

Curriculum Vitae – Cathy Garlick

Full Name	Catherine Ann Garlick						
Nationality	British						
Present Position	Senior Data Management Consultant, Statistical Services Centre (SSC), since 1996						
Work Address	Statistical Services Centre, Harry Pitt Building, The University of Reading, Whiteknights Road, P.O. Box 240, Reading RG6 6FN, UK						
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Previous Employment	<table><tr><td>1991 – 1996</td><td>Data Management Consultant, Statistical Services Centre, University of Reading</td></tr><tr><td>1983 - 1989</td><td>Systems Programmer, Department of Computer Science, University of Reading</td></tr><tr><td>1980 - 1983</td><td>Computer Programmer, Department of Applied Statistics, University of Reading</td></tr></table>	1991 – 1996	Data Management Consultant, Statistical Services Centre, University of Reading	1983 - 1989	Systems Programmer, Department of Computer Science, University of Reading	1980 - 1983	Computer Programmer, Department of Applied Statistics, University of Reading
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1983 - 1989	Systems Programmer, Department of Computer Science, University of Reading						
1980 - 1983	Computer Programmer, Department of Applied Statistics, University of Reading						
Qualifications	B.Sc. (Computing and Mathematics), Queen Mary College, University of London, 1980						
Languages	English – mother tongue						

Pen portrait

Cathy is a senior member of the Statistical Services Centre team, providing data management support for training and consultancy work.

Cathy's main areas of interest are in data management and database applications, and she often takes a lead role in the data management aspects of SSC consultancies. She is particularly concerned about data being well-structured and organised, with close attention to data quality. She is co-author of several Good Practice Guidelines involving data management, including *The Role of a Database Package for Research Projects*, and in a similar capacity has worked with the World Agroforestry Centre in Nairobi, Kenya to help develop their data management training materials.

Between 2001 and 2007 Cathy was the key data management resource person for "Young Lives", an international study on child poverty, involving cohorts of 3000 children in Vietnam, Peru, India and Ethiopia followed over a 15 year period. The work included developing a data management strategy for the project and training local teams on the use of database management systems. Cathy was instrumental in preparing the first round of quantitative data for submission to the UK Data Archive. She remains engaged with the project as a Data Advisor. Cathy has also been responsible for the design of the databases that were at the centre of the Monitoring and Evaluation Programme of the Starter Pack Project in Malawi, involving the distribution of packs of seed and fertiliser to all farmers.

Cathy has extensive experience with MS Access, having used it to write the SSC's administrative databases and also numerous consultancies and projects including Young Lives. She is able to pass on some of her expertise when she teaches on the Centre's *MS-Access® for Data Management - a Hands-on Approach* short course. She is also a contributor to other courses involving data management, including ones for postgraduate research students at the University of Reading.

Using Camtasia, a software package for producing video demonstrations, Cathy has developed a series of demonstrations for using CS-Pro which take the user through the entire process of creating the data entry system, entering the data and preparing it for analysis. She has also

produced video demonstrations on using Dataverse and Dropbox. These are all available on the SSC YouTube channel at www.youtube.com/user/SSCbroadcast.

More recently Cathy has been leading the SSC team in a contract with GAIN (**Global Alliance for Improved Nutrition**) to provide data management and statistical support for end-of-project surveys into iodine deficiency and iodised salt. The work has involved preparing data entry systems for use on Android smart phones, training field staff in the use of the data entry systems and real-time monitoring of data collection.

