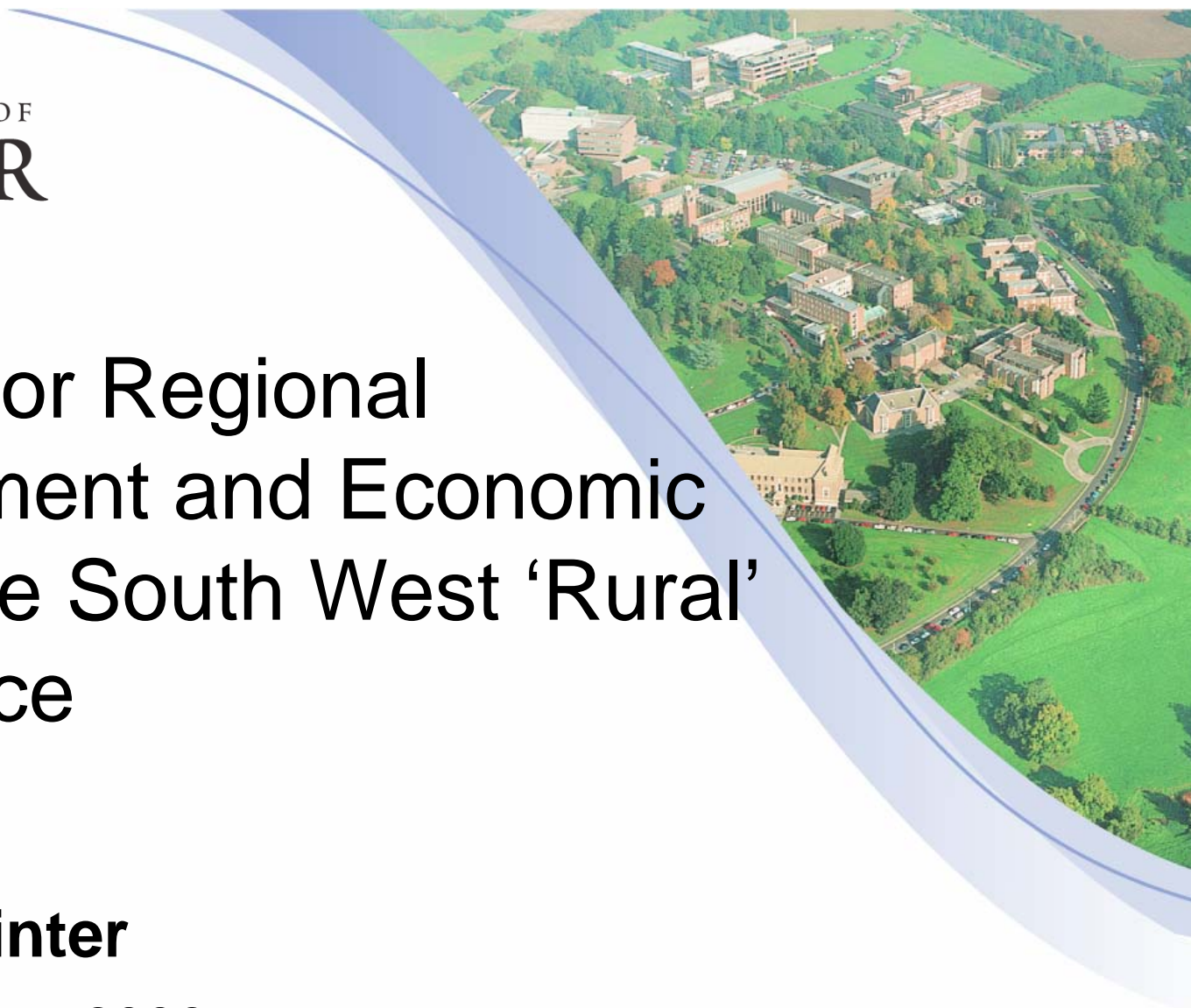




Science for Regional Development and Economic Policy: the South West 'Rural' Experience

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RELU January 2006



Aims of Talk

- To explore some of the implications for science and for knowledge exchange of the new regional 'architecture' of governance, especially in the context of SW 'rural' initiatives.
- To give as a specific example the SW Rural Research Priorities Board.

The New Regionalism

- The main characteristics of this are well-known and need little elaboration here – RDAs, RAs, strengthened GOs, the emphasis on partnerships at regional and sub-regional level.
- This is having an effect on research funding and strategy. e.g. GWR.
- I want to spend a little time on some of the less well-known players and initiatives in the new regionalism.

The SW Rural Affairs Forum

- What does the Forum do and how does it operate?
- To what extent is it a forum for knowledge exchange?
- Working with partners – e.g. Chamber for Rural Enterprise (CORE)

The Sustainable Farming & Food Delivery Partnership

- Discovering the need for regional knowledge.
- Recognising the role of regional science.

SW Rural Research Priorities Board

- Origins at Conference of farmers and local & regional policy makers at Seale-Hayne in April 2003.

Questions addressed in talk that led to Board formation

- Why does research matter?
- What is the research capacity in the SW region?
- What should be done at a regional level?

Why does research matter?

- Because of the connection between innovation and regional economic development: creation of sustainable localized advantages in face of globalisation.
- Research shows the importance of local spin-off from knowledge generation institutions, the importance of inter-firm interaction and flows of skilled personnel between firms.

