



IANAS AMAZON INITIATIVE Science By and For the Amazon IANAS Manaus Letter

The Inter-American Network of Academies of Sciences (IANAS) was founded in May 2004 and unites the Academies of Science of 24 countries from the Americas. This regional network was created to support cooperation towards the strengthening of science and technology as a tool for advancing research and development, prosperity, and equity in the Americas. Therefore, IANAS is in the unique position to provide an independent source of policy advice to governments and to society on key scientific and technological issues to address challenges such as poverty, inequality, climate change, and environmental degradation. Solutions to these challenges are essential for sustainable development.

We hereby commit to support and endorse the efforts for the regional sustainable and equitable development through partnerships among the governments of the Amazon region and their Science Academies: Academia Nacional de Ciencias de Bolivia; Academia Brasileira de Ciências; Academia Colombiana de Ciencias Exactas, Físicas y Naturales; Academia de Ciencias del Ecuador; Caribbean Academy of Sciences / Guyana chapter; Academia Nacional de Ciencias del Perú; Academia de Ciencias Físicas, Matemáticas y Naturales de Venezuela; and the Académie des Sciences (France) for French Guiana and the Foundation for the Advancement of Scientific Research in Suriname.

Our academies have undertaken studies on diverse areas of knowledge of the Amazon region in the last decades. Some of our member academies and the scientific community also participated in the 2021 Assessment Report prepared by the Science Panel for the Amazon (SPA) that engaged multiple global voices to cover: 1) the Amazon as a regional entity of the earth system; 2) human presence and sociocultural diversity in the Amazon; 3) social-ecological transformations in the Amazon; and 4) the solution space for finding sustainable pathways for the Amazon.

Given the global importance of the Amazon biome, it will require efforts from all nations, especially those from the Americas, to embrace the following goals:

- a) A comprehensive strategy for the preservation, conservation, restoration, and remediation of ecosystems and biodiversity of the Amazon. This includes a sustainable bioeconomy based on healthy forests and flowing rivers, increased investments in research and education, and the reinforcement of regional governance to enhance a fair and sustainable management of natural resources, human rights, and territorial integrity.
- b) Implementing a groundbreaking bioeconomy model centered around healthy forests and flowing rivers, founded upon scientific knowledge and expertise from Indigenous Peoples and local communities, leading to technological advancements.
- c) Ending of deforestation, forest degradation, intentional fires, illegal mining and other criminal activities throughout the region by 2030.

Science, technology, and innovation play crucial roles in addressing the challenges and opportunities in the Amazon region. Effective development models require a comprehensive approach to ensure sustainable production and consumption of natural resources while promoting social and economic advances. Science provides the necessary insights and knowledge about the region's ecosystems, biodiversity, and the impacts of human activities. It can help in understanding the complex ecological dynamics of the Amazon and provide data-driven solutions for sustainable resource management.

Furthermore, it is crucial that development models for the Amazon respond to the demands and aspirations of the societies living in the region. The models should be inclusive and consider the social, cultural, and economic dimensions, as well as the environmental aspects.

The collective engagement of the IANAS academies will provide evidence-based advice for policy makers at the local, regional, and global levels on subjects regarding the Amazon and its connection to global environmental changes and natural disasters, which impact energy, water and food security, health, and biodiversity. A distinct component of our proposed action is to enhance the network of researchers from the region with other research programs focusing on the Amazon. This is important not only to foster local scientific capacity, but also to gain a wider, more inclusive perspective into the problems and challenges in the region. IANAS is uniquely suited to bridge existing gaps by increasing the participation of local researchers with expertise in the region, such as the Science Panel for the Amazon (SPA).

The mitigation of global environmental problems cannot be achieved without development models that respond to the societal needs of the Amazonian countries. IANAS commits to work with governmental and non-governmental organizations, including the Amazon Cooperation Treaty Organization (ACTO). In addition, IANAS will provide opportunities to strengthen engagements between academies from the Amazonian and non-Amazonian countries and facilitate the establishment of young researchers, both of which are of utmost importance for the effective implementation of policies in science and technology.

Respectfully submitted on August 3, 2023, from Manaus, Brazil

Helena B. Nader, IANAS Co-Chair

4 - da

Karen B. Strier, IANAS Co-Chair

Kener & Strier

On behalf of the IANAS Members and the IANAS Amazon Initiative Countries:

Academia Brasileira de Ciências

Academia Chilena de Ciencias

Academia Colombiana de Ciencias Exactas, Físicas y Naturales

Academia de Ciencias de América Latina

Academia de Ciencias de Cuba

Academia de Ciencias de la República Dominicana

Academia de Ciencias de Nicaragua

Academia de Ciencias del Ecuador

Academia de Ciencias Físicas, Matemáticas y Naturales de Venezuela

Academia de Ciencias Médicas, Físicas y Naturales de Guatemala

Academia Mexicana de Ciencias

Academia Nacional de Ciencias de Argentina

Academia Nacional de Ciencias de Bolivia

Academia Nacional de Ciencias de Costa Rica

Academia Nacional de Ciencias de Honduras

Academia Nacional de Ciencias del Perú

Academia Nacional de Ciencias del Uruguay

Academia Nacional de Ciencias Exactas, Físicas y Naturales de Argentina

Académie des Sciences (France) for French Guiana

Asociación Panameña para el Avance de la Ciencia

Caribbean Academy of Sciences

Caribbean Academy of Sciences / Guyana chapter

Caribbean Scientific Union

Foundation for the Advancement of Scientific Research in Suriname

Royal Society of Canada

US National Academy of Sciences