



Safe and Affordable Water in Mexico City

Key areas of Mexico City's water sector

U-M team with Isla Urbana supervisor

GLOBAL IMPACT ARTICLE SERIES

Water is a fundamental human right; however, gaining access to clean water is a challenge for many of the 20 million people who live in Mexico City. Lakes and canals that once surrounded the city have been drained, causing city residents to experience droughts and floods on a regular basis. With aging infrastructure and the constant need to import large amounts of water, new water management policies are necessary.

“Some communities on the periphery [of the city] have little access to clean water,” says Rachel Gutfreund, a University of Michigan (U-M) School of Medicine student. “These communities tend to be of low socioeconomic status and have to buy their water, while those living in the city have free access.”

Rachel is part of a U-M Dow Fellows team that spent a year working to improve water policy in Mexico City. These graduate students used qualitative interviews to document the priorities and visions of various stakeholders within the local water sector. Working closely with their client, Isla Urbana, the team mapped multiple types of water sector projects and drew upon stakeholder input to inform the development of a better water sustainability plan for the mayoral administration.

WATER SCARCITY

Water scarcity in Mexico City has critical consequences for the health, cultural legacy, and economic stability of the region and its residents.

“The city has been experiencing subsidence, or sinking, for the past several hundred years, which has been paired with flooding issues,” says Emily Pfeleider, another member of the U-M Dow team. “Also, the water infrastructure is not able to properly serve the population [of Mexico City], and poor infrastructure can cause pipe leakage and unaffordable water prices.”

The team divided the water sector into eight axes so they could accurately capture the scope of the water crisis in Mexico City.

Key stakeholders then identified which areas they felt needed the most attention.

COMMUNITY-BASED APPROACH

To express the full range of concerns among stakeholders, the team traveled to Mexico City and conducted in-person interviews with 32 different stakeholders, with most interviews conducted in Spanish. Relevant stakeholders were selected to represent different perspectives. The team sought to understand the most significant barriers and potential solutions.



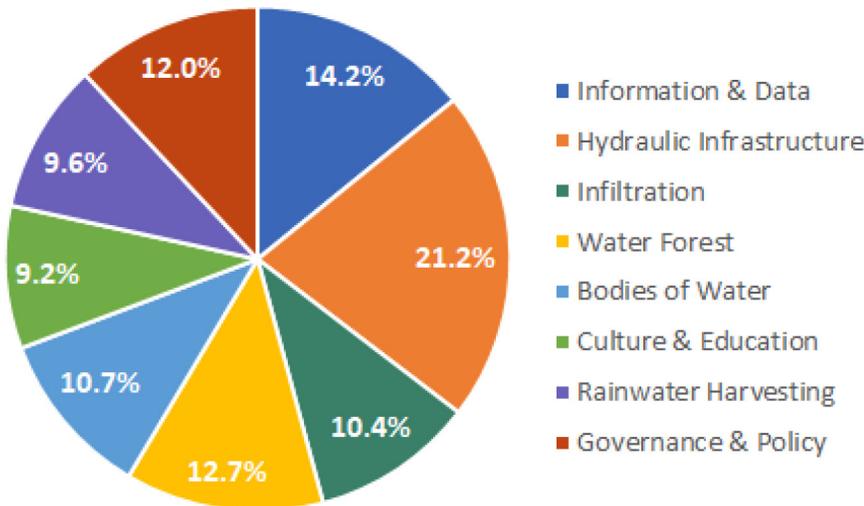
“Two members of our team were in Mexico City for three months over the summer and were the main members conducting the interviews,” says Pfleiderer. “In the first week, we met with our client, and they generated a list of people they thought would be relevant [to interview] and we supplemented this list based on the research we performed.”

“Many people are passionate about the subject and have a lot to say,” adds Gutfreund. “We sought to bring together a lot of experts and give everyone a voice so we could form a comprehensive summary.”

“It was an honor and privilege to meet with the experts that we spoke with,” says Pfleiderer. “We never anticipated that people would be able to give us that amount of time and attention. Isla Urbana did an incredible job facilitating the process.”

RESULTS AND RECOMMENDATIONS

After meeting with stakeholders, the team assembled the results into an allocation chart to show the areas that needed the most attention. The stakeholders cited infrastructure as the most common issue regarding water quality, with governance and policy issues also considered significant. However, the proposed solutions varied among the areas (see allocation chart below). This result confirms the conclusion that water management is complex, with many possible options to address challenges.



Average allocation of 30 points representing the relative importance of each axis clockwise.

- Isla Urbana will use the work performed by the Dow Fellows team to advise the Secretary of Environment in Mexico City on where to allocate resources and how best to address the water crisis.
- This collaborative process will serve as an example for future stakeholder coalitions to address water scarcity and other sustainability issues.

PROJECT TEAM

- Ellen Abrams, Ross School of Business and School for Environment and Sustainability (SEAS)
- Emily Pfleiderer, Gerald R. Ford School of Public Policy and SEAS
- Ernesto Martinez Paz, College of Engineering
- Rachel Gutfreund, School of Medicine

FACULTY ADVISOR

- Dr. Glen Daigger, Civil and Environmental Engineering

CLIENT

- Isla Urbana

READ MORE

- Full Project Report
- Dow Sustainability Fellows Program
- Dow Global Impact Series

This project addresses the following United Nations Sustainable Development Goals.

SUSTAINABLE DEVELOPMENT GOALS

