

<b>Project:</b>	Implications of a nutrition driven food policy for land use and the rural environment
<b>Project Investigator:</b>	Bruce Trail
<b>Duration:</b>	2005-08
<b>Impact Summary:</b>	The research showed that policies to promote healthy eating, if successful, will lead to significant changes in agricultural regimes and land use patterns which in turn have a widespread effect on landscapes and rural employment

### **Research Aims**

- The objective of the research was to examine the potential for the development of sustainable UK food chains capable of delivering healthy foods that consumers wish to buy at prices they are willing to pay and to assess the impact on land use and the rural environment and economy

### **Contribution to knowledge & understanding**

- The research found that there was potential for enhancing the healthy qualities of some foods: the use of novel UV plastic film in poly-tunnels could help to enhance the flavonoid and antioxidant capacity of vegetables; grazing sheep on biodiverse pastures seems to have a beneficial effect on the fatty acid profiles of the lamb produced. Consumers say that they are prepared to pay the extra production costs for 'super-foods'
- Scenarios to show the impact of healthier eating were developed using a land use allocation model and input-output model. These showed that areas dependent on livestock production would decline, creating unemployment, movements of population and fewer but larger farms. The results also showed that intensive horticulture in east and south-east England would increase under this model, with more poly-tunnels and water consumption but no growth in employment

### **Implications for policy & practice (e.g. recommendations)**

- The research studied two policy tools which could be used to encourage consumers to eat more healthily. The research found that tax changes can produce moderate improvements but tend to be unpopular, while social marketing could be made more effective with better targeting for specific groups
- The research found that there is potential for choosing varieties, breeds and animal and husbandry methods to select for healthy nutrient profiles and that consumers would be willing to pay for significant improvements provided the products could meet health claims and labelling regulations

### **Applications of research for public policy/services and business performance**

- The results will have an impact on the soft fruit industry, which will be able to present evidence that growing soft fruit under plastic benefits consumers by extending the growing season without any loss of nutritional quality
- The Department of Health has expressed interest in the work on fiscal interventions to promote healthy eating

### **Stakeholder engagement and contribution**

- The research was informed by a stakeholder platform which advised on science priorities and acted as a conduit for project findings
- Outreach activities involved 12 presentations to stakeholders including a conference organised by British Polythene Industries Visqueen Horticultural products, the British Grassland Society, the Plants and Health Showcase at the University of Reading, Chartered Institute of Marketing Food and Drink Group and the Sustainable Development Research Network conference

### **Stakeholder comments**

"Relu projects have made an important and significant contribution to the CRC 'Inquiry into the future for upland communities in England'. We received evidence arising from five Relu projects via submissions to the 'call for evidence', published outputs of Relu funded research, conversations with Relu researchers and contributions to the Inquiry's series of research seminars. In particular, several Relu personnel played an important and much appreciated role in the last of these. Along with the Inquiry's other evidence streams, Relu evidence has helped shaped the development of the Inquiry and the formulation of its conclusions." (Peter Carruthers Commission for Rural Communities)

"In the work I am involved with at Promar International and as the Chair of the Food, Drink & Agricultural Group of the Chartered Institute of Marketing, I have found that the research on areas such as organics, food miles, local sourcing and attitudes towards other key areas of the food sector such as GM have been highly informative, even if they have been at an early stage of development. Not least they have helped bring much more clarity to complex issues. I am aware that this has been based on credible and robust research from a project with no vested interest to grind which I have found most refreshing. Having attended and participated in a number of key Stakeholder Meetings, I have always felt that the results of this work deserved a wider audience" (John Giles, Divisional Director, Promar International, Chair, Food, Drink & Agricultural Group of the CIM)

### **Soft networks (e.g. work shadowing, visiting fellowships)**

- Matthew Ordidge (post-doc) gained work experience shadowing the Farm Advisory Service Team at a commercial soft fruit grower
- Alex Lobb followed a work shadow programme with the Food Standards Agency

### **Securing future impact (post-project/follow-on work)**

- 7 post-docs went on to work on other research projects, a further 2 took up research posts (one of these was a PhD student) and one was employed as academic staff at Reading. The experience of working on the project has enhanced researchers' employment prospects with one post-doc being appointed as the Scientific Curator of the National Fruit Collection at Brogdale, another being appointed as a senior researcher in public health at Dundee and another being appointed as a researcher at the SAC