World Water Week at Home 2020

Focus on the Americas: Conclusions

Water and Sanitation Division

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WORLD WATER WEEK AT HOME 2020

FOCUS ON THE AMERICAS

CONCLUSIONS

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CONCLUSIONS

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EXECUTIVE SUMMARY

This year's World Water Week at Home explored "Water and Climate Change: Scarcity in Abundance". Due to the COVID-19 pandemic, water specialists were not able to meet in person in Stockholm, as they had in previous years. Instead, they created and participated in virtual conferences. All 122 events were free and open to the public, intended to facilitate cross-country exchange. Participants from international organizations, governments, civil society, academia, and public and private water companies shared their thoughts on climate solutions based on effective communication, behavior change, and resilience.

The Inter-American Development Bank collaborated with 17 water-related agencies to create sessions for the Focus on the Americas program of World Water Week. The agenda consisted of **four general sessions**: (i) No Amazonia, No Water: Climate change in the rainforest; (ii) In Abundance of Scarcity: Securing water in times of drought; (iii) Unlocking Climate and Blended Finance for Resilient Solutions; (iv) Mobilizing the Wheels of Innovation: Private sector action for water; **two showcases**: (i) Tech to Wet: HydroBID digital innovation for water security; (ii) Water Funds: Piggy banks for future droughts; and **one seminar**: "Building back better": Where is my climate finance money? Post-COVID considerations.

This paper summarizes the main findings of the Focus on the Americas events, and provides recommendations on strategies that will help Latin America and the Caribbean (LAC) address challenges such as drought, floods, and biodiversity loss in the Amazon through innovative and sustainable projects.

OVERVIEW OF SIWI 2020

World Water Week (WWW) is the leading global event for the water and sanitation sector, hosted every year by the Stockholm International Water Institute (SIWI) in Stockholm, Sweden. Specialists in the field, researchers and the general public convene to discuss the future of water throughout this event. All sessions related to LAC are grouped into the Focus on the Americas program, which the IDB's Water and Sanitation Division has coordinated since 2015.

This year, WWW took place virtually from August 24 to the 28, and focused on "Water and Climate Change: Scarcity in abundance". Over the course of just five days, 321 different organizations convened on 122 sessions. Forty-one percent of these events had over 100 participants, and another 41 percent had between 50 and 99 participants.

OVERVIEW OF THE FOCUS ON THE AMERICAS PROGRAM

Under these new, unique circumstances, a total of 17 organizations collaborated with the IDB's Water and Sanitation Division (INE/WSA) on the content of the Focus on the Americas program: the Amazon Cooperation Treaty Organization (ACTO), Anheuser-Busch InBev (AB InBev), the Development Bank of Latin America (CAF), the FEMSA Foundation, Fundación Chile (FCH), Hydronia, Latin American Water Funds Partnership, the Mexican National Water Commission (CONAGUA), the Municipalidad de Santa Fe (Argentina), the Nature Conservancy (TNC), the Organization of American States (OAS), the PepsiCo Foundation, RTI International, the United Nations Economic Commission for Europe (UNECE), Water for People, Water.org, and the World Resources Institute (WRI). The IDB is very grateful for their input and participation.

An outstanding group of high-profile water and sanitation experts from government agencies, utilities, international organizations, the private sector, start-ups, and donor agencies served as speakers and panelists at the LAC sessions. Discussions were held under the SIWI framework "Water and Climate Change: Scarcity in abundance". Participants shared experiences related to using governance, technology, nature-based solutions, and finance in innovative ways to overcome challenges such as drought, water pollution, urban floods, deforestation, and the COVID-19 pandemic. The program was divided into four general sessions, two showcases, and one seminar (see Appendix).

