grows and its niche is clarified.

The Initiative's strategic objectives are designed to popularize the term land restoration, to inspire action among key stakeholders, particularly the private sector, women and youth, to apply novel technologies in outreach, and to recognize and affirm these change agents.

Considering that awareness precedes action, which precedes behavior change, communication activities are mostly focused on reaching new audiences using different

The Initiative organized: exhibitions; sponsorship or partnerships events; targeted thematic webinars (see report above); building community through Building Bridges for Land reported above; promoting the activities and events organized by the Initiative and its partners; disseminating information through the monthly e-newsletter, flyers and social media campaigns. ICO also started designing a Museum Exhibition that will open in late 2024.







The initiative was displayed globally at conferences in Orlando, Darwin, Nairobi. Muscat and at COP 28 in Dubai.

Exhibitions

ICO exhibitions took different forms, including stands and visuals, and were on display at conferences of the International Federation of Surveyors (FIG), in May 2023, in Orlando Florida; the 10th World Conference on Ecological Restoration (SER) held in September in Darwin, Australia; Global Landscapes Forum (GLF) Nairobi, 2023, Hybrid Conference held in October; the Arab Forum for Environment (AFEN 2023), and at the back-to-back sessions of CAMRE and the Ninth session of the Conference of Environment Ministers in the Islamic World held in October 2023 in Muscat, Oman.



The joint G20 GLI Pavilion at the COP 28 in Dubai

Figure 5: participation numbers

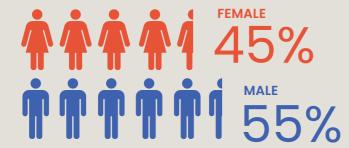
BUILDING BRIDGES FOR LAND:



1136 **Attendees** In- person

LETS TALK LAND: 2520

Figure 6: Gender distribution of both events



Cooperation with the Art and Exhibition Hall of the Federal Republic of Germany and the Bergische Universität Wuppertal

ICO and BundesKunstHalle (Art and Exhibition Hall of the Federal Republic of Germany) continued the partnership initiated in October 2022 to conceptualize a creative museum exhibition concept on land restoration, with the assistance and support of the faculty and Masters students in the Department of Industrial Design (Faculty Design & Art) at Bergische Universität Wuppertal, in Germany. The University student group called "Strategic Product-and Innovation Development" was led by Professors Dr Martina Fineder-Hochmayr and Dr Ing Fabian Hemmert. The students presented their findings and recommendations at the UNCCD Bonn Campus in July 2023 and to the University community in August 2023.

The final product, which will include a didactical design, exhibits and communication strategies, tools and technologies, will be used in a land restoration exhibition themed "Save Land. United for Land" to be displayed in Fall 2024 at the Bundeskunsthalle, in Bonn. The exhibition is co-sponsored by UNCCD G20 Global Land Initiative.

The team developed a mission statement and researched and proposed communication strategies and tools that could be used to inspire Museum visitors to take action to restore land locally and/or globally. Following a series of presentations, including by senior UNCCD staff and ICO technical experts, the students held workshops and carried out field and deskresearch in the subject.

An important component of the outputs was the students' extensive research. They had visited, documented and analysed around 20 science and art exhibitions all over Germany. Significantly, they conceptualised and documented eight interesting and creative research activities to engage the public, which they tested in the city of Wuppertal. For example, "RoLAND", a talking heap of soil in a city street, addressed passers-by, encouraging them to perform actions to protect or regenerate land. RoLand was remotecontrolled, and took people by surprise.

The research and experimental findings provided valuable ideas on the "dos & don'ts" for the exhibition. The research also shared ideas for the public relations and marketing strategies planned for the exhibition, such as postcard series, picture journeys, quizzes, love letters addressed to land, and other social media activities.

As part of the research, the students started and successfully grew an Instagram account and community called "Students for Land," which by July 2023 had over 2,000 users.

The workshops involved a participatory creative process to develop a joint mission statement and concepts and potential content for exhibits to stimulate the five physical human senses. They distilled and developed 16 "potential fields", which describe the key aspects the exhibition should pay attention to: Time, Accessibility, Individuality, Regionality, Responsibility, Emotions, Dimensions, Contrasts, Narrative, Connectedness, Interactions, Novelty, Language, Identification, Senses and Content for Children.

Looking ahead, several of the ideas and concepts for the individual exhibition installations and didactical tools, such as Augmented Reality companions, a multimedia globe, floor projections, interactive stations and games, are practical and feasible. They will be incorporated in the exhibition. The social media account was also migrated to ICO in the interim, but will be re-assigned to be run by students interested in land restoration and ecopreneurship for students.

The exhibition, will feature innovative installations and interactive elements

ICO and Bundes

KunstHalle

collaborate

exhibition in

Bonn.

on a Fall 2024

land restoration

Working Group Session with Wuppertal University Masters' Students at the UN Bonn Campus in Univ 2022

Consultative Workshop on Communication

In April 2023, ICO organized a threeday meeting with the communication representatives from the institutions leading implementation of the one billion hectares pledged for restoration by 2030. Participants include representatives from CBD, Convention on Wetlands (Ramsar), Global Landscapes Forum, UNCCD, including the ICO, UNDER, WOCAT and youth.

In addition to developing a communications strategy to promote land restoration, participants shared expertise on how to harness and maximize the use of new media technologies and tools. From Google Trends for research to ChatGPT, Instagram and Facebook for targeted outreach, and scaling the use of data analytics to assess and monitor progress. Participants agreed to prioritize collaboration in communications and outreach targeted at three audiences: young people, press and media, and parliamentarians.

These audiences are critical partners in raising global awareness about land restoration as a key and indispensable nature-based solution for the three foremost

global environmental challenges of our times: land degradation, biodiversity loss and climate change.

An analysis of Google Trends early in the year showed that land restoration is neither a well-known concept in policy circles nor a widely known nature-based solution among environmentalists. For instance, at the start of 2023, four times as many people searched for the term "environment" on Google compared to those searching for the term "land restoration." And twice as many people searched for the term "land degradation", compared to those searching for "land restoration".

After the workshop, ICO has worked with partners to reach young people during the Global Change-Maker Academy for Parliamentarians held in August 2023, in Bonn, the Global Landscapes Forum held in October 2023 in Nairobi, and the United Nations Climate Change Convention's 28th Session of the Conference of the Parties (UNFCCC COP28) held in December 2023 in Dubai, United Arab Emirates.

The workshop focused on communication strategies to raise awareness about land restoration worldwide.



Workshop participants, Bonn, Germany, April 2023

"This year, we set up a strong communication foundation for the Initiative, with the vision, people and communication media needed to reach our target audiences worldwide with inspiring messages to take actions to restore land. But the important role that our partners and community (which includes you and I) need to play to motivate women, youth, policymakers and the private sector to restore one billion hectares of land in just seven years cannot be overstated. Every communication action we take will go a long way. Come and be part of the change movement - Generation Restoration."

Waqaki Wischnewski

Communications Coordinator G20 Global Land Initiative Coordination Office





Digital Media

Website

ICO increased the number and range of products shared through the website, one of the ICOs most important sources of information about the Initiative. News, multimedia stories, announcements and digital reports are shared on the site. The website is a crucial source of information and archive for critical messages that are shared via social media. The website metrics show the effectiveness of the site in maintaining user interest.

Over 12,000 users engaged in more than 20,000 sessions by visiting the ICO website during the year, with a notable engagement rate of 52.6 per cent. The number of active users closely matches the total user count, indicating strong and consistent user engagement. Most of the visitors came from India, Germany and United States of America, but the most engaged users were in India, Germany and Switzerland.

More than half of the traffic was from direct visitors. Other users came by way of organic searches, organic social and referrals, in that order. This signals a strong brand presence and effective use of diverse traffic channels, such as social media as well as effective use of key words to enable users to search for information.

This trend underscores the importance of timing content releases strategically. Maximizing the publication of key content early in the week can capitalize on higher user engagement levels, ensuring that important updates and event information reach the audience when they are most active online.

The success of the G20 Land Initiative's online presence hinges on a combination of well-timed content release strategies and the creation of innovative, relevant content that resonates with current trends and audience interests. Looking ahead, ICO will focus on these aspects to foster high levels of engagement and effectively communicate its mission and activities. Data from the web traffic trends of 2023 will inform the scheduling and posting of relevant content regularly, targeting the days with the highest traffic. It will also

inform the provision of content to increase visits to the pages and on the days experiencing the least traffic.

E-newsletter

Since January, the e-newsletter was disseminated to subscribers around the world. It is the Initiative's fastest-growing product. The Initiative uses flyers at exhibitions and stands to facilitate information where time is a constraint. During the year, the newsletter numbers grew from 1,000 to over 22,000 subscribers as shown in Figure 7 next page.

The website reaches 12,000+ users, showcasing global reach and strong user engagement.

Social Media

The Initiatives' day-to-day communications are conducted mainly through digital outreach. GLI uses Instagram, Facebook and LinkedIn. In late 2023, WhatsApp and X (formerly Twitter) Arabic and YouTube were added to the channels of communication. A significant development in the second half of 2023 was increased posting of content, daily on Instagram, Facebook and LinkedIn. Overall, there were over 589,000 page and profile impressions across all networks.

As reflected in the data below, LinkedIn is the best-performing platform. This social media growth is organic, with the impact of influencers evident in the sudden uptake of followers. Growth was also driven by participants at GLI events, such as webinars, campaigns around special events, the newsletter and partners. The most popular posts on each of the social media channels matched the ICO's intended target audience for the channel.

Looking ahead, the communication tools set up and used in 2023 will remain the key outreach media, with improvements in the quality and regularity of the content shared on each channel to ramp up engagement. ICO will also focus on producing more audiovisual content, particularly films and videos, building partnerships and training communicators in the subject.

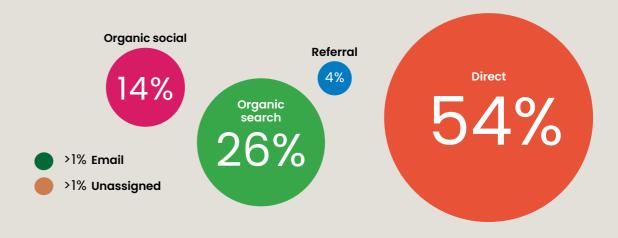
"I am very happy to see the organic growth of our social media channels. While LinkedIn remains our most robust platform, there is also growth in Instagram and Facebook."

- Antonia Mendes, Social Media Consultant, G20 GLI

Figure 7: Online engagement in numbers 2023



Figure 8: Pathways of Visitors to the g20land.org website



Elevating the voices of youth and women

G20 Global Land Initiative is mandated to empower women and youth engaged in land restoration. In 2023, ICO sponsored and operated one of the three Pavilions at the Global Landscapes Forum (GLF) Nairobi 2023 Hybrid Conference held 11 - 12 October under the theme, "A New Vision for Earth." Over 7,000 participants from 130 countries joined the conference, which reached 27 million people via social media and media channels.

