



## Water Program

### Report of Activities and Accomplishments of the Water Program of IANAS 2017

#### a) Main accomplishments of 2017

##### 1. Ottawa Meeting

The meeting of the Water Program of IANAS was held in Ottawa, Canada from August 13 to August 17<sup>th</sup> in Carleton University. The three-day event was supported by the Royal Academy of Science and Carleton University; organized by the Water Program Focal Point of Canada, Dr. Banu Ormeci and the Co-Chair of IANAS, Prof. Jeremy McNeil. The IANAS Water Program meeting was held on the 14<sup>th</sup> and half day the 15<sup>th</sup> of August and the Agenda can be found at [http://www.ianas.org/images/docx/Agenda\\_Ottawa.pdf](http://www.ianas.org/images/docx/Agenda_Ottawa.pdf).

Dr. Ormeci organized a public event at Carleton University on the 16<sup>th</sup> where all the participating IANAS Focal Points presented different topics in a “Symposium on Water Challenges and Solutions in the Americas” and there were ongoing Panel Discussions on topics such as “Current and future water challenges in the Americas” and Opportunities and Solutions to water challenges in the Americas” (see annex for program). This event was followed by the Opening Ceremony of the Global Water Institute in Carleton University which will be directed by Dr. Banu Ormeci.

<http://www.ianas.org/index.php/programs/water-program?id=643>

It is important to note that the Director and Hydrologist of the International Hydrological Program of UNESCO of the Regional Office for Latin America and the Caribbean in Montevideo, Uruguay (PHI-LAC), Dr. Miguel Doria participated in the IANAS meeting in order to discuss future collaboration between UNESCO and the IANAS Water Program.

#### Main Results and Conclusions of the Water Program meeting:

- Progress on the upcoming book “**Challenges of Water Quality in the Americas**”. There was notable progress in the elaboration of country chapters from all participating focal points: Argentina, Canada, Brazil, Bolivia, Chile, Colombia, Grenada (Caribbean), Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Honduras, Peru, Nicaragua, Venezuela and the USA. Most chapters are being written by a water quality expert team. Also, the focal point groups responsible for the four introductory chapters have been formed and are working: Water Quality (change in time, global picture challenges), Monitoring, Water and Health, and Hydro-social cycle. There is also a chapter being prepared on Renewable Energy and its use to secure water quality which will have contributions from different countries in the form of case studies.
- Collaboration with **Canadian Research Institutes**. Presentations were made from two Canadian research organizations, International Development Research Center (IDRC) and Mitacs. The discussion that followed focused on future collaboration.
- Activities relating the different Programs of IANAS.



The **Water program** is currently working together with the **Energy program** in the preparation of the chapter on the Use of Renewable Energy to secure water quality for the Water Quality book. The Energy Program focal point from the Dominican Republic made a short contribution by Skype on the progress of this contribution.

There were also contributions from different focal points from the Water program in the recently published book on **Water Security and Nutrition in the Americas**, especially in the subchapters on resources and food security.

- Future collaboration with UNESCO and the Regional Office for Latin America and the Caribbean. There will be activities planned between the Water Program of IANAS and UNESCO especially in **water quality issues**. The upcoming book on Water Quality will be a collaboration between the two organizations. The Co-Chair of the Water Program participated in the meeting of the National Coordinators and Focal Points of PHI-LAC UNESCO in September of 2017 to further the collaboration between the two organizations. There are plans to form a working group of PHI-LAC especially for Water Quality where IANAS focal points will be asked to participate.
- A special version of the **Urban Water Challenges in the Americas** has been completed in the form of an **Executive Summary** oriented especially for policy and decision-makers where each focal point has summarized his country chapter into a four-page contribution.
- Capacity training activities. The organization of a workshop on **Eutrophication of Reservoirs** has been planned for 2018 and will be supported by SENACYT of Panama. Focal points of Colombia, Venezuela, Guatemala and Panama will participate as professors in the workshop that will be held in Panama.
- Due to the special situation of water resources in the Caribbean countries under climate change, it was considered of special important to contribute to the design and organization of a book on **Water Challenges in the Caribbean**. Miguel Doria from UNESCO will also support with the participation of Caribbean Focal Points of PHI-LAC. It was decided to have a session in the UNESCO meeting in September to invite Caribbean Focal Points to work together using the same design of the water quality book as country contributions and the IANAS Co-Chair and the Caribbean Focal Point were invited to prepare the session in the Bahamas.
- Participation in **World Water Forum**. The representative from the Brazilian Academy of Science proposed the participation of the Water Program in the 2018 World Water Forum which will be held in Brasilia in March of 2018. The proposal will be made to UNESCO to organize a session on Urban Water Challenges directed to Policymakers with the participation of a group of Focal Points.
- **Possible New Initiatives**. Four main ideas were proposed for future activities of the Water Program of IANAS: 1) a new **publication** of the Water Program on **Groundwater Management Problems** oriented to present problems and solutions for better groundwater management. Publications like these could open up discussions for solutions and the correction of bad management practices, 2) proposal for **capacity training program** on different water management topics, 3) collaboration in groups of countries for **research projects focused on new water management strategies**, 4) creation of **demonstration farms with critical**



**technology for rural areas** in water treatment of special problems like heavy metals.

It was suggested to prepare proposals for these four projects for discussion in the next meeting of IANAS in 2018.

