

# 1 SCENE SETTING

## 1.1 What is biosecurity?

Biosecurity is a relatively new term. It is significantly broader than quarantine, which in a Constitutional sense is restricted to the consideration of diseases and disease agents, with an emphasis on containment and exclusion. The narrow definition of quarantine does not include pests and weeds which are not disease vectors, but are nevertheless capable of causing great economic or environmental damage.

The Panel has defined biosecurity as ‘the protection of the economy, environment and human health from the negative impacts associated with entry, establishment or spread of exotic pests (including weeds) and diseases.’

## 1.2 Why is biosecurity important?

Australia’s favourable pest and disease status is integral to its agricultural and food sector. It also contributes to the unique status of Australia’s natural environment. Being an island, Australia’s plants and animals evolved in isolation until relatively recently. As a result, they are vulnerable to exotic pests and diseases. Australians place a high value on the country’s environment and biodiversity.

Australia’s agriculture, fisheries and forestry industries make an important contribution to Australia’s economic and social prosperity. In 2006-07 they contributed \$38.5 billion to Australia’s gross value of production (equivalent to 2.8 per cent of Gross Domestic Production) and provided employment for 272,000 people in rural and regional areas (Department of Agriculture, Fisheries and Forestry 2008).

Freedom from many of the world’s major pests and diseases provides Australia’s export oriented agricultural sector with a clear advantage in global markets. For example, the ability to demonstrate the absence of significant pests and diseases, such as BSE, foot and mouth disease and Karnal bunt, allows Australia to maintain favourable market access.

The introduction of a serious exotic pest or disease to Australia could have significant implications for the economy and the natural environment. For example, six years ago the Productivity Commission modelled the economic costs to Australia of a 12 month outbreak of foot and mouth disease at between

\$8-13 billion (Productivity Commission 2002). Similarly, following the discovery of red imported fire ants in Queensland, the Australian Bureau of Agricultural and Resource Economics estimated the potential cost of this pest over a thirty year period to be nearly \$9 billion (Kompas and Che 2001).

These figures provide a strong argument for a biosecurity system that can quickly and effectively deal with potentially dangerous and costly pests and diseases. They do not, however, provide an argument for preventing trade altogether. For example, almost all of the crops and animals (and many of the pastures) forming the basis of Australian agriculture were initially imported into the country. Only a very small amount of Australia's agricultural production incorporates the use of native flora and fauna. The ability of the agriculture sector to continue to import new genetic stock and cultivars safely is essential to its future sustainability and capacity to be competitive in domestic and international markets.

### 1.2.1 The global treaty framework

Australia is rightly at the forefront of international advocacy for agricultural trade liberalisation, vigorously pursuing its interests through avenues such as the Cairns Group, which Australia chairs. The Cairns Group is a coalition of 19 agricultural exporting countries. Since it was formed in 1986 the Cairns Group has been an influential voice in global agricultural trade negotiations within the World Trade Organization and its predecessor, the General Agreement on Tariffs and Trade.

Australia benefits from the application of the fair and consistent international trading rules established by the World Trade Organization. For biosecurity, the World Trade Organization's *Agreement on the Application of Sanitary and Phytosanitary Measures* (the SPS Agreement) has particular relevance. Australia was instrumental in negotiating the SPS Agreement and ensuring it provided an objective basis to challenge unjustifiable barriers to its agricultural exports.

Under the SPS Agreement, World Trade Organization Members have the right to adopt sanitary and phytosanitary measures necessary for the protection of human, animal and plant life or health. These measures must be science-based, not more trade restrictive than required and not arbitrarily or unjustifiably discriminatory against trading partners. At the core of the SPS Agreement is the concept of an 'Appropriate Level of Protection'. Australia's Appropriate Level of Protection is currently expressed as 'providing a high level of sanitary and phytosanitary protection, aimed at reducing risk to a very low level, but not to zero.'

