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Reflection on CIERP Funding for India Travel

In January 2020, I spent two weeks in Jaipur, India studying biogas production within government-sponsored cow sanctuaries (called *goshalas* in Hindi). I visited two *goshalas* as well as Rajasthan's famous "cow ministry": the Directorate of Gopalan of Rajasthan. After returning to Fletcher, I used my experiences in India to inform my capstone on the generative potential of biogas schemes in Rajasthan. CIERP Funding thus allowed me to complete research that proved vital for my capstone project.



In Jaipur, I began my trip with a visit to Durgapura Goshala, which is maintained by the Rajasthan Gau Sewa Sangh ("Cow Protection Society"). The sanctuary is home to over a hundred indigenous cows and serves as a site of religious significance for its many Hindu patrons. The sanctuary also aims to be economically self-sufficient through the sale of milk, dairy, *gomutra ark* (a traditional form of medicine derived from cow urine), dung, and biogas. As of January 2020, the *goshalas* daily activities are powered by biogas generated from cow dung produced by the sanctuary's cattle. This dung is transformed into a slurry and fed into a biodigester tank, producing the methane necessary to power simple machines. Many of Durgapura Goshala's workers live on-site, and their heating and cooking is powered by the energy generated from dung. Durgapura Goshala also hopes to turn a profit from their production of biogas by selling the gas to a nearby energy company, which will in turn scrub the methane and upgrade it for use by more complex engines.

I also visited Hingonia Goshala, which is Rajasthan's largest cow sanctuary. Over ten thousand cows of all breeds call Hingonia home, and most are rescued from the streets of nearby Jaipur. Hingonia Goshala has three large biodigester tanks that it had hoped to use to generate energy for the entire sanctuary. However, as of January 2020, only one of the tanks was functional, as the other two had been damaged during a storm. This situation is an unfortunately common occurrence within Rajasthan, as only 50 of the 150 *goshalas* equipped with biogas production



technology have operational equipment. This statistic reveals the urgent need for maintenance and upkeep to be incorporated in any biogas production schemes, perhaps through built-in mechanisms for easy access to more loans or microcredit.

Finally, I visited the office of the Directorate of Gopalan in the heart of

Jaipur. The Directorate is the first organization of its kind across India. Founded in 2013, it serves as the center for all cow-related quandaries in the state, including the rescue of stray cattle, the financing of *goshalas*, and indigenous breed conservation. Because the cow is such a political animal in India, it remains the center of several policy debates surrounding religious freedom, economic growth, and public health. Rajasthan is the first state government in India to consolidate all of these conversations into a single institution, and assign a cabinet-level minister to oversee all development planning related to cows.

Thanks to CIERP, I was able to use my time in India to inform my capstone, which I submitted in April 2020. Titled “Prioritizing Bovine Materiality Over the Politics of Exclusion: Making Space for Economically, Environmentally, and Socially Transformative Schemes Within Rajasthan’s Directorate of Gopalan,” my paper puts forth several suggestions towards creating a more sustainable and socially equitable society through the influence of the Directorate of Gopalan. I am very grateful that CIERP allowed me to investigate this topic further and gain on-the-ground experience in Rajasthan.

