

Power Instability in Rural Zambia, Case Macha

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Abstract

This paper provides insights on the nature of electricity supply in the rural village Macha, Zambia. It reports on case study research. Use of Information and Communication Technologies and access to e-services are constrained by the availability of electricity. In Zambia's rural areas, 3.5% of households have access to electricity supply. This paper shows such electricity supply can be erratic. When supply is available, it follows a diurnal pattern. The electricity supply varies considerably, including voltage dips and brown outs. It can cause equipment to enter into unstable states, to fail or to damage. Qualitative engineering aspects interact also with social factors, especially in rural Africa. Interventions must be sensitive to the complex array of challenges for people to be able to appropriate the benefits of ICT and e-services.