RURAL ECONOMY AND LAND USE

RESEARCH COUNCILS UK

International interdisciplinary research:

a review of programmes and the implications for RELU

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Background to Project

The need to pursue a RELU-like agenda has been recognised by many international bodies such as:

DIVERSITAS
an international programme of biodiversity science

ICRAF

WorldFish CENTER
people · science · environment · partners

IHDP

APN
Asia-Pacific Network for Global Change Research

UNESCO
United Nations Educational, Scientific and Cultural Organization

Reasons to review activities of programmes and initiatives:

1. Identifying good practice from existing programmes will benefit areas within the RELU programme.

2. Identifying the tools, techniques and approaches for effective interdisciplinary research within existing initiatives will save time and money.

3. Identifying other relevant non-UK programmes will allow UK science to be located within the broader international context.

4. Bringing relevant non-UK programmes to the attention of the RELU community will promote international collaboration and enhance funding base for RELU.

Four main aims of the project

1. Identify those non-UK programmes and initiatives which share or include the aims and objectives of RELU

2. Within initiatives, identify best practice with respect to mechanisms that facilitate integration, build capacity and help to transfer knowledge

3. Identify science programmes and outputs which are relevant to RELU

4. Publicise the findings within the UK science community

Identifying programmes sharing RELU aims

- **Systematic web-based review**

- **Programmes scored (0-16 points) according to set of objective criteria:**
  - **whether research was interdisciplinary**
  - **whether research was policy-orientated**
  - **capacity-building for interdisciplinary research**
  - **emphasis on knowledge transfer**
  - **stakeholder involvement**
  - **whether the programme was multi-site**

