Teagasc Job Specification

Contract Research Officer – Soil Researcher
Agricultural Catchments Programme
(Ref: CRO/ACP/0718)
(Externally Funded Non Grant-in-Aid)

Post Type: Temporary Externally Funded Non Grant-in-Aid contract post, the indicative duration of which is 15 months, subject to contract.

A panel may be formed from which future similar vacancies may be filled; such a panel will remain active for a maximum period of 12 months.

Title of Project: Agricultural Catchments Programme.

Location: Teagasc, Crops, Environment and Land-use Research Centre, Johnstown Caste, Wexford.

Reporting To: Programme Manager – Agricultural Catchments Programme and/or other nominated manager as maybe identified from time to time.

Grade/Salary: Research Officer, with a starting salary of €33,056 per annum. The current salary scale is €33,056 to €64,337.

Remuneration may be adjusted from time to time in line with Government Policy.

Basic Function: To contribute, as part of the Agricultural Catchments Programme (ACP) team, to the evaluation of the effectiveness of the measures contained in the Nitrates Action Programme under the Nitrates Directive with particular emphasis on:

- Producing policy-relevant peer-reviewed scientific papers using existing and new ACP data and disseminating the results to a wide audience.
- Improving understanding of the linkages between sources of nutrients and their availability for transport and loss to water.
- Analysing the data produced to assess the effectiveness of the measures.
- Disseminating the results of the programme to a wide audience.

Background: The Agricultural Catchments Programme is a national project of excellence based on a stakeholder partnership which generates knowledge to underpin profitable farm production in a clean environment.

The objectives of the Agricultural Catchments Programme are:

- To generate knowledge to ascertain the efficacy and cost effectiveness of the Nitrates Action Programme (NAP) measures and the derogation in terms of water quality and farm practices.
- To provide a basis for a scientific review of NAP measures with a view to adopting modifications where necessary.
- To achieve a greater understanding of the factors that determine farmer’s understanding and implementation of the NAP.
- To disseminate this knowledge to a wide audience including farmers and other stakeholders.

To achieve these objectives an integrated research, technologist, technician and advisory team works with farmers in six catchments in conjunction with Teagasc’s Research and Knowledge Transfer Directorates. This programme is managed by the
Agricultural Catchments Programme Manager supported by the Principal Scientist who leads the scientific team within the group. Close liaison is maintained with farmers and farming organisations at local and national level. The first two four-year phases of the Programme ran from 2008 to the end of 2015. Phase 3 of the programme runs from the beginning of 2016 to the end of 2019.

The programme provides:

- Planning and technical support for catchment farmers to underpin profitable farming systems.
- Baseline and monitoring datasets for farm production, nutrient and farm management practices, nutrient transformations and transfers to water and their impact on its quality. These are used to contribute to the national monitoring requirements of both the Nitrates and Water Framework Directives.
- A transparent scientific and economic assessment of the effectiveness of the Good Agricultural Practice measures in S.I. No. 65 of 2018 required by the Nitrates Action Programme. Modification of the measures to meet the water quality targets of the Water framework Directive are identified if required.
- An assessment of socio-economic and behavioural factors affecting implementation of the measures.
- A platform for technology transfer, education and promotion which uses output from the programme in the formulation of advisory and technology transfer initiatives.

Main Duties and Responsibilities:

