



Barriers to farmer adoption of Cattle EID

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This is one of a set of briefings based on presentations given at the XXV European Society for Rural Sociology conference, Florence 2013 in a working group on 'Biosecurity and Rural Governance'.

Key message: Cattle EID adoption rates can be improved by addressing farmers' concerns about the growing complexity of information demands associated with cattle and the increasing record-keeping burdens this places on farms.

Key findings

- This briefing reports the key findings of a project focusing on low adoption rates for cattle electronic identification (EID) which sought to identify underlying reasons for farmers' 'reluctance' to adopt.
- Qualitative methods were used to gather opinion about the adoption of disease control technology in the Scottish cattle sector. Interviews were conducted with farmers in two locations; Aberdeenshire and Orkney.
- Generalisations that farmers are 'technology-shy', either culturally or because of an ageing demographic, are challenged by evidence of enthusiasm for technological innovation on farms.
- The farmers interviewed generally expressed enthusiasm for technology adoption as further demonstrated by the variety and amount of digital technology and other devices found on their farms e.g. mobile phones, computers and satellite navigation systems.
- Livestock farmers are involved in an increasing series of information flows, having to supply data of different kinds to a range of external agencies, both to comply with statutory requirements and as a result of market pressures (see figure 1). Managing information flows is a substantial administrative burden for farmers.
- Requirements placed on farmers to manage these increasing information flows constitute a particular shift in power for farmers from autonomy to compulsion, with farmers held accountable for information often at the risk of financial penalties for failures to maintain accurate systems.
- There is a lack of association between cattle EID and beneficial economic returns or labour saving opportunities.
- Messages promoting direct farmer benefits from cattle EID adoption, in terms of profit through healthier stock or through labour saving in relation to record management, are not always prominent in Scottish Government information to livestock keepers.
- The belief that current technology is not 'future proof' or concerns about 'the Betamax effect'² can deter farmers from making investments.
- The unpopularity of the mandatory sheep EID scheme appears to deter voluntary adoption of the cattle EID scheme.
- There is a perception that cattle EID is an additional layer of bureaucracy with no farmer benefit.
- Measures could be taken to 'future proof' current farmer investment decisions reassuring them that early adoption will not be a wasted investment.
- Messages reinforcing the epidemiological objectives of EID could be strengthened.

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² Betamax was a video technology platform that was quickly superseded by a rival platform leaving early adopters with obsolete equipment.

Background: The results of this project challenge commonly held assumptions that farmers often fail to be technologically innovative because they are ‘technology-shy’. The research follows earlier studies in attempting to explain some of the failure to adopt specific technology in terms of perceived disadvantages and lack of awareness about proposed benefits. Specifically the research explores why Aberdeenshire and Orkney cattle farmers are generally unenthusiastic about voluntary adoption of cattle EID as a strategic disease control technology for the national herd. Figure 1 shows the current demands on Scottish farmers to provide data on cattle.

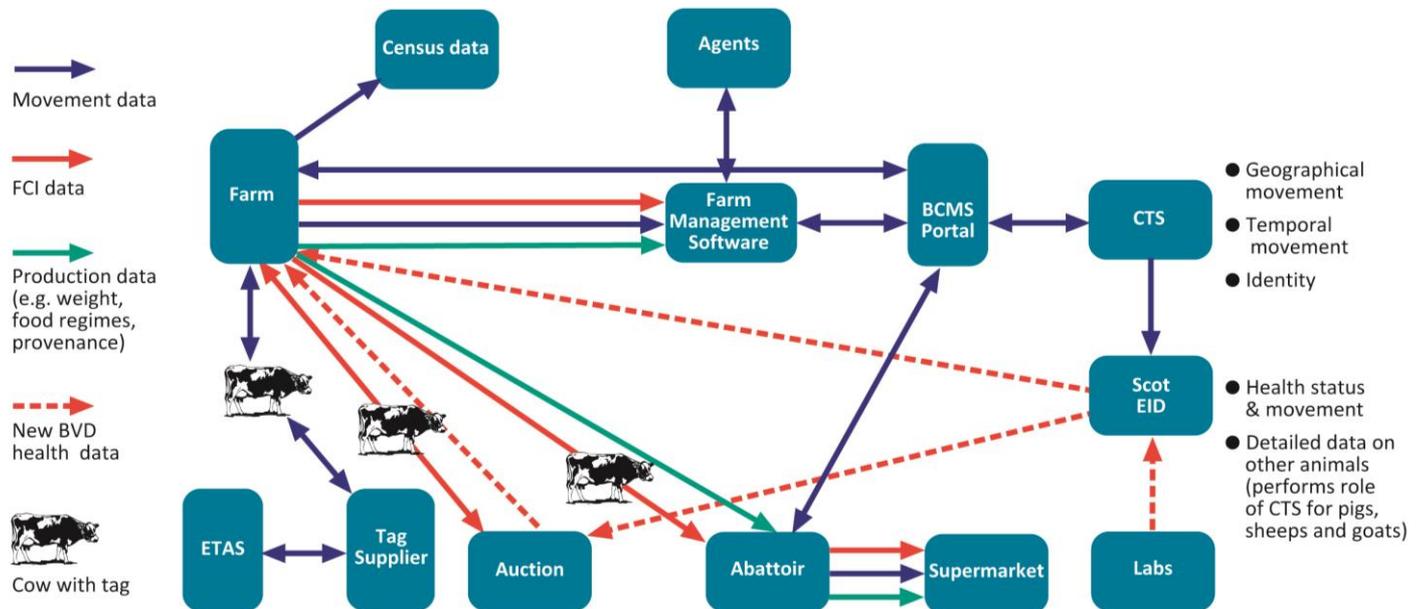


Figure 1: Current demands on farmers in Scotland to provide cattle data

Notes: FCI = Food chain information / CTS = Cattle tracing system / BCMS = British Cattle Movement Service / BVD = Bovine Viral Diarrhoea

Methods: Mixed qualitative methods were used to gather views about the adoption of disease control technology in the Scottish cattle sector. Interviews were conducted with farmers in two primary locations; Aberdeenshire and Orkney. These regions are strategically important for the Scottish beef industry and incorporate both breeding and finishing elements of the supply chain. Farmers were asked about their individual adoption of digital and other technological devices comprising both general consumer digital electronics such as mobile phones and satellite navigation devices and specific disease control technologies including cattle EID. Questions were designed to establish whether the farmers were generally ‘technology-shy’ or cited other reasons for not adopting cattle EID.

Further stakeholder interviews, including with representatives of ScotEID (<http://www.scoteid.com/>), were used to explore the information challenges facing cattle farmers in terms of the variety of digital information that livestock keepers are required to gather. Scenario Planning workshops were held with a wide range of cattle industry stakeholders to develop understandings of the technological environment in which cattle farmers operate.

Policy implications: In order to promote voluntary adoption of cattle EID or to make the technology more acceptable farmers’ concerns could be tackled in a variety of ways:

- New information demands might be incorporated into systems that are already in use in recognition of the existing and growing demands already made on farmers for diverse information.
- Measures could be taken to ‘future proof’ current farmer investment decisions reassuring them that early adoption will not be a wasted investment.
- Messages reinforcing the epidemiological objectives of EID could be strengthened.
- Disease control objectives could be emphasised in a number of government publications, such as ‘Sheep and Goat identification and traceability: Guidance for Keepers in Scotland’ and ‘Pig Identification and Registration: Guidance for Keepers in Scotland’.

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