Despite Australia's role in advocating the SPS Agreement, many trading partners now view Australia's biosecurity system as protectionist. Allegations have been

made that Australia's Import Risk Analysis process is a *de facto* trade barrier. Australia has consistently and vigorously defended its system bilaterally and within the World Trade Organization. However, these perceptions remain and put at risk Australia's trade policy credentials. They also increase the likelihood of retaliatory action by frustrated trading partners seeking to use biosecurity barriers against Australian agricultural exports in potential export markets. The Panel notes that New Zealand, Australia's close friend, neighbour and fellow trade liberalisation ally, is currently seeking to overturn Australia's measures affecting the importation of apples from New Zealand through the World Trade Organization's dispute settlement procedures.

## **1.3 Applying biosecurity**

### **1.3.1 Emerging risks**

A number of emerging risk factors affect the need for and nature of biosecurity. Some of these include:

- the urbanisation of rural regions, leading to a heightened risk of pest and disease incursions and zoonoses due to the increasing interaction of urban communities with agricultural production areas;
- increases in the international movement of people and goods, particularly from areas that present higher biosecurity risks, which complicates the ability to identify risks at the border;
- intensification of agriculture, affecting the ability to contain and limit the spread of a pest or disease once an incursion takes place;
- the global movement of genetic material to improve yields and support research, which presents a range of risks that requires the development of specific technologies;
- skill shortages in critical areas such as taxonomy, microbiology and entomology, placing limitations on the ability to develop biosecurity systems and respond to pest and disease incursions; and
- the challenges from climate change, including increasing numbers of viable natural pathways for exotic pests and diseases to enter Australia.

With these changes comes a greater risk of pest and disease incursions. Some recent overseas examples include: the establishment of bluetongue virus in Western Europe; the spread of tramp ant species; the spread of West Nile fever to North America; and the establishment of varroa mite in the New Zealand bee population. Recent Australian incursions include: European house borer; tramp ants; sugar cane smut; grapevine leaf rust; citrus canker; Khapra beetle; currant-lettuce aphid; and equine influenza.

### 1.3.2 A ‘whole of continuum’ approach

The world is responding to the evolving challenges by increasing the focus before and behind national borders. Examples of such responses include building intelligence networks, adopting the principles of regionalisation and compartmentalisation, shifting the emphasis from ‘not known to have’ pests and diseases to ‘known not to have’ those pests and diseases when accepting imports from a country or region, securing food chains and applying new technologies.

In some countries, there is a practical recognition that borders are porous and the principal focus needs to be on monitoring, surveillance and response to pest and disease incursions, rather than prevention and interception. Australia takes a different perspective in substantial part reinforced by its island status and consequently its greater capacity to control the movement of people, animals and plants across the border.

### 1.3.3 Risk management rather than risk elimination

In the past, Australia protected its shores from exotic pests and diseases through a quarantine system that used isolation, segregation, disinfection and measures to kill insects once people or products of concern were identified at the border. The task has become considerably more complex, and to accommodate this there needs to be a shift from zero risk to managed risk, from barrier prevention to border management, from ‘no, unless ...’ to ‘yes, provided ...’

Adopting a multi-layered biosecurity system means that detecting an exotic pest or disease within Australia need not be a failure of the system if it is detected quickly and dealt with at low cost. This was illustrated with the detection in Western Australia of Khapra beetle within a recent immigrant’s personal effects after they had cleared quarantine. Although the pest was not detected during risk mitigation activities at the border, a commercial pest controller identified its presence, notified authorities and steps were taken successfully to contain and eradicate it before it was able to spread to surrounding areas.

### 1.3.4 A partnership approach

Over the years there have been a number of inquiries into Australia’s biosecurity system—an indicator of the importance given to a robust system. The last comprehensive review, *Australian Quarantine: a shared responsibility*, was undertaken in 1996 by a committee chaired by Professor Malcolm Nairn. One of the main themes of the Nairn Report was that responsibility for Australia’s quarantine and biosecurity system should be shared between the government, business and the Australian community.

