

# Research Environment Enhancement

A key, but often neglected, area of research is the management and organisation of data. With well managed data, statistical analysis can show researchers whether a different cropping technique offers robust benefits to farmers. Comparisons with results from previous years can also be made. For some years now, Uganda's National Agricultural Research Organisation (NARO) has expressed interest in building its data management capacity and in 2003 a clear opportunity, working with the Ugandan National Banana Research Programme (NBRP) on data from CPP-funded banana projects, was presented. The ensuing project (R8301) developed an agreed data management policy for NBRP which gives scientists an organised structure to manage research more effectively, emphasising best practice approaches to time management, conventions on co-authorship, and data security and ownership. It provided on-the-job training for research staff, a workshop, specialised training for two key data managers in NBRP, and also set high standards for documenting research protocols and metadata, and for timely production of properly analysed outputs. A manual, *Guidelines and Procedures for Effective Data Management*, was produced which has been endorsed by the Director General of NARO and distributed to all scientific staff.

Project R8301 was so successful that NARO's Director General requested a follow-up project (R8410) – for an assessment of needs both in capacity building for scientific staff and in recruiting or developing statistics and data management specialists. Recommendations from R8410 will provide longer-term capacity-building plans for the whole NARO system. This is timely because NARO is currently completing a restructuring process to ensure even 'upstream' agricultural research will focus on the needs of the rural poor, and will reach them through 'downstream' zonal institutes whose mandate includes consultation, participation and outreach to ensure beneficiaries can gain effective access to relevant technologies. Achieving this entails formulating people-centred research and dissemination activities, and providing a solid, defensible evidence base for policy actions. The much increased emphasis on consortium-based interdisciplinary working demands improved capacity to organise and make use of data, and transmit information and insights efficiently.

Developing a framework for a 'culture' of well-organised data management and good statistical practice is an investment in the strengthening of NARO to fulfil their



*Project team consulting with technicians at Forest Resources Research Institute (upper) coffee Research Institute (lower)*

function of working towards the goal of a sustained contribution to rural poverty alleviation through improved food security and livelihoods. The protocols and methods developed and the lessons learnt during this project are likely to be of great benefit to strengthen other government research institutes across the continent.



*Technician recording data on coffee wilt study*

**R8301:** Archiving data from integrated pest and disease management projects within the Uganda Banana Research Programme

**Contact:** Savitri Abeyasekera, Reading University, UK