Consultancy Experience

- Providing data management and statistical support for **GAIN** end-of-project surveys into iodine deficiency. This work is on-going and so far has included:
 - ⇒ Developing ODK (Open Data Kit) systems for mobile data collection;
 - ⇒ Checking and substantially correcting an Access database for data entry from paper questionnaires;
 - ⇒ Real-time monitoring of data collection;
 - ⇒ Developing survey questionnaires;
 - ⇒ Producing detailed training materials for field staff;
 - ⇒ Delivering training on the use of the mobile devices for data collection;
 - ⇒ Transfer of the data to SPSS;
 - ⇒ Producing summary data reports using SPSS.
- Delivering training of trainers sessions for **Aga Khan Foundation** based on the Survey Training Pack and Facilitators' Guide (2014)
- Developing a Survey Training Pack for **Aga Khan Foundation** together with a "Facilitators' Guide" (2013-2014)
- Designing CSPro data entry systems for **Aga Khan Foundation** surveys in Tanzania (2013 & 2014).
- Work for the **CCAFS** (Climate Change Agriculture & Food Security) programme (2011 onwards) including:
 - ⇒ Creating CS-Pro data entry systems for Baseline Household Surveys;
 - ⇒ Developing data checking procedures and guides for CS-Pro and SPSS;
 - ⇒ Merging baseline survey data across sites, including recoding;
 - ⇒ Setting up a Dataverse archive for the Baseline Household data and documentation;
 - ⇒ Major contributor to the development of a *Data Management Support Pack*.
- Contributor to training materials (**2010**) for *Data Handling* module of an e-learning course for RUFORUM (Regional Universities Forum)
- Advisor to trainers on the *Data Management* module of the RUFORUM MSc (**2010**).
- A member of the SSC team working on a project funded by the **McKnight Foundation (2009 onwards)** providing Research Methods support to CCRP (Collaborative Crop Research Programme) projects in West, East and Southern Africa and in South America. Contributions to the work include:
 - ⇒ Development of training materials for a **Data Flow** course and delivery of the first **Data Flow** course in Egerton, Kenya (Feb. 2010);
 - ⇒ Ongoing development and organisation of a Resource Pack for CCRP projects;
 - ⇒ Development of a series of video demonstrations on using CS-Pro;
 - ⇒ Development of a sophisticated project monitoring database (SYMON) for CCRP projects written in MS-Access (2011 – 2012).

- Contributor to training materials (**2009**) for a distance learning Data Management course for the **Earthquake Reconstruction & Rehabilitation Authority (ERRA)**, Pakistan. The course includes general data management issues and the use of CS-Pro for data entry.
- Author of two booklets (2009) for the **Department for International Development (DFID)** funded and **NR International** managed *Research Into Use (RIU)* programme. The booklets are entitled *Competent Data Management – a key component – Part I – Elements of a Good Data Entry System* and *Part II – Illustrating the data entry application using CS-Pro*
- Work for Scottish and Southern Electricity (SSE) (**2009 & 2010**) manipulating and producing error reports on large datasets (millions of records) of meter readings.
- Data manipulations and management for a consultancy with Health Professionals Council (HPC) working on their data for continuing professional development (CPD) – (**2009**).
- Key member of the team (**2008**) providing statistical support to the Organisation for **Economic Co-operation and Development** (OECD) in their work under the **PARIS21** programme. This includes a substantial contribution to the first two chapters of the Survey Quality Assessment Framework (SQAF) document.
- Development of a substantially complex database in Access (**2007/2008**) for handling data from a large survey in India, of a **Unilever** funded *Indian Hand Washing Study* concerned with relating hand-washing to levels of disease incidence in urban poor households, having 1-2 children aged around 5 years, in slum areas of Mumbai (**India**). The work involved writing a comprehensive data-entry manual and training of data entry staff, together with the development of a separate database manual detailing tables, forms and reports in the database and how Epi-Info can be used to do double data entry comparisons. Later work included writing substantial programs in VBA to manipulate and extract the data ready for analysis. Two visits were undertaken to India in association with this work.
- Designer of databases (**2008**) for use in the *CHAMPSEA (Child Health and Migrant Parents in South East Asia)* project based at **St. Andrews University**.
- Data management and analysis for an annual survey (**2006 onwards**) among members of the **Incorporated Society of Musicians**. This work involved preparing questionnaires, developing the database for data entry and management, and analysis of the results. Since 2009 the survey has been online using Survey Monkey software.
- Data Manager for the **Department For International Development (DFID)**-funded research project “Young Lives” (**2001-2007**), which is a longitudinal study with a cohort of 2000 children born in the year 2000, and another 1000 8-year olds in the same year, in each of India, Peru, Ethiopia and Vietnam. Overall responsibility included providing support and training to the four country teams as well as managing the datasets centrally. The work also included writing the databases for the first two rounds of data collection and submitting the data from the first round to the UK public data archive.

