Research Stimulus Fund

Final Report

An economic evaluation of public access provision to farmland in Ireland

DAFM Project Ref No: RSF 06 304
Start date: 01/11/06
End date: 30/04/11

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Please tick below the appropriate area on the research continuum where you feel this project fits

BASIC/FUNDAMENTAL ........................................... APPLIED/PRE COMMERCIAL

vj

Key words: Public access, valuation, WTP, WTA (max 4)
1. **Rationale for Undertaking the Research**

The aim of this project is to evaluate the economic potential of open-air outdoor recreation associated with improved public access to farm land in the Republic of Ireland for walking using stated preference techniques. Unlike other EU countries formal public access provision in Ireland is limited and dependence on by-product access is high. Farmers frequently face external costs and nuisance effects due to access provision and tourism related economic benefits associated with recreational uses are hampered by the lack of provision.

2. **Research Approach**

The research achievements are described below under each of the four main tasks. The first four tasks are as follows:

- Task 1: Literature Review and Questionnaire Design
- Task 2: Willingness to Pay Survey
- Task 3: Willingness to accept survey
- Task 4: Payment Vehicle Investigation

Detailed on-farm surveys (Teagasc National Farm Survey), site surveys and a public survey have been conducted with recreationists, the general public and landowners in order to establish demand for a walking product but also to identify the financial, institutional and cultural conditions necessary to ensure that farmers provide improved recreational access and carry out the required improvements and maintenance to support this activity. The project also identified landowner preferences for different types of payment vehicle and different institutional mechanisms involved in providing this public good. Stated preference techniques (face to face and on site surveys) were conducted to assess the willingness to pay by the general public for improved access for recreational walking on private farm land and commonage. A detailed socio-economic analysis of these measures was carried out identifying economic, social, cultural and political factors that may restrict subsequent provision of this public good.

3. **Research Achievements**

A literature review was conducted (task 1) which highlighted the fact that public access to private farm land for recreational activities (e.g. walking) has been a contentious issue with many landowners restricting public access despite the potential benefits that can accrue.

There are three outcomes related to task 2: 1) Willingness to pay results from three site surveys; 2) Willingness to pay results from a survey of the Irish public; and, 3) results from a tourism business survey. For the site surveys three sites were surveyed, two inland sites and a coastal site. **Results from the inland sites reveal a median willingness to pay for formal access with improved trail infrastructure of €12.22 for the lowland case study site compared with €9.08 for the upland case study site.**

Results from the willingness to pay survey of the Irish public used a nationally representative survey to determine individuals’ preferences for 4 different types of farmland walking trails. **Results indicate that many Irish residents favour more walking trails in the Irish countryside and a high proportion of the respondents surveyed are willing to pay for improved access.** Mean WTP bids per trip ranged from €5.43-€37.86. Respondents had a strong preference for river walks, for trails of a shorter length (2-3 hrs), for gravel paths, walks that have signs and car parks.
Results show a segmented market. On the one hand there is a strong demand by individuals who are relatively older, female and/or have children for various trail facilities (such as an information point, route map, defined trail, signposting, stiles/footbridges, car parking and an access agreement with landowners) as important. On the other hand this research reveals that individuals who engage in more challenging walks are less likely to feel the provision of trail facilities and infrastructure is important. This latter group represents a different market and should not be ignored by policy makers. They require a different product with challenging walks across mountain tops in remote areas.

Results from the survey have been presented at the European Association of Environmental and Resource Economists Annual Conference, Rome and The international Choice modelling conference, Leeds, 2011, the Agricultural Economics Society Conference in Warwick in April 2011 and two papers have been submitted to international peer reviewed journals and are under review.

Results from the tourism business survey reveal that approximately half of all Bed and Breakfast (B&Bs) accommodation providers are willing to contribute €0.70 (for every overnight visitor) towards a trust fund that would compensate farmers maintaining farm landscapes and for assured public access. B&B providers favoured a state run scheme supported by farm subsidies to a trust fund.

Task 3 set out to estimate landowners’ willingness to accept, by way of compensation, measures necessary to improve public access to farm land for recreational walking purposes. Farmers reported a number of reasons such as nuisance impacts (interference with agricultural activities), insurance liability and potential invasion of privacy as the main objections to allowing public access to their land. Results indicate that 51% of landowners are not willing to provide access, 21% are willing to provide access free of charge and 28% sought compensation. Results show that farmers who are relatively younger, and/or had previous exposure to walkers and/or in relatively lower intensity farm enterprises along the western seaboard were the ones most in favour of public access. **Median willingness to accept for the cohort of landowners seeking compensation was found to be €0.46 per meter of walkway.** Respondents expressed a strong preference for an agri-environment scheme payment vehicle.

