

THE INTER-AMERICAN NETWORK OF ACADEMIES OF SCIENCES

- IANAS is a non governmental organization representing 20 Academies of Sciences and 3 scientific regional organizations in the Hemisphere
- Founded in 2004 to support cooperation to strengthen science and technology as a tool for advancing research and development, prosperity and equity in the Americas.

IANAS Overview

- IANAS Members
- North America

The Royal Society of Canada: The Academies of Arts, Humanities and Sciences of Canada
US National Academy of Sciences
Mexican Academy of Sciences

Central America and the Caribbean

Cuban Academy of Science
Academy of Sciences of the Dominican Republic
Academy of Medical, Physical and Natural Sciences of Guatemala
National Academy of Sciences of Costa Rica
Nicaraguan Academy of Sciences
Panamanian Association for the Advancement of Science
National Academy of Sciences of Honduras

South America

Academy of Physical, Mathematical and Natural Sciences of Venezuela Colombian Academy of Exact, Physical and Natural Sciences
Brazilian Academy of Sciences
National Academy of Sciences of Peru
National Academy of Science of Bolivia
Chilean Academy of Science
National Academy of Exact, Physical and Natural Sciences of Argentina
National Academy of Sciences de Cordoba, Argentina
The National Academy of Sciences of the Oriental Republic of Uruguay

Regional Members

Latin American Academy of Science Caribbean Academy of Sciences Caribbean Scientific Union

Academy of Sciences of Ecuador

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IANAS Focus in the Region



- IANAS Water Program
- IANAS Energy Program
- IANAS Food and Nutrition Security Initiative for the America
- IANAS Women for Science Program
- IANAS Science Education Program
- IANAS Capacity Building

IANAS Structure, Operation and Funds

- IANAS General Assembly The Academies meet every 3 years to discuss the future of the organization
- Executive Committee reviews the progress and prepares recommendation to the Programs, oversees IANAS budget
- The Leadership Two IANAS Co-Chairs, Juan Asenjo (Chile), Jeremy McNeil (Canada)
- The Secretariat hosted by the Mexican
 Academy of Science Offices in Mexico City and and
 the Beckman Center in Irvine, CA-NAS
- Funds come from
 - the Academies hosting the events,
 - Mexican Academy of Sciences, NAS and other academies
 - IAP (Global Network of Science Academies,
 - other international sources such as UNESCO, Leopoldina, etc.
- IANAS Staff = 2 Soldiers

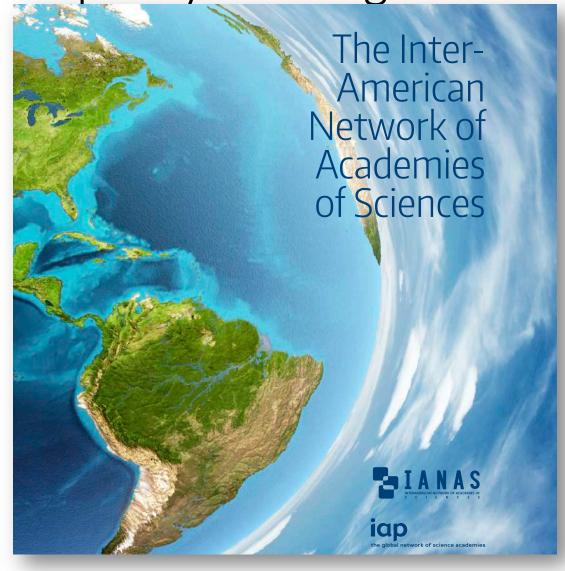
- The Academies appoint one Focal Point for each of the IANAS programs and they are top scientists contributing pro bono in their respective fields.
- Each Program has one or two Co-Chairs.
- Each Program meets every year in different countries of the Americas to discuss and review the progress and to plan future work.
- IANAS is privileged with the support of 100 Focal Points appointed by their Academies of Sciences and more than 500 scientists and organization supporting pro bono our organization.

The IANAS General Assembly 2016



Hosted by the Brazilian Academy of Sciences here the Presidents of the Academies of Sciences of the Americas with Re-elected co-chairs Juan Asenjo, new elected Jeremy McNeil and second and last term co-Chair Michael Clegg.