⇒ Presentation of data management guidelines and database demonstration at a “Young Lives” workshop in Johannesburg, South Africa during November 2001.

⇒ Data management support visit to the “Young Lives” India team in February 2003 leading to the development of an “Append” function for merging the databases.

⇒ Data management training during a “Young Lives” workshop in Hyderabad, India during February 2006.

The project was first set up through an academic consortium including the London School for Hygiene and Tropical Medicine (LSHTM), the South Bank University and Reading University, working over the first five years with advocacy partners “Save the Children”. Current work (**2008 onwards**) involves being Data Advisor to the project which is now led by Oxford University’s Department of International Development. Recent work for the project (**Sep – Dec 2011**) includes developing Access databases for the Schools surveys in Vietnam and Peru.

- Data management and analysis work for two surveys run by the **Police Federation of England and Wales**. The surveys were on “Working life balance” (**2003**) and on “Training and Continuing Professional Development” (**2006**) among Inspectors and Chief Inspectors.

- Author of preliminary documentation for "Data Publishing" – an extension to the "Logbook" toolkit. This resulted from a visit to Kenya in November **2006** to work with data managers at the **World Agro-forestry Centre**.
- Work with the Banana Research Programme in Uganda during February **2004** on the use of Logbook for their projects led to the development of the "Logbook Users' Manual" and "Logbook Data Managers' Guide".
- Re-designing (**2004**) of the **Malawi** Targeted Inputs Programme (TIP) Farm-families database so as to make it more flexible. This work was undertaken for the **TIP Logistics Unit** in Malawi and paid for by the UK Department for International Development (**DFID**).
- Author of detailed documentation for "The Logbook" data management toolkit developed by Peter Muraya at the **World Agro-forestry Centre**. Discussions with Peter in Kenya during July **2003** lead to the production of manuals for the "Logbook Database" and the "Logbook Assistant".
- Designer of data entry and management systems (**2001-2003**) for the **DFID**-funded *TIP (Targeted Inputs Programme) monitoring and evaluation surveys* in Malawi.
- Preparation of training materials for a course on "Research Data Management" in collaboration with the **World Agroforestry Centre** in Kenya (**2002**).
- Adviser (in **2000**) on the use of SPSS for data management for researchers on the **DFID** funded project *Use and Management of Donkey Societies* in Peri-urban Areas of Ethiopia
- Lead contributor (**1998**) to the preparation of a paper on *Data Management Guidelines for Landfill Monitoring Work*, an output from the **EPSRC**-funded research project under the **Waste and Pollution Management Programme**.

Teaching Experience

- Course developer and trainer for a 10-day training course on CSPro for Data Management for staff from **BITC (Botswana Investment and Trade Centre) (2015)**; this training included a session covering the recent Android version of CSEntry and synchronisation with Dropbox.
- Course developer and trainer for a 7-day training course on CSPro for Data Management for the **Zambia Central Statistical Office (2014)**
- Content Expert for a 5-week e-learning course on using CSPro for Data Management.
- A 1-day training course (**2013**) on **Taking Excel Further – Macros for Data Management** for **Health & Safety Executive**.
- Course developer and trainer (**2012**) for a 5-day Microsoft Access course for the **Barbados Statistical Services** as part of a project funded by **Oxford Policy Management (OPM)**
- Course developer and trainer (**2011**) for a bespoke 5-day course on CS-Pro for staff from BEDIA (**Botswana Export Development Investment Authority**).
- Course developer and trainer (**2010**) on a week-long course on *Data Flow* for McKnight funded CCRP Projects in East Africa. The course was run at Egerton University in Kenya.
- Course developer and trainer (**2007 onwards**) on an annual course on *Research Data Management*, later called *Quality Data for Good Research*, for postgraduate research students at the **University of Reading** under the Graduate Skills Development Programme, funded by Robert's money.
- Director and trainer on **SSC's regularly advertised** 3-day intensive course on *Microsoft Access for Data Management: A Hands-on Approach*. This has been **on-going since 2000**.
- Courses on *Information Management (2001, 2002)* and *Survey Data Management (2003, 2004)* for second year undergraduate students at the **University of Reading**.
- Trainer on the 1-week course (**2004**) on *Design of data entry forms and databases in MS-Access* in **Malawi** for the Ministry of Agriculture, Targeted Inputs Programme Logistics Team

