

# A joint Research Councils Programme co-sponsored by Defra and SEERAD



# Data resources for rural sustainability research: realising their combined potential

http://reludata.csl.gov.uk

A RELU Data Management Scoping Study

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#### Questionnaire

#### Response:

- 17% responded (114 of 646 sent)
- Non-respondents contacted, 60% 'not relevant', others mainly 'lack of time' (N=150)

#### Origin of respondents:

University/College	68%
Government Research Institute	14%
Charity/not-for profit institution	9%
Other	5%
Research Council Institute	4%

### Research Interests

Environment	43%
Rural Development	31%
Farming and Food	27%
Economics	11%
Other	32%

# Research Programme Funding Body

(26 past and present RCUK programmes were specified)

11%
29%
17%
13%
8%
68%
7%

#### **Data Access**

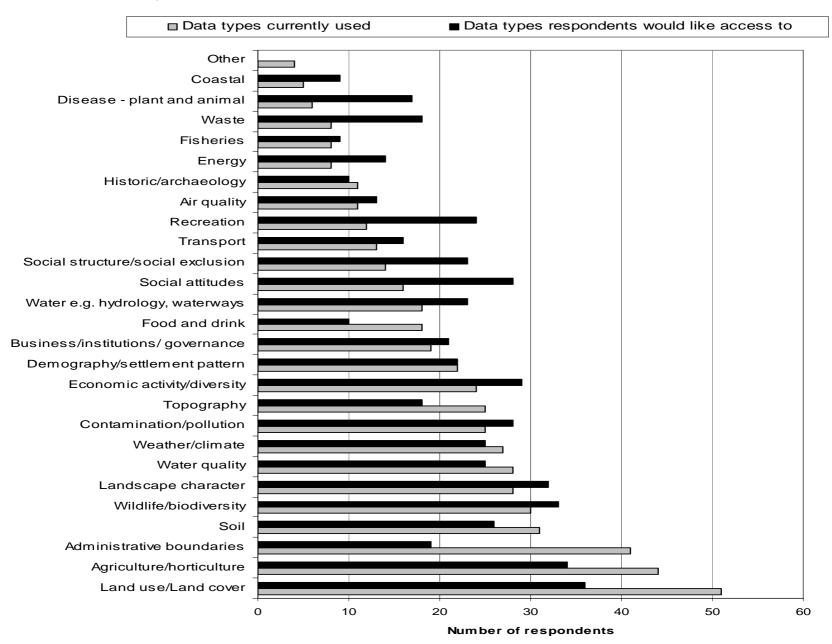
75% required access to external datasets

	Discipline			Instit		
	Social scientists	Environ. scientists	Econom- ists	Govern- ment	Education	AII
N	26	63	22	16	79	114
% Yes	69	78	68	88	70	75
% No	27	17	27	6	25	22
% Do not know	4	5	5	6	5	4

### Data access (types of data)

- The most frequent data types accessed were:
  - land use/cover
  - agriculture/horticulture
  - administrative boundaries.
- There was an apparent difference between data types currently used and future needs, e.g.
  - An increased future need to access datasets on: social attitudes, social structure/social exclusion, recreation, energy and waste

#### Data access (types of data)



### Datasets and access arrangements

- Most commonly accessed datasets:
  - Digimap (21%)
  - Countryside Survey (20%)
  - Population Census (15%)
  - Agricultural Census (15%)
- Access arrangements for commonly used datasets:
  - 11 free access
  - 6 licence (Digimap, Soil)
  - 4 access rights
  - 2 self-owned

# How respondents discovered the datasets they used in their research.

Method of discovery	N	%
Colleagues	69	65.7
Internet: owning organisation website	55	52.4
Internet: data portal	40	38.1
Library	31	29.5
Catalogue	10	9.5
Other	6	5.7

#### Difficulties with access

	Discipline			Instit	ution	
	Social scientists	Environ. scientists	Econom- ists	Government	Education	All
N	26	66	22	16	78	114
%Yes	23	41	41	63	31	38
%No	50	44	55	38	56	49
%Do not know or N/A	23	11	5	0	13	13

#### Nature of difficulties with access

	Current (n = 80)	Anticipated (n = 86)
Cost	44%	43%
Confidentiality	21%	26%
Ownership issues	17%	19%
Expertise/data structure	12%	13%
Other	5%	

#### Current difficulties:

- Agricultural Census
  - confidentiality 4
  - expertise/data structure 3
  - cost 2
- NSRI Soils and NATMAP
  - cost 8
  - expertise/data structure 1

#### Anticipated difficulties:

- Soil
  - cost 6
  - availability 1
- Schemes (uptake)
  - confidentiality 5

### Data integration

•25% currently integrate data or use integrated datasets

	Discipline			Institu		
	Social scientists	Environmental scientists	Economists	Government	Education	All
N	26	66	22	16	78	114
%Yes	12	33	14	31	21	25
%No	81	42	64	50	62	57
%Do not know	4	20	23	19	18	18

# Types of data integrated (from examples given):

	Current (n = 43)	Future (n = 37)
Environmental/Environmental	64%	72%
Environmental/Socio-Economic	29%	12%
Socio-Economic/Socio-Economic	7%	16%

• Most integration was into landscape units e.g. km<sup>2</sup>, field (67%) rather than a political units e.g.county, output area (29%)

# Tools for data management and integration

	Discipline			Institu	ution	
	Social scientists	Environmental scientists	Economists	Government	Education	All
N	26	66	22	16	78	113
% Spreadsheets	73	77	64	69	74	75
% Mapping/GIS	31	53	59	44	50	53
% Statistical software	23	39	36	50	36	50
% Database software	19	32	0	44	21	36
% Graphical	42	61	32	63	47	24
% CIS	12	9	9	19	9	15
% Other or N/A	23	12	14	25	14	10

# **Further work**

- Consultation
  - Social scientists
  - GIS/statisticians
  - Data managers
  - Data providers
  - Computer scientists

- Social scientists
  - What were the difficulties with the questionnaire?
  - Explore data integration issues
  - Explore QA, archiving and DM issues

#### GIS / Statisticians

- Methods used for data integration
- 3 most important issues
- Some preliminary results:
  - Methods: common framework e.g OS mastermap, LCM2000
  - Issues: scale, licensing and availability of data, quality, availability of metadata, how to map qualitative data,

#### Data managers

- What worked and what didn't?
- Explore data interchange/sharing/communication between researchers
- Explore archiving

#### Some preliminary results:

- Personal approach
- Timeliness
- Enforcement
- Resources

#### Data providers

- Resources
- Problems
- Technological developments and trends
- Some preliminary results:
  - Resource demanding
  - Internet
  - Quality issues

- Computer scientists
  - New technologies
  - Breadth of access
- Some preliminary results:
  - Quantity of data
  - Grid technology
  - E-social science
  - Scanners

# **Further work**

Workshop on data integration

19 May, King's Manor, York

Report