Study findings reveal that recreational trail developments meet economic efficiency criteria, particularly in areas where farmers have low opportunity costs, in marginal agricultural areas with outstanding scenery where consumer demand for trail attributes is high.

As part of task 6 a meta-analysis was performed upon two independent published survey research (Buckley et al., 2009 and Howley et al. 2012 –Task 2 and 3) representing 14 separate trails and 302 respondents. We also gathered data from Recreational officers across 14 different trail sites which were surveyed in 2010 (Brennan 2010). Findings suggest that the economic impact of a walk is influenced by high quality scenery, informative signs, car parks, picnic tables, toilets, stiles footbridges and shops and accommodation providers close to a walk. Trails with a high economic impact include the Burren Way, Bluestack Way, Cullahill/ Binninea loop, Glenbarrow, Burrishoolle, Kerry Way, Benbulben and Hornhead trail.

4. **Impact of the Research**

It should be noted that farmers reported a number of reasons such as nuisance impacts (interference with agricultural activities), insurance liability and potential invasion of privacy as the main reasons why they would be unwilling to allow public access to their farmland for walking activities. In any future public access initiative efforts should be made to alleviate farmers concerns surrounding these issues.
End users should be aware that reducing uncertainty with respect to access to farm land will go a long way to supporting tourism developments allied to recreational activities.

End users should be aware of the heterogeneity across respondents surveyed. Residents based in urban areas appear to exhibit quite different preferences from their rural counterparts having a stronger preference for public access, trail facilities and safety concerns with respect to livestock compared to their rural counterparts. There is a group (approx. 20 per cent of the national sample) who would not use trails at all if they were developed on a large-scale basis. Tailored policy-options that respond to the different needs of the general population will therefore generate the most benefit to Irish citizens.

The feasibility of initiating a trust fund to compensate farmers for trail provision and maintenance should not be discounted and may prove to be an important supplement to ensure the viability of the farms, their landscapes and the rural tourism which depends on them.

Study findings may also be of interest to the scientific community. The research conducted here was the first to elicit preferences for farmland trails in Ireland. Methodological investigations of the type described in the labelled choice experiment (survey of the Irish public) are new to the literature. The literature on tourism businesses and their link to agriculture (agro-tourism) is not well developed and this project makes a contribution to the work undertaken by Pruckner (1995) and Hackl, et al (2007).

5. Exploitation of the Research

The results from this study would suggest a strong economic rationale for policy intervention to improve public access to the countryside. Our findings show that to exploit this research effectively end users should focus attention on areas where farmers have low opportunity costs, in marginal agricultural areas with outstanding scenery where consumer demand for trail attributes is high (see Buckley et al., 2009 and Howley et al., 2012). It is in these areas, in particular, that recreational trail developments will past the standard economic efficiency criteria and if rural tourism remains a priority, whilst we acknowledge the current economic climate, it is recommended that budgetary provision is indeed made for this.

Although the tasks above provide answers to key policy questions posed by the study, we have drawn the various strands together that fall out of these tasks to make it more accessible for policy makers. The bullet points below thus serve as a summary of key policy findings from the study.

- Strong preferences for secure public access and trail facilities and infrastructure by the majority of respondents (especially by families, older people) and a WTP for these
- A minority still want a “wild” walking experience. This minority does not have strong preferences for trail facilities, some provision should be made for this group
- Lowland walks should be given priority first, upland walks later
- Preference for river walks, trails of a shorter length (2-3 hrs) by majority
- Farmers with low opportunity costs should be given priority first, especially younger farmers
- Development of recreational trails meets economic efficiency criteria, particularly in areas where farmers have low opportunity costs, in marginal agricultural areas with outstanding scenery where consumer demand for trail attributes is high. Give these areas priority first.
- Accommodation providers such as bed and breakfast enterprises acknowledge the role of landowners in supporting rural tourism and are willing to contribute towards a fund that would compensate farmers in return for maintaining the farmland and providing access to visitors.
- Strong preference amongst farmers for an agri-environment scheme payment vehicle
- The Burren Way, Bluestack Way, Cullahill/ Binninea loop, Glenbarrow, Burrishoole, Kerry Way, Benbulben and Hornhead, are identified as key trails to be promoted to facilitate rural tourism.
A ‘bottoms up’ approach involving landowners is key to ensuring public access.

