

Preamble

1. We, the G20 Ministers for Environment, met virtually on September 16, 2020. Our meeting took place at a time when the world is collectively combating the COVID-19 pandemic. Devastating impacts of the virus on a global scale remind us of our vulnerabilities and interdependence, underscoring the importance of collective multilateral actions and international cooperation in the face of complex and interconnected global risks. We express our deep sorrow for the human suffering and loss of lives incurred worldwide as a result of the effects of this pandemic, and we recognize that recent epidemics highlight the growing globalization of health and environmental risks as well as the importance of adequate protection measures across the human-animal-ecosystem interface. It is in this spirit of solidarity and collaboration that we gathered to devise solutions and advance progress on the world's key environmental challenges. As we confront and recover from COVID-19, we commit to multilateral coordination and cooperation including the three Rio Conventions and other relevant fora, guided by the 2030 Agenda, while addressing the interconnectedness of poverty, health, economic and environmental challenges.
2. In advance of the United Nations Framework Convention on Climate Change (UNFCCC) COP26 in Glasgow and the UNCBD COP15 in Kunming, we reiterate our support for tackling pressing environmental challenges, such as climate change and biodiversity loss, as we promote economic growth, energy security and access for all, and environmental protection. Signatories to the Paris Agreement who confirmed at Osaka their determination to implement it, once again, reaffirm their commitment to its full implementation, reflecting common but differentiated responsibilities and respective capabilities, in the light of different national circumstances. These signatories recall the request by COP21 to communicate or update their nationally determined contributions reflecting their highest possible ambition, in accordance with their obligations under the Paris Agreement, taking into account means of implementation; and emphasize the importance of providing and mobilizing a wide variety of financial resources, to assist developing countries in their adaptation and mitigation efforts, in accordance with the UNFCCC and the Paris Agreement, reaffirming the importance of international cooperation. In addition, these signatories reiterate the invitation to communicate by 2020 long-term low greenhouse gas emission development strategies. These signatories recall the commitment made by developed countries to a goal of mobilizing jointly USD 100 billion per year by 2020 to address the needs of developing countries. All G20 members also continue to support efforts and utilize all

available approaches aimed at advancing environmental stewardship for future generations, and emphasize that further global efforts are needed to address these challenges, while maintaining healthy economies conducive to growth, decent jobs, and innovation. Within this context, we recognize the important role of, and impact on, land degradation and coral reef conservation, on which we have focused our attention in this meeting. We are therefore determined to take effective action in these areas in line with the latest science and in cooperation with relevant international conventions, as appropriate.

3. While the COVID-19 pandemic has generated health, social and economic consequences, with unknown long-term impacts, the significant challenges to our environment and biodiversity will persist after the pandemic has passed. We recognize that the pandemic and mounting global environmental challenges highlight the importance of sustainable production and consumption patterns. We, therefore, strengthen our resolve to conserve and more efficiently use our natural resources, protect, conserve, and restore biodiversity, ecosystems, and their species, and build a more environmentally sustainable, resilient, and prosperous future for all as part of an environmentally sustainable and inclusive recovery. We acknowledge that nature-based solutions or ecosystem-based approaches, including the valuing of ecosystem services, can provide co-benefits across these challenges and are integral to tackling these issues while providing benefits for biodiversity, climate systems, people, and poverty reduction. We recognize that aligning economic growth with environmental and social objectives is necessary to conserve and protect our Earth's ecosystems and biodiversity, enable its sustainable use, and ensure economic stability and long-term sustainable development. We further recognize that decoupling economic growth from environmental degradation, and conserving and protecting our ecosystems and biodiversity, requires concerted global partnerships and cooperation across all sectors, and that we must avoid those short-term interventions that could have negative environmental, health, and social impacts. We, therefore, commit to stepping up our efforts to tackle these challenges in advance of the upcoming conferences of the parties to the Rio Conventions.
4. We also acknowledge that increasing human-wildlife interactions, unsustainable human interventions that destroy and degrade ecosystems, wildlife trafficking, as well as the illegal trade and use of wild animals and their parts and some of their products increase the risk of zoonotic diseases, which have been reported to be linked to the emergence of pandemics, epidemics, or local outbreaks of diseases. Conserving and protecting our ecosystems and biodiversity and combatting illegal wildlife trade can make

an important contribution to reducing these risks. To this end, in line with the “One Health” approach and other holistic approaches we call for strengthened collaboration between international organizations involved in these issues, including the tripartite alliance of FAO/OIE/WHO, and welcome collaboration being extended to UNEP and other international organizations according to their mandate and conventions as appropriate, including CITES. We stress the need for the participation of all population segments and partners including women, youth, Indigenous Peoples and Local Communities, subnational governments, academia, ethnic and religious minorities, and the private sector, all of whom play an important role in the conservation of biodiversity, its sustainable use, and access to genetic resources and the fair and equitable sharing of benefits arising from their use. We will be guided by a sense of shared, long-term responsibility for our planet and citizens, consistent with the 2030 Agenda for Sustainable Development and will harness every opportunity in the environmentally sustainable and inclusive economic recovery efforts to strengthen our resilience to future challenges as well as to support the poor and vulnerable hit hardest by the crisis. We will work to conserve, restore, and sustainably manage the planet for present and future generations.