- **Two new Water Institutes**, the Peruvian Institute, Instituto Científico de Agua (ICA), and the Global Water Institute, Carleton University made presentations focused on the importance of garnering the support and collaboration of IANAS. The Water Program of IANAS has continuously supported ICA in several events and in the construction and reviewing of proposals from different focal point representatives of the Water Program of IANAS.

### **2. IANAS Water Program Participation in meeting of PHI-LAC Bahamas.**

On the invitation of the Director-Hydrologist of PHI-LAC, the Water Program Co-Chair participated in the National Coordinator and Focal Points (CoNaPHIs) meeting of PHI-LAC UNESCO in the Bahamas in September of 2017 where the working group on Water Quality was officially established. This will be a working group of collaboration between the Focal Points of the Water Program of IANAS and PHI-LAC.

The Focal Points of the Water Program for the Caribbean, Martin Forde and also the Focal Point from Food Security, Mark Wuddivera, also participated in the special meeting of the Caribbean Focal Points of PHI-LAC (11 countries) where the proposal for the content design and organization form of a book especially for the Caribbean countries “Water Challenges and Solutions for the Caribbean” was presented by the IANAS delegation for their consideration. (see annex, presentation)

### **3. Participation of Water Program in IANAS Food Security book**

Many of the Water Program Focal Points participated in the country chapters of the recently published book from IANAS “Challenges and Opportunities for Food and Nutrition Security in the Americas”. Also, the Co-Chair of the Water Program was part of the author’s team for the Regional Analysis prepared from country assessments by IANAS.

### **4. Workshop on eutrophication in Reservoirs, Sources of Contamination and Proposals for Management**

SENACYT of Panama has accepted a proposal from the Water Program Focal Points of Panama, Colombia, Venezuela and Guatemala to organize the workshop in Panama where Lake Alhajuela, part of the watershed of the Panama Canal, will be used as a Case Study. Students from public and university institutions of Panama will be invited as participants.(annex presentation of workshop)

### **5. International Seminar as preparation for the World Water Forum in Ipatingo, Brazil**

In response to the invitation of the International Hydrological Programme of UNESCO, Regional Office of Science for Latin America and the Caribe, the Water Programme of IANAS formed a team of 11 Focal Points to participate in the International Seminar: “Compartilhando Aguas: Do Local ao Global” with the objective of presenting the topic of



Quality of Water: present situation, problems and solutions in the different countries of the Americas. The IANAS Focal Points made up this special session of the seminar on Water Quality in the Americas where they presented the results of the progress on the new Water Quality book of the Water Program. <http://www.ianas.org/index.php/programs/water-program?id=713>

The Director of Projects of the Brazilian Academy of Science also participated in the event. The IANAS Focal Points present held a business meeting to discuss important plans for the future.

#### **6. Participation of Water Program in World Water Forum**

The Water Program of IANAS participated in the World Water Forum 2018 with a delegation of Focal Points from Brazil, Venezuela, Nicaragua and Peru. The Director of IHP and Honorary Co-Chair of the Water Program, Blanca Jimenez also was part of the team which focused on the presentation of the book on “Urban Water Challenges in the Americas” and related issues. The public attending the special session was very active in questions and comments and the session drew attention to this topic so important currently. A document as summary of the IANAS intervention can be found at: [http://www.ianas.org/docs/books/8\\_Water\\_Forum\\_sum.html](http://www.ianas.org/docs/books/8_Water_Forum_sum.html)

#### **7. Urban Water Challenges in the Americas: Summary for Decisionmakers**

The Water Program finalized the Summary of “Urban Water Challenges in the Americas” with the participation of chapter summaries from 20 countries, one special chapter on “Integrated Wet Weather Flow Management in the City of Toronto” and an Executive Summary. This important publications for policy-makers was featured in the IANAS web page on International Water Day, 22<sup>nd</sup> of March 2018. [http://www.ianas.org/docs/books/Urban\\_Water\\_Sum.html](http://www.ianas.org/docs/books/Urban_Water_Sum.html)

#### **8. Program for Capacity training proposal**

The Focal Point from Venezuela has elaborated a preliminary proposal to form a program for capacity training for the Water Program which will be the object of future feed back and improvement from all focal points.

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