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Farmer perceptions of voluntary risk-based trading to control bovine TB: why geography matters

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I warmly welcome LITTLE et al.'s (2017) paper which examines the potential of voluntary risk-based trading as an initiative to improve bTB risk information exchange between cattle sellers and buyers when cattle are sold. The mixed method analysis is based on a representative survey of cattle farmers in 'high' and 'low' bTB risk areas in England combined with focus group and other qualitative and secondary data. It provides useful insights into farmer perceptions of market-based bTB governance and it raises wider questions about the logic of using market-based instruments to deal with a complex animal disease such as bTB. I highlight below key findings that struck me as useful and significant, particularly geographical differences in the data, and link these findings to wider research in the social science biosecurity literature on risk perception and geography which suggests there is incompatibility between farmers and bTB policy because of place-sensitive farmer beliefs about bTB and nature and neoliberal models of animal health which are insensitive to place differences.

The survey data is stratified to examine farmer perceptions in 'high' and 'low' risk areas. There are important geographical differences in the data, which reflect differences in farmer perceptions of bTB risk in the two risk areas. For example, in terms of cattle trading practices, the risk of bringing in bTB was significantly more important (as a risk score) for farmers in low bTB risk areas. This is perhaps to be expected. Interestingly, respondents from low risk areas were more positive about having sufficient information to assess bTB status of cattle (87%) than those in high bTB risk areas (68%). Cattle trading patterns also vary in the two risk areas: 73% of farmers said they do not bring cattle in from high risk areas

– most farmers in high risk areas said this compared to 57% in high risk areas. When farmers were asked about the usefulness of information, farmers in low risk areas were more positive than farmers in high bTB risk areas. Moreover, when buyers were asked if they would support a voluntary cattle trading scheme just over half would support such an initiative (suggesting farmers generally are tentative) but the response is more positive in the low bTB risk (59%) compared to the high bTB risk area (47%). Pre-movement tests in high risk areas meant that buyers in high risk areas do not value a voluntary scheme so highly, which is echoed also in seller responses to the scheme. In summary, confidence and support for this particular voluntary market-based initiative (and indeed public schemes) is spatially dependent, reflecting disease pressure and risk perception differences, as well as other farm-related factors.

Recognising geographical differences in terms of farmer perceptions of bTB risk is important if we think about the wider 'institutional logic' (HIGGINS et al., 2016) driving market-based instruments, which is essentially a neoliberal agenda that is about encouraging farmers to take more responsibility and to share some of the cost to control bTB through market-incentivised schemes (MAYE et al., 2014; ENTICOTT, 2016). The general response from farmers to a voluntary risk-based trading scheme is lukewarm in LITTLE et al.'s (2017) study, particularly in high risk areas. Their study reveals potential limitations of voluntary-based strategies because scheme uptake could be highly geographically varied and also varied among buyers and sellers. Significant uptake in high risk areas of such a voluntary scheme is very unlikely simply because pre-movement testing exists and is already quite strict. The negative responses from farmers in high risk areas to the scheme, explained in terms of fatalism, a perceived lack of control and a general low level of confidence, are further reasons to anticipate low uptake and are supported by other social science research examining measures to control bTB in wildlife in high risk areas (MAYE et al., 2014). In high bTB risk areas farmers have developed strategies to 'live with' the disease, fatalistic that anything will ever be achieved to fully rid the area of the bTB problem.

In terms of developing voluntary bTB initiatives it would make sense then, if such instruments are deemed to be the way forward, to start by developing them in low risk areas where there is more confidence and less fatalism about controlling the disease. A voluntary scheme might have some value in low risk areas in terms of improving information provision and encouraging greater transparency of herd health. It might help some sellers to differentiate themselves but it is also questionable whether a voluntary scheme would really help bTB control. The main limitation is a governance one: the scheme needs to be driven not by the market but by policy and regulation. This would ensure a more spatially coherent delivery of the initiative, which would potentially benefit impact and assessment of impact.

There are some interesting findings in the paper too about information sources, credibility, social norms and processes of risk communication. The study shows, for example, the importance of traditional markets for selling cattle. The private vet is noted as a credible and trusted source. It was interesting that members of breed societies and cattle health schemes tended to be more positive towards the initiative and young respondents too. There is plenty here that could be built upon if a voluntary initiative was to be developed. For example, there is a good deal of work on farmer influences that suggests the vet is a highly trusted source in relation to bTB and herd health generally (e.g. GUNN et al., 2008; see NAYLOR et al., 2017 for a review) and they could be an important conduit to communicate and encourage farmers. We know from wider work on 'webs of influence' (e.g. ORESZCZYN et al., 2010) that if an initiative is communicated properly through the right/trusted sources it has much more chance of been accepted and adopted by farmers as a 'good farming' practice. So there is policy learning that can be taken from the paper to help build a potentially viable strategy, although I personally remain sceptical about the success of such an initiative unless it is more closely aligned with farmer beliefs, practices and geographical differences, especially if implemented as a voluntary-based mode of animal health governance.

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