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Quarantine Reform and Technical Market Access

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NSW 2006
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Paper presented to the 45th Annual Conference of the Australian Agricultural and Resource Economics Society held at Adelaide, 22–25 January, 2001.

Quarantine Reform and Technical Market Access

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1. Introduction

Despite major reforms to the Australian quarantine system in recent years and the implementation of the WTO Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement), quarantine decision making and technical market access issues continue to attract wide interest from the media, some industries, foreign governments and the general public. Quarantine-related issues and market access concerns remain high on the Australian Government's policy agenda.¹ The aim of this paper is to examine the impact of the quarantine reforms and the implementation of the SPS Agreement on quarantine decision making in Australia. The other side of the trade equation is export market access. As a major exporter of agricultural and processed food products, the impact of the SPS Agreement on other countries' quarantine regimes is of vital interest to Australia. An attempt is made to analyse recent changes in market access conditions for Australian agricultural and food exports.

This paper addresses these issues by first briefly reviewing the main principles of the SPS Agreement, which came into effect for developed countries in 1995, and outlining its significance for Australia.² The paper examines the major tenets of the report of the Australian Quarantine Review Committee (Nairn et al. 1996), which formed the basis for the Government's fundamental reforms to the quarantine system announced in August 1997 (DPIE 1997), before focusing on the impact that the Nairn reforms and compliance with the SPS Agreement have had on quarantine decision making in Australia. Finally, changes in market access conditions for Australia's agricultural and food exports are examined.

¹ 'Market access' is used in this paper to refer to 'technical' market access only, that is, quarantine (animal and plant) and food safety concerns which restrict or completely prohibit entry to a market.

² In recognition of their lack of technical expertise, technical infrastructure and resources, the least-developed countries were given until 2000 to implement the SPS Agreement and other developing countries were permitted to delay implementing most provisions of the Agreement for two years.

2. The SPS Agreement and its significance to Australia

It is widely agreed that extending the GATT rules-based system to agricultural products was one of the major achievements of the Uruguay Round. However, the prohibition on the use of non-tariff measures such as import quotas and licences and the reduction in tariffs, negotiated as part of the WTO Agreement on Agriculture, created concern that countries might turn to quarantine and non-tariff restrictions as an alternative means of protecting their agricultural industries. The SPS Agreement and the Agreement on Technical Barriers to Trade (TBT Agreement) were designed to prevent this happening.³ The 'underlying objective [of the SPS Agreement] is to ensure that governments do not use food safety and quarantine requirements as unjustified trade barriers in order to protect their domestic agricultural industries from competitive imports' (Stanton 2000a, p. 24).

2.1 Major provisions of the SPS Agreement

The SPS Agreement ensures that governments have the right to impose restrictions on international trade, provided that they are necessary to protect human, animal or plant health from certain risks. The SPS Agreement does not apply to all risks to human health, only to those risks arising from additives, contaminants, toxins or disease-causing organisms in food and beverages or risks from diseases carried by animals or plants. The Agreement also applies to the protection of animal health from pests and diseases, and from contaminated feedstuffs, and to the protection of plant health from pests and diseases. Measures to protect the territory of a country from damage resulting from the entry, establishment or spread of pests (even if they do not cause disease) are also covered by the SPS Agreement. The provisions of the Agreement relate to all plants and animals, not just commercially significant species, and include aquatic animals, and native flora and fauna.

When imposing a restriction, countries must be able to demonstrate that the restriction is based on scientific evidence, 'that is, that there is scientific evidence of potential health risks in the absence of the protective measure' (Stanton 2000a, p. 24). In cases where such evidence is not available, governments may apply the 'precautionary principle' and provisionally apply a measure, provided that governments pursue the necessary scientific evidence to review such a measure 'within a reasonable period of time'.

³ The TBT Agreement essentially covers food standards that are not related to the protection of human health and safety or diseases carried by animals. It thus encompasses labelling and nutritional requirements and rules designed to protect consumers against deception and fraud.

The SPS Agreement encourages governments to 'harmonise' or base their national measures on the international standards, guidelines and recommendations developed in other international organisations to which most WTO member governments belong. The SPS Agreement identifies three international organisations as being relevant:

- the Codex Alimentarius Commission (Codex) of the FAO and WHO for human health and food safety;
- the Office International des Epizooties (OIE), also known as the International Animal Health Organisation, for animal health; and
- the International Plant Protection Convention (IPPC) for plant health.⁴

Encouragement to use the international standards set by these organisations does not mean that these international standards are a ceiling on national standards. However, governments that do not base their national standards on the relevant international standards must justify their higher standards on scientific grounds.