5. Specifically, we are determined to: (i) strengthen the evidence base to inform collective action and appropriate policy development (ii) drive coordinated actions to avoid, reduce, restore, and reverse land and marine environment degradation and habitat and biodiversity loss; (iii) increase effective investment in nature-based solutions or ecosystem based approaches to enhance conservation and restoration of ecosystems as a scalable way to increase the resilience of ecosystems and people; (iv) continue our work towards preventing, reducing, mitigating, and ending pollution of terrestrial and marine environments, including marine litter, especially marine plastic litter and micro-plastics; (v) prevent, deter, and eliminate illegal, unreported and unregulated (IUU) fishing; and (vi) end illegal wildlife trade and illegal logging. In developing our collective response to the challenges outlined, we have built upon previous G20 environmental initiatives and continued previous sustainability work including the Osaka Blue Ocean Vision and the Roadmap for the G20 Resource Efficiency Dialogue, as well as other relevant existing initiatives by international and regional organizations.

Land Degradation and Habitat Loss

6. We stress that ecosystems including, but not limited to, forests, grasslands, drylands, rangelands, croplands, peatlands, mangroves, soil, tundra, karst, and wetlands are essential for the existence, survival and sustainability of biodiversity as well as food security and human well-being and are an

example of natural capital. We emphasize that healthy ecosystems provide vital provisioning and regulating services including maintaining air quality and fresh water resources, supplying food, medicinal products, wood and fiber, mitigating pollutants, supporting human health and well-being as well as nature-based recreation. In addition, healthy ecosystems play an important role in absorbing emissions and in reducing the risk of natural disasters and adapting to extreme weather events as well as in limiting land degradation, including by combating desertification and mitigating against future diseases and pandemics. In this sense, it is important to promote public programs and policies for the development of payment for ecosystem services taking into account the economic valuation of ecosystems and their services to inform decision-making as well as develop public private partnerships and provide incentives for private sector and stakeholder engagement and for the creation of a functional market for such services. We also acknowledge that land degradation in all its forms is a key force exacerbating biodiversity loss by driving fragmentation and loss of terrestrial habitats. Moreover, land degradation threatens a significant and increasing number of habitats and species around the world.

7. We recognize the urgent need for bold, coordinated and collective initiatives on land protection and restoration and on sustainable land management and use to strengthen existing efforts, such as the Bonn Challenge, the United Nations Decade on Ecosystem Restoration, and other multilateral initiatives, as well as to promote new ones. We recognize the benefits of cooperation between neighboring countries in sustainable land and water management and ecological conservation and restoration. We acknowledge the benefits of sustainable agriculture as an approach that adopts methods and practices that pursue productive, sustainable, and resilient food production systems that minimize harmful impacts to the environment, biodiversity and food security across the system – for the current generation and the generations after. We further acknowledge the benefits of the existing efforts and commitments such as those developed for Land Degradation Neutrality (LDN), Forest Landscape Restoration, Ecosystem-based Adaptation, and Disaster Risk Reduction as well as targets under the Convention of Biological Diversity and the United Nations Convention to Combat Desertification. We also recognize the contributions made through actions taken to meet the Aichi Biodiversity Targets. We call for increased efforts and cooperation to achieve Land Degradation Neutrality as set out in Sustainable Development Goal (SDG) 15.3 target, as well as to scale-up successful and appropriate action that will contribute to LDN without hampering the achievement of other SDGs. In the context of the economic recovery from COVID-19 and the associated challenges faced by our food systems and supply chains, work towards promoting sustainable value chains, delivering nature-based solutions or ecosystem-

based approaches, and implementing sustainable land use measures and secure land tenure with gender responsiveness will yield direct benefits to the livelihoods of rural and indigenous communities. We encourage public and private engagement to mobilize finance and investment for effective implementation of such vital measures to maximize the potential opportunity provided by these.