Focus on the Americas

IN NUMBERS

Over **469** virtual participants on average per session

Showcase sessions were the most popular, with an average of **543** PARTICIPANTS EACH

The session "In Abundance of Scarcity: Securing water in times of drought" was the most popular, with **562** VIRTUAL PARTICIPANTS

1,085 guests attended both showcases

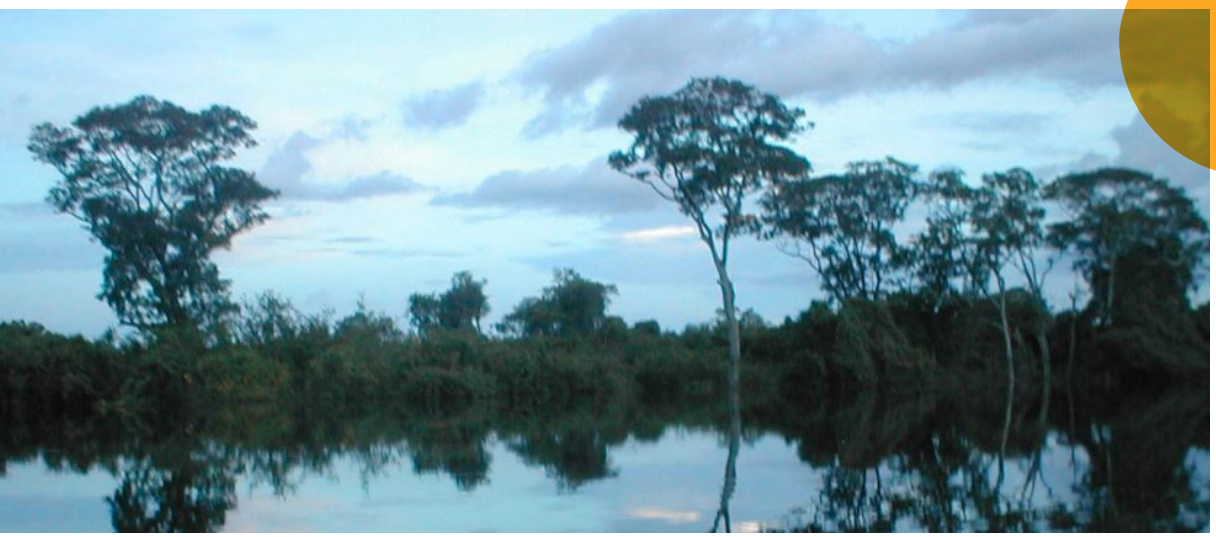
GENERAL SESSION 1

No Amazonia, no water: Climate change in the rainforest

Convening Organizations

Inter-American Development Bank (IDB), Amazon Cooperation Treaty Organization (ACTO), Organization of American States (OAS), United Nations Economic Commission for Europe (UNECE), RTI International

Total participants: 559



The current crisis in the Amazon Basin reveals an opportunity to shift to sustainable development in order to avoid what scientists refer to as “tipping points”, when the basin and its ecosystem would no longer be able to sustain themselves. This session explored solutions related to water and environmental issues in this vital region.

The Amazon Basin is essential; it regulates the global climate and plays a critical role in water cycles. Its rivers hold one-fifth of all the planet’s freshwater, and the Amazon River is the largest tributary to the oceans. The forest regulates climate and rainfall patterns at local and regional levels, providing favorable conditions for agricultural production and food security. The Amazon absorbs about 20 to 25% of all the carbon released into the atmosphere every year; it needs a sustainable development plan that prioritizes degradation prevention.

The Basin faces several challenges related to human activity and climate change. Illegal logging, forest clearing, and the encroachment of pasture and crop lands into protected areas, have all led to increases in fires and massive biodiversity loss. Deforestation reduces evapotranspiration and increases runoff and river discharge during flood events. Climate change worsens problems related to water pollution, deforestation, erosion, land-use change, and large destructive infrastructure projects in the Amazon. Scientific models suggest that climate change will increase extreme flow regimes, aggravating socio-economic conditions for populations living in the Amazon and threatening the ecological function of the basin. Meanwhile, extremely low river levels, which occurred during the droughts of 2005 and 2010, will also become more common. There needs to be more transboundary cooperation and coordination to address these and other challenges, including lack of wastewater treatment, poverty, poor institutional frameworks, and lack of environmental education in communities.

Conclusions

During the session, representatives from ACTO, ANA Brazil, the OEA, the IDB, and the UNECE shared their thoughts on solutions to the Amazon crisis and provided examples of successful management of comparable basins outside of LAC. All speakers highlighted the importance of a systematic, long-term strategy for degradation prevention as part of a sustainable development plan for the Amazon.