- Produce high quality, policy relevant papers for publication in peer reviewed scientific journals using existing and new ACP data.
- Oversee the implementation of existing ACP protocols for determining nitrogen and phosphorus availability for transport from a range of farming systems.
- Identify factors contributing the risk of nutrient loss to water.
- Collaborate in the adoption of existing or development of new models to describe and extrapolate ACP results.
- Contribute effectively to national and international scientific meetings.
- Participate in dissemination activities including farmer meetings, open days, stakeholder meetings etc.
- Contribute to the preparation of interim and final reports on the effectiveness of NAP measures.
- Collaborate effectively with Teagasc colleagues and other relevant national and international research programmes.
- Provide technical support to ACP advisory colleagues in the catchments.
- Contribute to productive teamwork within and outside the ACP.
- Supervise post-graduate students.
- Provide data as appropriate to colleagues and post-graduate students.
- Assist Teagasc in meeting the commitments of the Quality Customer Service charter and action plan.
- Actively participate in the annual business planning and Performance Management Development System (PMDS) processes.
- Fully co-operate with the provisions made for ensuring the health, safety and welfare of themselves, fellow staff and non-Teagasc staff and co-operate with management in enabling Teagasc to comply with legal obligations. This includes full compliance with the responsibilities outlined in the Safety Statement.
- Any other duties as may be assigned from time to time.

*This job specification is intended as a guide to the general range of duties and is intended to be neither definitive nor restrictive. It will be reviewed from time to time with the post holder.*
# Person Specification

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<tr>
<th>Qualifications</th>
<th>Essential</th>
<th>Desirable</th>
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<tbody>
<tr>
<td>• Candidates must have an honours Level 8 degree in agricultural science or a related discipline.</td>
<td>• PhD in agronomy, crop science, soil science, environmental science or other relevant discipline.</td>
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<th>Skills</th>
<th>Essential</th>
<th>Desirable</th>
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<tr>
<td>• Ability to design and conduct field and catchment scale experiments related to soil and agronomic science.</td>
<td>• General laboratory skills.</td>
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<td>• Data collection and analysis relating to soil science and nutrient management.</td>
<td>• Experience of conducting agronomic trials.</td>
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<td>• Strong proficiency in publication of peer-reviewed scientific papers and technical articles.</td>
<td>• Proficiency in writing technical and popular articles and informal presenting to non-technical groups.</td>
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<td>• Good one to one and group communication skills.</td>
<td>• Software skills including GIS and statistical packages.</td>
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<td>• General laboratory skills.</td>
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<th>Knowledge</th>
<th>Essential</th>
<th>Desirable</th>
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<td>• Good knowledge of Irish agriculture, general agronomy, soils and nutrient management practices on Irish farms.</td>
<td>• Knowledge of the Nitrates and WFD Directives and their impact on Irish farm management practices.</td>
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<tr>
<td>• Good knowledge of nutrient dynamics on Irish soils, particularly of nitrogen and phosphorus: crop requirements, nutrient transformations and loss pathways.</td>
<td>• Knowledge of the wider impact of agricultural source management on gaseous emissions.</td>
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<th>Behavioural Competencies</th>
<th>Essential</th>
<th>Desirable</th>
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<td>• Ability to work as part of a team, including consulting, collaborating and building relationships with key stakeholders.</td>
<td>• Ability to work independently if necessary, and meet self-imposed milestones and deliverables</td>
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<td>• Strives for high quality of work and demonstrates commitment to the programme.</td>
<td>• Ability to align personal development objectives with programme objectives.</td>
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<td>• Ability to communicate effectively to enable knowledge and technology transfer.</td>
<td>• Ability to work independently if necessary, and meet self-imposed milestones and deliverables</td>
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<th>Other</th>
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<th>Desirable</th>
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<tr>
<td>• Candidates must satisfy and continue to satisfy during employment with Teagasc, legal requirements to drive unaccompanied on Irish public roads.</td>
<td>• Knowledge of the Nitrates and WFD Directives and their impact on Irish farm management practices.</td>
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Note: The ‘essential’ qualifications, knowledge, skills and behavioural competencies outlined above are ‘must-have’ which will be used in the selection process.

## How to Apply

An application form for this position can be accessed on the Teagasc Website at [www.teagasc.ie/careers](http://www.teagasc.ie/careers).

Completed application forms should be TYPED, saved in PDF format and submitted by email to teagascjobs@clark.ie no later than **12 noon on Tuesday 14th August 2018**. Applications received after this time will not be considered.

Please state relevant reference code in all correspondence.

Teagasc is an equal opportunities employer. Canvassing will disqualify.