Ahead of the conference, the ICO spoke with over 70 journalists during the GLF online media seminar and developed a digital exhibition booth on the conference website to showcase its work. During the conference, ICO and its partners organized four main events in the Pavilion focusing on the empowerment of youth and women. It also organized, jointly with the Global Landscapes Forum, an official plenary session on youth action

The first Pavilion event titled, "Exploring the Dynamic Intersection of Land and Business Avenues," showcased innovative projects by four youth ecopreneurs who have established profitable businesses using land resources, and highlighted the projects' contributions to land restoration and local communities. Three ecopreneurs from Africa and the winner of the Youth Ecopreneur Award on Land Restoration, established under a GLI partnership with the International Trade Centre, spoke at the event. The event was followed by a youth consultation titled,

"Creating a land of opportunities for future generations," where participants reflected on the priorities for youth engagement in land restoration. Working in small groups, the youth participants explored possible activities for the ICO to engage youth and support them to strengthen their capacity, agency and leadership.

During a session on the second day titled, "Introducing the Land Restoration Challenge under the UN Decade on Ecosystem Restoration," ICO highlighted upcoming capacity building workshops and webinars, its new small grants programme for land restoration projects and other opportunities to empower communities to promote and benefit from land restoration. Speakers also highlighted the UN Decade and restoration projects on the ground. ICO partnered with the global Stand for Her Land Campaign and co-organized the event titled, "Why Control and Ownership of Land for Women Matters for Land Restoration." Grassroots women and members from Kenya's Parliament in attendance highlighted the importance of women's land rights in driving action among communities and ensuring widespread impact of land restoration.

Finally, the official plenary session on "Stewarding visions of justice and restoration" co-organized by ICO, with GLF and Youth in Landscapes, highlighted youth and community-led grassroots action for holistic landscape restoration in the Global South.



G20 GLI G20 Programme Coordinator Apoorva Bose leading a session at the Global Landscape Forum Hybrid Conference in Nairobi

"The future of our land is safe only when the young people show interest in it. In order for the young people to have an interest in land, we need to increase their awareness about how land is connected to our life, providing us food, shelter, raw materials for clothes and substrates for medicine in addition to numerous other externalities. Continuously engaging with our new generation is part of our strategy at the G20 Global Land Initiative."

Joann Lee

Lead on Stakeholder Engagement, G20 Global Land Initiative Coordination Office

Empowering Youth Innovators in Land Restoration

As part of youth empowerment, ICO partnered with the International Trade Center (ITC) to introduce a Special Category on Land Restoration at the Youth Ecopreneur Awards 2023. This category targeted young innovators whose projects addressed crucial aspects of land restoration in ten specific areas, including reforestation or afforestation, soil conservation and enrichment, wetland restoration and the use of modern technology for land restoration purposes.

Other partners of the Youth Ecopreneur Awards include the World Intellectual Property Organization (WIPO), Google's Startups for Sustainable Development program and the multinational law firm Sidley Austin.

Selection Process and Diversity

A total of 87 people from 34 countries in Africa, Asia and South America applied for the award. The selection process for the Special Category on Land Restoration comprised a two-step review. Firstly, a review of the applicants' written submissions on their project's characteristics, relevance, importance and contribution to land restoration.

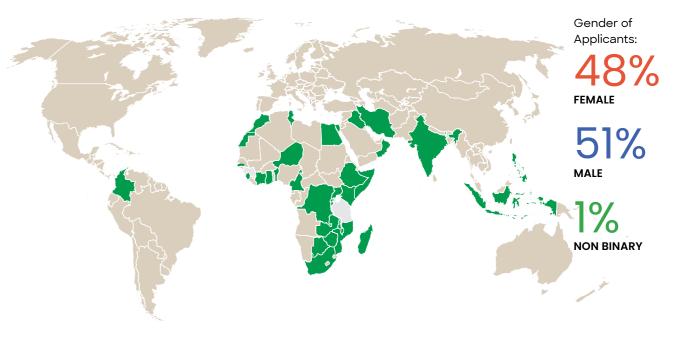
Secondly, the top 10 applicants presented their business pitches online to a panel comprising representatives from the G20 Global Initiative and the Ye! Community. The pitches of all 10 finalists demonstrated outstanding innovation and presented a diverse range of projects focused on land restoration.

Recognition and Rewards

The top 3 finalists participated in the World Export Development Forum 2023 (WEDF) in Ulaanbaatar, Mongolia, where they pitched their business to a broad audience and a select panel of judges. The finalists also received training from Google, specialized support on intellectual property (IP) protection from WIPO, connections to potential investors for additional funding and international exposure through spotlight pieces by ITC. Additionally, the winner of the Special Category on Land Restoration received a cash prize of 5,000 United States dollars to support their business.

ICO addresses data coverage gaps by engaging 126 global online volunteers in a strategic approach.







Outstanding Achievements

The top three finalists from the pool of finalists were Bôndy International (Madagascar), Sommalife (Ghana) and iPage (Bangladesh).



Bôndy International, a reforestation social enterprise based in Madagascar, actively involves local communities in the management of valuable forests to address the causes of deforestation. They also support the implementation of projects that make forests profitable in a sustainable manner.



Sommalife, operating in Ghana, offers support services to local producers in the shea value chain. Their aim is to increase their business income sustainably while contributing to environmental conservation. They provide access to finance, training, logistics and global markets.



iPage, a Bangladeshi climatesmart agritech start-up, empowers farmers to make smart decisions by utilizing data, Machine Learning and Artificial Intelligence. They offer site, crop and market-specific agronomic advice to small farmers, primarily in climatevulnerable zones, to help them optimize the production of high-value crops. The recognition as winners of the Youth Ecopreneur Award 2023 validates our efforts and inspires a new generation to innovate and grow on fertile ground.

- Mashrur H. Shurid, Co-founder & CEO, iPAGE Global Inc

Scaling Impact – our vision for the next 5 years

Looking ahead, the Initiative is committed to elevating the success of the Youth Ecopreneur Awards and expanding our impact. Building on the achievements of the 2023 edition, we envision a future where our collaborative efforts with the ITC, WIPO, Google, Sidley Austin and other partners result in even greater recognition and support for young ecopreneurs.

Our ambition is to scale up these awards, reaching out to 2000 ecopreneurs over the next five years. By doing so, we aim to create a broader platform for innovative solutions, nurturing a global network of young minds dedicated to sustainable land restoration.

A letter of intent to this effect was signed between the Executive Secretary of the UNCCD and Director General of ITC in the margins of COP28 in Dubai.



The finalists in the World Export Development Forum 2023 (WEDF) in Ulaanbaatar, Mongolia



Mr Mashrur H. Shurid, right, winner of the land restoration award, with Ms Paula Padrino Vilela, Project Management Officer, G20 Global Land Initiative Office

G20 Internship Programme

The G20 Internship programme offers young people, who are completing their studies, an opportunity to gain crucial experience that is often required by employers to get a job. Interns work in a structured programme directly under one of the ICO Senior Experts or ICO staff. Interns also have the opportunity to work together on a joint project, to work both virtually, on site or in a hybrid model. On site experiences ensure interns experience in-person office routines and have the opportunity to network with UN staff in the entire campus.

Since November 2022, the program has a total of 21 interns who have worked on numerous projects and collaborated on a number of publications, namely:

- G20 compendium of best practices: Restoration of forest fire impacted areas
- 2. G20 compendium of best practices: Restoration of mining affected areas
- 3. Land Restoration Country Profiles for all G20 countries as well as six countries in the Sahel Region namely, Mali, Sudan, Burkina Faso and Nigeria, to mention a few
- 4. Envisioning a **National System** of Land Restoration
- 5. Development strategy profiles for Sahel region countries namely Nigeria, Mali
- 6. Role of technology in Ecosystem restoration
- 7. GLI Global Course: Trigger Change! Innovative Agriculture Solutions for Land Restoration

- 8. Case Studies on Mine Restoration
 Closure by Mining Companies and
 Guidance plans on mine closure and
 restoration processes
- 9. Newsletter and blogs for the website.

They actively engaged in numerous communication and outreach activities, such as preparation of social media content including reels, and organization of live webinar series and hybrid BBL events, where they served as moderators and contributed to the preparation of event reports. Specifically, interns played key roles in the following events:

- Global Webinar on World Wetlands Day 2023
- Let's Talk Land 1: The proposed EU restoration law, a game changer in the landscape.
- 3. Let's Talk Land 2: Accelerating Naturebased Solutions
- 4. Let's Talk Land 3: The Role of Land Restoration in Disaster Resilience
- Let's Talk Land 4: Tech-Enhanced Land Restoration and Disaster Risk Reduction
- 6. BBL 4: Urban Forests: A Hidden Key for Future Real Estate Success
- 7. BBL 5: Exploring the Economics of Land Restoration
- 8. BBL 7: Response to Resilience: 15 Years of Partnership in Disaster Management

 BBL 8: Restoration Business and Finance: Realizing a Land of Opportunities "Global land restoration is of utmost importance, and it has been a privilege to work with committed professionals who are truly making a difference in the world."

- Song Kim, G20 GLI, UNCCD intern

"Each intern we mentor at the UNCCD adds a unique thread, weaving resilience and commitment into the fabric of a better future for generations to come."

Georgina Bwango,

Finance Officer and Internship programme manager, G20 Global Land Initiative Coordination Office





While working at the policy level is important, it is also useful for the senior leadership of the UNCCD to connect with grassroots level activities. Keeping this in mind, two high-level field visits to land restoration projects took place in 2023.

Nadukuppam and Pitchandikulam restoration sites, Chennai, India

Ibrahim Thiaw, UNCCD Executive Secretary, and Rickey Kej, UN Goodwill Ambassador, went on a field visit to Nadukuppam and Pitchandikulam land restoration sites in Tamil Nadu, India. The trip was organized jointly by G20 GLI Senior Expert Mr Santhakumar Velappan Nair and Mr Joss Brooks, a restoration expert, with over 40 years experience in restoring degraded land.

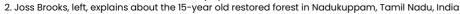
One objective was to see and understand the land restoration and reforestation activities and approaches used in Tamil Nadu, and more specifically, the native revegetation of this bioregion – a Tropical Dry Evergreen Forest (TDEF). This is one of the rarest and most diverse ecosystems in India. The other objective was to interact with the local communities and restoration experts, some of whom have worked in the area for over 40 years.

The delegation learned the ideology behind this initiative and discussed the water and soil conservation techniques used. The 15-year old forest is designed as an agroforestry and water retention landscape. At Nadukuppam, the delegation interacted with the local community members working with Mr Brooks. The delegation visited the Environment Centre at the Village School, the Women Knowledge Centre, which is also the women's seed bank, and took a walk in the 35-acre Ethnomedical Forest and Nursery.

At Pitchandikulam, the Executive Secretary and UN Goodwill Ambassador discussed with other senior restoration experts about the costs, benefits and approaches to land restoration and reforestation of dryland areas, drawing on the experience of reforestation of Auroville in India. The delegation also took a walk in the 50-year-old forest and visited the Bioresource Center as well as the Museum of Traditional Technology of Tamil Nadu. Mr Thiaw was also invited to speak about the importance of land restoration at various academic institutions, including to over 3,000 students at the Stella Maris Autonomous College.



1. Ibrahim Thiaw, UNCCD Executive Secretary, speaks about land restoration to students at Stella Maris









Ms Andrea Meza, Deputy Executive
Secretary, UNCCD, and Dr Muralee
Thummarukudy, Director of the Initiative
Coordination Office (ICO), visited the
Navadarshanam Community in Bengaluru,
India, where they interacted with villagers
and explored their communal land. This
collectively-managed land demonstrates
innovative and sustainable land
management practices, with a particular
focus on regenerative agriculture.