To tackle the Amazon's challenges, governments, academia, international organizations, and communities should cooperate to:

- **Enhance governance:** Facilitate intergovernmental and stakeholder dialogue regarding technical and political use of shared water resources. Prioritize improved legal and institutional frameworks.

- **Raise awareness and build technical capacity for stakeholders and decision-makers:** Improve the understanding and knowledge sharing of integrated ecological-socio-economic systems to create water management and climate solutions. Expand transboundary cooperation by identifying mutual interests, developing scientific studies on knowledge gaps, sharing information and analyses, and improving decision-making and planning.

- **Develop basin planning at the management and investment level:** Strengthen regional coordination and guide policy and institutional reforms to implement priority actions at the national and regional level. Include socio-economic and environmental objectives for both land and water infrastructure, protected area management actions, and targets for water allocation.

- **Mobilize funding for shared and coordinated projects:** Develop innovative financing methods that enhance the value of public sector spending by involving the private sector to support green infrastructure and optimize benefit sharing and water use in basins.

GENERAL SESSION 2

In abundance of scarcity: Securing water in times of drought

Convening Organizations

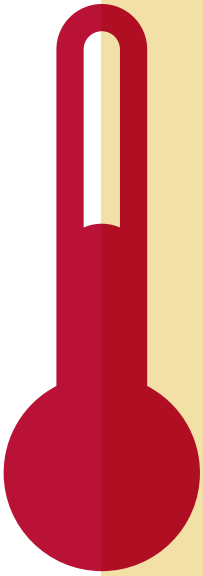
Inter-American Development Bank (IDB), Water For People, RTI International, Mexican National Water Commission (CONAGUA)

Total participants: 562

The purpose of this session was to discuss lessons learned from innovative planning and investment approaches that combat drought. Cases from across LAC were used to explore new planning and investment design tools that combat droughts.

As climate change increases the frequency and severity of droughts, it builds pressure on scarce resources and threatens not only water but also food and energy security. In LAC, a region with a third of the world's freshwater resources, drought should not translate into water shortages. However, reality proves otherwise. Mexico's Grijalva River, the country's second longest waterway, reached critically low levels in 2015. Brasilia has experienced the most severe water crisis in its history; the extreme decrease in rainfall and

diminished reservoir levels led the capital to ration its water supply, leaving many of its three million residents without continuous water. Central America's dry corridor faces ongoing water shortages, resulting in increased migration and socio-economic uncertainty.



Conclusions

Speakers discussed water security challenges, particularly the increase in drought frequency. LAC faces great spatial and temporal heterogeneity in terms of water distribution. Dependence on the agricultural sector and the expansion of large energy projects threaten water security. The region is very vulnerable to natural disasters, such as floods and droughts due to rapid and unplanned urbanization, environmental degradation, and governance failures. Communities must confront poor access to water and sanitation services, as well as institutional weaknesses and water infrastructure failures.

Given the complex relationship between water, sanitation, agriculture, and energy, water security and resource planning strategies must be approached from an integrated perspective. Innovative, sustainable, and resilient nature-based solutions and green infrastructure must be promoted by all water security strategies. Governments must resolve their lack of technical (data and information) and institutional capacity to anticipate and adapt to extreme events.

To better adapt and respond to the impacts of climate change on the water sector, the region needs to:

- Determine water resource availability based on accurate data.
- Guarantee the supply for current and future uses through green infrastructure and management of environmental services in surface and groundwater recharge areas.
- Improve the efficiency of water production and use in urban areas.
- Recover water quality of surface sources and strategic aquifers.
- Support the creation of specific governance mechanisms for water security. Generate knowledge and support institutions to develop early warning mechanisms, drought plans, and water security plans at basin and urban scales.
- Reconcile different sectoral demands for water through integrated planning for urban and rural uses, with a focus on the agricultural sector.

It must also innovate in these four fundamental areas:

- **Climate change and multisectoral planning**, by incorporating integrated water demand for various uses into the effective management of water services.

- **Water infrastructure and nature-based solutions**, by promoting combinations of gray and green infrastructure that boosts efficiency, reliability, and cost effectiveness in the provision of water services.

- **Institutional framework**, by deliberately making investments in knowledge and the implementation of advances in science and technology in water projects.