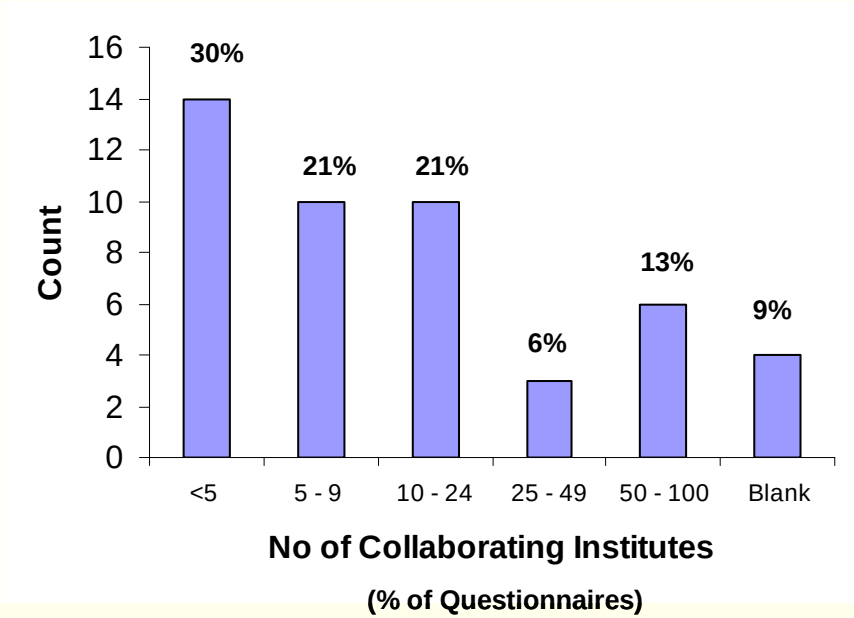
Programme scores against RELU

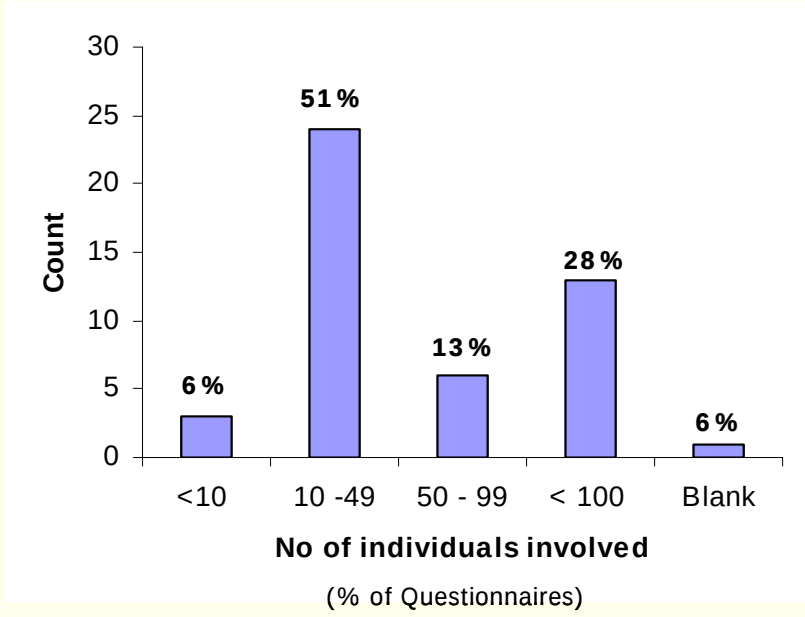
Acronym	Initiative	Points
RELU	Rural Economy and Land Use	16
MISTRA	The Foundation for Strategic Environmental Research	16
PEER	Partnership for European Environmental Research	16
SFMN	Sustainable Forest Management Network	15
USGCRP	US Global Change Research Program	14
IHDP	International Human Dimensions Programme on Global Environmental Change	14
IIED	International Institute for Environment and Development	13
IISD	International Institute for Sustainable Development	13
IGBP	International Geosphere-Biosphere Programme	12
WORLDFISH	Worldfish Centre (previously ICLARM)	11
GRANO	Approaches for Sustainable Agricultural Production in North-eastern Germany	11
UNESCO	United Nations Educational, Scientific and Cultural Organisation	10
NSF ERE	National Science Foundation Environmental Research and Education	10
APN	Asia-Pacific Network for Global Change Research	9
DIVERSITAS	An international programme of biodiversity science	9
SLRP	Sustainable Livelihoods Research Programme	7
EUROPA	European Commission Fifth Framework Programme	7
ICRAF	International Centre for Research in Agroforestry	5
ESSP	Earth System Science Partnership	4

Questionnaire targeting and response

- Programmes with ≥9 points were included in the questionnaire study
- 174 questionnaires sent to co-ordinators or directors of interdisciplinary programmes and initiatives
- 48 questionnaires returned (27%)
- Questionnaires sent to 24 countries
- 77% of respondents had background or training in more than one discipline

Vital statistics of collaboration

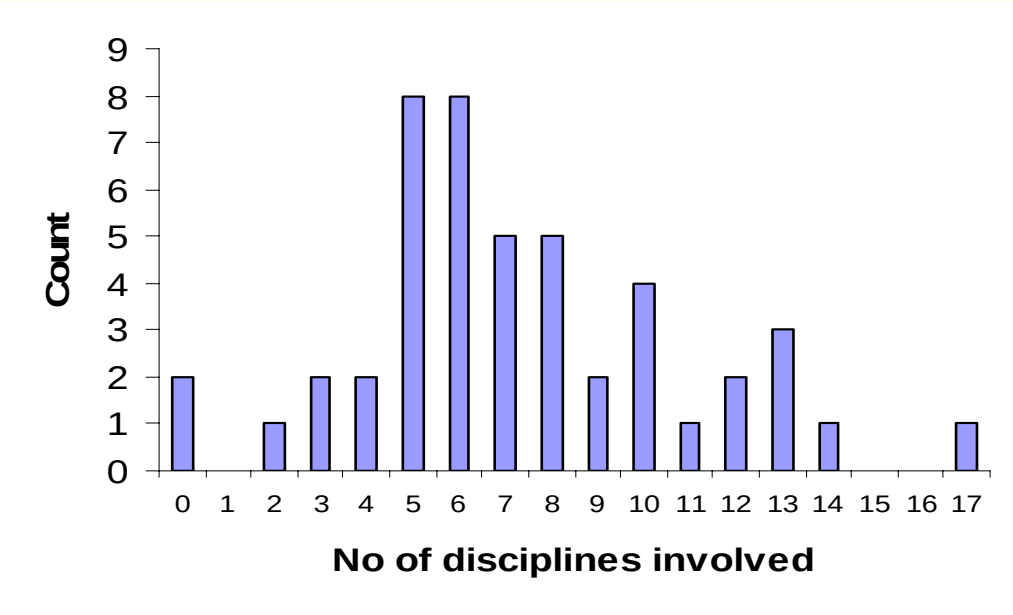




Half of programmes had <10 collaborating institutes

Just over half of programmes had 10-49 collaborating individuals

Disciplinary involvement



- Most programmes included 5-6 different disciplines
- Disciplines appearing most frequently were:
  - biology (85% of programmes), economics (77%), geography (77%), agriculture (72%)