The Navadarshanam Community employs a diverse range of sustainable practices, encompassing wilderness preservation, alternative energy, sustainable organic farming, water harvesting, health and healing initiatives, and the promotion of healthier traditional foods. These endeavors extend beyond mere economic considerations to address a comprehensive spectrum of household needs.

Furthermore, Ms Meza actively participated in dialogues with students at the Azim Premji University in Bengaluru, India. Sharing insights on the vast benefits of large-scale land restoration, she drew parallels with Costa Rica's successful experience in Central America.

Emphasizing the significance of policy in effecting change, Ms. Meza highlighted that every country, irrespective of its size or geopolitical strength, can contribute significantly to the global land restoration movement.

In her address to the students and faculty, Ms. Meza underscored the transformative power that various stakeholders, including students, politicians, academics and the private sector hold in shaping the future of their nations. She asserted that everyone has a role to play in ushering in meaningful change, making a compelling case for collective efforts in the pursuit of sustainable land management.

"I was very inspired by the visit of the Executive secretary to the academic institutions in Tamil Nadu. Usually, our students do not get to see such senior UN officials, but the Executive Secretary not only spoke to them but also spent significant time interacting with the young generation on the important topic of land, which matters to us all."

- K. Abdul Ghani, Founder & Chairman, Tree Ambulance Foundation, India

- 3. Ms Andrea Meza, UNCCD DES, arrives at Azim Premji University
- 4. Ms. Andrea Meza, UNCCD DES, listens to stories from Navardasham community members
- 5. Ms. Andrea Meza, UNCCD DES, hugs a community member in Navardasham











Engagement with the International Federation of Surveyors (FIG)

The Fédération Internationale des Géomètres (FIG), also known as the International Federation of Surveyors, was founded in 1878. This federation of national member associations from more than 120 countries is the premier international organization representing the interests of surveyors worldwide. It covers the whole range of professional fields within the global surveying, geomatics, geodesy and geoinformation communities (www.fig.net).

FIG provides an international forum for discussions and developments aimed at promoting professional practice and standards. It is one of the world's largest conglomerations of land use professionals, and is a UN-recognized non-governmental organization (NGO).

ICO is currently engaging with the FIG as a key global stakeholder in land use, administration and management, with a view to share the Initiative's vision, mission and core objectives. This strategic partnership is a platform for the G20 GLI to promote its key messages on halting land degradation

and to promote land restoration and habitat conservation among the land professionals largely responsible for implementing land policies in over 120 countries.

ICO participated, and was a co-sponsor of, the 2023 FIG Annual Working Week held in May/June 2023 in Orlando, Florida. FIG also set up an exhibition, which served as a key entry point for engaging with conference participants visiting the exhibition booths in large numbers. FIG Commission 7 focuses on Women's Access to Land (WA2L) and land rights.

ICO participated in FIG's Commission 7 to promote women's access to land and ownership rights, which has implications for women's involvement in land restoration. ICO senior expert on gender subsequently attended the Annual Conference of FIG's Commission 7 in October, in Deventer, Netherlands, to strengthen collaboration. In December, ICO and FIG Commission 8, hosted a joint webinar titled, "Land Use Planning to Address Land degradation." Commission 8 works on Spatial planning and development.





The G20 Global Land Initiative booth visitors at FIG Week 2023, in Orlando, Florida



Prof Kakulu speaking about the Initiative and women's land rights at the Annual Meeting of Commission 7 in October in Deventer, Netherlands.

"As per the latest report from UNCCD, the fastest conversion of land use is happening for urban expansion. It is, therefore, important that the Global Land Initiative work proactively with land use planning communities so that even as the inevitable urban expansion happens, land restoration considerations can be integrated into it. This can be done by developing green spaces within the city, conserving peri-urban green spaces or creating offsets for ecosystem restoration."

Professor Iyenemi Ibimina Kakulu Senior Expert on Gender and Land, G20 Global Land Initiative



Training on Mine Restoration

The Society for Ecological Restoration (SER) is a dynamic global network of over 4,000 members who promote the exchange of knowledge and expertise among ecological restoration practitioners and scientists from diverse disciplines and backgrounds. In addition to communicating knowledge about cutting-edge tools, technologies and scientific findings, SER actively promotes best practices and effective restoration policy around the world.

SER World Conferences are the principal global meeting points for professionals and students interested in ecological restoration and management. These conferences are a platform for knowledge exchange, discussion and engagement not just on the latest trends in restoration science, practice and policy, but also about the specific tools, techniques, challenges and strategies needed to restore damaged and degraded ecosystems worldwide.

The G20 Global Land Initiative was a strategic sponsor of, and had an exhibition booth at, the Society's 10th World Conference (SER2023) held 26 – 30 September 2023 in Darwin, Australia. Over 1,000 delegates from 80 countries gathered for the four-day event.

Leading voices from business, policy and indigenous people discussed the role of ecological restoration worldwide. The first steering committee meeting of the reconstituted board of the Decade on Ecosystem Restoration was also held on the sidelines of the SER event, where ICO had the opportunity to present and discuss the land restoration challenge with the UNDER Steering Committee.

Following the meeting, SER and ICO organised from 2 - 4 October 2023, a three-day training titled, "The Ecological Restoration of Mine Sites: A Hands-On Workshop," in Perth, Australia. It addressed

the pressing need for sustainable practices in the mining industry. The workshop was a promising step towards integrating ecological restoration principles in mining operations. The workshop aims were fostering collaboration, establishing standards-based restoration and promoting community engagement, particularly with indigenous groups.

Out of the 355 applicants for the training, 26 participants from 19 countries were selected. Participants engaged in a mix of lectures, discussions and practical exercises, with a focus on the use of standards and tools like the Ecological Recovery and Social Benefits Wheels. The training covered both theoretical knowledge and practical exercises, and field trips to operational sites for a first-hand experience of the practical challenges and solutions in mining.

The feedback from a survey of the attendees was positive overall, with high ratings of satisfaction, including in the learning objectives and facilitator effectiveness, and recommended areas to strengthen the training.





Ms Daniela Cristofori, Visualization Expert, G20 Global Land Initiative, speaks to visitors to the ICO booth



Participants at the training workshop in Perth, Australia

"Mining is an important economic activity, which by its very nature leaves scars on the landscape and threatens biodiversity. More than 10 million hectares of land under are mining operations, with possibly an equal amount of land under quarries. It is important that best practices in mine restoration are not only documented but also widely shared among practitioners for sustainable land restoration to ensure mining areas transition to sustainable and safe habitats for all."

- Shalini Dhyani, Senior Scientist, National Environmental Engineering Research Institute, Nagpur, India







Biosaline Agriculture as an Approach to Land Restoration

The International Center for Biosaline Agriculture (ICBA), in collaboration with ICO, from 6-9 November 2023 conducted an international training course titled, "Biosaline Agriculture as an Approach to Land Restoration," in Dubai, United Arab Emirates (UAE). The 22 applicants selected from the 477 who applied included decision-makers researchers and experts from 19 countries. The course is accredited by the CPD Accreditation Services, UK, an education authority that certifies organizations providing Continuing Professional Development (CPD).

The training program focused on a range of nature-based technologies and approaches for managing and restoring degraded soils and mitigating and adapting to climate change effects in agriculture. It was based on more than two decades of ICBA's research and development work in sustainable natural resources management and land rehabilitation in different parts of the world.

In particular, the course offered insights into global and local impacts of climate change, the significance of crop biodiversity, integrated cropping systems and sustainable land and water resources management. It covered a variety of topics, including the use of salt-tolerant food and feed crops and agroforestry systems for soil rehabilitation, salinity mitigation and freshwater conservation.

Addressing the participants, Dr Muralee Thummarukudy, Director, G20 Global Land Initiative Coordination Office, said: "At the G20 Global Land Initiative, we are committed to forging partnerships that drive positive change in our world's landscapes. Together with ICBA, we hope to build capacity and pioneer innovative solutions in biosaline agriculture, fostering sustainable land use and contributing to a greener, more resilient future for all." He also presented the mission of G20 Global Land Initiative, and its activities around the world.

The ICO-ICBA partnership aligns with ICBA's continued efforts to develop individual and institutional capacities to support sustainable agricultural development, food security and livelihoods in different regions.

"We were delighted to partner with the G20 Global Land Initiative on this important topic of land restoration. The International Center for Biosaline Agriculture has been training people around the world on the practices and opportunities of land restoration. This is the first time we were doing a course focusing on the opportunities of using biosaline agriculture as an approach to land restoration."

- Mr Ghazi al Jabri, Capacity Building Specialist, ICBA



The ICO biosaline agriculture

3. Field visit to the University of Cologne.

One billion hectares of land are up for

restoration by 2030. Achieving such an

restore degraded land on an industrial

system does not produce experts,

partners worldwide to foster a new

The course titled, "Trigger change!

· introduction to land restoration

agriculture innovation and

entrepreneurship for restoration

knowledge and skills.

covers topics such as:

agriculture

ambitious target will require countries to

scale and to jump-start a land-restoration

economy. However, the current education

land restoration. A global course to address

this gap is being developed by University

generation of students with the required

Innovative agriculture solutions for land

restoration," will be available starting in

to any higher education institution with

the Fall of 2024. It will be freely accessible

courses in agriculture, land restoration and

sustainable land management. The course

· tools and technologies for restoration

socio-economic aspects of restoration

supervisors or technicians to undertake

genetically modified plants and introduction to FarmBot technology



Development of the Global University Course

Center for Development and Environment and WOCAT, University of

The course is a response to the G20

Global Land Initiative mandate to build

capacity. The target is to embed land

restoration in the curriculum of 1,000

million graduates by 2040. The vision is

change agents with knowledge, skills,

and attitudes in sustainable agriculture

and land restoration for reducing land

degradation and improving livelihoods

partnership with and contributing to the

capacity-building objectives of Decade

on Ecosystem Restoration. The course is

modular and based on the principle that

course or the entire course into existing

agriculture-related curricula worldwide.

in the field of agriculture, innovation and

The main course contributors come from

some of the most reputable organizations

professors can directly include parts of the

globally." It is being developed in

to "equip a new generation of innovative

Universities worldwide to reach one

- Berne, Switzerland TH Köln, Cologne University of Applied Sciences, Germany
- · Azim Premji University, India

Trigger

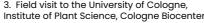
Change!

"We need a course that is global in scope, but not cast in stone. It should be flexible to be spread around the world, initiating a collective push through towards the target of reaching one million trainees in 20 years."

Dr Muralee Thummarukudy, Director, G20 Global Land Initiative



collaborated with ICBA for an international trainina.



4. Visit to the Department green houses with









2. Participants at the



training in Dubai, UAE





GCAP's

first cohort,

parliament-

arians from

25 countries,

advocates

restoration.

comprising 29

Contributing partners include:

- · Wageningen University and Research, Netherlands
- · University of Cape Coast, Ghana
- · Universidad de Cuenca, Ecuador
- · Universitas Gadiah Mada, Indonesia
- · German-Jordanian University, Jordan
- · Agricultural University of Ibadan, Nigeria
- · University of Lilongwe, Malawi
- · Centre for Applied Systems Analysis, Malawi
- · Univerza v Ljubljani, Slovenia

- · University of Antananarivo and LLandev, Madagascar
- · Food and Agriculture Organisation of the United Nations/United Nations Decade for **Ecosystem Restoration**
- · United Nations Environment Programme

The course will be launched officially in March 2024. It will be promoted through regional training of trainers workshops and regional webinars as well as through global outreach of the partner institutions and targeted conference events at 1,000 agriculture universities worldwide.



