

**Technology Updates** 

**Rural Economy and Development** 

Project number: 5655 Funding source: DAFM Date: January, 201 Project dates: Nov 2006 – Sept 2010

Economic evaluation of public access provision to Irish farmland



## Key external stakeholders:

Department of Agriculture, Fisheries and Marine, Department of Environment and Local Government, Department of Transport, Tourism and Sport, The Irish Sports Council, local authorities, farm organisations, walking/hiking groups' representative bodies, community groups

# Practical implications for stakeholders:

Results from this research will assist policy development in the area of walking-based recreational tourism across the Republic of Ireland.

## Main results:

- Twenty one per cent of landowners were willing to participate in a proposed public access recreational walking-based scheme (under certain conditions) on a free-of-charge basis while 28 per cent indicated that they would be willing to participate if given financial compensation. A total of 51 per cent of farmers indicated they would not participate in such a scheme.
- The mean willingness to accept payment for those farmers seeking compensation was 46 cent per linear metre. When combined with farmers willing to provide access for free, the average willingness to access for willing farmers was 27 cent per linear metre.
- The general public generally preferred shorter walks (1-2hrs) and generally would be willing to pay for the provision of trail facilities such as a gravel path, car parking facilities, fencing and signage.

# **Opportunity/Benefit:**

The analysis conducted and published in this project can help inform policy formulation in the Republic of Ireland in the area of public access provision for recreational walking. The research examines both the demand and supply sides of the policy issue.

# **Collaborating Institutions:**

NUI, Galway.



Teagasc project team:

**External collaborators:** 

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#### 1. Project background:

Despite the potential benefits accruing from recreational use of the rural landscape, public access to private farm land is a contentious issue with public access generally at the discretion of the landowner. This is not a situation unique to the Republic of Ireland as issues relating to public access to land for outdoor recreation are a contemporary preoccupation amongst governments worldwide. Rural based recreational activities provided through amenities such as well maintained and developed walking routes have the potential to deliver significant economic benefits to rural areas through tourism based revenue and, as such, can be an important tool for rural and regional development. For instance, in 2007, a total of 517,000 overseas visitors to the Republic of Ireland undertook some form of walking activity which was estimated to be worth €340 million to the Irish economy and there is potential to grow this market. The present situation where public access is limited and dependent on the goodwill of landowners is a serious constraint on tourism development. Through original survey research, the aim of this project was to examine the issue of public access from the perspective of the general public (demand side) as well as the farmer landowner (supply side).

### 2. Questions addressed by the project:

Given the divisive nature of this issue in the Republic of Ireland the research was undertaken to examine both individuals' demand for access to the rural landscape and farmers' willingness to allow individuals to access their land for recreational activities. With this aim in mind, two nationally representative surveys, one of the farming population and one of the national population, were carried out to examine this issue. More specifically, this project used non-market valuation techniques to examine farmers' willingness to accept estimates (WTA) for public access provision and individuals' willingness to pay (WTP) for the provision of walking trails. Given that public access to the countryside can be classed as a public good, obtaining an economic value for provision aids policy decisions in this area.

### 3. The experimental studies:

#### Data collection – Farmers' Willingness to Accept:

The data source used to examine landowners WTA for improved public access to their land for recreation was the Teagasc National Farm Survey (NFS) in 2007. The NFS is collected annually as part of the Farm Accountancy Data Network (FADN) requirements of the European Union. A supplementary questionnaire eliciting landowner attitudes on the provision of public access for walking was conducted in conjunction with the regular NFS data collection. In carrying out the survey (n=975) each interviewee was asked to indicate their level of participation in a five year walking scheme under certain conditions. The scheme conditions described identified a specific route, and specified that walkers would be expected to follow a countryside code, no permanent right-of-way would be established, full public liability insurance indemnification would be provided and maintenance costs for the walkway would be covered. Landowners were then given three choices indicating that they would either: not participate in such a scheme, participate on a free-of-charge basis or participate only if given financial compensation. Those respondents who indicated that their participation was dependent on financial compensation were then presented with a contingent valuation WTA scenario to establish the minimum amount a landowner would be prepared to accept ( $\notin$ /per annum) per metre of walkway crossing their land, to ensure participation. Farmers have become accustomed through participation in agri-environment schemes to making trade-offs between production and provision of environmental public goods and this was the template adopted in this instance.

#### Data collection: Individuals' WTP for walking trails:

The data source utilised to determine individuals' demand for walking trails was a nationally representative survey (n=601) of the general population based on age, gender, socio-economic and geographical stratification of respondents. A labelled choice experiment was used to determine individuals' preferences for four different types of farmland walking trails; these were a hill walk, riverside walk, field walk and bog walk. These were the walking trail types most commonly identified by respondents, in focus groups that were conducted to inform the questionnaire design, as being particularly important. Two focus groups were also





held following the survey to help provide a deeper understanding of issues raised in the survey.

#### 4. Main results:

Farmers' Willingness to Accept for public access provision:

Twenty one per cent of landowners were willing to participate in the proposed public access scheme on a free-of-charge basis (providing there were no personal costs to them) while 28 per cent indicated that they would be willing to participate in a walking scheme if given financial compensation. The remainder of the sample (51%) reported that they would not participate in this scheme even if given financial compensation. The remainder of the conditions under which farmers were willing to grant access included no permanent right-of-way being established, full public liability insurance indemnification and finally the maintenance costs for the walkway being covered. This has significant implications for the public provision of walking trails as it suggests that there is a significant opportunity to provide a large number of walking trails at relatively low cost. For the cohort (29 per cent of farmers) who sought financial compensation for access provision, the mean WTA was estimated at 46 cent per metre of walkway per annum. This would suggest an average cost of €460 per kilometre of walkway per annum for these landowners to cooperate with providing walking trails.