8. We stress the importance of science- and evidence-based approaches to policy making and take note of the findings of the international and regional bodies spearheading robust research and assessment activities. We also acknowledge the role of the traditional knowledge of Indigenous Peoples and local communities. We support research and development, harnessing science, technology and innovation, and leveraging technologies towards implementing the 2030 Agenda for Sustainable Development as well as other related development initiatives. We note with deep concern the findings presented in recent scientific assessments, which reflect the best available science and highlight the fact that unprecedented exploitation of land and fresh water resources are implying higher risks to people's livelihoods and well-being, and that biodiversity is declining globally at a rate unprecedented in human history, in particular due to unsustainable use of natural resources and land degradation. We also note the think-piece by the International Resource Panel on 'Land Restoration for Achieving the Sustainable Development Goals' according to which land restoration and rehabilitation can have significant co-benefits for all the SDGs. In the context of the evidence above, we underscore the importance of continuing work at all levels to achieve the inter-linked objectives of the United Nations Decade on Ecosystem Restoration, the three Rio Conventions and the Global Forest Goals of the United Nations Strategic Plan for Forests, guided by the 2030 Agenda for Sustainable Development. We are committed to combating land degradation and habitat loss in the framework of SDG 15 and the United Nations Decade on Ecosystem Restoration, and to stepping up our efforts on the conservation and sustainable management of land and biodiversity in advance of the fifteenth meeting of the Conference of the Parties (COP15) to the CBD, the fifteenth session of the Conference of the Parties (COP 15) of the UNCCD and throughout the United Nations Decade on Ecosystem Restoration. We call for all CBD parties to adopt at CBD COP 15 an ambitious, realistic, practical, and effective Post-2020 Global Biodiversity Framework with strong implementation support mechanisms, responsibility and transparency, including enhanced reporting, to facilitate the transformational changes needed to achieve the 2050 Vision for Biodiversity.

9. We support the launch of a Global Initiative on Reducing Land Degradation and Enhancing Conservation of Terrestrial Habitats which aims to support existing efforts to prevent, halt, and reverse land degradation and habitat loss through sharing of knowledge and best practices on protecting, conserving, sustainably managing, restoring, and rehabilitating degraded land, and by showcasing and disseminating publicly available data and information on degraded lands and conservation/restoration efforts. The initiative will also contribute to capacity building and encourage greater private sector support and general public engagement in land restoration efforts. The initiative focuses on complementing and supporting existing efforts while striving to avoid any duplication of efforts. The Initiative will seek synergies with existing relevant initiatives including the UN Decade on Ecosystem Restoration and the implementation of the post-2020 Global Biodiversity Framework.

Coral Reefs Conservation and the Reduction of Marine Litter

10. We highlight the importance of promoting a healthy and resilient marine environment because the ocean, seas, and coastal ecosystems are fundamental to our planet and future. The ocean is an important source of biodiversity, and we acknowledge the interlinkages between land and sea given their vital role in the climate system and the wide range of ecosystem services they offer. Clean, safe, healthy, productive and resilient ocean and seas are essential for sustainable development and sustainable ocean-based economy.
11. We reiterate our previous commitments (including those under SDG 14) on conserving and sustainably using the ocean, the sea and marine resources for sustainable development, and specifically on preventing and significantly reducing marine pollution and marine litter, including marine plastic litter, microplastics, as well as nutrient pollution from land- and sea-based sources, and confirm our commitment to work in cooperation with international and regional organizations and other relevant stakeholders. We also acknowledge the ocean-related work under the auspices of the United Nations Environment Assembly (UNEA) resolutions, including resolution 4/6 on marine plastic litter and microplastics and resolution 4/13 on sustainable coral reefs management and resolution 3/7 on marine litter and microplastics and call for more effective and reinforced national, regional, and international actions on the issue. We reaffirm our commitment to reduce additional pollution by marine plastic litter to zero by 2050 through a comprehensive lifecycle approach that includes reducing the discharge of mismanaged plastic litter by improved waste management and innovative solutions while recognizing the important role of plastics for society as articulated by the Osaka Blue Ocean Vision and

to calling on non-G20 members to share the vision. We aim to accelerate all actions pertaining to deliver on the G20 Implementation Framework for Actions on Marine Plastic Litter in line with the G20 Action Plan on Marine Litter launched in 2017 by sharing best practices and innovative solutions, working towards the compatibility and interoperability of monitoring and analytical methodologies, and compiling information and data. We encourage scientific communities and experts to continue exploring ways to identify and estimate the sources, pathways and fate of plastic waste leakage.