Figure 10: Partners





























"If we need to meet the ambition of restoring one billion hectares of land, we need tens of thousands of technical experts who can support the restoration activity. This cannot be achieved by ad-hoc training programmes with small cohorts. The global agricultural curriculum we have developed will help to train the required number of technical experts around the world who can support the emerging restoration industry."

Dr Karen Sudmeier-Rieux

Environmental Education and Outreach Specialist, G20 Global Land Initiative



The latest UNCCD report shows that 100 million hectares of land have been degraded every year since 2015. Therefore, the ambition of achieving a 50 per cent reduction in degraded land will require the restoration of more land than when we started in 2015.

The UNCCD report also highlights that restoration happens when national legislation mandates both a reduction in land degradation and increased land restoration. But only a few countries in the world have comprehensive legislation for either reducing land degradation or enhancing land restoration. The EU restoration law, which was a subject of intense debate in 2023, is an example of the desired legislation, which if implemented, may have a dramatic impact on the outlook for land restoration.

In light of this, ICO teamed up with the United Nations System Staff College and organized the first "Global Changemakers Academy for Parliamentarians (GCAP)." GCAP aims to sensitize parliamentarians about land restoration, including the economic and social benefits of land restoration, and the best practice in sustainable land management and land restoration.

The Academy took place in August 2023, with 29 Parliamentarians from 25 countries, including 14 females, as the first cohort. The training was designed for an audience that addresses issues at the policy and lawmaking levels.

The core training included Master Classes by experts, field visits to land restoration sites and group work. The trainers included Dr

Nick Leimu-Brown (Oxford University), Dr Shashi Tharoor (former Minister and sitting Member of Parliament in India), Dr Iyenemi Ibimina Kakulu (Professor, Port Harcourt University, Nigeria) and Dr Musonda Mumba, Secretary General of the Convention on Wetlands, among others. Former President Carlos Alvaredo Quesada of Costa Rica also addressed the group in an inspiring session on the last day. The team also met and interacted with both the UNCCD and UNFCCC Executive Secretaries.

The Parliamentarians went on a field visit to the Eschweiler Lignite Mine in Germany, which has been in operation for the past four decades and is scheduled for decommissioning by 2035. The parliamentarians met community leaders and technical experts, and observed firsthand both the mining activities and mine restoration initiatives. Long-term plans for a post-coal economy were explained to the

This GCAP cohort has since become passionate about land restoration. They not only organize their own meetings on the sidelines of important meetings such as the Africa Climate Summit held in August 2023 in Nairobi and during COP28 in December in Dubai. But some have become strong advocates of land restoration, a number of them have proposed field-level projects for implementation while others are planning to organize regional and national GCAPs to increase the pool of policymakers who are sensitized to the topic.



Course participants during the visit to

"It was very exciting to have been part of the first cohort of the Global Changemaker Academy of Parliamentarians in land restoration in Bonn organized by the G20 Global Land Initiative, along with UN System Staff College. Land is fundamental to the livelihood of our communities, especially women. Yet, not enough attention is given on sustainable land management. We are going to increase awareness on this topic and address legal and legislative gaps."

Jacqueline Amongin, Member of Parliament, Uganda



International Workshop on Social, Economic and Institutional Aspects of Land and Ecosystem Restoration

On 27-29 April, the Azim Premji University (Bangalore), Indian Institute of Forest Management (Bhopal), and the UNCCD/G20 Global Land Initiative Coordination Office (Bonn) jointly organized an international conference on the Social, Economic and Institutional Aspects of Land and Ecosystem Restoration. The conference objectives were to:

- Discuss and document the social, economic and institutional factors/ conditions that enable land and ecosystem restoration
- Understand the role of non-governmental actors, including the private sector in restoration, and the challenges, and
- Build a network of academics and practitioners to promote land and ecosystem restoration globally.

Prior to the event, participants were divided into five sub-themes, namely:

- 1. Restoration and the Social Context
- 2. Challenges in Financing Restoration
- 3. Restoration as a Business
- 4. Working with Communities and People
- The use of government schemes, such as Mahatma Gandhi National Rural Employment Guarantee Act (NREGA), for land restoration.

A draft discussion paper on each subtheme was collectively prepared before the conference. The discussion draft was completed on the first day of the conference and five parallel sessions were convened to finalize it.

Subsequently, on the second day, four working groups, meeting in two parallel sessions, identified the cross-cutting issues of the sub-themes. One working group focused on the sub-themes, 'Restoration and the Social Context' and 'Working with Communities'. The other addressed the subthemes, 'Financing Restoration' and 'Restoration as a Business'.

Thereafter, participants went on a field trip to a restoration site adjoining a forest. The Navadarshanam community in Bangalore, Tamil Nadu, which was founded in 1990 occupies 115 acres of land. During the visit, the community presented different facets of sustainable living that support and sustain the local livelihoods. The participants spoke to the community members about eco-restoration and wilderness preservation, alternative energy, sustainable organic farming, water harvesting, health and healing.

On the final day of the conference, coordinators of the five sub-themes presented each of the group's key observations and findings. The key outcomes from the conference were converted into two working papers.

Five subthemes, including financing and community involvement, were addressed at the conference.

"Land restoration is not just a technical exercise to be handled by ecologists and soil scientists. There are enablers of land restoration, which need to be understood to make effective public policy to promote restoration. There are also fundamental socio-economic drivers of land degradation, which also need to be understood and addressed to prevent further land degradation."

Santhakumar Velappan Nair,

Professor Economic-sociology, Azim Premji University, Bangalore, India

Technical Advice on Field Implementation

During the G20 India Presidency in 2023, a decision was taken to focus on the restoration of mining affected areas (as well as areas impacted by forest fires). In this context, the ICO worked with two institutions in India to understand the nature of the challenges in mine restoration.

Technical experts from the G20 Global Land Initiative visited the coal mining areas of Angul in Odisha, India, where the district administration is developing plans for land restoration. India has a legally mandated District Mineral Trust Fund, with contributions from the mining royalties. The visit began as a scoping exercise to consider the environmental, social and economic factors tied to coal mining clusters. Attention was devoted to understanding land degradation, ecological impacts, public health implications and the overall environmental condition of the area. The delegation went on site visits, engaged with mining industry representatives and local government officials, and witnessed the impacts of mining and the ongoing restoration activities first-hand. A report with recommendations to improve the ongoing mining as well as restoration activities was provided to the District Administration.

The second case of mining restoration included the work of the Karnataka Mining Environmental Restoration Corporation (KMERC). This is one of the largest mine restoration initiatives globally, with a workplan of over USD 3 billion in consolidated funds and projected revenues from mining operations. KMERC is tasked with undertaking mine restoration in four districts of Karnataka, which are severely affected by mining operations. While the core postmining area covers approximately 200 km², restoration will benefit a catchment area spanning around 30,000 km² with a population of approximately 8 million people.

ICO conducted a scoping visit to the districts in the southern state of Karnataka that are affected by mining to assess opportunities for collaboration and knowledge exchange. The delegation, made up of national and international experts with extensive

"Mining can cause significant damage to the landscape, but mining also raises significant resources, which can both support land restoration and help the country and community to prosper. There are international best practices of land restoration and post-mining economic transitions around the world and we, at GLI, are keen to promote these initiatives."

Ishwar Naravanan.

Senior Expert on Biodiversity, G20 Global Land Initiative

experience in ecological restoration, held detailed discussions with local stakeholders. Additionally, an experiencesharing workshop was held jointly with KMERC to facilitate discussions among the key stakeholders and to gather insights into the capacity building and training requirements.

The scoping report emphasized the importance of a comprehensive and integrated, landscape approach for ecological restoration of these mining landscapes. It spells out the immediate, medium- and long-term actions required to achieve effective land restoration and contribute to the United Nations Sustainable Development Goals (SDGs). The report also provided suggestions on ways to strengthen ongoing ecological restoration activities through soil amenders, remediation of polluted soils and promoting a mix of native tree species, which would increase carbon sequestration. The report provides a comprehensive listing of the key actions and recommendations needed to achieve sustainable and effective ecological restoration in the mining landscapes and in the adjoining areas.

In November, officials from the Government of India visited Germany and held discussions with the German institutions involved in restoring mines. The discussions between the officials and the technical mining experts highlighted the need for opportunities for regular technical exchanges and visits between countries to learn from best practices.

The Scoping report emphasizes landscape approach for effective ecological restoration in mining areas.



Institutional Strengthening at Indian Institute of Forest Management

The Indian Institute of Forest Management (IIFM) based in Bhopal, Madhya Pradesh, was founded in the early 1980s as an autonomous management training institute covering natural resources and forestry. In October 2020, five premier institutions under the Ministry of Environment, Forests and Climate Change were scheduled for disengagement. The aim was to rationalise autonomous bodies for 'minimum government, maximum governance,' to ensure efficient use of public funds. The core funding to disengaged institutions was scheduled to be reduced to zero over a three- to four-year period ending May 2025. Dr K Ravichandran, its current and the Institute's 25th Director, was hired in September 2022 to reform IIFM.

IIFM has four main functions: education; research; training; and consultancy. Education is the largest endeavour, with its mainstay courses of two-year post-graduate diplomas (PGDs). IIFM currently offers two long-standing PGDs in Forest Management (PGD-FM) and Sustainability Management (PGD-SM), although it is currently embarking on new curricula, recruiting new staff and enrolling new students. Across all activities, IIFM has an operational budget of 40 Crore Rupees per year (US\$4.8 million) with a view to doubling this in the short- to mediumterms.

During India's Presidency of the G20 in 2023, the Government discussed with the ICO the assignment of institutional strengthening of the IIFM. Prof Tony Simons, G20 GLI Senior Fellow, made three visits to IIFM in March, May and August to:

- 1. Examine the current modus operandi and institutional functioning of IIFM
- Deliver teaching and research-oriented seminars to staff, students and visiting trainees
- 3. Engage with IIFM staff (faculty and administrative) to secure greater contributions, understanding and ownership of an evolving institution
- 4. Forecast some newly emerging opportunities for IIFM to consider, and
- 5. Provide recommendations, observations and suggestions to IIFM on high-level priority issues to help strengthen the institute.

The key issues agreed with IIFM to help deliver a fit-for-purpose and stronger institute included: (a) strengthening performance management and benchmarking; (b) introducing full-cost recovery; and (c) boosting tuition and grant revenues beyond just core funding shortfalls.

Staff members were understandably anxious and cautious at the outset, although they quickly embraced the need for self-initiated change. Creditably, they completed diagnostic surveys of their institute with high participation rates (70 per cent) and developed an iterative change management framework to help direct change with the IIFM Board and their senior management.

It is useful to consider this exercise in the context of how Indian forestry and global forestry have evolved over the past four decades.



IIFM, founded in the 1980s, undergoes reforms, focusing on education, research and performance. In the early 1980s, India had a forest cover of 19 per cent, which today stands at 24.4 per cent. The increase can be attributed to a number of factors although the keen attention of the Indian government to policies and strategies is particularly influential. For instance, the 1980 Forest Conservation Act set out to balance reversing deforestation whilst simultaneously minimising adverse effects on forest-dependent communities. Moreover, India was the first country in the world to enact a National Agroforestry Policy in 2014.

