

# Farming Connect



# TRY-OUT FUND HANDBOOK

**BRINGING YOUR IDEA TO LIFE** 





# Carrying out your own farm trial

The Try-out Fund is available for farmers and growers to address specific local problems or opportunities with the aim of improving efficiencies and profitability within agricultural businesses whilst protecting the environment.

Undertaking a trail on your own farm will allow you to base decisions on data evidence gathered from the trial results and show whether the impact of a new approach is real or if it occurred by chance.

However, to ensure results are accurate trials require time and attention to detail to establish. To ensure robust findings basic research principles need to be followed both in the design of the trial and the analysis of the results.

This handbook provides essential information on what to do before, during and after any trial.

Once a try-out project has been successfully awarded, support will be provided by the appointed member of the Farming Connect technical team for your Try-Out.

# You will need to start with a question

# "What do you want to know?"

Set a simple question(s) that the trial aims to answer. The question will help inform the trial design and the potential investment (e.g. time/cost/equipment) the trial will need.

Once you have decided on a question for your Try-Out project, check that it meets the FINER criteria, explained in the table below. A well-defined, useful, and timely question should be answerable with the resources available and give meaningful results.

# The FINER criteria -

FEASIBLE	<ul> <li>Trial needs to be practical and doable</li> <li>Question has to be focused and not to broad</li> <li>Should have adequate sample (e.g soil samples, weights, yield measurements etc)</li> </ul>
INTERESTING	<ul><li>Is your trial of interest to other farmers or growers?</li><li>Is it relevant to Welsh agriculture?</li></ul>
NOVEL	<ul><li>Does it answer gaps in knowledge?</li><li>Or</li><li>Does it build on current knowledge?</li></ul>
ETHICAL	- Adhere to ethical guidelines (eg. Animal health and welfare, Health & Safety etc)
RELEVANT	<ul> <li>Generates new knowledge</li> <li>Provides an accurate answer</li> <li>Relevant to at least one of the <u>Sustainable Land Management outcomes</u></li> </ul>



# **PLAN**

Once the question is clear, develop a methodology to test the question.

#### Your method should:

- > Provide enough detail that another person could repeat the trial in an identical fashion.
- > Be specific and literal. For instance, state quantities, what will be applied, how often and why any decisions such as frequency/amount etc. were made.
- ▶ Be prescriptive like a recipe, a method should be something that can be followed closely. And subsequently scrutinised.

#### **EXAMPLE OF INFORMATION TO INCLUDE:**

- > Where is the study site?
- What are the characteristics (Land based projects - management, aspect, topography, soil type etc. Animal based projects - Age, weight, sex, breed, etc.)?
- > What are the treatments?
- Treatment details size, replication, randomisation (More information below)
- > What is being measured how?
- > How often and when will measurements be taken?
- > What data and how is it recorded— how will this be analysed?

- > SIZE The larger the plot/sample size (e.g number of animals) the more confidence you'll have in the results as a larger plot/sample will average out small-scale variability.
- > RANDOMISATION allocating treatments to plots/groups using chance methods (e.g., by a random number generator, drafting 1 in every 3 lambs to a certain treatment). This helps limit the effect of random variation.
- > REPLICATION repeating the same treatment in different plots/groups. This helps account for variation when comparing treatments. Control treatments are essential for baseline information.

# For example -

**STUDY A -** Looking at application methods for on-farm slurry and grass growth rates

**CONTROL** - Zero slurry applied. The control plot will act as a baseline for grass growth

Treatment 1- Slurry applied via splash plate.

Treatment 2- Slurry applied by trailing shoe

Treatment 3- Slurry applied by shallow injection

Control T2

Classic Latin square design

T1 T3

The trail could be undertaken across multiple fields. If the results are similar in different fields which have different soil types, soil indexes, grass varieties, topography etc the results from the trail are strengthened.

When collecting grass measurements, simply throw a quadrat within each treatment to choose the area of grass to measure, don't look for areas or select yourself as this will introduce bias. The number of grass measurements will be dedicated by the size of the plot.

<sup>\*</sup>The minimum is a control and one treatment

# **FALSE RESULTS**

This is an outcome where other factors influence a result, but this result remains attributed to the factor being studied.

Example:

Study B - measuring grass growth after nitrogen addition

#### WHAT FACTORS COULD AFFECT THIS?

- Weather
- > Soil type
- > Grass species
- > Availability of other nutrients
- **>** Topography
- > Uniformity of N application
- > Other factors (site specific)

When designing a Try-out project keeping a diary of treatments and management plus any variables such as weather patterns, animal health, incidences outside of your control will all be helpful when coming to understand the results.

Regular updates will be expected; therefore, a diary and log of ongoing data collection will help formulate these updates.