12. We recognize the environmental importance, as well as socioeconomic benefits of coral reefs, which shelter and support at least 25% of all marine species. We stress that coral reefs are among the most valuable ecosystems on Earth which provide vital environmental services for human well-being, as well as food security, livelihoods, economic opportunities and coastal protection for at least 500 million people across the world. Coral reefs play a major ecological role in the protection of marine species and other coastal ecosystems, such as mangroves and seagrass beds which also provide vital ecosystem services. However, coral reefs and related ecosystems are particularly threatened by acidification and ocean warming, unsustainable human activities, including excessive exploitation of reef resources, destruction caused by unsustainable dredging, land reclamation, and inappropriate sea-bed mining, overfishing and the use of destructive fishing methods and land-based sources of pollution mainly from marine litter, increased nutrients, toxic substances, and wastewater. We also acknowledge the threat to marine ecosystems from sea-based sources of pollution and eutrophication, increased ocean temperatures and increased acidification, and extreme weather events. The aggregate and increasing effects of these stressors are reducing the resilience of reefs and increasing their vulnerability to coral bleaching, disease, and invasive species, resulting in a rapid loss of biodiversity and critical habitat for many species and ecosystem services for society, jeopardizing the livelihood of hundreds of millions of people and may result in the extinction and loss of many marine species. To emphasize the significance of this vital ecosystem, we will continue to maintain and restore coral reefs including in line with the future results of the negotiations on the Post-2020 Global Biodiversity Framework at COP 15 of the CBD.
13. We therefore recognize the urgent need to intensify our efforts to prevent further degradation, and to conserve and restore coral reefs, including through ambitious international action on halting biodiversity loss. We note the importance of science and research and development directed to assist ecosystem management and the relevance of the United Nations Decade on Ecosystem Restoration and the United Nations Decade of

Ocean Science for Sustainable Development (2021-2030). Moreover, we acknowledge that effective management practices, such as Marine Protected Areas (MPAs) and Other Effective Area-based Conservation Measures (OECMs) can serve as a powerful tool for protecting sensitive ecosystems such as coral reefs and sustainably managing resources for increased ecosystem resilience. Effectively managed marine areas, through MPAs, can also offer a nature based solution or ecosystem-based approach to increase ocean ecosystems' resilience to and help halt biodiversity loss. We also note that unsustainable fishing remains a serious threat to marine ecosystems, including coral reefs, in many parts of the world, and confirm the importance of preventing, deterring, and eliminating illegal, unreported, and unregulated (IUU) fishing and destructive fishing methods to ensure the sustainable use of marine resources and to conserve the marine environment, most notably its rich biodiversity.

14. We aim to work at all levels to improve coral reef conservation and restore and conserve the remaining reefs while reducing anthropogenic stressors. We recognize and reinforce our support for the important work of dedicated organizations as well as relevant national, regional and international initiatives such as UNEP Coral Reef program, the International Coral Reef Initiative (ICRI) and its Global Coral Reef Monitoring Network (GCRMN), the Coral Triangle Initiative (CTI), and other international initiatives that share best practices on coral reef science and management. G20 countries who are members of ICRI encourage others that are committed to the protection, conservation and restoration of coral reefs to consider applying to join ICRI. We recognize the importance of regular, long-term monitoring of coral reefs within our available resources and within our jurisdictions, and knowledge sharing and support for GCRMN through contributions to regional and global reports on the status of coral reefs and establishing enduring and globally accessible repositories for coral reef monitoring data. We recognize the pressing need to build capacities to enhance financing mechanisms, support efforts by developing countries, generate and share the scientific information and knowledge important to the effective management of conservation and restoration efforts, promote community-based restoration, and improve technical and scientific cooperation and innovation while safeguarding against additional stressors relevant to the sustainable management and restoration of coral reefs. We also acknowledge that conservation efforts alone will not be enough to mitigate against widespread habitat loss in our ocean and seas. These necessary efforts should be complemented with actions to conserve and restore coral reefs for these critical ecosystems to be conserved in the coming decades, as well as actions to reduce anthropogenic stressors.

15. To complement and collaborate with existing efforts of relevant national, regional, and international initiatives such as ICRI, its GCRMN, and UNEP, we launch the Global Coral Reef R&D Accelerator Platform initiated by the G20, with voluntary participation by G20 members, non-member countries and others who are committed to protecting, conserving, and restoring coral reefs. The platform is an innovative initiative aimed at delivering solutions for coral reef managers to implement conservation, resilience, adaptation, and restoration actions. This would be achieved by advancing research, innovation and capacity building in all facets of coral reef conservation, restoration, and adaptation, and strengthening ongoing efforts and commitments made to enhance coral reefs conservation and restoration and prevent their further degradation.

Way Forward

16. We stress that the prosperity of current and future generations depends on the ability of the international community to align economic growth with conservation of the Earth's ecosystems and biodiversity, a stable climate, and sustainable management of all natural resources which are the foundations of healthy and resilient economies. To this end, we commit to scale up our efforts in addressing the aforementioned challenges at all levels and to urgently take concrete actions in line with the recommendations of science to conserve and restore the environment, its ecosystems and their services on land and at sea, and protect the ocean. As we recover stronger and better from the COVID-19 pandemic, we must do so through an environmentally sustainable and inclusive recovery ensuring a more inclusive, resilient and sustainable future aligning our recovery efforts with the need to address these environmental challenges, recognizing the case for environmental action as fundamental to sustainable and inclusive growth and long-term economic prosperity. In doing so, we will, leverage inter alia the G20 Resource Efficiency Dialogue, while taking into account national circumstances. We recognize the importance of sharing information and experiences on environmental policies and actions related to recovery from COVID-19 in accordance with national circumstances, and welcome recent events on sustainable recovery, including the Online Platform for Redesign 2020. We encourage the provision of financial, technological and capacity building support to developing and least developed countries, making the best use of existing governance frameworks and working to identify new and innovative solutions as well. Recalling the principles of the Rio Declaration and recognizing that we face different challenges, we will strengthen our international cooperation towards sustainable development.

