

C40 CITIES

Semarang, Indonesia:

West Semarang Water Supply Project

Model: Public-Private Partnerships

Semarang set up the West Semarang Water Supply Project using a public-private partnership (PPP) to treat dam water and help reduce groundwater extraction. Since 2020, the city has received the Regional Development Planning Award from the national government three times for its work.



THE CHALLENGE

Developed along a river catchment, the city faces frequent flooding, a contaminated water supply, and most seriously, land subsidence as groundwater extraction causes land to sink.



HOW IT WORKS

The PPP was established in 2019, primarily for infrastructural development. The city was the contracting agency, using a Build Operate Transfer (BOT) scheme with a 25 year concession, where the company transfers the water treatment facilities and pipeline networks to the city after project completion.

The project had **strong support** from both the Mayor and the national government, as well as from a national PPP unit.

Operational as of 2021, water from the Jatibarang Dam is treated to supply more than 60,000 households with clean water. The city used this project's infrastructure to address other local needs. For instance, surrounding communities received business development support through training on sustainable tourism, with a particular focus on protecting biodiversity, such as the native monkey population.

The total investment was US\$80 million, of which US\$30 million was private investment. The water system has a capacity of 1,000 litres per second.



Project infrastructure served multiple purposes. In addition to making sure water is affordable to residents, the city created an amphitheatre, built at the dam, which is freely available for residents to use. Given its success in reducing groundwater extraction, the city is in discussions to replicate the project in the east of the city.



LESSONS

Cities should, as much as possible, build commitment from different spheres of government; in this case, the national government is also one of the funding partners. This helped Semarang secure private financing that would cover multiple mayoral terms, giving the private sector confidence that the project would continue throughout these political transitions.