STATEMENT BY SENIOR INTERNATIONAL SCIENCE ADVISORS IN ADVANCE OF THE 15th CONFERENCE OF THE PARTIES TO THE CONVENTION ON BIOLOGICAL DIVERSITY

There is compelling evidence that global biodiversity is rapidly declining. More than one million species are now threatened with extinction, many within the next several decades,[1] ushering in what may well be the sixth mass extinction in the earth's history.[2]

Biodiversity provides many material and cultural benefits to people. The yield or quality of more than 75 percent of global food crops depend on animal pollination.[3] Approximately 50,000 wild species are used for food, energy, medicine or material.[4] Biodiversity enhances food security by facilitating food production, maintaining seasonal food supply stability, and increasing food supply resilience to shocks such as droughts, floods and pest outbreaks.[5] Global biodiversity is a rich trove of genetic information that has supported the development of novel drugs and therapies, with new technologies potentially further enabling natural product-based drug discovery.[6]

Biodiversity decline has important consequences for human health, security and economic welfare. Loss of important biodiverse marine and coastal habitats increases the risks to life and property from floods and hurricanes for some 100–300 million people living in coastal communities.[7] Because wildlife is the source of 70 percent of novel pathogens, human encroachment on natural habitats substantially increases the risk of disease transmission from wildlife to people,[8] which in a world of global trade and travel, increases the risk of global pandemics.[9] Collapse of wild pollinator populations, marine fisheries and timber production alone could reduce global GDP by $2.7 trillion annually by 2030, with economic losses of up to 10 percent annually in vulnerable low- and lower-middle-income countries.[10]

The biodiversity and climate crises are largely of human making. And they are inextricably linked: biodiversity loss exacerbates the effects of climate change, which in turn accelerates biodiversity loss. Consequently, mitigating and adapting to climate change and protecting and restoring biodiversity are often mutually supporting goals.[11]

Three decades after the 1992 Convention on Biological Diversity and 14 Conferences of the Parties, the global response to the biodiversity crisis remains "woefully insufficient."[12] Avoiding catastrophic biodiversity loss depends on immediate, coordinated and effective biodiversity protection, conservation and restoration action. At COP15, we call on governments to:

- *Commit* to the post-2020 Global Biodiversity Framework. Meeting the framework's goals and targets requires immediate action to transform domestic and international economic, social and financial sectors, and commodities supply chains, to incentivize the protection, conservation, restoration and sustainable use of wildlife populations and terrestrial, freshwater and marine ecosystems; disincentivize activities that undermine biodiversity conservation efforts; and promote integration of natural capital or nature's services into national economic accounting systems.
- *Invest* immediately in actions for which there is compelling evidence of beneficial effects on biodiversity. Priority should be given to actions that also help mitigate or adapt to climate change, accelerate progress towards the United Nations Sustainable Development Goals, and build social, economic or ecological resilience, with a focus

on areas of high vulnerability and extensive local or regional biodiversity or that make significant contributions to global biodiversity.

- *Implement* robust, transparent, scalable, replicable and effective mechanisms for biodiversity monitoring that meet international standards. Such mechanisms are critical to transparent reporting and accounting, filling critical data gaps, prioritizing locations for recovery or restoration actions, and evaluating the effectiveness and human welfare implications of conservation or management actions.
- *Coordinate* action at local to international levels, with particular focus on empowering equitable and inclusive action on biodiversity protection, conservation and restoration through funding programs, voluntary technology or knowledge sharing on mutually agreed terms, and capacity-building, to encourage participation across networks of communities and with public and private sector partners and reduce the costs of protection, conservation or restoration investments.
- *Foster* innovation through the weaving of biodiversity knowledge from diverse knowledge systems; and by strategically investing in nature-based, Indigenous-led or community-based solutions; building replicable and scalable local to national-scale scientific capacity especially in low- and lower-middle-income countries; and developing scalable, cost-effective technologies to improve sustainable consumption and production, rapid biodiversity assessment and evaluation, species recovery and ecosystem restoration.
- *Engage* the public by working with domestic and international partners to develop and deploy inclusive strategies for raising public awareness and understanding of nature's values and the global biodiversity crisis, with particular focus on children and young adults.

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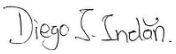

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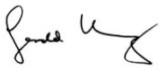

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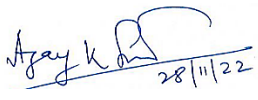

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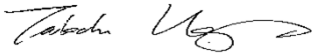

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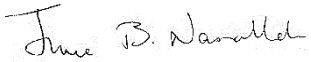

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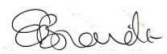

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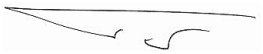

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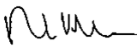

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