Capacity Building



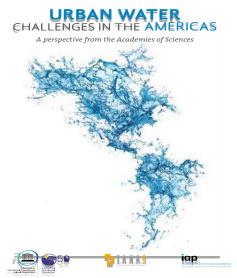


IANAS: Tangible results 2013-2016

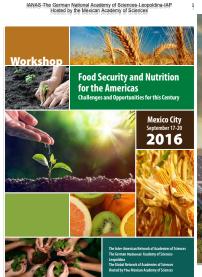
IANAS Reports and other publications

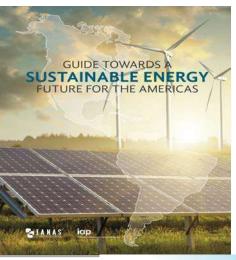
- Diagnóstico del Agua en las Américas. Spanish version released on March 2012/ ISBN 978-607-9217-04-4
- Women Scientists in the Americas. Their inspiring Stories. March 2013 / ISBN Pending
- Young Women Scientists: A bright future for the Americas March 2015
- Cambio Climático. Evidencias, Impactos y Opciones. July 2013 / Rights granted by NAS to IANAS for free public dissemination)
- Diagnosis of Water in the Americas. June 2013 ISBN 978-607-96209-2-9
- Urban Water Challenges in the Americas: A perspective from the Academies of Sciences. March 2015/ ISBN 978-607-8379-12-5
- The Inter American Network of Academies of Science: An example of Science-Based cooperation in the Americas. AAAS Science & Diplomacy. 03.30.2015. Clegg, M. T., J. A. Asenjo and A. de la Cruz. 2015
- Survey of Women in the Academies of Sciences. May 2015/ ISBN Pending

Tangibles

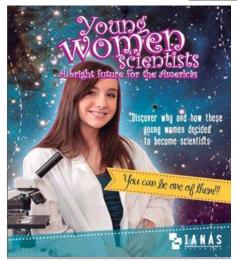












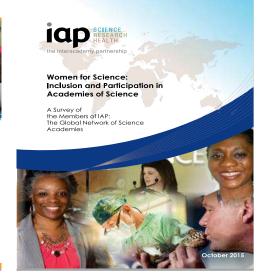


SURVEY OF WOMEN IN THE ACADEMIES OF THE AMERICAS

REPORT PREPARED BY FRANCES HENRY
FOR THE IANAS WOMEN FOR SCIENCE PROGRAM

MAY 2015





The Water Program

Hosted by Centro de Ciencia y Tecnologia de Antioquia, the Water Program met in November 2016 in Medellin Colombia to review the advancements of the report on Water Quality in the Americas and to deliver the Executive Summary on Urban Waters in the Americas.

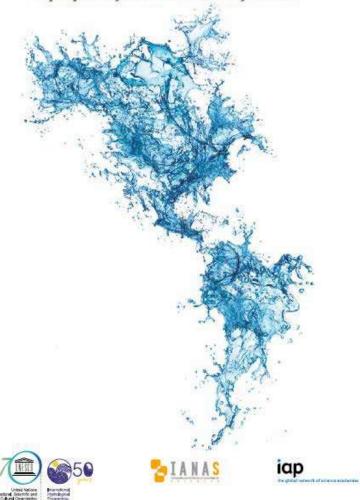
The IANAS Focal Points was invited to give different talks at the National Symposium on Water organized by the hostess institution.

Next projects: Water Quality Publication The Caribbean Water Report and Executive Summary of the Urban Waters



URBAN WATER CHALLENGES IN THE AMERICAS

A perspective from the Academies of Sciences



resource deficit intense precipitation

floods waterborne disease

drainage water distribution

contamination

sustainability

climate change

overuse of resources

system water loss to supply nonintegrated Management illegal connections to supply

water deficit

less rain

unequal service overuse of water

unequal Sci Vice
scarce surface water
Contamination
updating and maintaining water infrastructure
weak water governance
Sewage and treatment
water management

sanitation services

waterborne diseases water transporting/harnessing incomplete infrastructure

climate change

nonintegrated management

flooding water overuse rainfall increase limited water infrastructure volcanic contamination water pollution water infrastructure water pollution

greater rural population water-scarce city locations

urban planning

splacement outside original basins climate barriers

Word Cloud constructed by Jorge Sanchez, University of Arizona

IANAS Women for Science



Argentina Mariana Weissmann National Academy of Exact, Physical and Natural of Argentina (ANCEFN) • Bolivia

Mónica Moraes R. National Academy of Sciences of Bolivia •
Brazil Marcia Barbosa Brazilian Academy of Sciences •
Canada Frances Henry The Royal Society of Canada •
Caribbean Neela Badrie Caribbean Academy of Sciences •
Chile Cecilia Hidalgo Chilean Academy of Sciences • Colombia Angela Camachos Beltran Colombian Academy of Exact, Physical and Natural Sciences • Costa Rica Giselle Tamayo National Academy of Science of Costa Rica (ANC) • Cuba Olga Fernandez Academy of Sciences of Cuba • Dominican Republic Milena Cabrera Maldonado Academy of Sciences of the Dominican Republic • Ecuador

María Veronica Crespo-Pérez Academy of Sciences of Ecuador • Guatemala

Sciences of Guatemala • Honduras

María Guadalupe C. Alduvin Sainz National Academy of Sciences of
Honduras • Mexico Judith Zubieta García Mexican Academy of
Sciences • Nicaragua Margarita Vannini National Academy of Sciences
of Nicaragua Peru Ruth Shady National Academy of Sciences of Peru •
Uruguay Ana Denicola National Academy of Sciences of Uruguay •
USA Carol Gross US-National Academy of Sciences • Venezuela
Liliana López Academy of Physical, Mathematical and Natural Sciences
of Venezuela IANAS Juan Asenjo/ Jeremy McNeil/ Katherine
Vammen /Adriana de la Cruz / Marcos Cortesao John Hildebrand/
John Boright...

