# IANAS STRATEGIC PLAN Adopted at IANAS General Assembly Punta Cana, Dominican Republic, 18 July 2013

IANAS is the Inter American Network of Academies of Science and includes 18 science academies from throughout the Americas. The goals of IANAS are

- To strengthen and empower science communities in the American hemisphere by enhancing the capacities of academies and science associations.
- To serve as formal and informal sources of S&T advice and expertise to all levels of government and civil society in the Americas.
- To develop programs on scientific capacity building, science education, science communication and other science-related issues of significance to the Americas;
- To collaborate with the Global Network of Science Academies (IAP), the Inter Academy Council (IAC) and allied organizations such as ICSU and TWAS.

**IANAS** is an organization of science academies. Science academies are self-renewing honorific organizations, independent of governments, in which members are elected on the basis of scientific merit. By virtue of their credibility and independence from government, academies provide an independent perspective on societal issues related to science, technology, health and education.

**Networks are powerful instruments** for sharing and rapidly disseminating information, best practices and novel ideas through a larger community. As the science academy network for the Americas, IANAS is dedicated to strengthening and empowering science communities in the hemisphere by enhancing the capacities of academies and science associations. The major issues of the 21<sup>st</sup> century transcend national borders and IANAS seeks to play a coordinating role in bringing effective solutions to governments and societies within the Americas.

**Vision:** IANAS aspires to make the academies of the Americas more effective instruments in providing science advice to governments, in engaging society in implementing S&T based solutions to pressing problems, and in so doing, to contribute to social and economic development in the hemisphere.

**Mission:** IANAS works through the science academies of the Americas to (1) enhance human resource development in science, technology and health by improving the quality of science education at all levels; (2) develop programs that employ science to provide solutions to major societal challenges such as water resource needs, energy development, disease surveillance, disaster mitigation,

biodiversity loss, environmental pollution, climate change and other problems; and (3) promote STI (science, technology and innovation) strategies essential for economic development, poverty reduction and quality of life at the national and regional levels.

Accomplishments in the first decade: IANAS was established as a consequence of a meeting of the academies of the hemisphere in Santiago, Chile in May 2004. Since its inception IANAS has initiated active programs in academy capacity building, science education, water resources, energy, and women for science. Each of these programs has developed a series of successful activities.

- o Capacity building
  - A new level of cooperation has been reached by the member academies of IANAS on actions to solve pressing academic and societal needs.
  - New Academies have been established in Nicaragua, Uruguay and Ecuador.
  - Programs on scientific exchange have been developed for young to mid career level investigators. To date 28 scientists from Latin America and the Caribbean have participated in the program.
  - Organized a workshop on the science funding landscape hosted by the Guatemalan Academy.
  - A partnership with the Organization of American States (OAS) has been initiated.
  - Organized a workshop with science journalists and academy leaders from throughout the Americas to enhance the communication of science to the public.
  - IANAS has developed significant linkages with UNESCO, the Inter-American Development Bank (IDB) and with the Caribbean Community and Common Market (CARICOM).
  - IANAS has developed an informative web site (<u>www.ianas.org</u>) that provides linkages to science policy reports from a number of sources.
- o IANAS Education program
  - Inquiry based education programs are working with variable levels of success in 17 countries of the Americas.
  - Worked to develop systems for the evaluation of IBSE (inquiry based science education) projects.
  - Held workshops in many countries of Latin America and the Caribbean on science teacher training.
  - Worked to revive the INDAGALA web resource for IBSE materials in Spanish.
- o IANAS Women for Science program
  - Advanced the awareness of gender inequalities in science in the Americas
  - Worked to advance the role of women in academies in the

- Americas.
- Introduced a prize for an outstanding woman graduate student from the Americas. The first award was made in 2012.
- Published the book "Women Scientists in the Americas: their inspiring stories" in both Spanish and English.
- Helped to establish women's committees in seven academies.
- Hosted a workshop in Mexico to extend the findings of the IAC report on women in science to wider audiences in Latin America and the Caribbean.

## o The IANAS water program

- Organized a workshop in Brasil entitled "Bridging Water Research and Management: Enhancing Water Management Capacity in the Hemisphere".
- Organized meetings on water resource issues in many countries of the Americas.
- Published the book "Diagnóstico del agua en las Américas" that provides a unique and comprehensive evaluation of water resource challenges in the Americas.
- Identified urban water as a high priority topic for the next book length report.

## o The IANAS Energy Program

- Organized a workshop in Buenos Aires to disseminate the insights and recommendations of the IAC report, "Lighting the way; Toward a sustainable energy future."
- Identified under served populations as a high priority topic.
- Hosted annual workshops on energy issues in the Americas
- Cooperated with the ISCU regional office for Latin America on a coordinated energy strategy.
- Worked with the IANAS Women for Science program to address the role of women in energy conservation and use.

# ➤ Goals for the 2013 – 2016 triennium and beyond

To be a key provider of high quality science policy advice in the Americas – Objectives, timelines and methods of evaluation.

- To make academies the premier sources of S&T advice in the Americas
  - Measurement: increases in government requests for academy advice, Increases in science policy reports by IANAS academies, Incorporation of IANAS academy advice into legislation,
  - Goal: Increase of science policy contacts in IANAS countries by 50% by 2018

To provide science based solutions to major resource challenges in the Americas.

- o Goal: provide advice on energy and water resource challenges to the governments of at least 75% of IANAS countries by 2018.
- Develop at least two new IANAS reports on specific water and energy topics by 2015.
- Determine water and energy resource needs of underserved populations in the Americas and identify appropriate policy responses by 2018.
- o Search for resources to initiate an IANAS Biodoversity program.
- o Insure that IANAS reports are sources for media articles in at least 75% of IANAS countries by 2018.

## To enhance science literacy

- Goal: to reach 25% of science teachers in poor areas of the hemisphere by 2018.
- Continue to extend inquiry based science education programs to schools, paying special attention to the training of teachers.
- Continue to offer teacher-training workshops on selected science based topics.
- Enhance cooperation between teachers and program coordinators of the different countries through the use of Internet, video conferences, communication via skype, web page interactions, etc.
- o Link with other organizations, especially la Main a la Pate, seeking to enhance science education in hemisphere.
- Increase the production of educational materials and make them available to all countries of the Americas.
- Complete the revitalization of the INDAGALA web site as a universal Spanish language source for IBSE materials by 2015.
   Each Academy involved in the Science Education Program will submit the Educational material produced by each local program.

Increase public understanding of science through the media by working with science journalists.

- Measurement number of journalists involved and number of articles on science topics that result from contacts with journalists.
- Goal: Increase science based articles in major newspapers of the Americas by 15% by 2018.

## Provide tools for rational decision-making

- o Increase access to data-bases and policy reports as tools for rational decision making by 20% by 2018.
- o Increase representation of policy makers involved in IANAS workshops by 20% by 2018.

## Collaborate with allied organizations

Ocontinue to work with IAP / IAC, ICSU and TWAS to develop regional workshops aimed at disseminating recommendations from major IAC reports to national decision makers. Assist in extending major ICSU reports to the science communities of the Americas. This focus serves the dual purpose of disseminating major reports and also providing academies with national action agendas.

IANAS will develop a fund raising strategy, involving both governmental and non-governmental sources, to enable the implementation of a more ambitious program.

- o Identify funding opportunities for IANAS initiatives.
- o Goal: At least 50% of the funding for IANAS programs and initiatives will come from non-IAP sources by 2016.
- o Establish an IANAS endowment.
- Goal: The IANAS endowment will have at least one million USD in assets by 2018.