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VETERINARY ADVISORY SERVICES

Inquiry into Biosecurity & Quarantine Arrangements

This report is a submission on two aspects covered by the Terms of Reference namely "The adequacy of current biosecurity and quarantine arrangements, including resourcing" and "projected demand and resourcing requirements". Its contents are confined to comments on Animal diseases.

The Adequacy of current biosecurity and quarantine arrangements, including resourcing.

The response by Government agencies to the recent Equine Influenza outbreak has been most encouraging. The implementation and adherence to biosecurity principals at airports and quarantine stations with clean in/clean out entry points and separation of different intakes of animals have greatly reduced the possibility of disease causing organisms from escaping from these stations. This aspect of quarantine is the easiest to fix and control as points of entry to Australia for animals from overseas can be relatively inexpensively controlled.

There are other sources of animal and bird imports that are less easily controlled and monitored. These require some form of observation and administration. For example the natural migration of birds is uncontrollable and has been occurring for thousands of years without adverse impact. This is because firstly, there has been a dearth of domestic animals and birds present in Australia along the migration routes. And secondly, the relatively long distances between stops for migrating birds ensures disease prevents affected animals from making the journey. However, as the population of humans increases with their associated domesticated animals there will be a proportional rise in the risk of introduction of exotic disease.

Most exotic diseases of viral origin have a relatively short incubation period. The exceptions are the prions or "slow viruses" causing Bovine Spongiform Encephalopathy (BSE) in cattle, Scrapie in sheep and Kuru a disease of humans present in Papua New Guinea. These have an incubation period that may take decades before clinical signs manifest. As the population of the Torres Straits and Cape York Peninsular rises there will be increased risk of the introduction of disease from Papua New Guinea. The State Departments of Agriculture currently have herds and flocks of sentinel animals situated in remote locations (e.g. Broome in Western Australia) that are monitored for signs of disease. These are of limited value because the laboratories capable of identifying any exotic disease are situated so far away from the sentinel animals that any disease presence will have an opportunity to spread significantly by the time it is identified. This is another aspect of biosecurity of which more will be said later.

Recommendation 1 Sentinel flocks and herds held in the North of Australia are continued, augmented and monitored.

Quarantine and Biosecurity on the Farm

The resourcing problems for quarantine and biosecurity arise at post entry points where undiagnosed diseases emerge on the farm where there is no expertise available to identify the threat.

A recent survey of Western Australian farmers and the veterinary profession concluded that over 90% of farmers would not have a veterinarian on their property at all if it were not for the fact that Schedule 4 drugs need to be supplied by the Veterinary profession[1]. It also concluded that there were only five veterinarians in the whole State who received their entire income from agricultural practice one from sheep, two from cattle and two from pigs[2]. This is despite the fact that every veterinarian receives a comprehensive training in the recognition and diagnosis of exotic disease at all Veterinary Schools.

This lack of accessible expertise is due to a systematic dismantling of Agricultural services to the farming community by Government agencies over the last forty years. The services removed include agricultural advisors, stock inspection services, laboratory services and veterinary services. The services that remain are largely office based and as a result recent disease outbreaks in sheep and cattle have been slow in diagnosis and spread beyond easy control. Footrot and ovine Johnes disease are two examples of controllable diseases which if diagnosed early could have limited impact on agricultural communities. The current outcome of ovine Johnes disease in Australia is what happens when inadequate resources are mustered and too many compromises are made to save resources. Hendra virus in horses is a recent disease causing organism that has serious zoonotic implications if inadequate resources are used to develop disease limiting strategies.

It is not my place to do cost/benefit analysis on a disease like Hendra as I do not have the economic expertise. It is my understanding that Animal Health Australia are developing a relationship with the school of Economics at the Australian National University who do have the expertise to perform these kinds of studies and this committee should avail themselves of that data.

The recent mothballing of regional agricultural diagnostic laboratories is a further indication of the demolition of services to agriculture. It is not adequate to have AAHL in Geelong being the only laboratory to diagnose the presence of exotic organisms. This laboratory should fulfil the same roll as Perbright in UK. It is a confirmation lab. Every State should have at least one laboratory within 24 hours

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[1] V Maxwell, JAL, Costa, ND, Layman, LL and Robertson, ID. (2008a). Rural veterinary services in Western Australia: Part A. Government veterinary services. *Australian Veterinary Journal* 86:1-7.

[2]Maxwell, JAL, Costa, ND, Layman, LL and Robertson, ID. (2008b). Rural veterinary services in Western Australia: Part B. Rural practice. *Australian Veterinary Journal* 86:74-80.

travel of all agricultural regions and sentinel flocks. These laboratories should have the ability to conduct initial diagnostic tests sufficient to confirm the suspicion of the presence of an exotic disease. Confirmation from AAHL can follow at a later date. The important matter is that exotic disease containment plans are initiated to contain the spread of disease thereby minimising the cost to the community.
The question arises as to how to pay for regional laboratories. The business model previously used was 100% funding from the State. Social commitments have changed funding requirements so alternative arrangements need to be considered.

