

Agriculture and Rural Development Committee: Review of Bovine Tuberculosis

NIAO Written Submission - 16 April 2012

Introduction

1. NIAO carried out a detailed review of the progress made by the Department of Agriculture and Rural Development (DARD) under its Bovine Tuberculosis (bovine TB) eradication programme. The main fieldwork was carried out in 2006 and 2007, following which there was a series of extensive consultations, with DARD, on the findings. Our report¹ was published in March 2009. The Assembly's Public Accounts Committee (PAC) subsequently held an Evidence Session with the Accounting Officer and reported its conclusions and recommendations in June 2009.²

Scope of the NIAO and PAC Reviews

2. NIAO and the PAC focused on five main areas:
 - The level and cost of bovine TB in Northern Ireland
 - Testing for bovine TB
 - Preventing the spread of bovine TB
 - Compliance with the EU Directive
 - Compensation, enforcement and tackling fraud.

A number of the key points are outlined in the following paragraphs.

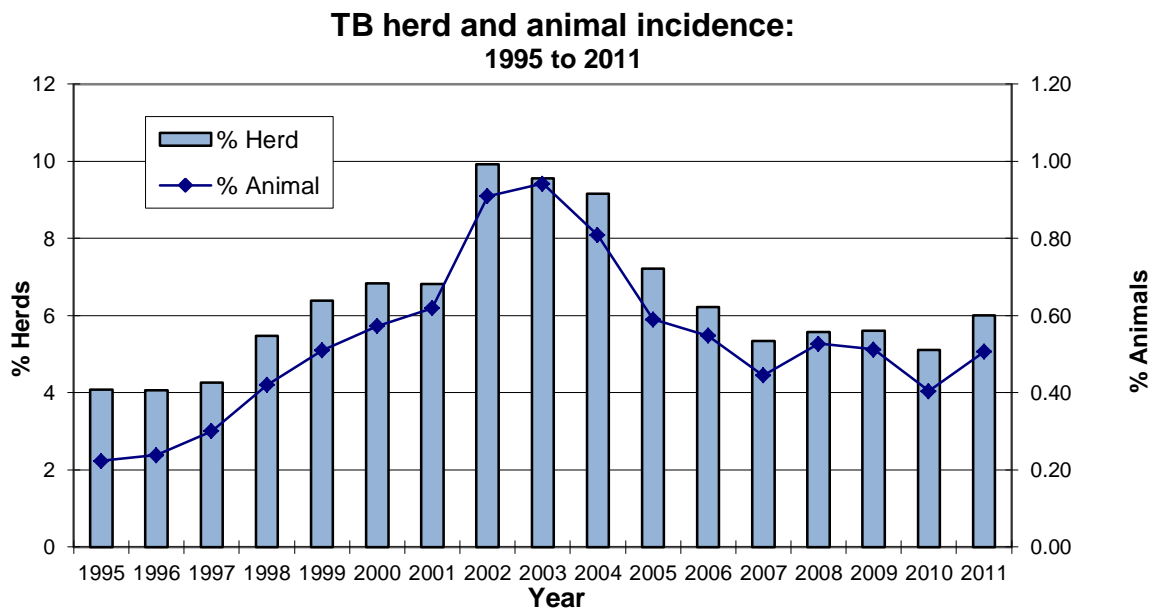
The Level and cost of Bovine Tuberculosis

3. Northern Ireland currently has some 26,000 herds of cattle, with around 1.6 million animals. Bovine TB has been a significant problem for decades, with at least one quarter of herds having had the disease. The Westminster PAC reported on bovine TB in 1993-94. At that stage, DARD was in the midst of a three-year 'Enhanced bovine TB Eradication Programme' which aimed to reduce the disease to 1986 levels when, on average, only 0.06% of animals tested were reactors. However, results were disappointing - at the close of the Programme in 1995, incidence levels had increased and were some four times higher than targeted.
4. From 1997, there was a significant increase in cases of bovine TB, rising from around 4 per cent of herds tested in 1996 to a peak of some 13% in 2002. This was the highest level of bovine TB in Europe. By 2007, the herd incidence of the disease had reduced to some 5.4%, although this was still significantly higher than the pre-1997 level. Over the past four years, the level has remained largely static, but with an increase in the past year to just over 6% at December 2011 – see **Figure 1**.

