1086-VL-2895 Csilla Szabo\* (csilla.szabo@usma.edu). Resource Networks' Influence on the Social Network and the Effectiveness of Public Policy. Preliminary report.

Water and energy sustainability continues to be a challenge faced across the world. With continued urbanization and changes in the Earth's climate, these challenges will likely multiply in the decades to come. The resource networks of energy and water are directly linked and vital to the success of a country. This success is not limited to economic advancements, but also the well being of its people as measured by the social issues associated with education, technology, and health care, to name just a few. Public policy enacted by local and national governments drives many of these developments, but non-governmental organizations (NGOs) and behaviors of individuals and communities also play a crucial role in resource utilization and distribution. The complexity of this network is a challenge for governments of developing nations. Here we model the existing flow networks of energy and water in a developing country along with the social and government networks that influence and enact public policy and map the dynamics of the social, political and economic networks to measure the extent to which they react or adapt to new technologies and renewable energy. (Received September 26, 2012)