Climate adaptation and resilience: São Paulo's challenge in protecting water resources in favor of water security

March 21, 18h, Virtual Event

Organized by: Democracy and Sustainability Institute (IDS), Parliamentary Mandate of Deputy Marina Helou, Secretary of Environment, Infrastructure and Logistics of the State of São Paulo (SEMIL), São Paulo Legislative Chamber’s Water Defense and Environmental Parliament Front and Water Governance Observatory (OGA).

Background on the event

Monitoring soil use changes is important to ensure water safety within any territory. Current technologies allow following these movements, reducing response time in case of irregularities or changes that can upset water-related natural cycles. São Paulo’s environmental institutions have expertise in controlling and monitoring the soil use, yet needed methodological updates and technologies are required to effectively react to illegal actions. In this way, the objective of this initiative is to enable and operate a top notch deforestation monitoring system in watershed areas of São Paulo’s Macrometropolis. The main expected results are achieving adequate monitoring, a validating warnings tool that automatically sends them to the competent authority, cross-data gathering (property register, area, before and after footage, preexistence of embargoes or fines) and accessible information to the whole society regarding the severity of each case and the adequate solutions through technological tools. It is important to highlight that this set of tools is part of a larger strategy headed by IDS along with São Paulo Legislative Chamber’s Water Defense and Environmental Parliament Front; OGA (Observatório de Governança das Águas - Water Governance Observatory); in order to promote water safety, involving other instruments that allow to address such a complex challenge. This side event of the UN Water Conference was organized to discuss the achievements, challenges and the importance of the conservation of head catchments and combat to deforestation to protect water and promote water security of São Paulo’s Macrometropolis.

Water Action Agenda

The most relevant Sustainable Development Goal to this initiative is SDG 6, since the initiative aims to a greater care and protection of water in watershed regions in order to provide water safety, water
in quantity and quality enough for human supply, besides other activities. It also has as an important goal the promotion of SDG 15, since soil use will be monitored, mainly deforestation, in key-areas (the watersheds). Moreover, two other Sustainable Development Goals are significant. Firstly, SDG 16 since the initiative seeks to strengthen public institutions and promote a proactive approach between civil society and local power, as it’s developed in partnership with São Paulo’s state Legislative and Executive, envisioning a new, more responsive and effective governance to the issues involved in the project. Besides these four Sustainable Development Goals and their interlinkages represented in the challenges of the federative governance in Brazil and the complexity of watershed areas, merging water and soil, deforestation and quality of water; SDG 11, since mitigate negative impacts of squatters in these critical water production regions is also key to the success of this project.

Key Issues discussed
- The audit carried out by SEMIL identified that 52 of the 92 alerts analyzed between May and August 2022, were considered eligible for inspection (56%);
- In previous work carried out by the IDS, the aggregated analysis of all monitoring systems indicates that there is a dynamic of gradual growth, year by year, in areas with vegetation alteration. Between 2020 and 2019 there was an increase in the rate by 125%. And between 2021 and 2020 this growth rate was 39%;
- From the point of view of the municipalities, Cotia had the largest area altered in terms of water source, with 55,210 m², from 2019 to August 2022. The municipality of São Paulo occupies the second position in this ranking;
- Need for the authorities to internalize the tools and technological solutions developed within the scope of the project “Monitoring and generation of deforestation alerts in the head catchments of the São Paulo Macro-Metropolis”;
- From a methodological point of view, SEMIL analyzes each of the alerts and their respective description and classifies them as “appropriate” or “inappropriate” alerts based on technical criteria.

Key recommendations for action
- Expansion of funding for restoring degraded areas in the basin as well as for monitoring deforestation;
- Need for active involvement of water governance instances, such as hydrographic basin committees in encouraging the restoration of degraded areas and monitoring of São Paulo water sources;
- Strengthening of a water security approach that looks beyond engineering works and brings centrality to actions for the conservation of springs and head catchment areas;
- Placing water sources at the center of the water security strategy, providing transparency to these dynamics that take place in the territory;
- Propose assertive public policies that interrupt the degradation process and enable a local development strategy for these areas.