17. We express our deep appreciation to Saudi Arabia for its resourceful and determined leadership of the G20 in the face of the unprecedented and devastating global impact of the COVID-19 pandemic. We recognize Japan's effort in introducing the environment workstream in the G20 in 2019. We thank Japan and the European Union for organizing two online workshops dedicated to the important issue of marine plastic litter on 7 and 8 September, where issues around monitoring and data compilation, circularity of plastic production, and how to address single use plastic products and abandoned lost or otherwise discarded fishing gear, innovative solutions, improved waste management, resource efficiency, and enhanced recycling infrastructure, were discussed. We look forward to continuing our work on environmental priorities under the Italian G20 Presidency in 2021.

G20 Environment Ministers Communiqué

Annex

G20 Documents

1. Global Initiative on Reducing Land Degradation and Enhancing Conservation of Terrestrial Habitats
2. Global Coral Reef R&D Accelerator Platform

Other Documents

3. A Statement of the Presidency on the Republic of Turkey's Position

Annex 1: Global Initiative on Reducing Land Degradation and Enhancing Conservation of Terrestrial Habitats

An initiative launched by G20

Land degradation and the associated loss of natural terrestrial habitats are major drivers of environmental and natural resource depletion worldwide with significant impacts on terrestrial habitats, on biodiversity and its ecosystem services, including weather systems and the absorption of emissions in addition to causing significant socioeconomic impacts. Fortunately, land restoration and avoidance of habitat loss are often cost-effective solutions to address biodiversity loss and other key environmental challenges yielding high social and economic returns, and are closely connected to ecosystem restoration contributing to achieving SDG 15, and in particular its target 15.3. There are several existing initiatives that aim to address land degradation and habitat loss at the local, regional, and global levels. Despite this good work, the rate of land degradation and habitat loss continues to be alarming with significant human, environmental, economic and social consequences, highlighting the urgent need to support existing efforts to prevent land degradation and to restore land. In that regard, the land degradation and restoration assessment by IPBES points out that most of the UN Sustainable Development Goals cannot be achieved unless the causes of land degradation and habitat loss are addressed simultaneously.

This initiative, which is based on voluntary participation, aims to support existing efforts to prevent, halt, and reverse land degradation and habitat loss through sharing of knowledge and best practices on protecting, conserving, sustainably managing, restoring, and rehabilitating degraded land, and by showcasing and disseminating publicly available data and information on degraded lands and conservation/restoration efforts. The initiative will also contribute to capacity building and encourage greater private sector support and general public engagement in land restoration efforts. The initiative focuses on complementing and supporting existing efforts while striving to avoid any duplication of efforts. The Initiative will seek synergies with existing relevant initiatives including the UN Decade on Ecosystem Restoration and the implementation of the post-2020 Global Biodiversity Framework.

1. Overall Objective of the Initiative

The initiative seeks, on a voluntary basis and according to members' capacity, to enhance collaboration among G20 members and non-member countries to implement relevant SDG goals and related targets under the 2030 Agenda for Sustainable Development, by targeting three inter-related objectives:

- I. **Conserving land and halting habitat loss, fragmentation and land¹ degradation**, notably through sharing knowledge and best practices on conservation incentives, including strengthening physical and functional connectivity and quality of protected areas, enhancing land conservation, promoting sustainable land management practices, promoting active fire management and implementation of other policies and best practices to enhance land conservation and reduce land degradation.
- II. **Promoting integrated, sustainable, and resilient land and landscape management** through: nature-based solutions or ecosystem-based approaches; financing mechanisms; urban and land use planning processes at different levels and scales; stronger implementation of international agreements and local environmental governance and laws; the empowerment of Indigenous Peoples and Local Communities (including women, youth, and smallholders) in land management; secure land tenure, property and land-use rights in accordance with national legislation, as well as supporting sustainable land and water management policies and sustainable agricultural practices, including traditional practices, in order to maintain and enhance ecosystem functionality.
- III. **Restoring degraded land** through sustainable and locally or regionally appropriate reforestation, afforestation, natural regeneration/revegetation, restoration of ecosystem services, sustainable agricultural practices, and deployment of nature-based solutions or ecosystem-based approaches for biodiversity conservation, among others, in order to restore ecosystem functionality in a landscape context. This objective will seek to prevent transfer of degradation (i.e. avoid restoring one area to the detriment of another).