At the global level, India has contributed to and supported various international efforts on forestry. These efforts include: the FAO Committee on Forestry (since 1972); Tropical Forest Action Plans (1985); Agenda 21 at the United Nations Conference on Environment and Development (1992); International Timber Trade Organisation (1992); United Nations Forum on Forests (2000); and Glasgow Leaders' Declaration on Forests and Land Use from COP26 (2021). To continue to do so will take enhanced human capacities nurtured at dynamic institutes such as the IIFM.

The IIFM assignment and global forestry issues remind us that forest protection, land restoration and aligned land management require long-term plans, commitment and learning. Whilst by no means fully assured, the forest and land-based ecosystems in India are in a strengthened place with the professionalism of IIFM and the foresight and leadership of the Government of India.

India supports global forestry, emphasizing IIFM's role in capacity building.









Restoration Landscape 2023

The year 2023 began on a high note for landscape restoration, with the adoption in December 2022 of the GBF at the Fifteenth session of the Conference of Parties to the Convention on Biological Diversity (CBD COP16), which has an explicit target on ecosystem restoration. GBF Target 2 states;

"Ensure that by 2030 at least 30 per cent of areas of degraded terrestrial, inland water, and coastal and marine ecosystems are under effective restoration, in order to enhance biodiversity and ecosystem functions and services, ecological integrity and connectivity."

CBD, along with its Parties and other international organisations, in 2023 promptly started operationalizing the framework.

Three important actions were initiated;

actions were examined thoroughly.

3. Following GBF adoption, and its Target 2, the working group expert organizations mobilized and entered into a partnership

 GEF Assembly meeting in August 2024 in Vancouver launched the Global Biodiversity Framework Fund, with initial contributions from Canada and the UK. The GBF is required to raise 30 billion US dollars every year up to 2030 to support the implementation of the framework.

GBF Target 2

aims for 30%

restoration by

ecosystem

2030.

- 2. In September 2023 CBD held a knowledge exchange session for parties to the CBD titled, "Workshop on ecosystem restoration-related planning and capacity-building needs for the implementation of the Kunming-Montreal Global Biodiversity Framework (GBF)." During the event, which was attended by 114 participants from 41 countries, special attention was given to GBF Target 2, where the role of monitoring and its implications on ecosystem restoration actions were examined thoroughly.
- the working group expert organizations mobilized and entered into a partnership to support the implementation and monitoring of ecosystem restoration. The initial group made up of, among others, FAO, CBD, UNCCD, Secretariat of Biodiversity Indicators Partnership at UNEP-World Conservation Monitoring Center, Convention on Wetlands and IUCN came together to align their reporting processes and remove duplication of effort. The membership was broadened to include UNEP, United Nations Development Program, World Resources Institute (WRI), System of Environmental Economic Accounting (SEEA), Restor, CIFOR-ICRAF, Conservation International and World Wide Fund for Nature (WWF). The new partnership has developed a Roadmap for GBF Target 2 leading up to CBD COP 16 and beyond.

In 2020, together with other G20 countries, Saudi
Arabia made a pledge to intensify the effort
to combat land degradation and enhance
restoration, and made commitments and
launched the G20 land conservation initiative,
whose target really is to work with all
stakeholders to spread knowledge and
capacity and foster stronger engagement
on land restoration globally."

 Dr Osama Ibrahim Faqeeha,
 Deputy Minister for Environment, Kingdom of Saudi Arabia

Launch of the Freshwater Challenge

The Freshwater Challenge was launched at the UN Water Conference in New York in March 2023 by the governments of Colombia, the Democratic Republic of Congo, Ecuador, Gabon, Mexico and Zambia. Since the inception of the challenge, these countries have been supported by core partners, namely, WWF, IUCN, UNEP, The Nature

Conservancy, Wetlands International, Conservation International and Secretariat of the Ramsar Convention on Wetlands. The initiative aims to: support, integrate and accelerate the restoration of 300,000 km of degraded rivers and 350 million hectares of degraded wetlands by 2030; and to conserve intact freshwater ecosystems.



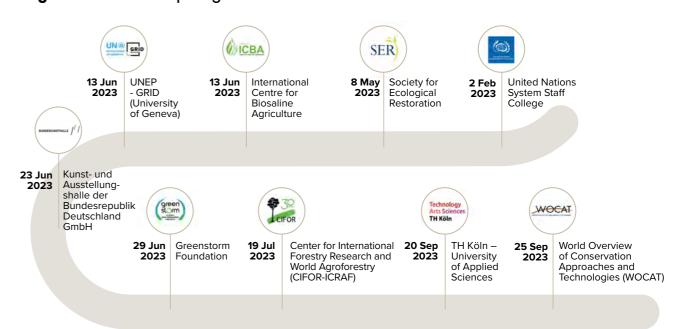
The EU Restoration Law

In June 2022, the European Commission adopted a proposal for a European Union-wide Restoration law with ambitious targets for restoration of all ecosystems, including urban ecosystems. In 2023, the law went through consultations both within and outside the European Parliament. In November 2023, a provisional agreement was reached between the European Parliament and the Council on the Nature Restoration Law. Once adopted and applied in the EU Member States, the law will make a key contribution

to reaching climate neutrality by 2050 and increasing Europe's preparedness and resilience to the effects of climate change. The law is expected to set in motion a process for the continuous and sustained recovery of nature across the EU's land and sea. As an overall target to be reached on the EU level, Member States will put in place restoration measures in at least 20 per cent of the EU's land areas and 20 per cent of its seas by 2030. By 2050, such measures should be in place for all ecosystems that need restoration.



Figure 11: Partnerships signed in 2023



UNCCD's Reports on Land Restoration

The most important set of new global data on restoration, which came out in 2023, were the UNCCD country reports. The data presented in a series of reports that the UNCCD secretariat presented in 2023 to the Committee for the Review of Implementation of the Convention (CRIC21). The following is the general status of the overall reporting based on these reports.

By 28 February 2023, 126 of the 196 Parties had submitted their national reports. Forty reports were from Africa, 31 from Asia, 23 from Latin America and the Caribbean and 9 (75 per cent) from Northern Mediterranean countries, 11 from Central and Eastern European countries and 12 (44 per cent) from Parties that do not belong to a regional implementation (See Figure 13).

Based on the reports, 1.52 billion hectares of land were reported degraded, which is 15.5 per cent of reported land. It also showed 1.2

billion people, which is 25 per cent of the reported population, were exposed to land degradation (See Figure 14).

The report shows that between 2015 and 2019, at least 100 million hectares of healthy and productive land were degraded every year, affecting food and water security globally. The loss, equivalent to twice the size of Greenland, is impacting the lives of 1.3 billion people, who are estimated to be directly exposed to land degradation.

The baseline sets the benchmark against which change in the extent of land degradation is compared in subsequent reporting periods. These changes are used to monitor Parties' progress on avoiding, reducing and reversing degraded land in line with the principles of the Land Degradation Neutrality mitigation hierarchy (See Figure 15).



The reports from CRIC21 further indicate that:

- Globally, the largest cumulative per cent change in any land cover class is in artificial surfaces (e.g. Urban and constructed areas), which grew 64.5 per cent between 2000-2019, representing an additional 73,600 square kilometres (km2). Conversion has mostly come from cropland and grassland.
- 2. Globally, tree-covered areas increased by 28,100 km2 between 2000-2010, but by 2019 had suffered a net decline of 157,000 km2 (1.3 per cent) below 2000 levels. Most of the transitions to and from tree-covered areas were with grassland and cropland. But conversion to grassland was the largest in both baseline and reporting periods at 245,900 km2 and 126,700 km2 converted, respectively.
- 3. Globally, by 2019 grassland saw a net loss of 760,300 km2 (4.2 per cent) below 2000 levels. Most grassland losses are transitions to tree-covered areas, cropland or other land.
- 4. Globally, cropland has increased by 217,300 km2 (2.8 per cent of the 2000 cropland extent). Most of this gain is the result of transitions from grassland and tree-covered areas.

- 5. Globally, wetlands saw a net loss of 31,200 km2 (3.8 per cent) by 2019. Most wetland losses in the baseline and reporting periods have been due to transitions from treecovered areas to grasslands and croplands.
- 6. Globally, 1,331,300 km2 (2.1 per cent) of the reported land area was degraded due to negative land cover changes in the baseline period, and an additional 748,800 km2 (1.2 per cent) has degraded in the reporting period.
- 7. Globally, 65.6 per cent of the reported static vegetated land area1 showed increasing or stable Land Productivity Dynamics (LPD) in the baseline period. However, 8.7 per cent of the reported static vegetated land area showed declining LPD, and a further 24.1 per cent was reported as stressed, representing almost 43.5 million km2 collectively.
- 8. Globally and in the baseline period, the largest declining productivity trajectories were reported for transitions from tree-covered areas to grassland, which exhibited declining LPD across 55,810 km2, or 17.8 per cent of the reported net area change.

Figure 12: Percentage of degraded land by region

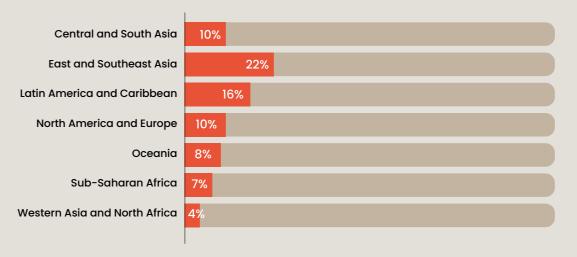


Figure 13: Status of Global Target achievements

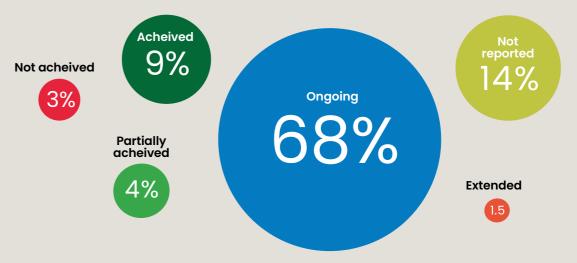


Figure 14: Global data on restoration 2023

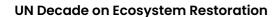
(billion) hectares of land was reported degraded, which is 15.5

per cent of reported land

1.2B

(billion) people, which is 25 per cent of the reported population, are exposed to land degradation

- 40



The United Nations General Assembly resolution A/RES/73/284 of 1 March 2019, which proclaims 2021-2030 the United Nations Decade on Ecosystem Restoration (UNDER), is to be implemented "within existing structures and available resources, with the aim of supporting and scaling up efforts to prevent, halt and reverse the degradation of ecosystems worldwide and raise awareness of the importance of successful ecosystem restoration."

The resolution invites UNEP and FAO to lead the implementation of the decade, in collaboration with the secretariats of the Rio conventions (desertification, biodiversity and climate change), "other relevant multilateral environmental agreements and entities of the United Nations system, including by identifying and developing possible activities and programmes, within their mandates and existing resources, and through voluntary contributions, as appropriate."

UNDER has been operational since 2021, with a secretariat based in both FAO and UNEP and a strategy developed in consultations with Member States and other stakeholders. Over the past two years, it has developed into a partnership of all major international agencies and over 200 restoration actors ranging from the private sector to NGOs.

