



Biogas in Nepal: Rethinking Waste and Energy

Shaunna Barnhart

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Wednesday, October 8, 2014

11:45 a.m.—12:45 p.m.

Anthropology 206

Light lunch provided



Shaunna Barnhart earned her PhD in Geography from Penn State University. Her research focuses on issues of energy, waste, development, governance, and sustainability across scale with ongoing research on the use of biogas (methane derived from decomposing organic matter) as an energy source and waste management strategy in Nepal. Her work has been published in *The Professional Geographer*, *The Journal of Sustainability Education*, and has appeared as a chapter in the edited volume *Forests and People: Property, Governance, and Human Rights*. Her dissertation research, based on 17 months of fieldwork in Nepal, investigated the intersection of household level biogas as an energy source, a forest conservation method, a development tool, and a source of potential revenue through international carbon credit trading.



Talk Abstract: Dr. Barnhart's talk will provide an overview of biogas technology as a development and waste management strategy in Nepal. With over 300,000 household biogas units built since 1992, Nepal's public-private partnership biogas sector continues to grow. Biogas is used in rural farming households to reduce reliance on firewood for cooking, thus contributing to improving health through improving indoor air quality while conserving forest resources and reducing labor expended for securing primary energy needs. Biogas is a technology that reduces greenhouse gas emissions and as a result, the government or an appointed organization can aggregate those emission reductions for trade in international carbon markets. Biogas is also used in Nepal at institutional

levels, such as schools and monasteries, has been employed to manage hospital waste, and is currently being promoted for business waste management and energy generation. Dr. Barnhart's talk will focus on the strengths and shortcomings of the biogas sector in Nepal and its deployment as a clean development mechanism with consideration given to the governance of changing energy strategies and the role that individual household decisions play in creating a global commodity – the carbon credit.