The initiative will also seek to enhance collaboration among G20 members and non-member countries, as appropriate, to support the implementation of current commitments for land protection, sustainable land management, and restoration, as well as seek additional voluntary commitments from participating countries to raise ambition in this respect and contribute to SDG 15, in particular target 15.3.

2. Initiative activities

- A. **Land conservation, sustainable management, and restoration website:** 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,

¹ Including, but not limited to, forests, rangelands, croplands, mangroves, peatlands, wetlands

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.

- B. Engagement of private sector and civil society:** the Initiative will engage the private sector to encourage it to support land restoration efforts and adopt sustainable land management practices. This activity will comprise an outreach/encouragement function to promote needed investments and provide information to link investors/contributors to interested initiatives. Similarly, with strong calls from society for urgent environmental action, the Initiative will encourage direct engagement of civil society, including by mobilizing the general public.
- C. Sharing knowledge and building capacity:** the initiative will support the exchange of know-how and capacity building between G20 members, non-member countries, and other partners and additional stakeholders, as well as support efforts to accelerate exchange of best practices to enhance land conservation and restoration efforts.

3. Initiative Implementation Framework

The initiative will be implemented through the Initiative Coordination Office (ICO) under oversight of the UNCCD. The ICO will receive guidance and strategic direction by the **Steering committee** consisting of all interested G20 members, the Secretariats of the UNCCD, FAO, UNEP, as well as non-member countries and other institutions that contribute to the work of the ICO.

The Initiative Coordination Office (ICO) will have dedicated full-time staff and an annual budget from which it will fund its core activities. The ICO will receive administrative and financial oversight from the UNCCD Secretariat as part of a formalized collaboration agreement. The ICO would undertake the following:

- Creating and administering the Land conservation, sustainable management, and restoration website;
- Managing the administrative budget allocated to the ICO;
- Showcasing existing knowledge-sharing products on reducing land degradation and organizing capacity building and knowledge sharing activities
- Preparing reporting on the Initiative for consideration and approval by the initiative Steering Committee and transmission to key stakeholders, such as the G20 and concerned IOs.

Reporting: an annual report will be submitted to the G20 members and published on the initiative website, containing information on progress on

national and international pledges based on publicly available information and data shared on a voluntary basis by participating countries and organizations, as well as on progress of the initiative activities listed in Section 2.

Financial considerations: Funding of the ICO budget will be provided on a voluntary basis by G20 members, non-member countries, and by other institutions. To support the launch of the initiative, the Kingdom of Saudi Arabia will provide a financial contribution sufficient to fund the initiative ICO budget for the first 10 years. Other G20 members are encouraged to contribute voluntarily as well.

4. Voluntary country pledges

To support the Initiative's overall objectives, G20 members and other non-member countries and stakeholders are invited to make, on a voluntary basis and according to members capacity, country pledges and commitments via the relevant forum / fora or other suitable means such as:

- Pledges to protect, conserve, sustainably manage, restore or rehabilitate degraded land
- Direct contributions, including to existing funds and initiatives aimed at land and ecosystem conservation, sustainable management, and restoration
- Capacity building contributions such as training for grass-roots projects and/or policy support for government officials
- Any other in-kind contribution

5. Next Steps

The Saudi Presidency proposes the following timeline for next steps on the Initiative:

- Following endorsement at the Environment Ministers Meeting, the Initiative will be submitted for Leaders' endorsement at the G20 Riyadh Summit on Nov. 21-22
- Implementation of the Initiative will start in 2021, in line with the launching of the UN Decade on Ecosystem Restoration

Annex 2: Global Coral Reef R&D Accelerator Platform

An initiative launched by G20

The G20 is a major custodian of warm-water and cold-water coral reefs, with about half of the world's tropical reefs located in the Economic Exclusive Zones of G20 members. The G20 considers coral reefs to be amongst the most valuable ecosystems on earth, harbouring incredible biodiversity, supporting livelihoods, and providing economic opportunities for at least 500 million people across the world. However, they are also amongst the ecosystems most vulnerable to unsustainable human activity, which causes coral reef decline through pollution, direct destruction, and ocean warming and acidification. Thanks to their significant economic and scientific capabilities, G20 members can play a vital role in preventing the grim predictions of a catastrophic loss of coral reefs from being realized if the current rate of coral reef loss continues. The G20 therefore proposes the establishment of a voluntary Global Coral Reef R&D Accelerator Platform to accelerate scientific knowledge and technology development in support of coral reef survival, conservation, resilience, adaptation and restoration. The initiative is targeted at addressing the most important knowledge gaps and will be placed in an overarching program design framework.

