Policy Note – Spatial Data Requirements for Land-Based Policy Objectives

SRUC: Ian Merrell, Simon Gibson-Poole, Steven Thomson,

Hutton: Dave Miller, Keith Matthews, Kirsty Blackstock, Douglas Wardell-Johnson, Naomi Beingessner, Annie McKee

This policy note is informed by research conducted through the Environment, natural resources and agriculture Strategic Research Programme 2022-2027, funded by the Scottish Government's Rural and Environment Science and Analytical Services (RESAS). It draws on evidence from both James Hutton Institute (Hutton) and Scotland's Rural College (SRUC) projects in Theme C (Human Impacts on the Environment; Project: Land Use Transformations) and Theme E (Rural Futures; Project: Scotland's Land Reform Futures).

The Scottish Government have a range of policies, strategies, initiatives and public funding streams concerned with land use (Hutton / SRUC collaborative Research Briefing on the coherence between all these mechanisms here). The data needs informing these extensive policy objectives are complex (and can be directly or indirectly affected by the evolution of policy to meet emerging national outcomes). It is apparent that better integration of the disparate administrative and research-based data sources will be needed to provide well-informed policy development, implementation, and monitoring - while minimising unintended outcomes.

Mapping landownership in Scotland has been a longstanding issue, with the most complete dataset linking land to people or corporate entities being that of Who Owns Scotland (Wightman, A.). The main public-sector data source for land ownership is through the Land Register maintained by Registers of Scotland. The Land Register provides detail of most land and property registered since 1981, while the Register of Sasines contains older title deeds, some of which still remain in physical copy only.

The Land Register is, however, still incomplete and much of the land ownership data that can be sourced from it is limited in detail and challenging to standardise for analysis. With the 2024 Land Reform Bill including provisions that will require large land holdings (>1,000 ha and >3,000 ha) to be identified there is increased urgency to improve land ownership mapping, details of transfers, and details of controlling interests in land. More broadly, understanding patterns of landownership is also necessary since this influences many other policy objectives, including peatland restoration activities, wildlife management, crofting, agriculture, etc.

Hutton have reviewed 18 available data sources for landownership (report here), looking at coverage, updating schedules, accessibility, cost, granularity of ownership and shareability. They conclude that no single data set is fit-for-purpose and that even combining data sources is currently complicated, time consuming, expensive and it is almost impossible to share any outputs principally due to licensing considerations.

SRUC have developed a methodology to make Registers of Scotland's INSPIRE (cadastral parcels data) and Non-Residential Land Values datasets useable with a range of other data sources (methodology paper here). As a result, they were able to create an automated Landownership Typology that can classify parcels of land with a suite of useful and fine-grained descriptors (report here). Aligning with Hutton's conclusions, this tool can only be accessed and explored by the licensee and the only outputs allowed (due to different licence agreements) are static maps. There is considerable potential for this tool (and future tools) to help inform evidence-based policy and other stakeholder decisions, however it is inaccessible.

There is a clear need to better exploit existing administrative and research-based data by combining multiple spatial data sources on land use and landownership. The researchers' recommendation should be considered a first step to improving such integration and enhancing transparency to better inform policy decisions. In the future, data access could be made more readily available to public bodies (e.g. Scottish Land Commission, Crofters Commission, Local Authorities, SEPA, NatureScot, Scottish Water, etc.), as well as registered community groups, charities and third sector organisations etc. The recent Unlocking Sasines project is a step in the right direction that will help demonstrate the extent of ownership (albeit without directly identifying an owner, meaning it does not provide the full functionality of the land register).

The way Registers of Scotland currently make available data for policy relevant, public-task research and analysis, seems at odds with the ambitions of the Research Data Scotland Strategy (Unlocking data, Improving Lives) and is not conductive for research collaboration. For example:

- Bulk data on land transactions within a current year are more expensive than those older than 12 months. These data require processing to match transactions with ownership boundaries, potentially leading to errors. Pre-matched data is available but is currently charged (c.£3) per-title and is therefore prohibitively expensive for research.
- Recently the Scottish Land Commission (SLC) and SRUC collaborated on a report of recent sales (here), yet due to licensing agreements, both parties had to purchase the data separately. The research in SRUC and SLC are supported through public money that is being used to purchase data from another public body to undertake public good, policy relevant research.

Instead, this data could be added to a Trusted Research Environment annually. For example, the Scottish Government are already partners in Administrative Data | Agricultural Research Collation (AD|ARC), a new platform to provide researchers, policy teams, government departments and other stakeholders with a Trusted Research Environment (more here) where multiple public data sources can be explored together. This type of environment could be used to host Land Register data.

Recommendations to Policy

<u>Recommendation 1: Create a Trusted Research Environment for Landownership Data:</u> Annual snapshots of landownership and sales data (both the Land Register and Register of Sasines) should be added to a Trusted Research Environment. This would allow accredited researchers (e.g. ONS accredited researchers) and public sector bodies to access the data in a secure environment, and for outputs to be shared with collaborators and stakeholder organisations . For example, the data could be accessed through the AD|ARC, or alternatively the UK Data Service. Access to the data could then be a matter of accreditation and project sign off with Data Sharing Agreements pre-negotiated and compliance with GDPR regulations ensured.

<u>Recommendation 2: Statutory Requirements:</u> It is not in Registers of Scotland's remit to use or provide their data to third parties to conduct analysis for decision-making; however, it is clear that other statutory bodies are increasingly looking to use this data in their decisions. Registers of Scotland currently provide bulk data packages to a variety of other statutory bodies if knowing ownership is a requirement of their statutory task. As a first step, we proposed that publicly funded research (Scottish Government's RESAS programme, UKRI, Scottish Funding Council, Scottish Land Commission funded research etc.) should also been considered as a beneficiary of this statutory requirement and be able to access and work with the data in the Trusted Research Environment.

<u>Recommendation 3: Standardising Data Entry:</u> Currently data is added to the Register by a selling land agent or solicitor. There are very few standardised sections of the form, even with some records being recorded in Hectares and others in Acres. There are multiple open text fields which invite inconsistency across the Register. A new form could be developed which standardises many of the input fields (multiple choice sections) and do not allow some sections to be missed (mandatory fields).

Next steps

SRUC and Hutton are continuing their work on land values, land use, and land ownership within the Strategic Research Programme using data that are currently available to them. The scope and accuracy of the research output will better inform policy decisions, and ongoing monitoring and evaluation could be enhanced, with improved access to RoS data as recommended. This would support the long-term land reform agenda within Scotland.