

Moving Research into Practice

- To help de-risk testing out new innovations it would be helpful to look at options to set up demonstrations of the new technologies in fields or farms owned or leased by UHI Orkney or an arrangement with local farms. This would enable farmers to see how the new technologies might bring benefits before making the necessary changes or investments in their businesses.
- To help with communication and collaborations it would be useful to have a regular communication link engineering and mathematics and focusses on through the Orkney Agricultural Discussion Group and Orkney Livestock Association along with specialist farmer-led groups for particular topics and research areas.
- Public engagement and communication of activities could also be done through local media and the Orkney International Science Festival.

Education and Training opportunities

- There are opportunities for education and training from supporting work in schools and Developing the Young Workforce through raising awareness of career opportunities in agriculture and related
- Newton Scotland is a project to provide Newton rooms in various parts of Scotland to offer an educational experience within science, technology, learning through practical activities. Thurso has a Newton Room (https://newtonroom.com).
- There may be options for post-graduate studies through setting up a MRes in Agriculture or other related sciences to enable students to study in Orkney and take part in different research projects that may involve placements within the SEFARI Institutes to gain access to new expertise and technologies that could be applied to research projects in Orkney.
- New research will bring new opportunities for innovation and commercial enterprise and it will be important to ensure connectivity with HIE and OIC to discuss the potential of new ideas.
- Resources and material based on research findings need to be developed to include as wide a range of formats as possible including local press where appropriate.

The full report can be found here: www.dkfdkjkjakfjafjajfjdjafjdfjjafjajajfjkdjkajjkdjfalks













to agricultural research





in Orkney



Summary

Agriculture is central to the economy, culture and heritage in Orkney and the successful adoption of new research and technology may bring significant benefits to the islands. Key challenges to the industry are to increase the efficiency of food production while protecting and enhancing the natural environment. The Orcadians have a strong history of being successful innovators and are also aware of the unique is currently out for consultation and there are opportunities available within Orkney's landscapes and communities. Improving connectivity and trust between researchers and islanders will help to maximise the benefits from new research and increase uptake of useful technologies. This report summarisies recent (2015-2025) agricultural research projects relevant to Orkney in a research directory that can be used to help collate and raise awareness of current research projects. A workshop was held on Orkney with local stakeholders to discuss their views on future research directions, knowledge gaps, how to improve local involvement and input and the potential for setting up

a "Living Lab" on Orkney. Recommendations to move forward are to establish a Research Hub on Orkney to help coordinate research activity, communicate outputs and encourage collaborations and new funding streams. Establishing key links with the SEFARI Research Institutes is a timely opportunity as the new Scottish Government Strategic Research Programme opportunities for researchers and stakeholders to codesign agriculture research questions relevant and useful for Orkney. To help support moving research into practice, demonstration fields, farms or specific managment practices could be tried out using UHI facilities to de-risk the testing of new technologies. The project also identified new opportunities for education, both secondary and tertiary, and training to encourage more people to take up careers in agriculture and to create new skilled jobs and

opportunities on the isands.



Place-based approach to Agricultural Research

- · Agriculture and farming are crucial aspects of the economy, culture and heritage in Orkney and there are challenges to the industry to increase the efficiency of food production while reducing impacts signposting and assisting with the development of on the environment and protecting nature. This requires a greater understanding of the impacts of different farming practices and land use strategies along with the opportunities arising from new research and technology to bring maximum benefits locally to Orkney.
- There is great potential to set up "Place-Based" research in Orkney focusing on Agriculture and working closely with local stakeholders to ensure that the research is relevant and useful with the overall objective of creating a locally driven approach to research on the islands.
- Orkney is an interesting location to establish a "Living Lab" approach involving a user centred open innovation ecosystem that integrates research and innovation through co-creation in a real world environment. Orkney farmers are very innovative and have a high reputation for the quality of their produce. They have a skilled workforce with a strong work ethic and long-standing family ties to the land.

Creation of a Research Hub

- The creation of a Research Hub contact point on Orkney, located at UHI Orkney would help to provide an important base to coordinate research activity, communicate outputs, encourage collaborations, funding opportunities and acting as a point of contact.
- The research hub could also provide information and signposting about availability of resources to support research such as lab space, equipment and refrigeration storage.
- The point of contact could also be responsible for curating the Orkney Research Directory a searchable resource for anyone interested in finding out more about research being conducted in Orkney and to encourage collaboration, avoid duplication of effort and over-engagement of stakeholders, leading to fatigue.

- To help support funding of the Orkney Research Directory there could be a system where researchers have to pay a small overhead fee to register to conduct research in Orkney and then provide a contact point and a summary of their research for the Directory.
- A project called the Scottish Islands Research Network has established a useful set of guidelines to help researchers working in island communities (https://islandsresearch.scot).
- UHI Orkney would be a good location for visiting researchers to get access to temporary office space, IT support, basic laboratory facilities and access to meeting rooms.
- It would also be very helpful if in the future there might be access to temporary, affordable accommodation for visiting researchers and students to maximise the potential of place-based research in Orkney. There are plans to build accommodation at the Orkney Research and Innovation Campus (ORIC) in Stromness.

Key Strategic Research Links

• The SEFARI group of Research Institutes conduct

- research, both applied and longer term, on agriculture, food and the environment and already have some connections and collaborations with Orkney. There is A SEFARI based knowledge broker for regional research great potential in exploring new opportunities for SEFARI researchers to conduct research in Orkney working with local stakeholders to help develop solutions for some of the challenges faced by farmers and to set this up in a more coordinated way to achieve maximum local benefits.
- The current Strategic Research Programme for Scottish Government runs from 2022-2027 and work is currently underway to look at what type of research will be needed for the future programme from 2027-2032. This is a timely opportunity for engagement with key stakeholder groups, to co-design new research projects relevant to Orkney that could be part of the new SRP.
- An action would be to set up a crucible type event to bring researchers together from different disciplines to discuss new research projects that would be relevant and helpful to Orkney.

- An output could include a roadmap for success for place-based research that could be used in other parts of Scotland.
- would be a helpful post to provide a link between SEFARI researchers, the new SRP, the Institute for Agriculture and Agronomy, UHI and local stakeholders in Orkney.
- There are also opportunities to link up with other Universities and organisations interested in agricultural research that would be relevant to Orkney and these could involve those working in similar climatic conditions, for example a Northern Alliance involving Scandinavia etc. An example of this is the Circumpolar Agricultural Association (https://circumpolaragriculture.wordpress.com/).