While setting out some general criteria for risk assessment, the SPS Agreement does not detail the methodology to be employed but directs governments to take account of the risk assessment methodologies developed by Codex, the OIE and the IPPC. A risk assessment should identify potential hazards and their consequences and may be quantitative or qualitative. However, as Stanton (2000a, p. 26) makes clear, a risk assessment is not required to determine whether a risk is 'acceptable'. It is 'a sovereign prerogative of governments to determine what is an acceptable level of risk' or in the jargon of the SPS Agreement, the appropriate level of protection (ALOP). However, in determining their ALOP, the SPS Agreement obliges governments to be transparent and consistent, and not to use different levels of acceptable risk for different products as an arbitrary or disguised restriction on trade. This is not to say that a government must determine a single ALOP that applies to all imports. It may, for example, apply a higher ALOP to risks to human health than for animal or plant health. A further principle is that having determined the ALOP, a government is required to select the quarantine measure, which is least restrictive to international trade, while still ensuring the required level of health protection.⁵

⁴ See Wilson (2000) for a discussion of these three 'sister' organisations.

⁵ For a more detailed discussion of these concepts see Stanton (2000a).

Despite the principles of the SPS Agreement being relatively straightforward, ensuring that quarantine and food safety polices comply with the Agreement is proving to be a challenging task for governments around the world. Developing countries, in particular, have raised concerns about the difficulties they face in implementing the Agreement and the need for further technical assistance. The wording of the Agreement is not specific in many details, and debate is occurring on such issues as how governments should define their ALOP, what is an 'appropriate risk assessment', what constitutes a 'consistent approach to risk management', how to define 'least trade restrictive' measures and what constitutes 'sufficient scientific evidence' on which to impose restrictions. These and other issues concerning the implementation of the SPS Agreement are being considered by the SPS Committee, which was established to oversee the implementation of the Agreement and to provide a forum for discussion of quarantine-related concerns.

When governments disagree on the legitimacy or fairness of a quarantine measure, they are encouraged to consult. However, if such informal consultations fail to resolve the issue, governments have recourse to the WTO dispute settlement procedures. Since the WTO was established in 1995, there have been three disputes involving SPS issues:

- the 'EC hormones' case, involving complaints by Canada and the United States against EC prohibitions on the importation of beef derived from cattle treated with hormonal growth promotants;
- the 'Australia–salmon' case, involving a complaint by Canada against Australia's restrictions on fresh, chilled or frozen salmon, and a subsequent complaint concerning implementation of the Commonwealth measures introduced in July 1999 and the action taken by the Tasmanian Government to prohibit imports; and
- the 'Japan varieties' case, involving a US complaint against varietal testing of a range of horticultural products for codling moth.

The outcomes of these disputes have substantially clarified the operation of the SPS Agreement, including how risk assessments must be done.⁶ Thus, the SPS Agreement is evolving through the legal interpretation arising out of trade disputes. This is not to suggest that scientific and technical issues are ignored. The panel of trade experts examining the trade dispute may seek advice from individual scientific and technical experts or establish an advisory panel, but the WTO dispute settlement mechanism is essentially a legalistic process.

⁶ See Pauwelyn (1999), Deady (2000) and Stanton (2000b) for excellent discussions of how the first three disputes have clarified the SPS Agreement.

2.2 The significance of the SPS Agreement to Australia

As already indicated, it is crucial to Australia's national interest that, as levels of agricultural protection fall as a result of the Uruguay Round and the current mandated negotiations on agriculture which are underway in Geneva, governments do not introduce new quarantine measures to protect their local industries from import competition. Not surprisingly, Australia was one of the key players in the drafting of the SPS Agreement to ensure that quarantine measures are scientifically based and applied only for the purpose of protecting human, plant or animal health (or preventing the introduction of unwanted pests). Such measures must not be used as an arbitrary or disguised form of trade protection.

Notwithstanding the complexities of its legal interpretation, the SPS Agreement essentially embodies the following basic principles. Quarantine measures imposed by WTO member governments shall:

- be based on science;
- be applied only to the extent necessary to protect human, animal or plant life and health;
- be applied consistently;
- be transparent;
- be no more restrictive than necessary to achieve the required level of health protection; and
- not discriminate between members where identical or similar conditions prevail (adapted from McKinnon 2000a).