- We live in a knowledge-driven economy.
- However much of the research on innovation and the region/local context has been conducted in high-tech firms (eg around Oxford and Cambridge).

So does the argument apply to agriculture and food?

- In principle YES - the agro-food sector responds to globalisation by developing specialist markets and seeking competitive edge, often through local branding.
- Whilst much knowledge may be codified and universal, there is strong evidence that tacit knowledge based on 'know-how' depends instead on interpersonal relationships, trust and spatial proximity.

- It has been suggested that economic under-development reflects poor learning characteristics within a region.
- The context for learning is heavily determined by institutional context - are research and HE institutions available? Are they networked into the relevant business sectors?

- In short, if the SW region is to be a competitive one, with the agro-food sector at the heart of its competitiveness, it needs appropriate knowledge generation and transmission.
- Appropriateness will mean regional relevance, regional networking and, therefore, regional location for some of the relevant research capacity.

SW Research Capacity: Regional Context

- SW provides 8% of UK GDP.
- SW has 15% of English land area.
- Agriculture provides 3.3% of SW employment (and 2.5% of GDP - twice the average in other English regions).
- Agriculture, hunting, forestry and fishing sector, account for 13% of businesses in SW.
- Food and Drink sector provides 5% of SW employment.
- Tourism sector 4.3% of SW employment.

Research capacity is provided primarily by four groups:

- Universities
- Research institutes
- Private sector research/consultancy companies (including charitable and pressure group organisations)
- Private businesses conducting their own R&D

Funding Sources

- The Higher Education Funding Council for England (HEFCE).
- Research councils (e.g. Biotechnology and Biological Sciences Research Council, Natural Environment Research Council & Economic and Social Research Council).
- Government departments.
- Private sector sources (e.g. trusts).
- The European Commission.

- SW institutions receive a total of just over £60 million of HEFCE research grant funding - approximately 6% of total (as against 10% if it were proportionate to GDP).
- Three Units of Assessment in the RAE are of particular relevance:

Agriculture in the RAE

- Management of rural resources and environment for the purpose of food and non-food production from crops and animals, and for services. Natural and social sciences which are studied in this context. (Horticulture, soil science, forestry, aquaculture, marketing and trade, and rural development are included.)

Food Science and Technology in the RAE

- the sciences relating to the processing, quality, and safety of foods including consumer and nutritional aspects

Veterinary Science in the RAE

- pre-clinical, para clinical, and clinical related subjects which comprise and contribute to the scientific and professional basis of veterinary science.

How does the SW fare on these?

- Agriculture - SW has 3.3% of staff entered into UK RAE (Plymouth and RAC) and 0% of research grant for agriculture.
- Food Science & Technology - no RAE submissions at all (but some capacity in other disciplines).
- Veterinary Science - 14% of staff entered into UK RAE and approx same % of income (Bristol Vet School).

What about Economics and Social Science?

- Divided between so many disciplines it is impossible to obtain meaningful RAE data.
- Surrogate measure of capacity - number of papers published in leading peer-reviewed journals.

Social Science Publications in Key Rural Journals

	No. of papers over 5 year period	% of UK contributions from SW	Top 2 UK institutions
Land Use Policy	133	11.2%	Gloucestershire Oxford Brookes
Journal of Rural Studies	179	12.26%	Newcastle Cardiff
Sociologia Ruralis	136	11.64%	Cardiff King's London
Journal of Environmental Planning & Management	240	12.91%	Oxford Brookes Gloucestershire
Journal of Agricultural Economics	146	2.32%	London (Wye/Imperial) Newcastle

Publications in Key Agricultural, Food and Veterinary Science Journals

	No. of papers over 3 year period	% of UK contributions from SW
The Veterinary Journal	182	13.43%
Research in Veterinary Science	267	8.37%
Trends in Food Science and Technology	123	3.49%
Crop Protection	424	3.86%
European Journal of Agronomy	173	7.48%
Animal Feed Science and Technology	431	7.81%

What should be done at a regional level?

- Take other sources of funding into account (e.g. research councils).
- Need to conduct a fuller audit of research capacity (but unlikely to alter the picture of a region in need of greater science resource).
- Need to determine research priorities.
- Need to enhance and increase research capacity where necessary.

Problems

- “Science policy in England is determined within a governance system in which regional interests and perspectives are overlooked in favour of short term national excellence.”
- “It is clear that a top-down approach to science policy has significant negative impacts on those regions not currently host to successful science facilities ..”
- Charles and Benneworth

- The new Research Priorities Board, as proposed by the Curry Commission, will be a national board.
- The regional delivery groups for the Sustainable Food & Farming Strategy are not being expected to develop thinking on science policy.

A Proposal

- The region should establish a Regional Priorities Board:
- 1) To shadow the work of the national Board.
- 2) To 'region-proof' the proposals made by the national Board.
- 3) To establish regional priorities and to lobby for appropriate funds.

- This cannot be done in a half-hearted way. If it is going to contribute towards the goal of a knowledge-rich and innovative region, it will require resources to facilitate its work.
- A partnership of CORE and existing research institutes should take this forward.
- The first task should be to lobby the RDA, GOSW, etc for the funds necessary to undertake the work.

Up-date

- The Board is now formed - chaired by Prof Nigel Curry of UWE.
- A contract has been let to examine research capacity and activity in the region.