¹ 'The Control of Bovine Tuberculosis in Northern Ireland' NIA 92/08-09, 18 March 2009.

² 'Report on the Control of Bovine Tuberculosis in Northern Ireland', Twelfth Report of Session 2008/2009.

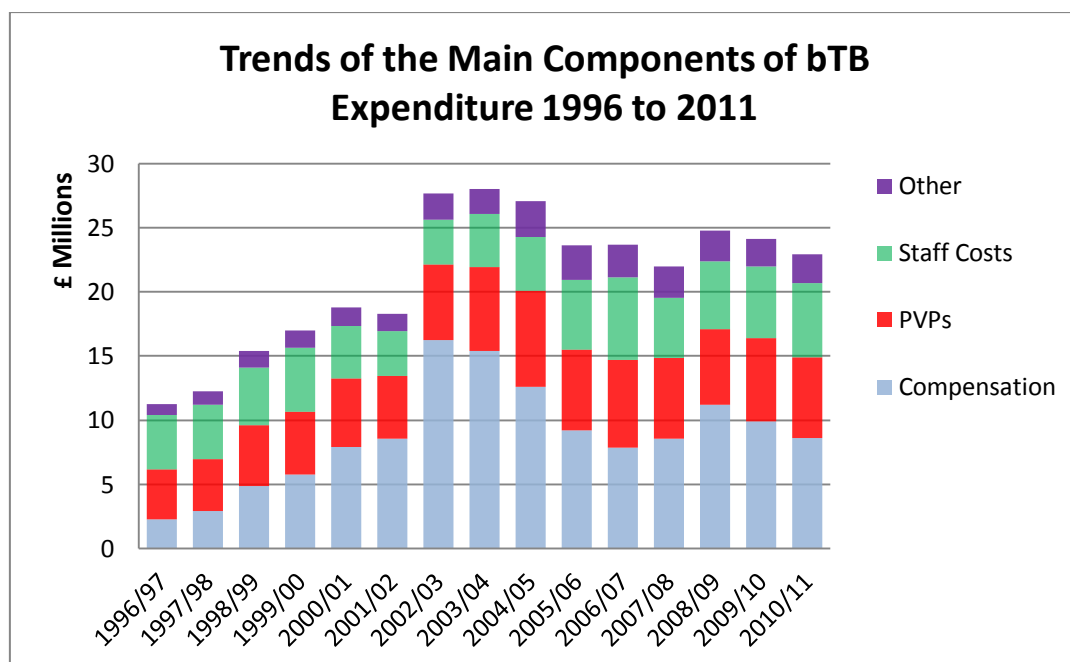
Figure 1:



Source: DARD

- The significant increase in prevalence of bovine TB has had a major impact on public expenditure. Over the 15 years to March 2011, DARD has spent £317 million on its bovine TB programme. This included £132 million on compensation to farmers for the compulsory slaughter of animals, £86 million to Private Veterinary Practitioners (PVPs) for herd testing, and staff costs of £71 million – see **Figure 2**. Total expenditure in 2010-11 was almost £23 million. Despite the huge cost, the evidence suggests that DARD is still many years from achieving eradication.