and NGOs including CARE International and Concern Universal. This work was funded by the **UK Department for International Development (DFID)**.

- A 3-day training course (**2000**) on *Scientific Data Management using MS-Access* for **Public Health Laboratory Services**, London.
- Course developer and trainer (**1995**) on a 2-week MS-Access course for **Cashew Research Project** in Mtwara, **Tanzania**.

Publications

Harpham, T., De Silva, M., Jones, N., **Garlick, C.** (2006). Maternal social capital and child wellbeing in comparative perspective. *Young Lives Working Paper No. 31*. Available at http://www.younglives.org.uk/publications/WP?b_start:int=60

Garlick, C.A., Stern, R.D., Muraya, P. (2004). Data Management Issues and Problems. In: Stern, R.D., Coe, R., Allan, E.F. and Dale, I.C. (eds), *Statistical Good Practice for Natural Resources Research*. CAB International, Wallingford, UK, 41-64.

Garlick, C.A., Stern, R.D. (2004). Use of Spreadsheet Packages. In: Stern, R.D., Coe, R., Allan, E.F. and Dale, I.C. (eds), *Statistical Good Practice for Natural Resources Research*. CAB International, Wallingford, UK, 41-64.

Garlick, C.A. (2004). The Role of a Database Package. In: Stern, R.D., Coe, R., Allan, E.F. and Dale, I.C. (eds), *Statistical Good Practice for Natural Resources Research*. CAB International, Wallingford, UK, 41-64.

Muraya, P., **Garlick, C.A.**, Coe, R. (2004). Developing a Data Management Strategy. In: Stern, R.D., Coe, R., Allan, E.F. and Dale, I.C. (eds), *Statistical Good Practice for Natural Resources Research*. CAB International, Wallingford, UK, 41-64.

Muraya P., **Garlick C.** and Coe R. (2002). *Research Data Management*. Published by World Agroforestry Centre, Kenya and available at <http://worldagroforestry.org/research-methods/sites/default/files/Research%20Data%20Management%20Manual.pdf>

Garlick, S., Barahona, C.E. and **Leidi, A.A.** (2000) Data Management Guidelines for Landfill Monitoring Work. Output from the EPSRC-funded Waste and Pollution Management Project.

Wilson, I.M., Leidi, A., **Garlick, C.** Abeyasekera, S. (1999). Management and Statistical Analysis of Landfill Monitoring Data. Sardinia 99, Seventh International Waste Management and Landfill Symposium. In Christensen T, Cossu R, Stegman R (Ed) Proceedings Volume IV: Environmental Impact, Aftercare and Remediation of Landfills. pp 315-322.

Work Experience pre-1990

1983-1989 at the Department of Computer Science, Reading University

From March 1983 until January 1989 Cathy was a Systems Programmer at the Department of Computer Science where she was responsible for the day-to-day management of the departmental UNIX systems. Her responsibilities included providing advice to both students and staff on computing issues, providing relevant documentation, supervising practical classes, performing regular backups on the system, etc. In addition, Cathy was Departmental Safety Officer during this time.

1980-1983 at the Department of Applied Statistics, Reading University

During this time Cathy worked as a programmer on an ODA funded project for the analysis of tropical meteorological data. She worked in Algol 68 and Fortran developing a suite of programs to assist in the analysis of rainfall patterns and other related climatic variables.