- **Stakeholder engagement**, by improving methodologies for participatory processes to evaluate challenges at different scales.

GENERAL SESSION 3

Unlocking climate and blended finance for resilient solutions

Convening Organizations

Development Bank of Latin America (CAF), World Resources Institute (WRI), Inter-American Development Bank (IDB), FEMSA Foundation, The Nature Conservancy (TNC)

Total participants: 481

Climate finance and emerging blended finance schemes represent promising opportunities to support green-gray infrastructure and nature-based solutions for water security and climate resilience. This session highlighted early experiences with leveraging climate finance toward these efforts and identified needs for scaling up across LAC. The keynote speech highlighted the inherent link between water, climate, and biodiversity, and the opportunity to use climate financing to integrate resilience and climate risk into the water sector.

Conclusions

Climate finance has long been used in the water sector to fund nature-based solutions, leverage alternative financing sources, build institutional policies, provide on-the-ground guidance, create incentives, and implement innovative pilots. By creating green jobs, nature-based solutions could play an important role in building a resilient economy after the COVID pandemic.

Convenors shared their strategies to improve water security and climate resilience worldwide and in the region. GCF finances projects, provides readiness funds for capacity development of national designated authorities, supports national adaptation planning, and accredits direct access entities. With regard to scaling up climate financing, GCF is preparing a water sector guide document to focus its limited resources on high-impact interventions, clarifying approval procedures, and developing sector-specific project development guidance. CAF is working with GCF to develop projects and programs that will reduce the impacts of climate change in the region. SABESP supports nature-based solutions to protect watersheds. Because part of the utility's mission is to provide quality water service to over 28 million inhabitants, SABESP owns and maintains vast protected areas through water and sanitation service tariffs. Additionally, SABESP is developing an Adaptative Plan for Climate Change and working with TNC and WRI to solve problems such as measuring the benefits of nature-based solutions, working with all watershed actors, and clarifying regulatory treatments of the costs.

The speakers shared several recommendations to unlock climate funds:

- Further integrate resilience and climate risk considerations and nature-based solutions for the water sector.

- Quantify the costs and benefits of nature-based solutions, environmental externalities, and collaborative efforts to include these solutions in the water sector agenda and incorporate them into financial and socio-economical decision making.

The following initiatives support the efforts mentioned in the session:

- IDB's Disaster and Climate Change Risk Assessment Methodology
  LINK

- GCF-CAF Project "Climate change: The new evolutionary challenge for the Galápagos"
  LINK

- CAF Guide "Salvaguardas Ambientales y Sociales"
  LINK

- GCF's Sector guidelines and simplified procedures
  LINK

- SABESP's Green Belt initiative
  LINK

- Latin American Water Funds Partnership
  LINK

GENERAL SESSION 4

Mobilizing the wheels of innovation: Private sector action for water

Convening Organizations
FEMSA Foundation, Inter-American Development Bank (IDB), Water.org

Total participants: 312

The private sector can test innovative climate and water solutions, scale up successful interventions, and monitor their progress over time. But businesses cannot act alone; they must collaborate with the public sector and academia to make these solutions attainable and sustainable. This session presented innovative solutions and explored the role of the private sector in closing the access gap to safe water and sanitation services.

Conclusions

Speakers discussed innovative effluent and sludge treatment projects and their impact on greenhouse emissions. They explored the business cases of innovative finance in agriculture, market solutions for water-driven products, and private financial institutions engaging in water access for the poor. Several one-of-a-kind collaborations in LAC were presented. The private sector is uniquely positioned to take a leading role alongside other sectors to find effective and innovative solutions to pressing climate problems. Cities must become more sustainable and resilient through stakeholders' joint action that considers all costs. Over the long-term, capital markets reward companies that are more responsible and sustainable.

In terms of recommendations, speakers shared the following:

- Scale up innovations in sludge and effluent treatment.
- Raise awareness about the importance of investment in the water and sanitation sector, while emphasizing the importance and urgency of joint action.

They also discussed these initiatives:

- Standardized metrics that analyze projects' Environmental Social Governance (ESG) risks and identify good practices.
- Innovative Financial Vehicles that measure savings and water efficiency.
- Nature-based models that improve quality and volume of water and agricultural products.