This voluntary initiative encompasses both warm-water, tropical coral reefs, as well as those growing in deep, cold waters, which have also experienced losses and are also threatened by multiple human pressures.

1. Overall Objectives of the Initiative

The objective of this voluntary G20 initiative is to increase support for and complement existing national, regional, and international initiatives that are currently working on coral reef conservation, resilience, adaptation, and restoration. To achieve this objective, the G20 proposes the establishment of **a Platform focused on accelerating international research and development** to improve the survival, conservation, resilience, adaptation and restoration of both warm-water and deep, cold-water coral reefs.

2. Platform Scope

The Global Coral Reef R&D Accelerator Platform aims to accelerate global R&D and associated capacity to support efforts to reverse the projected losses of coral reefs by focusing on the following areas:

- a. Establishing a coordinating mechanism to connect existing national, regional, and international R&D programs, as well as international panels and the diverse expertise of G20 members, learn from their efforts and diversity of R&D approaches, realize potential synergies, and identify and

- pursue R&D priorities to enhance resilience and conservation of coral reefs globally.
- b. Supporting a gender-balanced, transdisciplinary global community of scientists, technologists and innovators to develop scalable end-to-end solutions contributing to the objectives.
 - c. Seeking opportunities for engagement of the Platform with the R&D capacity of the private sector to collaborate toward coral reef conservation, resilience and restoration.
 - d. Facilitate access to and sharing information from a network of field, research and testing facilities across participating institutions.
 - e. Providing advanced R&D training and access to cutting edge research facilities and infrastructure in a gender-balanced way to scientists from developing and least developed countries to complement ongoing capacity-building efforts.
 - f. Developing and sharing scientific tools to assess the social and ecological costs and benefits of scalable applications based on proof of concept and pilot projects.
 - g. Delivering novel science and technology approaches, tested in pilot scale, to address specific needs and gaps as articulated by relevant stakeholders. Findings will be proactively communicated to ICRI and UNEP and to implementing mechanisms and initiatives, such as those funded by the Global Fund for Coral Reefs.

3. Platform Activities

Through its activities, the Platform will contribute to enhance the cooperation among the G20 members as well as non-member countries on coral reef conservation, protection and restoration and thus to the achievement of the relevant goals and targets under the 2030 Agenda for Sustainable Development, thereby also supporting the UN Decade of Ecosystem Restoration (2021-2030), the UN Decade of Ocean Science (2021-2030), and the implementation of the United Nations Environment Assembly resolution 4/13 on sustainable coral reef management.

The Platform's main activity will be the resourcing, management, and execution of a coordinated, collaborative, and targeted global R&D program, guided by scientific needs and supported by voluntary contributions from G20 members and non-member countries. The R&D program will focus on achieving specified and agreed goals, drawing together multidisciplinary scientists, engineers, and technologists to collaboratively identify, design, and deliver innovative, practical, and sustainable solutions under a comprehensive systems end-to-end approach to enhance coral reef survival, conservation, resilience, adaptation and restoration. These solutions should then be communicated to initiatives such as ICRI for further utilization and translation into conservation and restoration actions across the world by existing national

and international implementation efforts (e.g. UNEP, the Global Fund for Coral Reefs, Reef Resilience Network, the Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security – CTI-CFF and others).

The Platform will support scientific projects, selected through global, targeted calls for proposals and reviewed by a Scientific and Advisory Committee (see below). The selection process will follow best practice, streamlined procedures for preparation and selection. These projects will include:

- a) Research projects delivered through a coordinated, collaborative and targeted global program of research and development activities
- b) Proof-of-concept and Pilot projects to translate research outcomes into scalable applications, ready to be taken up by ICRI, UNEP and others, and funded at scale by the Global Fund for Coral Reefs or other initiatives that support conservation action, including by the private sector.

Projects will be open to scientists from all nations of the world. However, the research projects work must be conducted in participating institutions (see below).

The Platform will also organize a series of workshops and other events, where possible integrated with existing ones to increase participation and cost effectiveness, as well as an annual conference to report on progress where countries and organizations exchange experiences and views.

4. Membership and operating model

Participating Institutions: The Global Coral Reef R&D Accelerator Platform will consist of institutions, private sector actors, foundations, research programs and NGOs with research programs or activities aligned with those of the Platform. Participating institutions are encouraged to contribute to the Platform by facilitating knowledge sharing and collaboration and/or by providing access to their infrastructure (e.g. instrumentation, field stations, advanced facilities) and research results as an in-kind contribution to the Platform.

Platform Central Node: The Platform's Central Node (see below) will be based at King Abdullah University of Science and Technology (KAUST). The proposed location will allow the Platform to leverage KAUST's infrastructure to support R&D globally, while providing access to cutting-edge infrastructure and expertise in coral reefs, sequencing capabilities, advanced sensor technology and benefit from its access to the Red Sea, the Arabian Gulf, and its corals.

