



DataFirst

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Household Energy Data: Workshop 28 January 2016

University of Cape Town, Board Room, School of Economics building

Background

The Economic and Social Research Council (ESRC) of the UK and South Africa's National Research Foundation (NRF) issued a call last year for International Centre Partnerships. The UK Data Archive and DataFirst put in a bid which was successful. Our proposal envisaged a collaborative research and data compilation project in the area of household energy data. A short description of the project is available on the UK Data Service website [here](#). A big focus of the project is to deal with the challenges of 'big' and complex data. This includes:

- Confidentiality, legal and ethical issues: This is particularly important in relation to administrative data, but applies also to local level census and Demographic Surveillance Site data.
- Size and complexity: Municipal datasets are of a size that social scientists in South Africa are not used to analyse; combining data from different data sources raises analysis issues of a different type.
- Data quality - Missing data, data errors and provenance: How do you identify errors? How do you deal with them?

The focus of this workshop is to kick start this process in South Africa. The **aim** is to identify potential data sources and research projects that can feature as demonstrators.

Draft programme

8.45 – 9.00 **Introduction to the workshop:** Aims and objectives
M. Wittenberg

9.00 – 10.30 **Municipal electricity data**
Big municipalities collect consumption data. Some of this information (particularly from Cape Town) has already been used to analyse patterns of consumption among poor and rich households. Some questions for future work: there are data and organisational challenges (particularly around confidentiality) in working with administrative data – how can we address these? What other data can be matched to the municipal data to give us a finer grained picture of local electricity access and use? What are the developmental impacts of improving electricity access?
Inputs from: G. Smith & K McDermott, M. Visser

10.30 – 11.00 **Tea**

11.00 – 12.30 **Rural electrification**
The electrification of South Africa's rural areas has significantly increased access since the end of Apartheid. What, if anything, has been the impact of this? The

Wits/MRC Rural Public Health and Health Transitions Research Unit (Agincourt) has been monitoring demographic and health changes in the Agincourt area since 1992. Since 2000 they have also monitored changes in infrastructure and household assets as well as labour market outcomes. Some questions for future work: Can we see the impact of the electricity roll-outs on household outcomes in this area? What additional data (e.g. on timing of the roll-outs, consumption information) can we bring to bear?

Inputs from: M. Collinson, T. Dinkelman (via Skype)

12.30 – 13.30 **Lunch**

13.30 – 14.30 **The ESRC/NRF partnership project**

Outline of work being done in the UK; household energy data and research questions; managing and making big data accessible

Inputs from: L. Corti, N. Cunningham, S. Elam

14.30 – 15.30 **Local and national data**

The two projects discussed in the morning are micro-studies looking at two very different contexts. Much of the national policy discussion occurs on the basis of information in national level datasets (the census, information from the General Household Surveys, Eskom data). Some questions: How informative are national level datasets about local conditions? Can local information be used to improve the quality of national data? Can national data be used to improve our understanding of local conditions?

Inputs from: M. Wittenberg, T. Harris

15.30 – 16.00 **Next steps: General discussion**

16.00 - **Cocktail reception**

List of Participants:

UK Data Archive: Louise Corti, Nathan Cunningham

UCL Energy Institute/RCUK Centre for Energy Epidemiology: Simon Elam

DataFirst: Martin Wittenberg, Lynn Woolfrey, Takwanisa Machededze, Alex Montgomery, Tom Harris

Energy Research Centre: Jiska De Groot, Tara Caetano, Alison Hughes, Louise Tait, Harald Winkler, Wiebke Toussaint

African Climate and Development Initiative: Martine Visser, Kerri Brick, Samantha de Martino

School of Economics/JPAL: Grant Smith, Kathryn McDermott

MRC/Wits University Rural Public Health and Health Transitions Research Unit (Agincourt): Mark Collinson

Wits University, Animal Plant and Environmental Sciences: Wayne Twine

Dartmouth University, Economics: Taryn Dinkelman (by Skype)

Statistics South Africa: Niel Roux (or nominee)