

Regional Sustainability Transitions: Machinery Rings in Scotland

Introduction

In Scotland, 'machinery rings' evolved from small-scale local discussion groups and have become an established actor in the context of rural areas. The first ring was established in the Scottish Borders in 1987 as a means for farmers to reduce their fixed costs by sharing machinery and labour. Over the past twenty-five years, machinery rings have broadened their membership (e.g. trades, commercial companies, other organisations, and households) and evolved to include a range of additional functions, including training provision, commodities trading and support for renewable energy development. There are currently nine rings in existence across Scotland, the largest of which (Ringlink (Scotland) Ltd.) has around 2,600 members.

By offering a low-cost mechanism for resource sharing (particularly machinery when they were first established), machinery rings have helped farmers to reduce fixed costs/improve efficiencies, provided an alternative means to generate additional income (e.g. through contracting out spare resource capacity to other farmers), and provided a response to 'scaling up' in the industry by working together to compete in increasingly national (and global) markets.

Background to the research

This study has been conducted within the context of 'FarmPath', which is a European Commission funded study exploring changes that have occurred in farming in recent decades. In this context, machinery rings were identified by a group of stakeholders recruited for the project, representing a range of national organisations with an interest in agriculture.

Data collection has included thirteen interviews with farmers, representatives of three machinery rings, and other relevant individuals and organisations. In addition, five focus groups have been conducted with thirty nine machinery ring members from two different agricultural regions and machinery rings: North East Scotland (Ringlink) and the Scottish Borders (BMR).

In the context of FarmPath, machinery rings form part of a cluster of national teams studying new forms of

collaboration in agriculture; examples of collaboration are also being studied in the Freiburg region of Germany and the Alentejo region of Portugal.

Two other initiatives are also being investigated in Scotland: on-farm renewable energy production and non-commercial farming.

What changed?

A range of societal, economic and environmental drivers, which stimulated machinery rings to become established in Scotland were identified, including: a series of difficult harvests, which contributed to challenging economic conditions across the agriculture sector and (amongst other things) contributed towards a decreasing labour force; overcapitalisation of the agriculture sector; general scaling up across the industry e.g. machinery, farm sizes; leadership provided by original farmer groups and support by key organisational actors, including Scottish Enterprise, Scottish Agricultural Organisation Society (SAOS) and the Scottish Agricultural College (SAC).

The context, to which machinery rings were introduced, was a technologically-developing landscape (in terms of IT,

communications and agricultural technologies) that was potentially becoming less socially sustainable (as opportunities for farm successors were in gradual decline), and the economics of farming was (and continues to be) driven by the European Common Agricultural Policy.

Over the period that the rings have been established, machinery rings have affected Scottish agriculture in a number of ways:

- Specially developed computer software has become a defining feature of the rings' success, as has early adoption of Direct Debit technology – both have brought ease and efficiency to transactions made in the agriculture sector.
- Machinery rings have provided a mechanism by which farmers' access to new technologies has become enhanced, either as a 'supplier' or 'demander' member.
- Greater capacity to manage supply-demand relationships in a strategic way has been an important function of machinery rings, in terms of generating greater efficiencies between farmers (and other members) at a regional level.

- Increased formal collaboration in agriculture has been an important impact of machinery rings, through creation of an extensive membership base and (in some instances) formalising existing relationships between farmers (e.g. 'neighbouring' arrangements). In this context, leadership (by and within the rings) was identified as important, including good management provided by staff and strategic direction provided by boards of farmer directors.
- Rings provide new opportunities for young farmers and new entrants that did not exist previously. However, there were also arguments to suggest that the rings facilitate low retained labour on farms, and hence reduced opportunities for young people.
- Although machinery rings are technically formed as farmer-owned cooperative enterprises, lack of a sense of ownership of rings by farmers was apparent.
- A significant impact of machinery rings being introduced appears to be the institution of a new form of agricultural cooperative, characterised by extensive, voluntary participation, efficient systems, and contemporary opportunities for farmers to access, provide and share resources in a way that allows them to collaborate while also retaining independence and autonomy in the context of their farm business.
- Machinery rings have also become an alternative means of representing farmers in the context of relevant consultations and boards within the agriculture sector as a whole.

Key lessons learned:

Machinery rings represent a unique form of agricultural cooperative in Scotland, which perform a range of functions for a wide range of farmers (and other members). A key strength of machinery rings, which resonated with the idea of individual farmers' independence, is their flexibility, in terms of being accessible to individuals who chose to engage on a regular basis as well as those who prefer only to use it as a last resort.

Interestingly, as machinery rings have become larger and evolved (particularly into commodity trading) they have become more widely perceived as service providers as opposed to being an opportunity for businesses to collaborate, which was their original purpose.

Machinery rings are a significant representation of market power held collectively by individual farm (and other) businesses and an effective means for farmers to reduce their fixed and variable costs.

Although machinery ring members are bound by a set of rules and regulations, their participation is effectively voluntary in terms of how they utilise the rings on a day to day or even month to month basis. Indeed, there was some suggestion that machinery rings represent collaboration by default as a result of their effectiveness as a service provider, which facilitates relationships between individuals who are motivated to supply or demand a particular service – primarily for economic reasons.

Machinery ring membership is not universal across the farming community, but this study suggests that machinery rings represent an 'acceptable' form of collaboration that has developed within the agriculture sector – driven primarily by the needs of farmers.

Differences exist between machinery rings operating in Scotland, particularly in terms of the relative importance attached to different services; labour and contracting in the North East and access to commodities (especially fuel) in the Borders.

Machinery rings hold considerable latent potential to act as a mechanism to facilitate new and additional forms of collaboration to implement future policy priorities at a local or landscape-level. However, ultimately, the services provided by machinery rings are dictated by members' will, and would require motivation and/or incentive to become a reality.

Further reports and papers based on this project have been prepared and are forthcoming.

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This research was conducted as part of 'FarmPath' (Farming Transitions: Pathways towards regional sustainability of agriculture in Europe), funded through the European Commission's Seventh Framework Programme (2011-2014), and co-funded by the Land Use Theme of the Scottish Government Environmental Change Research Programme (2011-2016).

Additional thanks to Ringlink Scotland, www.ringlinkscotland.co.uk, Borders Machinery Ring, www.ringleader.co.uk and Scottish Agricultural Organisation Society (SAOS), www.saos.coop, for support during data collection.

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