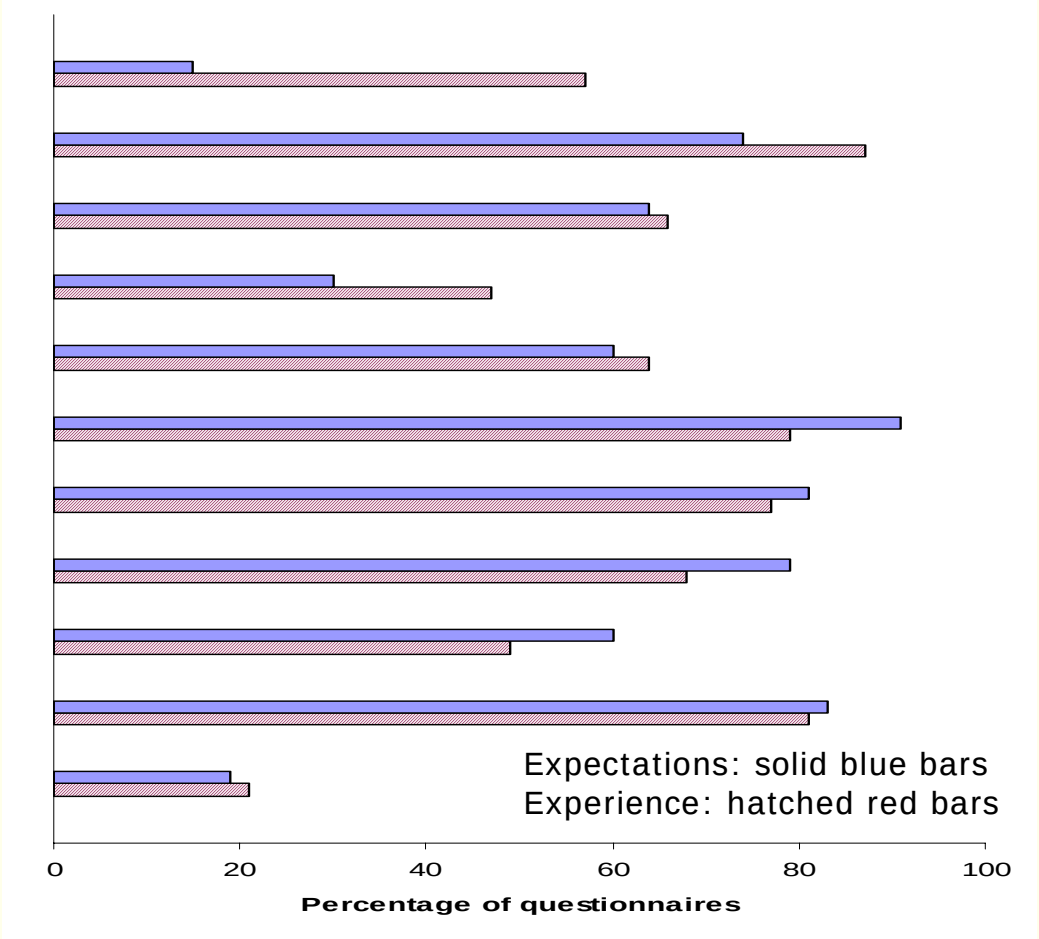
The nature of interdisciplinarity

- **Interdisciplinarity arose through:**
  - **project requirements (68%)**
  - **decision of the project team (57%)**
  - **funding body requirements (53%)**
- **Most respondents engaged in interdisciplinary research with the expectation that an interdisciplinary outcome would emerge**

