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Carol Brown and **Rachel R Roe-Dale*** (rroedale@skidmore.edu), Skidmore College, Math and Computer Science Dept., 815 North Broadway, Saratoga Springs, NY 12866, and **Mark Staton**. *Modeling the Diffusion of Manual Irrigation Pumps*. Preliminary report.

Modeling the diffusion of products and innovations is a rich field of research that is of interest to marketers, forecasters, economists, and business managers. The Bass model, an ordinary differential equation which describes product adoption over time, has been extensively studied and used to model sales data for the diffusion of many products. In this study we use the Bass model to analyze the diffusion of manual irrigation pumps in populations below the poverty line in Bangladesh, Tanzania, and Kenya. We also make conclusions regarding the values of the parameters estimated for the Bass model and the process of product adoption in economies at the base of the economic pyramid. (Received September 16, 2013)