Below we list some bullet points for policy makers drawn not from specific research objectives tested using data but from our own extensive observations and experience through the life of this project.

- Target local enduring initiatives that have an economic payoff. Strengthen and support institutional capacity (with training, funding) of these groups and afford these high priority
- More joined up thinking between statutory agencies to facilitate rural tourism and recreational walking
- Cooperation with the farming organizations. Involve the farming organisations such as the IFA and engage younger farmers in the process of trail developments, access and rural tourism (essential that farmers are part of (Comhairle Na Tuaithe).
- Focus on health benefits of recreational activities
- Focus on coastal trail developments with marine statutory agencies
- Develop initiatives to ensure farmers benefit from the walks
- Move away from recreational conflict issue to a focus on facilitating rural tourism. Important given the uncertainty regarding the continuation of farming by future heirs. A need to focus on market mechanisms linked to public good externalities to benefit rural communities and support a trust fund to maintain trails, develop local infrastructure and compensate farmers.

6. **Summary of Research Outputs**

(a) Intellectual Property applications/licences/patents
1.
2.

(b) Innovations adopted by industry
1.
2.

(c) Number of companies in receipt of information

(d) Outcomes with economic potential
1.
2.

(e) Outcomes with national/policy/social/environmental potential
1.
2.

(f) Peer-reviewed publications, International Journal/Book chapters.

Main Publications


(g) Scientific abstracts or articles including those presented at conferences


Access to the countryside: Walking in Rural Ireland. IRISH RURAL STUDIES SYMPOSIUM - Venue: Mellows Campus, Teagasc, Athenry, Co. Galway, Ireland - September 1st 2009

Presenter(s): Cathal Buckley, Department of Economics, NUI, Galway

Co-Author(s): Stephen Hynes, RERC, Teagasc.

Tom van Rensburg, NUI Galway.

Doherty, E., Campbell, D., Hynes, S. and van Rensburg, T.M (2010) Labels in environmental stated choice experiments: are these all respondents consider when choosing between recreational sites”. Paper presented at the the World Congress of Environmental and Resource Economists, Montreal, Canada, 2010. The same paper was also presented at the Irish environmental Economics Network seminar held at Athenry Co. Galway in September 2010.


Buckley, C., Hynes, S. and van Rensburg, T.M. 2008. Commonage - Comparisons between Ireland and other developed nations on the provision of public access to the countryside for walking – Are there lessons to be learned? Rural Economy Research Centre working paper series.

Presenter(s): Cathal Buckley, Department of Economics, NUI, Galway
Co-Author(s): Stephen Hynes, RERC, Teagasc.
Maria Heneghan, RERC, Teagasc.
Tom van Rensburg, NUI Galway.

Presenter(s): Cathal Buckley, Department of Economics, NUI, Galway
Co-Author(s): Stephen Hynes, RERC, Teagasc.
Tom van Rensburg, NUI Galway.

Presenter(s): Cathal Buckley, Department of Economics, NUI, Galway
Co-Author(s): Tom van Rensburg, NUI Galway, Stephen Hynes, RERC, Teagasc.

Internal Teagasc “T Research article”. Putting a value on access to farmland.
Author(s): Stephen Hynes, RERC, Teagasc
Cathal Buckley, RERC, Teagasc


(h) National Report
1.
2.

(i) Popular non-scientific publications
(ii) There are six practical / popular publications as follows:

Article in Irish Examiner titled “Rural areas step up for growing number of walkers” – 16/03/08.

Article by Sean MacConnell, Agriculture correspondent, The Irish Times – 23/02/08.
Article by Sean MacConnell, Agriculture correspondent, The Irish Times – 22/09/07.

Interview on the Late Word radio show, Today FM – 22/09/07.


(j) Workshops/seminars/open days at which results were presented (excluding those in (g))

A Symposium entitled: Valuing Public Goods in Managed Landscapes was held jointly by the Department of Economics, NUI, Galway and the Rural Economy Research Centre, Teagasc on the November 10th, 2006 in Lecture Hall 2, St. Anthony’s, NUI, Galway, Galway city.