SHOWCASE 1

Tech to wet: Hydrobid digital innovation for water security

Convening Organizations

Inter-American Development Bank (IDB), RTI International, PepsiCo Foundation, Hydronia, Fundación Chile, Municipalidad de Santa Fé (Argentina)

Total participants: 531

Many countries in LAC face challenges when it comes to flood and drought risk management due to lack of data and adequate software. HydroBID, an IDB-led initiative, supports water resources management and planning throughout the region. It offers a suite of quantitative models that uses hydrologic and climate data to estimate water balances, predict flood patterns, and support the design of resilient infrastructure in approximately 300,000 basins. Since 2016, the HydroBID Support Center (CeSH) has reached 150 water agencies in 20 LAC countries.

During this session, speakers provided testimonies on the use of CeSH tools to facilitate water resource planning and management in Mexico and Brazil, and extreme event mapping in Uruguay. Representatives from Argentina discussed how they plan to use this suite of tools to manage urban floods. The showcase

emphasized the importance of innovative tools in water resources management, as well as the commitment of the IDB to guarantee access to cutting-edge technology for effective decision-making.

Conclusions

Convenors made the following recommendations:

- The use of innovative software tools should continue to be promoted through initiatives that guarantee the transfer of technology and sustainability.
- The consolidation of the community of practice is necessary to promote regional collaboration.
- It is important to include academia, not only for its technical and scientific contribution, but also because it is where future professionals learn to support water resources management agencies.

Two important initiatives were shared during this session:

- HydroBID Model Suite. The suite integrates a water availability model (HydroBID), a supply-demand analysis model (HydroBID Alloc) and a hydrodynamic model (HydroBID Flood).
- HydroBID Community of Practice. The community was created by users of HydroBID tools. It holds annual meetings and hosts 2,500 members, including certified specialists who collaborate on trainings and project development.

SHOWCASE 2

Water funds: Piggy banks for future droughts

Convening Organizations

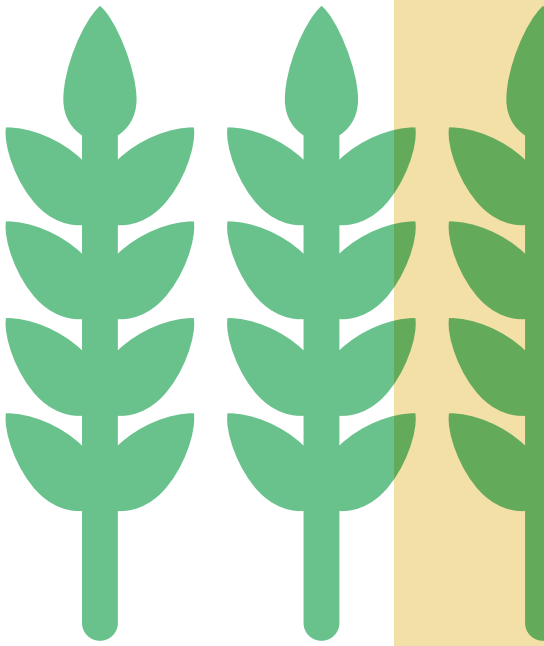
The Nature Conservancy (TNC), FEMSA Foundation, Inter-American Development Bank (IDB), Global Environment Facility (GEF), Anheuser-Busch InBev

Total participants: 554

Innovation is booming in LAC! During this session, water funds from across the region showcased powerful project ideas and competed for free coaching hours from multinational corporations and institutions. Project proposals included nature-based solutions focused on a green COVID recovery, climate-adaptation, and water security. Each contestant presented five-minute pitches and answered questions from the panel of judges.

Conclusions

Guaranteeing water quality and quantity is a fundamental component of water security. It can help prevent and manage crises such as COVID-19, given its direct link to sanitation, especially for the most vulnerable populations. Water funds build climate resilience by preserving water resources, offering technical and governance tools, and financing nature-based solutions, which in turn support green recovery by promoting environmental protection. Long-term financial mechanisms can mobilize and leverage public and private funding for climate-resilient water provisioning to vulnerable cities.