UNDER completed two significant actions in 2023:

- It released the Action Plan for the Decade in April. The plan sets out the next steps to collectively work towards the goals and vision of UNDER. Moving from strategy to action, this plan aims to allow UN Decade partners to mobilise around key priority areas for restoration - the Restoration Challenges - and provide leadership.
- 2. There are twelve restoration challenges identified by the action plan, namely: Biodiversity, Business, Cities, Climate, Communities, Education, Finance, Food, Human-Nature Relationship, Marine and Freshwater, Land and Youth. One or more institutions are leading each of these challenges, and also have a coordinating role.
- 3. The table below presents the restoration challenges and the key performance indicators that will be used to assess progress in each challenge.

Restoration Challenge	Key Performance Indicators
Biodiversity	 Pilot Project in the Atlantic Forest Pilot Project in the Amazon rainforest and Brazilian Savannah Hectares restored in Amazon rainforest, Brazilian Savannah and Atlantic Forest
Business and Philanthropy	 50 million dollars raised by 2030 15 private sector entities as part of the UN Decade Partnership framework financially supporting the World Restoration Flagships by 2030 30 web stories/articles and 5 presentations at key events showcasing and honouring the supporters and Flagships 575 companies with pledges by 2025 10 billion US dollars pledged for ecosystem restoration by business
Cities	 1,000 cities reached through communications on urban ecosystem restoration 100 champion cities by 2030 20 cities from the group of champion cities encouraged 1,000 restored spaces 250 institutions signed-up by 2025 1,000 volunteers signed-up by 2025
Climate	 350 million hectares of land restored 100 million people from climate vulnerable communities supported

Communities	 10 policy/practice exchanges Tenure security protection Active restoration of hectares of land 30 successful community-led restoration flagships Peer to peer learning facilitation Committees / councils / platforms equipped to address, and mediating, local land conflict Women participation in relevant local governance structures Targeted global campaigns
Education	 Number of key stakeholders and consortium partners mobilized at national, regional and global levels Number of resources developed for capacity building and advocacy – exemplar curricular framework, a road map in synergy with the Education of Sustainable Development for 2030 framework and roadmap and the Greening Education Partnership, collection of good practices Number of countries adopting Renewable Energy in their national education contexts Number of formal and non-formal education demonstration sites and pilots – Develop 5,000 collaborative partnerships with youth educational institutions (3,000), educators (2,000) and influencers (100)
Finance	 Review of key financial sector regulation, guidance and analytical tools Publish assessing Monitoring, Reporting and Verification (MRV) cost reductions trends and barriers
Food	 Twenty-model-camps operationalized decent youth-restorative-jobs generated (number to be determined) billion-dollars mobilised (amount to be determined) Twenty-country-local-anchors empowered
Human – Nature relationships	 Publication of principles for humanity and the living environment Publication of report comprising stories about humanity's relation with nature Measurable increase in public engagement on the human-nature relationship Documentary feature tracking the Panel's work, outputs and impact
Marine and Freshwater	Develop at least 10 activities to support the ecosystem restoration during the decade and ocean science for sustainability Identify at least 10 hotspots to prioritise restoration action Identify at least 10 partners to raise awareness and advocate
Land	 30 per cent areas under effective restoration by 2030 Land Degradation Neutrality achieved by 2030 Curriculum on land-based ecosystem restoration implemented in 1,000 universities A five-year plan to reach at least 10,000 participants in 100 countries with training programs on ecosystem restoration Develop a plan to build capacity for at least 10,000 Ecopreneurs around the world
Youth	 600 program participants over the 7 years of the program Annual Workshops (in-person or online, pending resource availability & health/safety precautions) Micro-grants offered to 10 per cent of graduates to implement their community restoration projects or support their social enterprise. 60 per cent of graduates employed within one year of program completion Jobs facilitated for young people in the restoration field (number to be determined)





Annex I: Country Reports on Degraded land

	BASELINE		REPORTING			
Reporting country	Total area degraded land (km²)	Per cent degraded land (%)	Total area degraded land (km²)	Per cent degraded land (%)	Confidence of reporting	
Algeria	58 123	2.4	118 959	5	medium •	
Antigua and Barbuda	36	9.8	38	10.3	low •	
Armenia	5 487	19.3	5 532	19.4	low •	
Australia	563 298	7.3	628 567	8.2	low •	
Azerbaijan	9 776	11.6	10 832	12.8	medium •	
Bangladesh	2 909	2.3	28 790	22.3	-	
Belize	1706	7.9	1 603	7.5	-	
Benin	43 382	37.6	43 382	37.6	-	
Bhutan	4 607.6	11.9	5 227.4	13.5	medium •	
Bolivia (Plurinational State of)	54 736	5.1	107 140	10	low •	
Bosnia and Herzegovina	4 319.5	8.5	3 458	6.8	medium •	
Botswana	210 267	36.3	99 215	17.1	high	
Bulgaria	1 230	1.1	8 296	7.5	high	
Burkina Faso	94 207	34.6	22 347	8.2	high	
Burundi	5 948	23.9	3 007	12.1	medium •	
Cambodia	30 799	17.4	34 653	19.6	low •	
Cameroon	28 019	6	14 888	3.2	medium •	
Canada	858 457	9.7	1 035 708	11.7	-	
Central African Republic	9 893	1.6	32 458	5.2	high •	
Chad	26 728	2.1	118 759	9.4	high	
Chile	43 533	6.1	46 022	6.4	medium •	
China	2 611 593	-	2 573 713	-	_	
Colombia	331 897	28.8	343 934	29.8	medium •	
Costa Rica	16 879	33.2	16 209	32.1	medium •	
Czech Republic	2 514	3.2	7 771	9.9	medium •	
Côte d'Ivoire	16 228	5.1	37 761	11.8		
Dominica	0	0	3	0.4	high •	
Dominican Republic	23 134	48.6	14 865	31.3	low •	
Ecuador	55 555	21.9	32 402	12.8	medium •	
Equatorial Guinea	230.1	0.8	305.8	1.1		
Eritrea	4 991	4.2	40 453	33.7	medium •	
Estonia	5 002	11.7	3 196	7.5		
Eswatini	981	5.7	4 176	24.1	medium •	
Ethiopia	92 626	8.3	222 666	19.9	high	
Finland	2 892	1	1 327	0.4	medium •	
Gabon	33 990	13.1	76 217	29.4	medium •	
Gambia	453	4.4	3 574	34.8	medium •	

	BASELINE		REPORTING			
Reporting country	Total area degraded land (km²)	Per cent degraded land (%)	Total area degraded land (km²)	Per cent degraded land (%)	Confidence of reporting	
Georgia	3 296	4.8	4 595	6.6	medium •	
Ghana	8 057	3.5	38 572	16.6	medium •	
Greece	6 111	4.8	7 422	5.8	low •	
Guinea	26 306	10.8	58 048	23.8	medium •	
Guinea-Bissau	1734	5.3	9 070	27.9	low •	
Guyana	37 338	17.8	33 354	15.9	high •	
Haiti	14 325	53.9	6 116	23	low •	
Hungary	2 098	2.3	13 229	14.4	-	
India	142 786.6	4.4	305 071.9	9.5	medium •	
Indonesia	183 658	9.9	326 833	17.6	-	
Iraq	25 914	6	28 939	6.7	medium •	
Italy	41 830	14.1	36 990	12.5	low •	
Jamaica	568	5.2	838	7.7	medium •	
Jordan	4 746	5.4	22 718	25.6	low •	
Kazakhstan	549 525	20.6	566 910	21.3	medium •	
Kuwait	165	1	525	3	-	
Kyrgyzstan	20 278	10.6	18 319	9.6	low •	
Latvia	10 971	17.3	5 526	8.7	medium •	
Lebanon	1 110	10.8	1103	10.8	low •	
Lesotho	2 692	8.8	2 693	8.8	high •	
Liberia	17 883	18.7	8 537	8.9	medium •	
Libya	14 904	0.9	24 543	1.5	low •	
Lithuania	4 202	6.6	9 106	14.3	low •	
Madagascar	51 356	8.8	187 358	31.9	medium •	
Malawi	6 400	6.8	25 200	26.8	high •	
Malaysia	26 163	8.1	49 392	15.2	medium •	
Mali	86 052	6.9	115 822	9.3	medium •	
Mauritania	28 303	2.7	141 060	13.6	medium •	
Mauritius	189	9.7	202	10.3	-	
Mexico	1 098 978.7	56.7	1 394 037.6	71.9	high •	
Mongolia	209 707	13.5	362 609	23.4	medium 🌕	
Montenegro	913	6.7	905	6.7	medium •	
Morocco	23 446	3.3	35 820	5	medium 🌕	
Namibia	4 055	0.5	10 230	1.2	medium 🌕	
Nepal	5 303	3.6	12 220	8.3	medium 🌕	
Netherlands	-	-	4 531	13.3	-	
Nigeria	79 055	8.8	210 658	23.4	high •	
Oman	1 072	0.3	18 140	5.9	-	
Pakistan	63 055	7.3	28 118	3.2	medium •	

