

International Conference on Global Forest and Tree Restoration

Rome, Italy - 11 and 12 October 2022

Final Statement

Organized under the high patronage of the President of the Italian Republic and with the patronage of the Ministry of Agricultural, Food and Forestry Policies and the Ministry of Ecological Transition, the International Conference on Global Forest and Tree Restoration was held in Rome, Italy, on 11 and 12 October 2022. The meeting was convened by the Accademia Nazionale dei Lincei in partnership with the Food and Agriculture Organization of the United Nations, Enel Foundation, Accademia Nazionale delle Scienze detta dei XL, Accademia dei Georgofili, Accademia Nazionale di Agricoltura, Accademia Italiana di Scienze Forestali, Società Geografica Italiana, and Federazione Italiana Dottori in Agraria e Forestali (FIDAF).

The Conference was organized in the wake of the G20 Summit which took place in Rome on 30-31 October 2021, and the UN Climate Change Conference (*COP26*), held in Glasgow on 20 October 2021, which solemnly and authoritatively affirmed the fundamental role of trees and forests in the protection of the global environment. In particular, the point 19 of the G20 Rome Leaders' declaration verbatim states: "Acknowledging the urgency of combating land degradation and creating new carbon sinks, we share the aspirational goal to collectively plant 1 trillion trees, focusing on the most degraded ecosystems in the planet, and urge other countries to join forces with the G20 to reach this global goal by 2030, including through climate projects, with the involvement of the private sector and civil society".

Conference results

Presentations and discussions allowed participants to reach a consensus on the following points:

- Forests and trees play an essential role in the preservation of ecosystems and for the livelihood of present and future generations; it is urgent to increase the contribution of forest ecosystems to climate change mitigation and adaptation.
- Afforestation, reforestation and ecosystem restoration and forest sustainable management should not be viewed as a substitute for immediate reduction of fossil fuel emissions and better resource use and efficiency.
- Restored ecosystems are crucial because, in addition to climate change mitigation and adaptation, they provide a range of services, such as soil and biodiversity protection, clean water supply, prevention of zoonosis, provision of health, cultural values, timber, feed, fuelwood and medicines.
- Large-scale global forest conservation, forest and ecosystem restoration and afforestation programs contribute not only to climate change mitigation and adaptation, but also - especially in contexts with high levels of youth unemployment and poverty – to job creation, nature conservation mainstreaming and to promoting social equity, with the objective of improving global health, greater political stability, and achieving a more effective and proper containment of migratory pressures in a long-term perspective.

- Ecosystem restoration does not consist only in planting shrubs and trees: it goes far beyond that, it must also include the development of a kit of restoration tools that includes tree care, forest protection, forest stewardship and management, green infrastructure planning and design.
- Ecosystem restoration can be implemented by using several strategies - such as natural regeneration, assisted natural regeneration, farmer-managed natural regeneration, agroforestry, active tree planting - contextualized to local site conditions - including geo-morphological, hydrological, and meteorological conditions, and climate trends and its effects on forests, local communities, and the environment. The potential restoration effects and benefits should be discussed with local communities.
- Tree planting and reforestation are means to restore functioning ecosystems that are resilient to climate change and to disturbances, but afforestation by planting trees in native savannas and or grasslands would immediately entail an abrupt increase of carbon emissions of soil organic matter consumption, which would be restored only in the very long run.
- The planning and management of a great and ambitious worldwide program, deployed at global, regional, and local scale, for the conservation of natural forests, the enhancement of sustainable forest management, the regeneration of degraded ecosystems and the planting of new trees require a concerted scientific, technical, and financial effort, with focus on the non-industrialized world.

Experts recognized and analyzed the following critical points that can hamper the implementation of forestation and ecosystem restoration programs at global and local level:

- **Identification of areas potentially suitable for priority reforestation and environmental restoration.** The causes of ecosystem degradation are often linked to unsustainable management of cultivated areas, grasslands, and forest, but agriculture and forestry must be part of the solution, by promoting sustainable forest management, higher integration of agroforestry activities, and sustainable agro-ecological practices.

It is imperative to rank priorities, and identify suitable intervention areas, and contextualize strategies and actions with local communities. Science must define and inform policy makers, public and private funding agencies, stakeholders, and the public at large about climate effective actions, and to support ecosystem restoration projects, their design, planning, management, and monitoring.

- **Capacity to produce proper quantities of certified high-quality propagation material.** Forest management guarantees the sustainable use of forest from the ecological, economic, and socio-cultural point of view. Forest scientific research has led to improved knowledge on various functional aspects of the adaptation and acclimatation of forest genetic resources to climate changes.

Restoring, regenerating, or establishing resilient forests requires effective management of the forest propagation material, seeds and seedlings that are needed for afforestation campaigns and ecosystem restoration projects. It is necessary that the forest nursery sector is enabled, including through capacity building, to respond to the specific needs of forestry projects to provide proper quantities of certified high-quality propagation material.