Since then, there have been a number of positive developments, such as the establishment of Plant Health Australia, the Quarantine and Exports Advisory Council, the Eminent Scientists Group, AusBIOSEC and the National Biosecurity Committee.

In February 2006, a report by the Agriculture and Food Policy Reference Group, chaired by Mr Peter Corish, was provided to the Minister for Agriculture, Fisheries and Forestry. The Report reiterated the importance of maintaining Australia's favourable pest and disease status and made recommendations on the need for a coordinated national approach, changes to the Import Risk Analysis process, independence for Biosecurity Australia and improved communication around biosecurity.

Despite these reviews, Australia has failed to build the institutions to underpin effective and comprehensive cooperative arrangements—that is, the organisational structures, information systems and resources to achieve the Nairn Report's vision. In fact, since 1996 there may have been a deterioration in these cooperative arrangements and a level of fragmentation within the Commonwealth. There is evidence of a reduced flow of biosecurity information between the Commonwealth and the states (for the purpose of this report 'states' is taken to mean 'states and territories'), and of states acting independently in some areas.

A new approach is needed which provides:

- a common understanding between the Commonwealth, the states, business and the community at large of their respective roles and responsibilities and how these will be met;
- a legal framework that can underpin a genuinely national approach for exotic pests and diseases;
- a framework to underpin a more effective approach to risk analysis, including assessment and management (monitoring, surveillance and response) of regionally established pests and diseases; and
- the institutions, protocols, information systems, programs, research, and resources (funding and skills) necessary to achieve these objectives.

## **1.4 The Quarantine and Biosecurity Review**

The Quarantine and Biosecurity Review was announced on 19 February 2008 by the Minister for Agriculture, Fisheries and Forestry, the Hon. Tony Burke MP. The terms of reference are at Appendix B.

Following the release of an Issues Paper to prompt discussion, all interested parties were given the opportunity to participate in the Review through a formal submission process. The Panel received around 220 written submissions from a

wide range of interested parties (including a number of overseas submissions) which is a reflection of the importance the community places on Australia's biosecurity systems (a list of submissions is at Appendix D).

The Panel consulted with a broad range of domestic and international stakeholders, including participating in over 170 meetings with individuals and representatives of organisations. The Panel also sought information from trading partners on their arrangements for managing biosecurity risks. Discussions were held with government officials and business representatives in New Zealand, North America and Europe. The Panel also met with representatives from the World Trade Organization and Member countries in Geneva and overseas embassy officials based in Australia.

### 1.4.1 Report structure

The Panel has written the Report with a structure that will ensure the many issues raised during the consultation process are discussed and that the terms of reference for the review are appropriately covered. Most chapters describe the current position, then summarise comments received from submissions, and finally present the Panel's views, leading to specific recommendations.

Chapter 2 examines the relationship between the Commonwealth and the states.

Chapter 3 considers the organisational structures that would ensure the most effective delivery of biosecurity policy and activities.

Chapter 4 looks at improving the relationship between government, business and the community and provides recommendations to ensure the theme of the Report **One Biosecurity: a working partnership** is realised.

Chapter 5 addresses the articulation and communication of Australia's Appropriate Level of Protection and improving the Import Risk Analysis process.

Chapter 6 draws together the legislative arrangements required to give effect to the Panel's recommendations.

Chapter 7 reviews the way Australia's biosecurity agencies manage risk across the continuum.

Chapter 8 investigates mechanisms to ensure the integrity of Australia's biosecurity systems is of the highest order.

Chapter 9 discusses resourcing requirements of Australia's biosecurity agencies at the Commonwealth level and addresses management and staffing issues that were raised during the consultations.

Chapter 10 benchmarks Australia's biosecurity arrangements with systems used by trading partners.