



# Water and climate in latin america: symposium conclusion

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Published online: 20 August 2018  
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## Symposium conclusion

This Symposium highlights a few of the extensive links between water and climate change, specifically within Latin America. Given the global nature of climate change, every mile you drive and hamburger you eat contributes greenhouse gas emissions that add to global totals and fuel changes in the climate around the world. While only focusing on a sampling of the myriad climate impacts in Latin America, through this Symposium we hope to bring greater awareness to the current and future changes underway in the Region. Numerous climate impacts are manifested through water—sea level rise, glacial melt, and extreme weather events, to name a few. Likewise, water resources will be greatly affected by climate change as temperature and precipitation patterns change and ecosystems shift. Water is key for the majority of economic activities, individual and social well-being, and ecosystem health. For example, given the reliance on subsistence agriculture, climate impacts will likely have dire impacts on food production and security.

Climate impacts in Latin America will not only be felt locally, but across the globe. Latin America provides 16% of global food and agriculture exports, and only 4% of imports—this includes nearly half of the world's coffee exports and 65% of the world's banana exports (Duff and Padila 2015). Overall, even though Latin America consists of only 16% of the global land area, it contains 40% of the world's biodiversity and nearly half of the world's tropical rainforests (IDB 2017). Finally, global markets depend on Latin America's rich supply of fossil fuel and mineral resources—extractive industries that rely on water supplies and compete with agriculture, cities, and hydropower for water.

In this Symposium, we aimed to contribute a range of analyses both for building lessons learned within the Region and for comparison outside the Region. This collection of articles shows that water and climate should not be treated as a separate issues, even though coordinating sectoral policies and processes is challenging. This extends beyond just water and climate to land use, agriculture, health, urban development, industry, and energy. Aside from coordination between sectors, development of salient climate data and the use of that data is also difficult (Lemos 2015). Integrating climate into water decision making involves peoples' perceptions of climate change, beliefs associated with it, and judgements of associated risk.

This collection highlights several questions regarding the governance of water and climate, which we hope will spark future research and debate. Who has the authority to make decisions and prioritize actions? When are those seen as legitimate? What responsibility does the government have at various levels versus communities, individuals, and businesses? A majority of these articles were not comparing specific water or adaptation actions, per se, but through individual cases they highlighted questions of responsibility, authority, and legitimacy. Further, they examined how we can move forward and better prepare for changes in the climate and water resources. Finally, these articles provide examples of the contribution academia can—and we argue needs to—play in preparing for and responding to climate change through interdisciplinary research, collaboration, and teaching.

## References

- Duff A, Padila A (2015) Latin America: agricultural perspectives. Economic Research of Rabobank. Available at: <https://economics.rabobank.com/publications/2015/september/latin-america-agricultural-perspectives/>
- IDB (Inter-American Development Bank) (2017) Biodiversity and ecosystem services program: an overview. Inter-American Development Bank, Washington, DC
- Lemos MC (2015) Usable climate knowledge for adaptive and co-managed water governance. Curr Opin Environ Sustain 12:48–52

For JESS Symposium on "Water and Climate in Latin America"

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