Reporting country Integrated and (kmr) Per cent geraded and (kmr) Integrated and (kmr) Integ		BASELINE		REPORTING		
Panama 25 891 35.2 23 679 32.2 medium of the policy of the po	Reporting country	degraded land	degraded	degraded land	degraded	
Paraguay 114 008 28.8 106 364 26.9 low of Medium Philippines 111 323.8 38.3 142 606 49.4 medium of Medium Portugal 12 700 14.5 5 368 6.1 medium of Medium Qatar 529 4.8 441 4 low of Medium Rwanda 8 470 35.9 6 367 26.9 low of Medium Saint Kits and Nevis 36 14.4 28 112	Palau	36	9.9	39	10.8	low •
Philippines 11323.8 38.3 142 606 49.4 medium Portugal 12 700 14.5 5 368 6.1 medium Qatar 529 4.8 441 4 low Republic of Moldova 5 366 16.3 1769 25.4 low Saint Kitts and Nevis 36 14.4 28 11.2 — Saint Lucia 2 0.3 5 0.9 — Saint Vincent and the Grenadines 3 0.8 2 0.5 — Saot Tome and Principe 179 19 269 28.5 medium Saot Tome and Principe 179 19 29.9 28.5 medium Serbia 1669 1.9 3.671 4.2 low Sierra Leone 21239 2.9 1.455 2.0 medium Sierra Leone 21239 2.9 1.5 2.2 3.6 medium Sierra Leone 12339 2.9 5.56317 </td <td>Panama</td> <td>25 891</td> <td>35.2</td> <td>23 679</td> <td>32.2</td> <td>medium •</td>	Panama	25 891	35.2	23 679	32.2	medium •
Portugal 12 700 14.5 5 388 6.1 medium Qatar 529 4.8 441 4 low ● Republic of Moldova 5 366 16.3 1769 5.4 low ● Rwanda 8 470 35.9 6 367 26.9 low ● Saint Kits and Nevis 36 14.4 28 11.2 Saint Vincent and the Grenadines 3 0.8 2 0.5 Sant Orme and Principe 179 19 269 28.5 medium ● Saudi Arabia 13 235 0.7 20 925 10.4 low ● Senegal 2 349 12 3 4058 17.6 medium ● Serbia 1 659 19 3 67 4.2 low ● Serbia 1 659 19 3 67 4.2 low ● Sievra Leone 21 239 29.9 14 755 20.8 medium ● Siovania 2 308 2.6 5 585 11.5 </td <td>Paraguay</td> <td>114 008</td> <td>28.8</td> <td>106 364</td> <td>26.9</td> <td>low •</td>	Paraguay	114 008	28.8	106 364	26.9	low •
Qatter 529 4.8 441 4 low ● Republic of Moldova 5 366 16.3 1769 5.4 low ● Rwanda 8 470 35.9 6 367 26.9 low ● Saint Kitts and Nevis 36 14.4 28 11.2 — Saint Licia 2 0.3 5 0.9 — Saint Licia 1 9 269 28.5 medium Saint Licia 1 9 269 28.5 medium Saint Alicia 1368 2.8 5.585 17.6 medium Serbia 1368 2.8 5.585 11.5 — Slovakia 1389 2.8 5.585 11.5 — Slovakia 1389 <td>Philippines</td> <td>111 323.8</td> <td>38.3</td> <td>142 606</td> <td>49.4</td> <td>medium •</td>	Philippines	111 323.8	38.3	142 606	49.4	medium •
Republic of Moldova 5 366 16.3 1 769 5.4 low Rwanda 8 470 35.9 6 367 26.9 low Saint Kitts and Nevis 36 14.4 28 11.2 — Saint Lucia 2 0.3 5 0.9 — Saint Vincent and the Grenadines 3 0.8 2 0.5 — Saot Tome and Principe 179 19 260 28.5 medium Saudi Arabia 13 235 0.7 200 925 10.4 low Senegal 2 349 1.2 34 058 17.6 medium Serbia 1 659 1.9 3 67 4.2 low Steira Leone 21 239 2.9 14 755 20.8 medium Stovakia 1 368 2.8 5 585 11.5 ——— Stovakia 2 029 10.2 5 328 26.7 medium Stovakia 2 029 10.2 5 328 26.7	Portugal	12 700	14.5	5 368	6.1	medium •
Rwanda 8 470 35.9 6 367 26.9 low ● Saint Kits and Nevis 36 14.4 28 11.2 — Saint Unicer 2 0.3 5 0.9 — Saint Vincent and the Grenadines 3 0.8 2 0.5 — Sao Tome and Principe 179 19 269 28.5 medium • Saudi Arabia 13 235 0.7 200 925 10.4 low • Senegal 2 349 1.2 34 058 17.6 medium • Serbia 1 659 19 3 671 4.2 low • Sierra Leone 21 239 29.9 14 755 20.8 medium • Siovakia 1 368 2.8 5 685 11.5 — Siovakia 1 368 2.8 5 685 11.5 — Siovakia 2 38 2.6 7.7 20.2 2.7 medium • Siovath Africa 2 919 2.2 5 22	Qatar	529	4.8	441	4	low •
Scint Kitts and Nevis 36 14.4 28 11.2	Republic of Moldova	5 366	16.3	1769	5.4	low •
Saint Lucia 2 0.3 5 0.9 - Saint Vincent and the Grenadines 3 0.8 2 0.5 - Sao Tome and Principe 179 19 269 28.5 medium Saudi Arabia 13 235 0.7 200 925 10.4 low Senegal 2 349 1.2 34 058 17.6 medium Serbia 1669 1.9 3 671 4.2 low Serbia 1368 2.8 5 585 11.5 - Siovakia 1368 2.8 5 585 11.5 - Slovakia 1368 2.8 5 585 11.5 - Slovakia 1368 2.8 5 585 11.5 - Slovakia 1368 2.8 2.67 medium South 20 10.2 5 328 2.67 medium South Africa 29 193 2.4 356 007 29.3 low Spain	Rwanda	8 470	35.9	6 367	26.9	low •
Saint Vincent and the Grenadines 3 0.8 2 0.5 - Sao Tome and Principe 179 19 269 2.85 medium Saudi Arabia 13 235 0.7 200 925 10.4 low ● Senegal 2 349 1.2 34 058 17.6 medium ● Serbla 1659 1.9 3 671 4.2 low ● Sierra Leone 21 239 2.9 14 755 20.8 medium ● Slovakia 1368 2.8 5 585 11.5 Slovania 2 029 10.2 5 328 26.7 medium ● Somalia 79 140 12.5 232 936 36.9 medium ● South Africa 2 9193 2.4 356 007 29.3 low ● Spain 25 976.3 5.2 55 631.7 11.1 medium ● Sri Lanka 10 713 16.7 8 926 14.2 low ● State of Palestine 1 106 18.6 <th< td=""><td>Saint Kitts and Nevis</td><td>36</td><td>14.4</td><td>28</td><td>11.2</td><td>-</td></th<>	Saint Kitts and Nevis	36	14.4	28	11.2	-
Sao Tome and Principe 179 19 269 28.5 medium Saudi Arabia 13 235 0.7 200 925 10.4 low ● Senegal 2 349 1.2 34 058 17.6 medium ● Serbia 1 659 1.9 3 671 4.2 low ● Sierra Leone 21 239 29.9 14 755 20.8 medium ● Slovakia 1 368 2.8 5 585 11.5 - Slovenia 2 029 10.2 5 328 26.7 medium ● Somatlia 79 140 12.5 232 396 36.9 medium ● South Africa 29 193 2.4 356 007 29.3 low ● Spain 2.5 976.3 5.2 55 631.7 11.1 medium ● Sprian 2.5 976.3 5.2 55 631.7 11.1 medium ● Strianka 10 713 16.7 8 926 14.2 low ● State of Palestine 1106 18.6 1	Saint Lucia	2	0.3	5	0.9	-
Saudi Arabia 13 235 0.7 200 925 10.4 low ● Senegal 2 349 12 34 058 17.6 medium ● Serbia 1 659 1.9 3 671 4.2 low ● Sierra Leone 21 239 2.9.9 14 755 20.8 medium ● Slovakia 1 368 2.8 5 585 11.5 — Slovenia 2 029 10.2 5 328 26.7 medium ● South Africa 29 193 2.4 356 007 29.3 low ● Spain 25 976.3 5.2 55 631.7 11.1 medium ● Spain 25 976.3 5.2 55 631.7 11.1 medium ● State of Palestine 1106 18.6 1 547 26 medium ● Studan 138 908 7.2 103 220 5.4 — Switzerland 5 122 12.8 3 738 9.4 — Syrian Arab Republic 22 420 12 44 300	Saint Vincent and the Grenadines	3	0.8	2	0.5	-
Senegal 2 349 1.2 34 058 17.6 medium Serbia 1 659 1.9 3 671 4.2 low Sierra Leone 21 239 29.9 14 765 20.8 medium Slovakia 1 368 2.8 5 585 11.5 — Slovenia 2 029 10.2 5 328 26.7 medium Somalia 79 140 12.5 232 936 36.9 medium South Africa 29 193 2.4 356 007 29.3 low Spain 25 976.3 5.2 55 631.7 11.1 medium Sprian 25 976.3 5.2 55 631.7 11.1 medium State of Palestine 1 106 18.6 1 547 26 medium State of Palestine 1 106 18.6 1 547 26 medium Switzerland 5 122 12.8 3 738 9.4 — Syrian Arab Republic 22 420 12 44 300	Sao Tome and Principe	179	19	269	28.5	medium •
Serbia 1 659 1.9 3 671 4.2 low ● Sierra Leone 21 239 29.9 14 755 20.8 medium ● Slovakia 1 368 2.8 5 585 11.5 - Slovenia 2 029 10.2 5 328 26.7 medium ● Somalia 79 140 12.5 232 936 36.9 medium ● South Africa 29 193 2.4 356 007 29.3 low ● Spain 25 976.3 5.2 55 631.7 11.1 medium ● Spain 25 976.3 5.2 55 631.7 11.1 medium ● Strianka 10 713 16.7 8 926 14.2 low ● State of Palestine 1106 18.6 1 547 26 medium ● Sudan 138 908 7.2 103 220 5.4 — Suriname 29 158 17.8 25 347 15.5 medium ● Switzerland 5 122 12.8 3 738	Saudi Arabia	13 235	0.7	200 925	10.4	low •
Sierra Leone 21 239 29.9 14 755 20.8 medium Slovakia 1 368 2.8 5 585 11.5 — Slovenia 2 029 10.2 5 328 26.7 medium Somalia 79 140 12.5 232 936 36.9 medium South Africa 29 193 2.4 356 007 29.3 low Spain 25 976.3 5.2 55 631.7 11.1 medium Spain 25 976.3 5.2 55 631.7 11.1 medium Stri Lanka 10 713 16.7 8 926 14.2 low State of Palestine 1 106 18.6 1 547 26 medium State of Palestine 1 106 18.6 1 547 26 medium State of Palestine 1 106 18.6 1 547 26 medium State of Palestine 1 106 18.6 1 547 26 medium State of Palestine 1 106 18.6	Senegal	2 349	1.2	34 058	17.6	medium •
Slovakia	Serbia	1 659	1.9	3 671	4.2	low •
Slovenia 2 029 10.2 5 328 26.7 medium Somalia 79 140 12.5 232 936 36.9 medium South Africa 29 193 2.4 356 007 29.3 low Spain 25 976.3 5.2 55 631.7 11.1 medium Sri Lanka 10 713 16.7 8 926 14.2 low State of Palestine 1 106 18.6 1 547 26 medium Sudan 138 908 7.2 103 220 5.4 — Suriname 29 158 17.8 25 347 15.5 medium Switzerland 5 122 12.8 3 738 9.4 — Syrian Arab Republic 22 420 12 44 300 23.8 low Togo 1 447 2.6 9 533 16.9 high f Trinidad and Tobago 835 16.7 447 8.9 medium Turkiwenistan 79 014 17.1 82	Sierra Leone	21 239	29.9	14 755	20.8	medium •
Somalia 79 140 12.5 232 936 36.9 medium South Africa 29 193 2.4 356 007 29.3 low Spain 25 976.3 5.2 55 631.7 11.1 medium Sri Lanka 10 713 16.7 8 926 14.2 low State of Palestine 1 106 18.6 1 547 26 medium Sudan 138 908 7.2 103 220 5.4 — Suriname 29 158 17.8 25 347 15.5 medium Switzerland 5 122 12.8 3 738 9.4 — Syrian Arab Republic 22 420 12 44 300 23.8 low Togo 1 447 2.6 9 533 16.9 high 1 Trinidad and Tobago 835 16.7 447 8.9 medium 1 Turkmenistan 79 014 17.1 82 061 17.7 medium 1 Turkiye 109 862.5 </td <td>Slovakia</td> <td>1368</td> <td>2.8</td> <td>5 585</td> <td>11.5</td> <td>-</td>	Slovakia	1368	2.8	5 585	11.5	-