#### **ANALYSE THE RESULTS**

Assistance can be provided by the appointed member of the Farming Connect technical team.

The analysis of results will help identify the answers to the questions set at the start of the trial. Depending on the data type using Microsoft Excel could be an option where there are functions and formulas to interpret the results and visual options to display results such as bar graphs.



# REPORT WRITING

It is a requirement that a report is written with full details and results at the end of the project, the report can be produced in conjunction with the appointed member of the Farming Connect Technical team.

The report should be clear, accurate and objective where statements are supported by appropriate evidence.

Report structure will need to follow the headings below -

#### > INTRODUCTION

This should give the context and scope of the report in relation to your project question. State your objectives clearly, define the limits of the report, outline the method of the trail, and give a brief general background to the subject of the report. The introduction should be kept brief with full methodology and results shared later within the report.

#### > METHODOLOGY

In this section you should state how you carried out your project. What form did your project take? How did you collect your data? What measurements did you make? Detail everything that happened in the experiment – everything must be included.

#### > RESULTS OR FINDINGS

Present your findings in as simple a way as possible. The more complicated the information looks, the more difficult it will be to interpret. Graphs, charts and diagrams help to identify key results and break the flow of written text.

### **>** DISCUSSION

This is the section where you can analyse and interpret your results drawing from the information that you have collected, explaining its significance. Identify important issues and suggest explanations for your findings.

Outline any problems encountered and try and present a balanced view.

### **>** CONCLUSIONS AND RECOMMENDATIONS

This is the section of the report, which draws together the main issues. It should be expressed clearly and should not present any new information. You may wish to list your recommendations in a separate section or include them with the conclusions.



# TRY-OUT FUND - FREQUENTLY ASKED QUESTIONS

### 1. What is the application process?

- a. There will be 3 application windows in 2023
  - Window 1 22/5/2023-12/06/2023
  - Window 2 End Summer (exact dates TBC)
  - Window 3 Autumn (exact dates TBC)
- b. Application form can be found on the Farming Connect website. Guidelines on completion and submission of application form is also available via the Farming Connect website.
- c. Applications will be scored by a review panel and successful and unsuccessful applications will be notified within 2 weeks of the closing date.

# 2. Do all members who are part of the project have to be based in Wales?

The fund is open to individuals or groups of up to 4 farming business and growers in Wales.

Each member must be registered with Farming Connect as a full Farming Business as outlined in the Eligibility Criteria table: <u>Farming Connect Eligibility table</u>

# 3. How will the funding be made available?

Farming Connect will be responsible for the financial elements of the project. Claims will only be paid when Farming Connect is satisfied the relevant expenditure has taken place and that the work has been completed according to the plan and a full report has been submitted. Payment will be made within 30 days of receiving an invoice with the required supporting reports etc, as agreed in the plan on awarding the try-out.

# 4. Will confidentiality of project ideas be kept?

Throughout the application process Farming Connect will not disclose confidential details of projects with any other party. Information relating to the different projects will only be made public once the project has been approved for funding.

Farming Connect privacy notice is available here: Farming Connect Privacy Notice

## 5. Who owns the data arising from a project?

Data will remain the property of the farmer/grower, however, as the project has been publicly funded, information relating to the project will need to be publicly available through Farming Connect. If a farmer/grower considers that they are bringing commercially sensitive information, then it is for them to consider whether a publicly funded mechanism such as Farming Connect is suitable for them.

# 6. What is the maximum duration for a project?

Successful projects must be implemented and completed within the timeframe noted on application form and agreed on awarding of a try-out fund. All projects must be completed by January 2025 to allow plenty of time for dissemination of results before the Farming Connect programme finishes in April 2025.

## 7. How will information be disseminated?

Dissemination of the project outcomes is an important part of the process. Projects will be required to submit regular progress reports and a final report to Farming Connect, which will be

available to the wider industry through the Farming Connect website.

Farming Connect reserves the right to utilise the reports and result. Those successfully awarded a try-out fund may be required to participate in Farming Connect knowledge transfer activities such as hosting on-farm events, featuring in a Farming Connect podcast, video or article in order to share and disseminate lessons learnt and best practice with industry.

# 8. What types of projects are not applicable for the Try-Out fund?

Projects which do not align with the Sustainable Land Management Outcomes, see link below and find on page 10.

Projects must align with at least one Sustainable Land Management Outcome to be eligible. Farm diversification outside agriculture cannot be funded.

Sustainable Farming Scheme Outline Proposal

# 9. What can the funding be used for?

Funding can be used for technical assistance, sampling, testing and other reasonable expenses such as those relating to short term hire of specialist equipment or facilities directly relating to the project. The participating farmers will be expected to provide items such as land, stock and also their time at no cost to the project. Funding cannot be used to fund the purchase of hardware or capital items.

No match funding is required.