

AQUAPUNCTURE

Catalytic Design for Water Access in Indonesia

STUDIO 12

MONDAY & THURSDAY 3-6PM

The Problem

Water is the world's most valuable resource, yet over 2.2 billion people do not have access to safe drinking water. In Indonesia's rapidly growing peri-urban communities, the water crisis is acute. Drinking water is often commodified and commercialised, becoming out of reach for disadvantaged residents.

For years, the government and NGOs have implemented top-down technocratic solutions to address these challenges. Heavy-handed, expensive engineering solutions have consistently failed to deliver lasting change because they ignore the socio-cultural drivers—the human element—necessary for local stewardship and sustainability.

This studio offers a counter point to the dominant narrative of water systems only as engineered hardware. Water access infrastructure is reimagined as a living network embedded in the local communities. Architectural design is used as a means to catalyse multiple socio-economic benefits and drive long term change for equitable water access, following an acupuncture approach.

The Approach

This research-led design studio is embedded in an ongoing pilot project led by the Informal Cities Lab in the Citarum River Basin. Nature-based solutions are being trialled on the study site in Bandung, to secure potable and non-potable water access for a community of nearly 12,000 residents, offering a unique learning opportunity.

Design proposals will be developed for a network of small-scale water access infrastructure—including public borewells and filtered water stations—following an Urban Acupuncture approach. This is a strategic, decentralised methodology where low-cost, small-size design interventions catalyze transformation on a much larger scale. The design journey will follow three steps:

Siting: Identifying strategic sites for acupunctural interventions, using interpretive mapping techniques.

Setting: Designing a design interventions using locally appropriate materials and construction techniques.

Scaling: Imagining your intervention as a networked infrastructure scaled across multiple communities.

International Field Visit (12-17 Apr)

To ensure your design is culturally, ecologically, and technically informed, the studio includes a mandatory 10-day field visit to West Java, Indonesia. The travel will include visit to completed and ongoing pilot projects on the site and engagement with local architects, historians, industry and NGOs. This unique, immersive experience will build skills in research-led, impact-based practice and international development, ensuring the project