Fecal Contamination in the Coonoor Watershed: An Indigenous Village-Level Exploration of Spatial, Structural, and Cultural Mediators

R. Meena and Emma Eaton, Human Development / CHE Cornell
Supervisors: T. Balachander, Gokul Halan and Neema Kudva

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Abstract

The following report presents the research conducted by the Nilgiris Field Learning Center’s 2017 Water Team. It builds on previous two years of study, which investigated water and waste in the Hubbathalai Panchayat of the Nilgiris. This year’s research moves further down the Coonoor watershed to understand relationships between water and health on an indigenous-village level scale. Fecal coliform was used as a primary means of bridging these two topics. A part of the NFLC water team’s five-year research plan, the investigation elucidates how tribal communities interact with upstream contamination, are affected by village-level contamination, and contribute to downstream contamination. Through a variety of qualitative and quantitative methods, the investigation examines the role that location, infrastructure, and culture play in mediating related interactions with fecal coliform. It then goes on to assess the implications that these factors have on health. Focus groups, mapping exercises, water quality testing, and observations revealed a disconnect between government infrastructure and community adoption. They also highlighted how communities relate to sanitation, village understandings of the links between water and health, and gendered perceptions of illness. The communities studied would benefit from sanitation efforts that created a constructive dialogue between both parties. As it stands, village perceptions and practices interact with government initiatives in a way that is unsustainable. Until an effective and equitable means of behavioral change can be implemented, downstream communities and the villages studied are at risk for increased exposure to fecal contaminants.