Ensuring that all WTO members adhere to these principles will result in better and fairer access to export markets. The SPS Agreement serves to improve market access for Australia by requiring countries to scientifically justify existing quarantine measures. As McKinnon (2000b, p. 212) points out, 'it is likely that the SPS Agreement will be of increasing importance to Australia in the future ... because continued globalisation of markets will see greater and more diverse opportunities for the export of fresh and live agricultural commodities'. Maintaining Australia's relative freedom from serious pests and diseases, through its strong quarantine system, assists exporters to gain access to overseas markets. Australia can also market its 'clean green' image if the use of chemicals to control pests and diseases is reduced. Changes in technical market access for Australian exporters are discussed in Section 5.

The scientifically based framework of the SPS Agreement is clearly of benefit to Australian exporters. But the same rules apply equally to Australia when determining import access for agricultural products from other countries. Australia's quarantine system has attracted strong criticism from Australia's major trading partners. Each of Australia's quadrilateral partners have expressed concerns — for example, New Zealand with respect to apples, Canada with respect to salmonids and pigmeat, and the United States with respect to chicken meat, pigmeat, salmonids and table grapes — as have the ASEAN countries, notably Thailand and the Philippines. The European Union has also raised concerns about Australia's quarantine system. The obligation on Australia, as a WTO member, to abide by the SPS rules is not always recognised by domestic stakeholders, consumers or even State governments, as recent events concerning the importation of salmon have demonstrated.

Under the SPS Agreement, Australia has the right to impose quarantine measures that are consistent with our ALOP, provided such measures are scientifically based and the least trade restrictive. The SPS Agreement affirms Australia's sovereign right to set its own ALOP which can best be described as 'very conservative' (AQIS 1999). This is consistent with Australia's trade profile as a major exporter of agricultural products and the trade benefits that flow from maintaining Australia's relative freedom from pests and diseases. In applying the ALOP, Australia adopts a 'managed risk' approach to quarantine. This reflects the increasing level of trade and tourism, the finite resources available for quarantine management and the constant threat of pests and diseases entering through natural pathways, such as migratory birds or being borne long distances on wind or sea currents (Nairn et al. 1996).

3. The nature of Australia's quarantine reforms

In December 1995, in response to mounting criticism of the Australian quarantine system from primary industry groups, the scientific community and the general public, the then government set up an independent review of Australia's plant and animal quarantine policies and procedures, chaired by Professor Malcolm Nairn. The review coincided with major changes that were occurring in the international trading environment, including the increased trade opportunities as a result of the conclusion of the Uruguay Round, the implementation of the SPS Agreement, increasing consumer concerns about food safety and rapid increases in world trade and tourism. Following a general election in March 1996 and endorsement by the Coalition Government, the Nairn Review presented its report — *Australian Quarantine:*

a shared responsibility — to the Government in November 1996.

The Nairn Review proposed fundamental changes to the culture of the quarantine service and the way quarantine policies are developed and put into effect. Central to the Nairn Review's recommendations was the need to develop a 'partnership approach' that embraced industry, governments and the wider community. The basic tenets of the Nairn Review can be summarised as follows:

- Development of a partnership approach to quarantine policies and programs involving the whole Australian community — the general public, industry and governments;
- Establishment of a statutory authority to develop national quarantine policy and ensure national delivery of quarantine services;
- Establishment of a more balanced approach to animal and plant health and quarantine by providing additional inputs for plant health and quarantine;
- Development of a more formally structured process for conducting risk analyses to provide a scientifically based foundation for a policy of manageable risk;
- Acknowledgment of the importance of quarantine to the natural environment;
- Expansion of the scope of quarantine by recognising the importance of activities in all three elements of quarantine — pre-border, border and post-border — as a continuum; and
- Enhancement of the focus on pre-border and post-border activities of the continuum of quarantine in the achievement of Australia's quarantine goal (Nairn et al., 1996, pp. 11–12).

In its response (DPIE, 1997), the Government accepted the basic principles and recommendations of the Nairn Review, with the exception of the recommendations to set up a statutory authority to be responsible for quarantine policy and programs. The government stressed the importance of Australia's quarantine system for potential agricultural exports and the need for 'a credible quarantine policy that is consistent with international rules and standards', and emphasised the need to 'accept the international rules with which we expect our trading partners to comply' and to base quarantine decisions 'on the weight of scientific evidence and judgement' (DPIE, 1997, p. 8). In providing additional funds to enhance the quarantine system — in the order of \$76 million over four years — the Government placed particular emphasis on increasing community awareness, applying the principle of 'manageable risk' (based on science) to quarantine decisions, protection of Australia's unique environment and recognition of the continuum of quarantine (that is, quarantine needs to be

seen as a continuum of pre-border, border and post-border measures). Greater emphasis was also to be given to improved consultation in import risk analysis, increased monitoring for pests and diseases, and enhanced national preparedness and response capacity (especially for plants and aquatic animals).