The following paper was presented at this event on 10/11/06: WALKING ACROSS COMMONAGE LANDSCAPES - A CONTINGENT VALUATION ASSESSMENT.
Presenter(s): Cathal Buckley, Department of Economics, NUI, Galway
Co-Author(s): Tom van Rensburg, NUI Galway, Stephen Hynes, RERC, Teagasc

Public Access Stakeholders Meeting Held at the Advisory and Training Centre, Athenry - Friday 21st September 2007

A workshop titled “The Farm Landscape Valuation” involving the research team and Dr. Nick Hanley, University of Stirling was also held in the Rural Economy Research Centre, Athenry on 30/10/07 to advise on WTP questionnaire design and delivery.

7. Permanent Researchers

<table>
<thead>
<tr>
<th>Institution Name</th>
<th>Number of Permanent staff contributing to project</th>
<th>Total Time contribution (months)</th>
<th>Average time contribution per permanent staff member</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUIG</td>
<td>1</td>
<td>13</td>
<td>13</td>
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<tr>
<td>Teagasc/NUIG</td>
<td>1</td>
<td>10</td>
<td>10</td>
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Total 2 23
### 8. Researchers Funded by RSF

<table>
<thead>
<tr>
<th>Type of Researcher</th>
<th>Number</th>
<th>Total Time contribution (months)</th>
<th>Average time</th>
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</thead>
<tbody>
<tr>
<td>Post Doctorates</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contract Researchers</td>
<td>2</td>
<td>35</td>
<td>18</td>
</tr>
<tr>
<td>PhD postgraduates</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Masters postgraduates</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Temporary researcher</td>
<td>5</td>
<td>28</td>
<td>5.6</td>
</tr>
<tr>
<td>Other</td>
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<td></td>
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<tr>
<td><strong>Total</strong></td>
<td>7</td>
<td>63</td>
<td></td>
</tr>
</tbody>
</table>

### 9. Postgraduate Research

- Total Number of PhD theses: 
- Total Number of Masters theses: 

### 10. Project Expenditure

- Total expenditure of the project: €388,609.35
- Total Award by RSF: €394,192.00
- Other sources of funding (specify): €

#### Breakdown of Total Expenditure

<table>
<thead>
<tr>
<th>Category</th>
<th>Name Teagasc</th>
<th>Name NUIG</th>
<th>Name Institution 3</th>
<th>Name Institution 4</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contract staff</td>
<td>161,908.87</td>
<td>68,059.70</td>
<td></td>
<td></td>
<td>229,968.57</td>
</tr>
<tr>
<td>Temporary staff</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post doctorates</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post graduates</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Consumables</td>
<td></td>
<td>35,908.54</td>
<td></td>
<td></td>
<td>35,908.54</td>
</tr>
<tr>
<td>Travel and subsistence</td>
<td>9,609.41</td>
<td>31,870.80</td>
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<td></td>
<td>41,480.21</td>
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<td><strong>Sub total</strong></td>
<td>171,518.28</td>
<td>135,839.04</td>
<td></td>
<td></td>
<td>307,357.32</td>
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<tr>
<td>Durable equipment</td>
<td>1,424.00</td>
<td>2,988.70</td>
<td></td>
<td></td>
<td>4,412.70</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overheads</td>
<td>42,879.57</td>
<td>33,959.76</td>
<td></td>
<td></td>
<td>76,839.33</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>229,968.57</td>
<td>135,839.04</td>
<td></td>
<td></td>
<td>388,609.35</td>
</tr>
</tbody>
</table>
11. Future Strategies

In response to requests by industry, the coordinator has developed a recreation and tourism “slide show”. The slide show brings together key project findings in an accessible form for policy makers and end users. It has been presented to the IUF, IFA, ISC and the coordinator has been asked to give the talk to Comhairle Na Tuaithe” (CnT). The talk has been well received and the coordinator is working with industry to identify community groups in Ireland with strong potential to enhance access provision and deliver economic benefits from recreational tourism.

12. Industry Collaboration

The Project team has liased with industry on a regular basis. This collaboration was initiated by the project coordinator at a conference entitled: The creation of partnerships in Ireland’s upland regions in Sligo on 21-23 November 2002. Since that time a number of meetings with the Irish Uplands Forum, Irish sports Council, Coillte, Comhairle Na Tuaithe” (CnT), SLR consulting, the Irish Farmers Association, Mountaineering Ireland and Failte Ireland, have grounded the research undertaken by the project and ensured that our findings are made accessible to end users and policy makers.