South Africa 29 193 2.4 356 007 29.3 low ● Spain 25 976.3 5.2 55 631.7 11.1 medium ● Sri Lanka 10 713 16.7 8 926 14.2 low ● State of Palestine 1 106 18.6 1 547 26 medium ● Sudan 138 908 7.2 103 220 5.4 — Suriname 29 158 17.8 25 347 15.5 medium ● Switzerland 5 122 12.8 3 738 9.4 — Syrian Arab Republic 22 420 12 44 300 23.8 low ● Togo 1 447 2.6 9 533 16.9 high ● Trinidad and Tobago 835 16.7 447 8.9 medium ● Turisia 13 789 8.9 9 538 6.1 low ● Turkmenistan 79 014 17.1 82 061 17.7 medium ● Uganda 1 885 0.9 23 723	Slovenia	2 029	10.2	5 328	26.7	medium •
Spain 25 976.3 5.2 55 631.7 11.1 medium Sri Lanka 10 713 16.7 8 926 14.2 low State of Palestine 1 106 18.6 1 547 26 medium Sudan 138 908 7.2 103 220 5.4 — Suriname 29 158 17.8 25 347 15.5 medium ● Switzerland 5 122 12.8 3 738 9.4 — — Syrian Arab Republic 22 420 12 44 300 23.8 low ● Togo 1 447 2.6 9 533 16.9 high ● Trinidad and Tobago 835 16.7 447 8.9 medium ● Turkmenistan 79 014 17.1 82 061 17.7 medium ● Türkiye 109 862.5 14.3 102 484.7 13.4 medium ● Uganda 1 885 0.9 23 723 11.6 — </td <td>Somalia</td> <td>79 140</td> <td>12.5</td> <td>232 936</td> <td>36.9</td> <td>medium •</td>	Somalia	79 140	12.5	232 936	36.9	medium •
Sri Lanka 10 713 16.7 8 926 14.2 low ● State of Palestine 1 106 18.6 1 547 26 medium ● Sudan 138 908 7.2 103 220 5.4 — Suriname 29 158 17.8 25 347 15.5 medium ● Switzerland 5 122 12.8 3 738 9.4 — Syrian Arab Republic 22 420 12 44 300 23.8 low ● Togo 1 447 2.6 9 533 16.9 high ● Trinidad and Tobago 835 16.7 447 8.9 medium ● Tunisia 13 789 8.9 9 538 6.1 low ● Turkmenistan 79 014 17.1 82 061 17.7 medium ● Türkiye 109 862.5 14.3 102 484.7 13.4 medium ● Uganda 1 885 0.9 23 723 11.6 — United Arab Emirates 166 0.2 1 053 </td <td>South Africa</td> <td>29 193</td> <td>2.4</td> <td>356 007</td> <td>29.3</td> <td>low •</td>	South Africa	29 193	2.4	356 007	29.3	low •
State of Palestine 1 106 18.6 1 547 26 medium Sudan 138 908 7.2 103 220 5.4 — Suriname 29 158 17.8 25 347 15.5 medium • Switzerland 5 122 12.8 3 738 9.4 — Syrian Arab Republic 22 420 12 44 300 23.8 low Togo 1 447 2.6 9 533 16.9 high • Trinidad and Tobago 835 16.7 447 8.9 medium • Tunisia 13 789 8.9 9 538 6.1 low • Turkmenistan 79 014 17.1 82 061 17.7 medium • Türkiye 109 862.5 14.3 102 484.7 13.4 medium • Uganda 1 885 0.9 23 723 11.6 — United Arab Emirates 166 0.2 1053 1.5 medium •<	Spain	25 976.3	5.2	55 631.7	11.1	medium •
Sudan 138 908 7.2 103 220 5.4 - Suriname 29 158 17.8 25 347 15.5 medium ● Switzerland 5 122 12.8 3 738 9.4 - Syrian Arab Republic 22 420 12 44 300 23.8 low ● Togo 1 447 2.6 9 533 16.9 high ● Trinidad and Tobago 835 16.7 447 8.9 medium ● Tunisia 13 789 8.9 9 538 6.1 low ● Turkmenistan 79 014 17.1 82 061 17.7 medium ● Türkiye 109 862.5 14.3 102 484.7 13.4 medium ● Uganda 1 885 0.9 23 723 11.6 - United Arab Emirates 166 0.2 1 053 1.5 medium ● Uzbekistan 132 972 30.2 114 259 26.1 medium ● Venezuela (Bolivarian Republic of) 55 064 6.1<	Sri Lanka	10 713	16.7	8 926	14.2	low •
Suriname 29 158 17.8 25 347 15.5 medium Switzerland 5 122 12.8 3 738 9.4 - Syrian Arab Republic 22 420 12 44 300 23.8 low Togo 1 447 2.6 9 533 16.9 high high Trinidad and Tobago 835 16.7 447 8.9 medium 10w medium 10w	State of Palestine	1 106	18.6	1 547	26	medium •
Switzerland 5 122 12.8 3 738 9.4 - Syrian Arab Republic 22 420 12 44 300 23.8 low ● Togo 1 447 2.6 9 533 16.9 high ● Trinidad and Tobago 835 16.7 447 8.9 medium ● Tunisia 13 789 8.9 9 538 6.1 low ● Turkmenistan 79 014 17.1 82 061 17.7 medium ● Türkiye 109 862.5 14.3 102 484.7 13.4 medium ● Uganda 1 885 0.9 23 723 11.6 - United Arab Emirates 166 0.2 1 053 1.5 medium ● Uzbekistan 132 972 30.2 114 259 26.1 medium ● Venezuela (Bolivarian Republic of) 55 064 6.1 81 408 9.1 medium ● Viet Nam 93 321.1 28.2 77 578.1 23.4 high ● Vemen 9 060 <t< td=""><td>Sudan</td><td>138 908</td><td>7.2</td><td>103 220</td><td>5.4</td><td>-</td></t<>	Sudan	138 908	7.2	103 220	5.4	-
Syrian Arab Republic 22 420 12 44 300 23.8 low ● Togo 1 447 2.6 9 533 16.9 high ● Trinidad and Tobago 835 16.7 447 8.9 medium ● Tunisia 13 789 8.9 9 538 6.1 low ● Turkmenistan 79 014 17.1 82 061 17.7 medium ● Türkiye 109 862.5 14.3 102 484.7 13.4 medium ● Uganda 1 885 0.9 23 723 11.6 - United Arab Emirates 166 0.2 1 053 1.5 medium ● Uzbekistan 132 972 30.2 114 259 26.1 medium ● Venezuela (Bolivarian Republic of) 55 064 6.1 81 408 9.1 medium ● Viet Nam 93 321.1 28.2 77 578.1 23.4 high ● Yemen 9 060 2 79 403 17.5 -	Suriname	29 158	17.8	25 347	15.5	medium •
Togo 1 447 2.6 9 533 16.9 high ● Trinidad and Tobago 835 16.7 447 8.9 medium ● Tunisia 13 789 8.9 9 538 6.1 low ● Turkmenistan 79 014 17.1 82 061 17.7 medium ● Türkiye 109 862.5 14.3 102 484.7 13.4 medium ● Uganda 1 885 0.9 23 723 11.6 - United Arab Emirates 166 0.2 1 053 1.5 medium ● Uzbekistan 132 972 30.2 114 259 26.1 medium ● Venezuela (Bolivarian Republic of) 55 064 6.1 81 408 9.1 medium ● Viet Nam 93 321.1 28.2 77 578.1 23.4 high ● Yemen 9 060 2 79 403 17.5 -	Switzerland	5 122	12.8	3 738	9.4	-
Trinidad and Tobago 835 16.7 447 8.9 medium ● Tunisia 13 789 8.9 9 538 6.1 low ● Turkmenistan 79 014 17.1 82 061 17.7 medium ● Türkiye 109 862.5 14.3 102 484.7 13.4 medium ● Uganda 1 885 0.9 23 723 11.6 - United Arab Emirates 166 0.2 1 053 1.5 medium ● Uzbekistan 132 972 30.2 114 259 26.1 medium ● Venezuela (Bolivarian Republic of) 55 064 6.1 81 408 9.1 medium ● Viet Nam 93 321.1 28.2 77 578.1 23.4 high ● Yemen 9 060 2 79 403 17.5 -	Syrian Arab Republic	22 420	12	44 300	23.8	low •
Tunisia 13 789 8.9 9 538 6.1 low ● Turkmenistan 79 014 17.1 82 061 17.7 medium ● Türkiye 109 862.5 14.3 102 484.7 13.4 medium ● Uganda 1 885 0.9 23 723 11.6 - United Arab Emirates 166 0.2 1 053 1.5 medium ● Uzbekistan 132 972 30.2 114 259 26.1 medium ● Venezuela (Bolivarian Republic of) 55 064 6.1 81 408 9.1 medium ● Viet Nam 93 321.1 28.2 77 578.1 23.4 high ● Yemen 9 060 2 79 403 17.5 -	Togo	1 447	2.6	9 533	16.9	high •
Turkmenistan 79 014 17.1 82 061 17.7 medium Türkiye 109 862.5 14.3 102 484.7 13.4 medium Uganda 1 885 0.9 23 723 11.6 — United Arab Emirates 166 0.2 1 053 1.5 medium • Uzbekistan 132 972 30.2 114 259 26.1 medium • Venezuela (Bolivarian Republic of) 55 064 6.1 81 408 9.1 medium • Viet Nam 93 321.1 28.2 77 578.1 23.4 high • Yemen 9 060 2 79 403 17.5 —	Trinidad and Tobago	835	16.7	447	8.9	medium •
Türkiye 109 862.5 14.3 102 484.7 13.4 medium Uganda 1 885 0.9 23 723 11.6 - United Arab Emirates 166 0.2 1 053 1.5 medium • Uzbekistan 132 972 30.2 114 259 26.1 medium • Venezuela (Bolivarian Republic of) 55 064 6.1 81 408 9.1 medium • Viet Nam 93 321.1 28.2 77 578.1 23.4 high • Yemen 9 060 2 79 403 17.5 -	Tunisia	13 789	8.9	9 538	6.1	low •
Uganda 1885 0.9 23 723 11.6 - United Arab Emirates 166 0.2 1 053 1.5 medium Uzbekistan 132 972 30.2 114 259 26.1 medium Venezuela (Bolivarian Republic of) 55 064 6.1 81 408 9.1 medium Viet Nam 93 321.1 28.2 77 578.1 23.4 high Yemen Yemen 9 060 2 79 403 17.5 -	Turkmenistan	79 014	17.1	82 061	17.7	medium •
United Arab Emirates 166 0.2 1 053 1.5 medium Uzbekistan 132 972 30.2 114 259 26.1 medium Venezuela (Bolivarian Republic of) 55 064 6.1 81 408 9.1 medium Viet Nam 93 321.1 28.2 77 578.1 23.4 high Yemen Yemen 9 060 2 79 403 17.5 -	Türkiye	109 862.5	14.3	102 484.7	13.4	medium •
Uzbekistan 132 972 30.2 114 259 26.1 medium Venezuela (Bolivarian Republic of) 55 064 6.1 81 408 9.1 medium Viet Nam 93 321.1 28.2 77 578.1 23.4 high • Yemen 9 060 2 79 403 17.5 -	Uganda	1885	0.9	23 723	11.6	-
Venezuela (Bolivarian Republic of) 55 064 6.1 81 408 9.1 medium • Viet Nam 93 321.1 28.2 77 578.1 23.4 high • Yemen 9 060 2 79 403 17.5 -	United Arab Emirates	166	0.2	1 053	1.5	medium •
viet Nam 93 321.1 28.2 77 578.1 23.4 high ● Yemen 9 060 2 79 403 17.5 -	Uzbekistan	132 972	30.2	114 259	26.1	medium •
Yemen 9 060 2 79 403 17.5 -		55 064	6.1	81 408	9.1	medium •
	Viet Nam	93 321.1	28.2	77 578.1	23.4	high •
Zimbabwe 37 127 9.6 35 656 9.2 high ●	Yemen	9 060	2	79 403	17.5	-
	Zimbabwe	37 127	9.6	35 656	9.2	high •

Global Initiative on Reducing Land Degradation and Enhancing Conservation of Terrestrial Habitats

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