Financial considerations: It is envisioned that the Platform will be funded by voluntary contributions by G20 members, non-member countries, and private

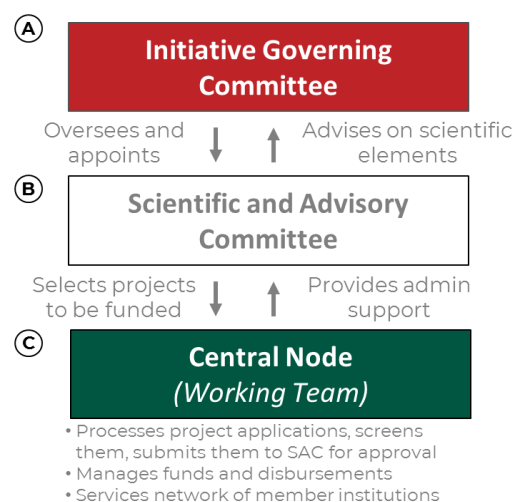
sector actors. A Scientific and Advisory Committee will advise on the allocation of this budget among programs and projects, which will be approved by an Initiative Governing Committee (details in next section). However, the goal is for at least 90% of the budget to be allocated directly to Research and Proof-of-concept and Pilot projects, with the remainder allocated to organization of workshops and conferences, communication and outreach. To support the launch of the Platform, the Kingdom of Saudi Arabia will provide the amount of USD \$10 million per year for the first 10 years, along with in kind contributions to strengthen the platform. Other G20 members and non-member countries are encouraged to contribute voluntarily as well.

Administrative costs: KAUST is prepared to provide all the administration functions to be executed by the Platform's Central Node at no cost to the Platform on request of the G20 Saudi Presidency, thereby representing an in-kind contribution from the Kingdom of Saudi Arabia to the Platform.

5. Initiative Implementation Framework

The Saudi Presidency will convene a temporary **Founding Committee** constituted of representatives appointed on a voluntary basis by G20 members to officially establish the Platform and detail its mandate and initial governance. The G20 may also decide to invite other non-member countries and institutions to the Platform establishment discussions as advisors to the **Founding Committee**. After official founding of the Platform, a permanent governance structure will be established, and the Founding Committee will dissolve itself. This permanent governance structure will consist of the following elements:

1. **An Initiative Governing Committee** composed of participating members who will oversee the Global Coral Reef R&D Accelerator Platform and will approve strategic plans, operating procedures, rules and procedures of the research programs (including project and participating institution eligibility criteria, conflict of interest rules, and review procedures), annual budgets, accreditation of participating institutions, and will approve fund allocations to research projects recommended by the Scientific and Advisory Committee.



2. **A Scientific and Advisory Committee** composed of scientists, practitioners and policy experts from leading organizations and

representatives from major ongoing research, conservation, restoration and adaptation initiatives, including academic institutions, scientific societies, and relevant international organizations that will assist the Initiative Governing Committee in its functions by developing and updating the strategic direction of research, designing and directing the R&D program, overseeing the scientific peer review of projects, and making recommendations on the research projects to be funded, which would then have to be approved by the Initiative Governing Committee.

3. **A Central Node** to administer the overall Platform, supporting the Initiative Governing Committee and the Scientific and Advisory Committee, including calls for projects and submissions, mechanics of the peer-review process, managing funds, grant agreements, collection of project reports and outcomes, and servicing the network of participating institutions.

Additional details on the governance, including decision-making processes, project funding rules, and eligibility criteria for participating institutions and projects, will be discussed and finalized by members of the **Founding Committee** during the Platform establishment phase (see next section).

Project and program evaluation: Project performance will be monitored, and the results of the overall Platform program will be reviewed by the Scientific and Advisory Committee, which will deliver its evaluation and recommendations to the Initiative Governing Committee. In addition, the Platform and the research program will also be subject to independent evaluation, with results of the assessment being reported to the Initiative Governing Committee.

6. Options for Participation

G20 members and non-member countries can participate in the Platform programs on a voluntary basis through various avenues such as:

- Providing voluntary financial contributions to support the Platform R&D programs
- Providing In-kind non-financial contributions
- Encouraging their scientific institutions to join the Platform
- Submitting requests for funding for research projects
- Participating in the Platform's research, knowledge-sharing or capacity building activities
- Participating in coordinated calls for project proposals among programs participating in the Platform

7. Next Steps

G20 members on a voluntary basis will appoint representatives to join the Founding Committee and begin the Platform establishment phase (Phase I).

The preparation work for Phase I will be mainly carried out by the Saudi Presidency and proposed to the Founding Committee, which will meet with the intention to finalizing the establishment of the Platform as soon as possible as depicted in the diagram below.