SEMINAR

“Building back better”: Where is my climate finance money? Post-covid considerations

Convening Organizations

Inter-American Development Bank (IDB), Asian Development Bank, Ministry of Environment and Energy of Costa Rica, World Bank Group

Total participants: 284

Climate-friendly actions will boost the economy and the environment in the post-COVID recovery period. This session explored climate finance worldwide, lessons learned from other sectors’ success stories, as well as how countries could attract investors to expand long-term financing of mitigation and adaptation projects.

Conclusions

COVID-19 has underscored the importance of building more resilient and sustainable water infrastructure. This seminar fostered a rich conversation about the challenges faced by the water sector to attract more climate financing in the COVID-19 recovery period, and the role of innovation in this equation. Speakers discussed the role of public and private sector partnerships (PPPs) to ensure the accomplishment of the sustainable development goals (SDGs), as well as the actions countries can take to attract more funding. Climate-friendly investments can help sustain both the economy and the environment. Almost 20 years ago, the energy sector leveraged investments from private corporations; the water sector can do the same. Restoration and resilience can be translated into financial gains through digitalization. Free riders, especially around cities, must be willing to pay for ecosystem services. Infrastructure projects must be less gray and integrated with green infrastructure.

Main messages

Throughout these sessions, showcases, and seminars, speakers were able to share their perspectives on climate challenges, such as drought and floods, as well as their solutions as they are applied in the LAC region. Unplanned urbanization, environmental degradation, and governance failures are at the heart of these issues. Many panelists emphasized the importance of nature-based solutions and innovation.

Better governance can help resolve the Amazon crisis.
In order to protect and sustain the Amazon Basin, there needs to be more effective transboundary cooperation that enhances governance, raises awareness, builds technical capacity for stakeholders and decision-makers, develops basin planning at the management and investment levels, and mobilizes funding for shared and coordinated projects.

Nature-based solutions are key components of climate change adaptation and mitigation.
Integrated nature-based solutions and green infrastructure can help mitigate the impacts of floods and droughts. By definition, these actions aim to protect, sustain, and restore ecosystems in order to support biodiversity and maintain human well-being. Sludge and effluent treatments have positive impacts beyond cleaning local bodies of water.

All water security initiatives require accurate and quantitative data.
HydroBID, an IDB-led initiative, offers a suite of quantitative models that uses hydrologic and climate data to estimate the water balances, predict flood patterns, and support the design of resilient infrastructure in approximately 300,000 basins. Access to this cutting-edge technology has helped Mexico, Brazil, Uruguay, and Argentina develop more effective water resource planning.

Climate finance is the missing piece of the puzzle.
The water sector must learn from the energy sector to leverage blended funding from the public and private sectors. Innovation and digitalization can help turn environmental water projects into financial gains.

Appendix

Focus on the Americas at World Water Week 2020
August 25-27, 2020 **10:00 – 15:00**

VIRTUAL EVENTS

Focus on the Americas took place on August 25 – 27, 2020 as part of World Water Week's virtual edition: WWWeek at Home. Virtual events were held via Zoom.

Simultaneous interpretation was available into English, Spanish, Portuguese, and French.

Times shown in the program are EST (Washington, D.C. times)

DETAILED PROGRAM

TUE 25	10:00 - 10:45	**Focus on the Americas:** No Amazonia, No Water: Climate change in the rainforest
	11:00 - 11:45	**Focus on the Americas:** In Abundance of Scarcity: Securing water in times of drought
WED 26	11:00 - 11:45	**Showcase:** Tech to Wet: HydroBID digital innovation for water security
	13:00 - 13:45	**Showcase:** Water Funds: Piggy banks for future droughts
	14:00 - 14:45	**Seminar:** "Building back better": Where is my climate finance money? Post-COVID considerations
THU 27	11:00 - 11:45	**Focus on the Americas:** Unlocking Climate and Blended Finance for Resilient Solutions
	13:00 - 13:45	**Focus on the Americas:** Mobilizing the Wheels of Innovation: Private sector action for water

FOCUS ON THE AMERICAS CONVENORS

The event is coordinated by the Inter-American Development Bank through the Water and Sanitation Division (INE/WSA) from the Infrastructure and Energy Sector, in collaboration with: