## RES-224-25-0037, Dr N Boatman, Central Science Laboratory 01 Sep 04 – 31 May 05

## Data Resources for Rural Sustainability Research: Realising their Combined Potential

This project explored generic and interdisciplinary issues of data management and integration relevant to the aims of the RELU programme, and aimed to provide a wider perspective on the policy and organisation of rural economy and land use data in the UK. Activities included a questionnaire survey of the RELU research community; targeted consultation with specialists; and hosting a workshop on data integration.

The survey indicated that problems in gaining access to data are widespread and commonly relate to cost and/or confidentiality. Environmental datasets (e.g. land use/cover) are currently widely used, whilst socio-economic datasets (e.g. waste, recreation) are likely to be more so in the future. Interdisciplinary working places particular demands on data availability and use; information on the existence of datasets, as well as documentation and metadata are generally organised by discipline. Once identified, datasets from different disciplines frequently use different scales or frameworks and require integration prior to joint analyses. Language is a major barrier to interdisciplinary working, particularly between social and natural scientists. Availability of tools for data integration is less of a problem, but methodologies and implications of integrating different datasets are often not well understood. Recommendations on the way forward include: data management for interdisciplinary research should be adequately resourced, and be considered before projects begin; stakeholder engagement is essential; as well as service provision and training; and effective enforcement.

This project has contributed particularly to the capacity building objective of the RELU programme: "To enhance capabilities for interdisciplinary research on rural issues, between social, natural and biological sciences", by providing insight into issues concerning data management and integration, indicating the needs of researchers with regard to data access and support, and providing pointers for the Data Support Service (DSS) to assist in the delivery of their own objectives of implementing the Programme's Data Management Policy. The RELU DSS has shown considerable interest in applying the results of this scoping study in the development of their service to RELU award holders.