

SFI Public Service Fellowship 2023

1. Name of Governmental Department or Agency
Central Statistics Office
2. Title of the Project
CSO3 Ecosystem Accounts – Recreation-related ecosystem services
3. Description of the Project
<p>The goal of ecosystem accounting is to provide a coherent and harmonised understanding of ecosystems and their relationships to the economy and the overall beneficiaries of ecosystem goods and services. The System of Environmental and Economic Accounting - Ecosystem Accounting (SEEA EA; adopted by the United Nations Statistical Commission in 2021) constitutes an integrated and comprehensive statistical framework for organizing data about habitats and landscapes, measuring ecosystem services, tracking changes in ecosystem assets, and linking this information to economic and other human activity. It aims to illustrate the benefits society receives from ecosystems and their services.</p> <p>In line with a proposed new EU regulation, the CSO is developing ecosystem accounting for Ireland. This would include accounts to cover ecosystem services (provisioning, regulating, and cultural) included in the regulation. For cultural services, the contribution of ecosystem services to tourism is covered under “Recreation-related ecosystem services” which looks at nature-based tourism-related services.</p> <p>The development of ecosystem accounts at EU level will address key policy objectives of the 8th Environmental European Action Plan, the EU Biodiversity Strategy 2030, Sustainable Development Goals (14 and 15) and additionally EU policies in areas such as agriculture and regional policy. Nationally, ecosystem accounts will also constitute an evidence base for policies such as the 4th National Biodiversity Action Plan.</p>
4. Project Scope
<p>This project is part of the CSO’s strategic goal to develop and prepare national ecosystem accounts that meet the criteria for preparing such accounts under the SEEA-EA statistical framework. The ecosystem accounts development will also ensure that Ireland meets its obligations under the European Commission’s proposal for new environmental economic accounts in the area of ecosystem accounting.</p> <p>Working with members of the ecosystem accounts division team, the SFI Fellowship researcher will be testing the Eurostat Guidance Note on recreation-related ecosystem services to determine any limitations involved in applying the methodology in Ireland. Through testing of the Note, the researcher will also provide valuable feedback to Eurostat and JRC, compare the different</p>

methodologies outlined in the note, and provide insights for improvement of the methodologies. One of key outputs of the researcher will be a CSO Frontier Series publication on recreational services based on the Guidance Note.

This work will benefit the CSO by contributing towards the compilation of the mandatory accounts, identification of data sources and data gaps, and identification of the key stakeholders and experts in the area. It will also feed into further development work on a national survey examining the cultural and recreational services provided by ecosystems.

More specifically, the SFI Fellowship researcher will:

1. Apply the guidance note to produce first estimates of the recreation-related ecosystem service using the Eurostat methodologies
2. Evaluate the guidance note and outputs, assess the relevance of the methodologies for Ireland, and identify areas for improvement. Create a catalogue of data sources and data gaps.
3. Apply valuation methods (depending on time available).

5. Skills/Expertise Required

The researcher will need to demonstrate the following skills/areas of expertise:

- Proficiency in using programming/scripting languages associated with statistical computing environment, in particular R, together with skills in geospatial analyses (whether in ArcGIS, R or Python).
- Technical statistical skills such as knowledge or experience in sampling and survey design, data linkage and integration, data processing, and data modelling. Expertise in data modelling would be a significant advantage.
- Expertise in ecology and/or economics would be an advantage.
- Strong analytical skills to collect, organise, analyse and disseminate significant amounts of information with attention to detail and accuracy, and the ability to extract key messages and underlying trends.
- Ability to work effectively on own initiative and as part of the Ecosystem Accounts team
- Strong communication, report writing and presentation skills.

6. Expected Outputs of Project

Deliverables:

1. A detailed technical report on the implementation of the Guidance Note, to include an assessment of the suitability of the methodology in an Irish context, catalogue of data sources and data gaps, and identification of opportunities for improvement.
2. A CSO Frontier Series publication on recreational services based on the Guidance Note.
3. A first estimation of the monetary valuation of the service (depending on time available).

7. Working Arrangements

The researcher would ideally be based in the offices of the CSO in Dublin (Rathmines). Flexible and remote working arrangements will be accommodated.

8. Expected Timeline

The project is expected to have a 12-months full-time timeline with the following components:

1. Literature review and data assessment phase- Months 1-4
2. Testing and development phase – Months 5-10
3. Documentation and dissemination Phase – Months 11-12

9. Contact Details

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