Figure 2:



Source: DARD

Testing for bovine TB

6. There are limitations in the tests used to detect bovine TB. The annual 'skin test' is the EU-recognised standard for identifying the disease in cattle, but it is not always accurate and fails to detect up to 1-in-4 infected animals. As a result, a reservoir of infection can remain within a herd. The 'gamma interferon' blood test is an ancillary test that may be used to complement the skin test. In June 2007, its use, on a voluntary basis, was confirmed as part of DARD's bovine TB control programme. Because the blood test has a greater 'sensitivity' than the skin test, it is particularly suitable for use in high risk herds
7. DARD said that it was looking at whether compulsory use of the blood test may be warranted, but highlighted two issues. The 'specificity' of the blood test is not yet as good as the skin test and so it will also identify, as reactors, a number of animals that are not actually infected. Second, the blood test costs £20 compared with the skin test at £2.50 (as at 2009). Given the cost implications, PAC recommended that DARD consider conducting a trial, in a high incidence area, as a basis for a cost-benefit assessment. PAC also recommended more research into the efficacy of the blood test and urged DARD to ensure that sufficient resources are applied as a high priority.

Private Veterinary Practitioners

8. PAC acknowledged the major contribution by PVPs to DARD's bovine TB programme, noting that, in the majority of cases, they have diligently carried out their responsibilities. Nevertheless, the evidence did show that, on occasion, not all private vets managed to meet the high standards required. At various times between 2002 and 2006, DARD reported concerns about the quality of PVP testing. Specific issues included late reporting of test results, the testing of exempt animals, failure to check dates of birth, failure to comply with health and safety requirements and the use of out-of-date tuberculin. PAC felt that this also pointed to a lack of supervision and control by DARD itself. We note that DARD has subsequently reported improvements across the various areas of concern.
9. Another issue noted was that detection rates differ considerably between PVPs and in-house staff. Data collected in two comparison exercises over a 10-year period from 1988 showed that, when compared on a like-for-like basis, in-house staff were between 1.5 and 1.8 times more likely to identify bovine TB than private vets. However, the reasons were not clear. The AVSPNI and NIVA³, in a submission to PAC, queried whether the absence of a supervision process for DARD staff, similar to that for PVPs, undermined the use of their testing results as a benchmark for PVPs. They also suggested there should be regular meetings between Divisional Veterinary Offices and local practices and that test result statistics, of individual vets testing within a practice, be made available to practice principals on a regular basis, to facilitate internal quality review.
10. The Department's 'Review of bovine TB testing arrangements' has made slow progress. Recommended in 2002, it took until 2005 to engage consultants. The consultants reported in 2006, recommending a range of improvements to testing arrangements. Our understanding is that these have not yet been implemented.

³Association of Veterinary Surgeons Practising in Northern Ireland' and 'North of Ireland Veterinary Association'.

Preventing the Spread of bovine TB

11. A 2002 Policy Review highlighted that inadequate boundary fencing (including stone walls and hedging) has been a major impediment to the successful control of bovine TB and noted that 79% of fencing did not prevent nose-to-nose contact between herds (DARD's 2004 Biosecurity Code specifies double-fencing with at least a 3-metre gap.) DARD was unable to provide PAC with a more up-to-date figure, but we understand that inadequate fencing remains a significant problem. More widely, DARD said that it wanted to link its Biosecurity Code to disease compensation, so that poor biosecurity would lead to a reduced level of payment. It appears, however, that this initiative has been shelved.
12. PAC considered that DARD should be much more proactive in encouraging farmers to attend training on early disease recognition and farm biosecurity planning and wanted the number of participants substantially increased. Between late 2004 and 2008, only 1,134 herdkeepers out of 26,000 had undertaken the DARD course. PAC also considered that attendance should be compulsory for farmers whose herds have suffered repeated infection, with failure to attend resulting in a reduction of compensation in future outbreaks.
13. DARD analyses in 1996 and 2002 indicated that a significant proportion of bovine TB breakdowns were caused by purchasing infected animals. The shortcomings of the skin test in detecting disease means that there is still a significant risk of purchasing infection, even from herds classified as 'Officially Tuberculosis Free'. In PAC's view, there was a strong case for pre-movement testing on a wider scale than at present. However, this recommendation was not accepted by DARD.
14. Infection in wildlife, particularly badgers, has long been considered a factor in bovine TB transmission. In submissions to PAC, both the AVSPNI and the Ulster Farmers' Union specifically highlighted this problem and DARD itself has attributed around 16-17% of outbreaks in recent years to wildlife. While the scientific evidence is complex and at times contradictory, long-term badger-culling trials in both Great Britain and the Republic of Ireland suggest that culling of badgers is not in itself a cost-effective solution to the bovine TB problem and, in certain circumstances, may even increase the spread of the disease. Another approach is to develop a vaccine for badgers. In Great Britain, DEFRA is undertaking a 5-year vaccine trial, its aim being to develop an oral vaccine by 2014.
15. To date, the Department has not actually intervened to tackle the wildlife factor in Northern Ireland, although it set up a 'Badger Stakeholder Group' in 2004 and commissioned a badger population survey in 2008. Given the scale and longevity of the wildlife issue, PAC considered that DARD had been slow to take action and expressed concerns about the timescale for future progress.