As described above, there were approximately an equal proportion of farmers willing to participate in the proposed walking scheme (21% for free and 28% with compensation) and those not willing to participate (51%). Farmers who were not willing to engage with improved public access provision cited reasons such as nuisance impacts (interference with agricultural activities), public liability concerns and potential invasion of privacy as the main reasons why they would be unwilling to allow public access to their farmland for walking activities. Econometric analysis was employed to better understand the major factors influencing farmers' willingness to participate in the walking scheme described above and the results are summarised below.

Previous experience of walkers accessing their land for recreation had a positive effect on the probability of landowners' participation in the proposed public access scheme. This indicates that what often may be unfounded negative perceptions surrounding walking activity by landowners with low exposure to walkers may be a factor influencing non-participation rates. Potential public liability was also found to be a significant factor; landowners with relatively large insurance premiums were much less likely to participate in this scheme.

Household demographics also strongly influenced the probability of farmers' willingness to participate in the walking scheme. More specifically, landowners willing to engage for free and for compensation had significantly less household members in the 65 years and over age bracket. Landowners of elderly years are traditionally associated with a more conservative approach on issues relating to land and property rights, particularly in the Republic of Ireland. It should also be noted that landowners willing to participate for free tended not to have young children (less than 5 years of age).

Location also appeared to be an important variable influencing participation. Farmers in the Midlands and Eastern part of the country are much more likely to be unwilling to participate in the hypothetical walking scenario than farmers along the Western seaboard. The Midlands and Eastern part of the country has a higher proportion of larger, more intensive farm holdings and less of a tradition of walking based recreational activity. As such, farmers in this region would be expected to be more concerned with the potential negative impacts on their production activity arising from members of the general public using their land. On the other hand, farms along the Western seaboard are, for the most part, extensive in nature and operate on relatively marginal soils. These farmers generally have lower incomes and lower opportunity costs to agriculture and as such have fewer concerns surrounding potential negative effects on production activity.

#### Individuals' demand and views towards the provision of walking trails:

This project examined individuals' preferences towards four different types of walking trails, namely a 'river walk', 'field walk', 'hill walk' and a 'bog walk'. Respondents had a strong willingness to pay for all the walking trail types. The 'river walk' was found to be the most highly valued by respondents. This is consistent with many landscape preference studies in which a water related feature is often reported as the most desirable landscape feature for individuals. The next most important trail type was the 'field walk' which was closely followed by the 'hill walk'. The 'bog walk' was the least attractive trail type for respondents. In relation to trail facilities, respondents generally had a positive willingness to pay for the provision of trail facilities such as a gravel path, car parking facilities, fencing and signage. Respondents also favoured shorter walks (1-2 hours). In particular, individuals who are relatively older, female and/or have children are much more likely to rate the provision of various trail facilities as important. It could be hypothesised that the provision of trail facilities to improve safety and ease-of-use is relatively more important for these individuals.

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Focus group participants stressed the importance of addressing the present uncertainty surrounding public access to farmland for recreational activities. This, in turn, will as one participant described "help tourism which will be a big help for the local community". Participants reported that with the current situation they often felt nervous about using informal walking trails as they were unsure whether landowners wanted them accessing their land. As one respondent commented in describing the potential advantages of formalised access: "I have felt quite nervous before coming across people in places which is quite stressful and I would rather have a relaxed walk knowing I have the right to be there".

### 5. Opportunity/Benefit:

This research can aid policy development in the area of public access provision for recreational walking across the Republic of Ireland. The primary stakeholders for this research project are national policymakers such as the Department of Agriculture, Fisheries and Food, Department of Transport, Tourism and Sport, Department of Environment and Local Government, local authorities, the Irish Sports Council, farm organisations, walking groups, community groups, and the policy making community in general.

#### 6. Dissemination:

The results of the project have been presented at a variety of both national and international conferences as well as academic seminars and policy workshops. These included the Agricultural Economics Society, the Teagasc Rural Development conference, the Irish Economic Association conference and a Public Access Stakeholders workshop.

A number of academic journal articles have been published on the back of this research.

#### Main publications:

Buckley, C., Hynes, S.P. and Van Rensburg, T. (2008). Public access for walking in the Irish Countryside - can supply be improved. Tearmann, pp. 1-14.

Buckley, C., Van Rensburg, T., Hynes, S. and Doherty, E. (2009). Walking in the Irish Countryside: Landowner preferences and attitudes to improved public access provision. *Journal of Environmental Planning and Management*, pp. 1053-1070.

Howley, P., Doherty, E., Buckley, C., Hynes, S.P., Van Rensburg, T. and Green S. (2012). Exploring preferences towards the provision of farmland walking trails: A supply and demand perspective. *Land Use Policy*, 29, 111-118.

Howley, P., Buckley, C., Hynes, S. and Van Rensburg, T. (2010). Understanding individuals' preferences for coastal walking trails: an Irish case study, *SEMRU Working Paper*.

#### **Popular publications:**

Hynes, S., Buckley, C. (2007). Putting a value on access to farmland. *Tresearch*, 2(3), 16-19.

Buckley, C., Hynes, S., Heneghan, M., Van Rensburg, T., 2008. Walking and Rural Tourism in Ireland. Paper presented at the Teagasc Rural Development Conference 2008.

7. Compiled by: Dr. Peter Howley