- **Integration, interaction and collaboration with local communities and other stakeholders.** A collaborative approach based on local communities' information, empowerment, and engagement, taking into consideration gender equity, is a fundamental pre-requisite for any policy aimed at improving forest ecosystem management, land restoration and climate change adaptation. Collaborative approaches include knowledge sharing, deliberative processes and co-creation with local communities and stakeholders.

Models and procedures of indigenous knowledge recognition, integration, and harmonization of social and technological innovations must be developed and tested in different social contexts, in order to promote local actors and community involvement in the adoption of sustainable land management practices in the long term, as well as to increase the scaling potential of the restoration actions.

- **Trade-off and conflicts with other ecosystem services.** Achieving food security, halting land degradation, combating climate change, and tackling biodiversity loss are major, urgent goals of present times, which may conflict with each other. Sustainable forest management and ecosystem service perspective aim at fulfilling many objectives simultaneously.

Ranking objectives in terms of priorities and selecting the most convenient trade-off become necessary. Scientific evidence can identify how trees, woods, and forests adapt to climate change, and how to use forestry to mitigate climate change, but it is up to policymakers to prioritize interventions. Policy and silvicultural measures tailored to the regional contexts should be designed and implemented in synergy with other targets, aiming at integrating mitigation and adaptation schemes, while preserving biodiversity and bioeconomy and balancing natural regeneration and tree planting.

- **Public-private partnerships.** Public-private partnerships play a pivotal role in synergizing public funding and private investments for forest deployment at scale. Unfortunately, these partnerships do not happen yet at the scale which is required: parties have different purposes, objectives, capacities, key performance indicators and time horizons. Their visions can be reconciled thanks to the notion of ESG (Environment, Social and Governance) impact creation, which is a common objective for both; but to achieve this, performance measures are needed to embed both the financial and ESG impact related performances, to which a financial cost can gradually be attached.

Public-private partnerships need an enabling environment to attract the interest of private sector and transparently regulate their inter-relationships. Innovative solutions must be developed around critical points in public incentive programs, to unlock the flow of public financial resources to implementers, scale up public investments in restoration, also relying on blended finance in collaboration with private entities.

- **Governance and financial resources.** Community-adapted governance arrangements and models, going hand in hand with adequate financial resources, facilitation, capacity building, and women empowerment, are essential components for afforestation, reforestation, and ecosystem restoration activities. Several governments have developed plans and strategies to prioritize areas for restoration under multiple environmental, social, and economic objectives. However, the implementation of restoration at scale faces several challenges including the lack of public funding and incentives to support restoration actions, perverse incentives in agriculture and other sectors, and low development of value chains.

Innovative solutions must be developed to address the bottlenecks of nature-related investments, to unlock financial flows that are urgently and massively required from the private and financial sector. The non-monetary value of these interventions should be considered in evaluating the efficiency of related investments. Conflicts between local and central governments and between foresters and other land-users must be considered. The dimension of the problems and the required solutions go beyond country boundaries and therefore require supranational approaches in governance and funding mechanisms.

Conference recommendations

The Conference, building on the content of the presentations and discussions, formulates the following recommendations:

1. Stopping deforestation for land-use change and forest degradation, expanding carbon sinks, and identifying fundamental pathways for action - including creation of a global movement and the engagement of Intergovernmental Organizations, national governments, Non-Governmental Organizations, civil society, and private sector is very urgent.
2. It is equally essential to dedicate efforts to prompt political support, and to build technical, institutional and community capacities, facilitating the integration of scientific and traditional knowledge, and mainstreaming ecosystem value beyond purely financial aspects, thus promoting the development of a real social and ecological value of forests and landscape.
3. Countries are urged to continue with renewed impetus in their efforts to increase the contribution of forest and other natural ecosystems to climate change mitigation and adaptation and other fundamental ecosystem services.
4. Countries are exhorted to facilitate a strong informed dialogue and promote a tight collaboration among governmental bodies, intergovernmental organizations, scientific institutions, civil society, and the private sector to overcome technical, political, legal, and financial shortcomings that often have impaired forestation, reforestation and ecosystem restoration,
5. Countries are asked to fully exploit the potential contribution of scientific academies, and research centers in bridging the existing knowledge gaps in forest and ecosystem restoration.
6. Considering the great importance of accelerating the definition of solutions by sharing experiences, lessons learned and best practices among international and national civil servants, scientists, practitioners, policy makers, private sector and other experts of the forestry sector, the Conference recommends to the Italian Government to host periodical international Conferences on Forest and Ecosystem Restoration, to be convened by Italian scientific academies, in collaboration with national and international organizations, focusing on specific critical issues.
7. Taking into consideration the high number of afforestation, reforestation, and ecosystem restoration undertakings, and acknowledging that they can find better synergies from sharing experiences, lessons learned and best practices, participants strongly recommend the G20 to promote the integration of existing platforms in a Global Forest Restoration Database, which can help synchronize existing and upcoming initiatives. The Global Forest Restoration Database could for instance develop a directory of existing and upcoming projects, and/or support sharing of open data on monitoring the state of forests, and/or the inventory of propagation material production initiatives, and/or other activities crucial for forest restoration.