

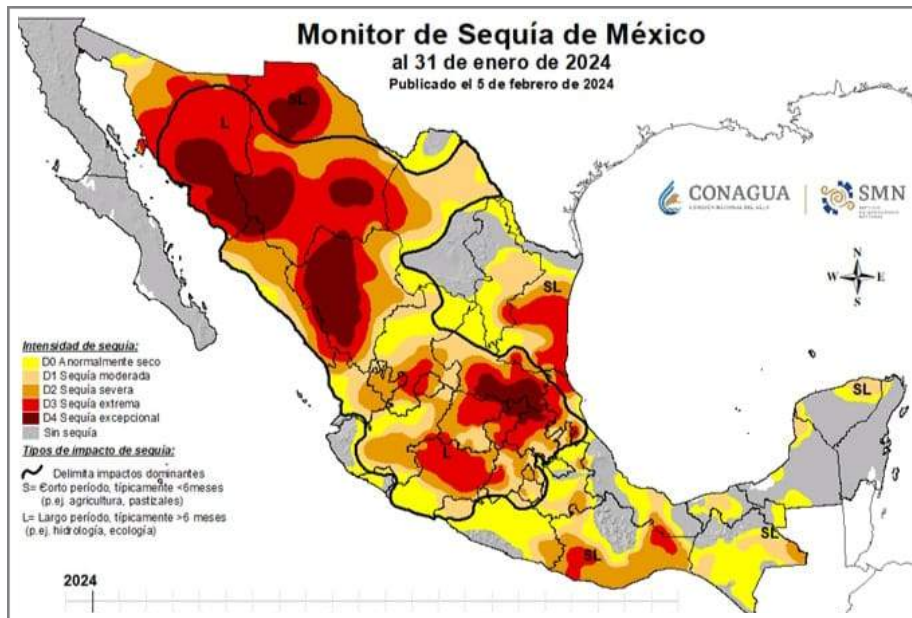
THE WATER CHALLENGE IN A NUTSHELL



Those of us who had the opportunity to participate in the 4th Symposium on Innovation for the Common Good and Sustainable Development were highly satisfied with the speakers and topics discussed. With over 20 presenters covering contemporary issues, the symposium helped us stay current on topics such as sustainability, resilience, planetary boundaries, blockchain, cryptocurrencies, and ESG.

One of the presentations that left a lasting impact on me was José Luis Luege's discourse on water management. In the short and medium term, we face a crucial dilemma: either we ensure adequate water supply to meet basic needs, or we witness a significant increase of water scarcity. Should we continue on our current path, the latter scenario seems inevitable, with profound impacts on various aspects of economic and social life.

We confront a grave issue of water stress in underground aquifers due to excessive extraction surpassing their recharge capacity. Why is it imperative to address this challenge? Because just as valuable as water itself is the time required to execute infrastructure projects, necessitating both political will and substantial economic resources, estimated at over 100 billion pesos in total, according to Engineer José Luis Luege Tamargo.



Now, let's examine the current situation through data:

- 70% of the Earth's surface is covered by water. However, 97% of this water exists in oceans, leaving only 1% as available freshwater, whether surface or groundwater.
- In Mexico, annual rainfall reaches 1.5 meters in states like Veracruz, Tabasco, and Chiapas, while the northern regions experience scarce precipitation.
- In 1950, Mexico's rural population numbered 15 million, contrasting with 11 million urban dwellers. Fast forward to 2020, rural inhabitants increased to approximately 26.5 million, while urban residents soared to 99.5 million.
- The most severe water stress in Mexico is concentrated in the north-central region, characterized by the lowest water availability (31%) and the highest population density (77%), contributing to 87% of the GDP.
- The year 2023 marked Mexico's driest period in recent history.

What measures can be taken to tackle this multifaceted problem?

Transitioning to highly technified agriculture with demand-driven irrigation methods like sprinklers, drip systems, and misting is imperative. Additionally, prioritizing crops with lower water demand and higher added value is crucial. Efforts must be made towards wastewater treatment, leak minimization, sewage treatment, and rainwater harvesting from May to October. Adequate storage facilities for water are also essential.

Forests serve as vital water sources, underscoring the need for their preservation and reinforcement. Restoration of ravines, rehabilitation of water bodies, construction of new dams, and adopting a long-term water management vision are imperative. Development plans must align with the water agenda, projecting towards 2050. As we approach June 2nd, date of elections in Mexico, let's seize the opportunity to make informed choices and exercise our voting rights conscientiously, advancing crucial issues like this with full awareness.