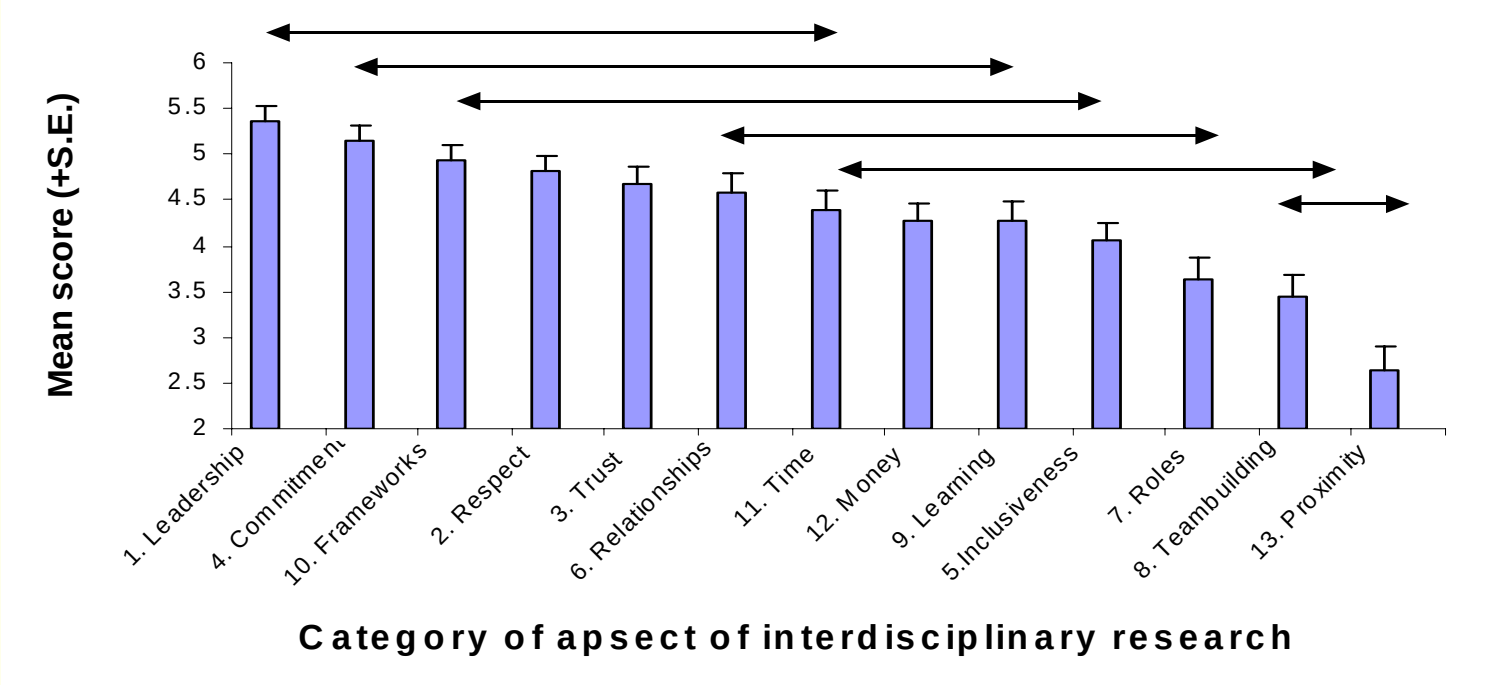
Expectations and experience

Possible criteria for success in interdiciplinary research

1. Monodisciplinary publications
2. Regular meetings, workshops
3. Interdisciplinary publications
4. Career opportunities
5. Stakeholder involvement
6. Added value of interdisciplinarity
7. Shared learning
8. Develop common concepts
9. Transparency of approach
10. Individuals working together
11. Other



Determinants of successful research



- **Leadership, commitment, organisation and respect were most important determinants of successful interdisciplinary research**

- **Geographical proximity was relatively unimportant**

Enhancing shared understanding

- Use of clear language without jargon
- Regular face-to-face, informal meetings
- Availability of fora for facilitation of discussions
- Regular self-evaluation and learning sessions
- Clear data policy
- Use of participatory methods
- Involvement of external stakeholders
- Strong relationships with community partners

Barriers to interdisciplinarity

- Interpersonal/interdisciplinary relationships
- Academic rewards/culture of competition
- Shortage of time
- Lack of trust
- Competition for and lack of resources
- Lack of common standards and understanding

Dissemination of results

- **UK DIVERSITAS web site**
- **Academic papers**
- **Final report**
- **RELU website and newsletter**

Acknowledgements:

For Funding:

RELU

Research Councils UK

For Advice & Helpful Discussions:

Professor Philip Lowe, Dr Les Firbank, Mr John Mills, Dr Mariella Marzano, Dr Liz Oughton & Dr Louise Bracken.