Compliance with the EU Directive

16. Isolation of reactors has been a significant problem in a number of herds, with farmers facing major logistical difficulties, particularly in dairy herds or where animals are in housing. Notwithstanding, it is incumbent upon the industry to meet the requirements of the EU Directive and farms should be properly equipped to apply the standard control procedures.

17. For many years, DARD did not comply with the EU Directive on ‘inconclusive’ test results - it allowed two re-tests rather than the one permitted by the EU and argued that compliance would cost £1.1 million annually. However, through its non-compliance, DARD cut itself off from additional funding made available by the EU to help eradicate disease. We understand that, in January 2010, DARD finally fell into line with the EU Directive and has since secured additional funding of some 5 million euros per year for 2010, 2011 and 2012.

Compensation, Enforcement and Tackling Fraud

18. There were a number of cases where multiple compensation claims had been paid to the same herdowners. PAC recognised that it can be difficult to eradicate bovine TB from herds but was concerned whether a 100% compensation rate provided sufficient incentive for herdowners to prevent infection. In its view, it was not right that the cost of repeated disease breakdowns rests entirely with the taxpayers – it felt that a share of the cost should be borne by the industry.
19. Given the 100 per cent compensation rate, the inherent risk of fraud is high. PAC considered that, as an added deterrent against fraud, DARD should seek to introduce a system of penalties against future compensation claims, where claimants have previously been found guilty of fraud. This was not accepted by DARD.

PAC’s Conclusions

20. Both NIAO’s and PAC’s overall conclusion was that the Department’s progress in tackling bovine TB had been much too slow. While acknowledging that the eradication of bovine TB in Northern Ireland represented a major challenge, PAC considered that, if DARD was to make real progress, there had to be a fundamental change in mindset - it must adopt a much more strategic approach, with a clear focus on eradication of the disease rather than mere containment. In its opinion, spending hundreds of millions of pounds on a programme that was not explicitly aimed at the eradication of bovine TB seemed a poor use of taxpayers’ money. PAC also believed that DARD would have to work much more closely with both the cattle industry and PVPs than it had done in the past. In total, PAC made 26 recommendations for improvement.

Developments since the NIAO/PAC Reviews

21. While progress has been made in reducing the incidence of bovine TB from its peak in 2002, the level currently remains significantly higher than in 1996 and many times higher than the 1986 level. Moreover, the annual cost of combating the disease also remains twice that in 1996-97.
22. NIAO has not carried out any further fieldwork on this topic since publishing its March 2009 report. However, in January 2012, DARD provided a report to PAC on progress against the undertakings which it gave to PAC in the Department of Finance and Personnel Memorandum of September 2009⁴. Further detail will be provided at NIAO’s oral briefing to the Committee on 24 April.

NIAO
16 April 2012

⁴ ‘Department of Finance and Personnel Memorandum on the Twelfth Report from the Public Accounts Committee, Session 2008-09: Control of Bovine Tuberculosis in Northern Ireland.’