In Western Australia the present State Government gained office through the support of the National Party and their "Royalties for the Regions' Policy. Put simply it was a plan to return 25% of the mining royalties back to the communities for infrastructural developments from where the royalties were coming. Part of the dislocation of society in Australia is occurring because there are population pressures happening in the big cities and a flood of people away from the regions. Future national development of Australia will depend on reversing that trend. Providing better facilities in regional areas will result in more people moving away from large cities. Placing agricultural laboratories and biosecurity administration in agricultural areas ensures those infrastructure elements are where they are needed, the staff attracts other support elements and communities grow. Increasing populations place greater need for banks and private businesses to return to the towns they have been deserting and before long the contracting of services that has been the hallmark of the past decades is reversed and the country returns to prosperity rather than operating a two speed economy as is present today. The main decision is ascertaining where to start the trend. In the 1970s Gough Whitlam commenced by relocating the Australian Taxation Office in Albury. Similar proposals were to be implemented in Orange, NSW.

Biosecurity and support for Agricultural and Horticultural Industries would, in my opinion, be a great place for this generation to start. Resourcing should be done in consultation and co-operation with producer organisations that these days are very well organised and supportive of public /private agreements. Bringing in support of local government helps spread the resourcing load.

Recommendation 2 The mothballing of regional veterinary and horticultural laboratories should cease. These laboratories should be reopened as a matter of urgency.

Projected demand and Resourcing Requirements

Simultaneously with the demise of agricultural advisory services, numerous Universities are developing large animal based veterinary schools. James Cook University in Townsville, Sturt University in Wagga, Queensland University at Gatton and Murdoch University in Perth are all investing millions of taxpayer dollars in agricultural facilities to train large animal veterinarians with no co-ordinated plan on how or where these highly skilled individuals are going to earn a living. The present farming economic model does not include veterinary consultants as part of the business plan and individual farm animal medicine is uneconomic to operate as a fire brigade service.

The veterinary profession have highly trained diagnosticians experienced in the diagnosis of exotic diseases. They are of no use unless out in the field visiting farms on a regular basis so a working partnership is developed between individual farmers and veterinarians. State Government Departments of Agriculture across Australia gave up employing sufficient veterinarians decades ago. Thus any exotic disease outbreak is generally well established beyond the original point of commencement by the time the veterinary profession is notified of a problem. This was ably demonstrated in the Equine Influenza outbreak of 2007. Numerous nodes of infection had spread from the quarantine station in Sydney right through NSW to Queensland. Australia was most fortunate that the disease of Equine Influenza is a very mild, albeit highly contagious disease, with low morbidity. Should a more devastating disease like Swine fever, foot and mouth disease or Ebola virus escape into the remote regions of Australia the social cost would be incalculable.

Resourcing numerous veterinarians in the field is expensive. In previous decades the costs were offset by individual government veterinarians providing a fire brigade veterinary service for which charges by the government veterinarian were made. The cost of providing such a service for an individual animal is now so prohibitive such a service is no longer achievable. However producer organisations are better organised and local government willing to put resources into helping professionals live in their communities. By providing buildings and supporting service provisions such as telephone, electricity and water services costs of providing a veterinary service can be decreased sufficiently to make biosecurity and quarantine surveillance achievable.

Recommendation 3 Sufficient veterinarians be employed by Departments of Agriculture to adequately service the Agricultural regions and farming community with a free diagnostic service so all deaths or sickness in farm animals are notified to the proper authorities and an accurate picture is developed on the distribution and level of all animal diseases, exotic or otherwise.

There is no doubt the Australian Universities are producing sufficient expertly trained veterinarians. The level of expertise and quality of Australian Veterinarians is recognised internationally with Australian Veterinary School qualifications accepted worldwide. The numbers of graduates are more than adequate to service Australia with the demographics of the profession changing from a male dominated profession to equality between the sexes and the average age lowering. The availability of expertise of experienced practitioners in large animal practice is not so optimistic. Most of the rural practices are owned by senior veterinarians approaching the age of retirement. Their younger associates are reluctant to take on the financial responsibility of practice ownership in agricultural areas because the financial returns are inadequate. The quality of large animal veterinary working life is stressful with many disruptions to social life outside normal working hours. The younger generations are not prepared to make as many sacrifices as their senior colleagues. This is an aspect of veterinary life that is unlikely to change even with more careful selection of veterinary students. However more careful selection of students with a rural background who are more likely to return to agricultural areas may increase the population of graduates in agricultural areas and decrease graduates flocking to city small animal practices. Government support of agricultural practice will reverse the trend to city living and better develop Regional Australia. This may simultaneously

help solve many of the infrastructure bottlenecks currently besetting the more populous States.

Recommendation 4 Veterinary student selection criteria for entry to University should be biased toward rural students with farming backgrounds to encourage development of rural practitioners. This needed especially in those Universities developing specific large animal biased courses. (Sturt, James Cook and Queensland).

Summary

Biosecurity and Quarantine are one of a number of services that can be sufficiently resourced if combined with producer organisations and local government. Provision of these services can bring life back to Regional Australia by attracting professionals and community services into regional towns. Any expense will be more than offset by the potential economic disaster an exotic disease will cause should one decimate our flocks or herds. Biosecurity ranks only behind water provision in ensuring food production sufficient for our population remains viable in Australia. The cost of the recent Equine Influenza outbreak exceeded 100 million dollars and that was in a non food producing animal and was a very mild disease. Five hundred veterinarians spread across the country at $60,000 a year salary is less than half that cost. This shows a massive cost benefit to Australia that with support from Producer Organisations and Local communities is affordable.

Recommendation 1 Sentinel flocks and herds held in the North of Australia are continued, augmented and effectively monitored.

Recommendation 2 The mothballing of regional veterinary and horticultural laboratories should cease. These laboratories should be reopened as a matter of urgency.

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