María del Carmen Samayoa Academy of Medical Physical and Natural

IANAS Activities and its links with the Women for Science Program

 Energy gender chapter into booklet?

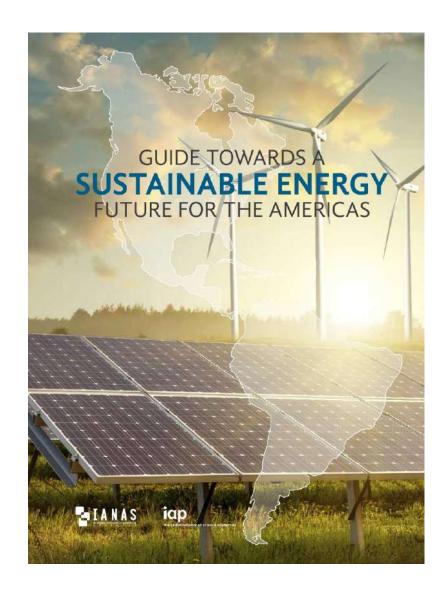




Report 2:

- The Energy Co-Chair approved the idea with the suggestion to to review and update the information.
- All authors have been contacted and they will deliver their updated texts by April-May.
- This new booklet will be posted in IANAS website as an electronic version by the end of the year.



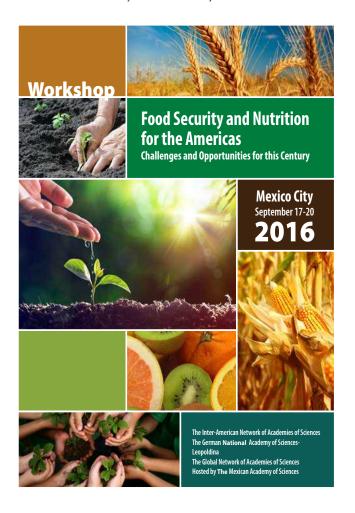


Food and Nutrition Security for the Americas



Meeting of Country Coordinators

IANAS-The German National Academy of Sciences-Leopoldina-IAP
Hosted by the Mexican Academy of Sciences



March 14-15, 2017 Lima, Peru

- Received and reviewed 18 chapters
 - Goal: Produce country specific assessments and produce a separate Summary for the Americas
 - All policy is at the national level: Country specific documents can be used for outreach to local policy makers and other audiences.
 - More than 200 experts from throughout the western hemisphere have contributed to the country assessments
 - Chapter on intersection of Gender Equity and FNS opportunities in the Americas
 - A Summary for the Americas will focus key big picture issues.
- Publish a book of country assessments and a separate Summary for the Americas document in Spanish and English.

Conclusions continued

- **Policy distortions Subsidies and perverse impacts**. E.g. the ethanol subsidies in US cause shifts to corn production for animal feed thereby causing the allocation of arable land to uses that fail to achieve the intended goal GHG mitigation.
 - Government policies fail to encourage the highest and best uses of arable land
 - Government policies frequently fail to encourage the best uses of water resources for food security.
 All countries need better land use policies.
- Need policies that encourage more efficient use of water in semi arid regions.
- Within country variance in food and nutrition insecurity (FNS) is greater than between country variance - that is every country has food insecure populations, but on average the countries of the Americas are about the same in FNS.
 Conclusion - that within country FNS policies are critical.
- **Prospects for innovation are strong** in many areas e.g. better environmental management, precision agriculture, biotechnology, improved policy options etc.
- The Americas will be critically important in the future in feeding a world of tenbillion.

IANAS Programs and its potential link with the **Energy Program**

With the Water Program

 A collaboration for the publication Water Quality for the Americas.

 With the Women for Science Program

 An updated version of the Chapter "Women, energy and water The effects of gender and culture on the roles and responsibilities of women"

• With the Science Education Program Contributions for the Indagala website

IANAS Energy Program

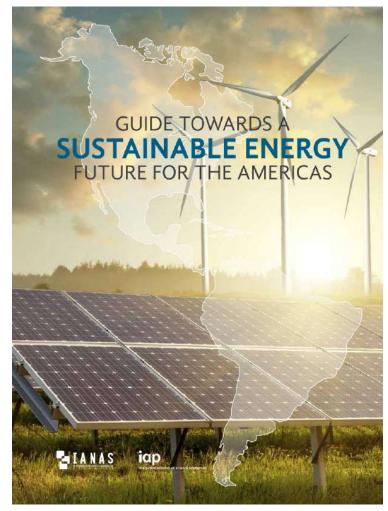
The publication "Guide Towards a Sustainable Future for the Americas" has been presented in different countries

The Program will meet in 2017 in Arizona to discuss:

A chapter about new alternative technologies to improve the quality of water in the Americas

A possible publication with Smart Villages about public policies for Unserved Population.

The update of the 2016 Publication





• THANKS_GRACIAS_OBRIGADA