In providing significant funding for quarantine — at a time of overall budgetary stringency — the Government demonstrated its commitment to maintaining a strong quarantine system (Tanner and Nunn, 1998). Consistent with the Government's endorsement of the underlying rationale of the Nairn Review of a 'shared responsibility', two-thirds of the funding has been provided by Government, with the remainder being contributed by industry through the application of the Australian Quarantine and Inspection Service's (AQIS) existing full cost-recovery policy.

4. Import risk analysis and quarantine decision making

The Nairn Review identified a number of fundamental principles that should apply to import risk analysis (IRA), similar to those that apply in other disciplines such as food safety (ANZFA, 1996) and environmental sciences (Norton, Beer and Dovers, 1996). In summary, risk analysis should be:

- conducted in a consultative framework;
- based on science and politically independent;
- transparent and open;
- consistent with other government policy and Australia's international obligations;
- harmonised to take account of international standards, guidelines and recommendations; and
- subject to appeal on process (Nairn et al., 1996, pp. 89–90).

These six principles were endorsed in the Government's response and incorporated into the new IRA process that came into effect in 1997 (DPIE, 1997, p. 21). The process is designed to ensure that the risks of entry, establishment and spread of pests and diseases, and their potential impacts are fully evaluated. Imports are only permitted where such risks can be managed in a way that is consistent with Australia's very conservative approach to quarantine risk management. The ALOP is essentially Australia's quarantine goal and the import decisions and quarantine protocols are the means of achieving that goal. Consistency in the

application of the ALOP is 'achieved by reference to existing Australian policies and procedures, by reference to relevant international standards, guidelines and recommendations, and through the contribution of experienced risk analysts' (Tanner and Nunn, 1998, p.451).⁷

4.1 Biosecurity Australia

The restructuring of Agriculture, Fisheries and Forestry — Australia (AFFA), that began in mid-2000, led to the creation of a biosecurity group within AFFA to undertake IRAs. Staff from AQIS, who had been responsible for IRAs, quarantine policy and export market access, were transferred to the new group — Biosecurity Australia — which is responsible for conducting quarantine risk assessments, negotiating export market access and working with international standard setting bodies and the WTO on SPS matters. The reorganisation separates quarantine policy making from the operational role of AQIS to ensure that the controversy associated with Australia's import access decisions does not undermine confidence in AQIS's operational functions, particularly with respect to export certification. Reference to AQIS will be retained in this paper for actions/decisions relating to IRAs and market access that occurred prior to the restructuring of AFFA.

4.2 The new IRA process

The new IRA process, which was put in place following the Nairn Review, is highly developed and clearly articulated. The *Import Risk Analysis Process Handbook*, which was published by AQIS in August 1998, sets out — for stakeholders and other interested parties — the process that is followed in conducting an IRA.⁸ The major differences between the new IRA process and the previous practice adopted by AQIS are in the 'duration, timing and consultative requirement, and the provision for an appeal mechanism' (Tanner and Nunn, 1998, p. 450). As shown in Table 1, most of the import requests can be addressed relatively quickly without the need for a formal IRA process. Those requests that involve significant variations in established policy require an IRA to be carried out. For the period 1993/94 to 1999/2000, 174 plant and animal quarantine decisions were made in response to requests to

⁷ As discussed in AQIS (1999), while Australia's ALOP is illustrated by the body of quarantine decisions, inevitably 'outliers' will occur. This is particularly the case with older decisions or in cases where new scientific evidence has emerged or new technologies have been developed. Review of such decisions is an on-going process.

⁸ The *Handbook* is currently being revised to reflect the AFFA restructuring.

import products or material not previously permitted. Of these decisions, more than half could be dealt with using the less formal review process, whilst the remainder — some 82 decisions — involved more complex issues, requiring a full IRA. Although caution needs to be exercised in comparing data before and after the introduction of the new IRA process, Table 1 indicates that the proportion of requests being addressed via IRAs has increased. This is largely a function of the increased funding of risk analysis that has allowed a greater number of IRAs to be undertaken simultaneously.

An IRA may be conducted on a 'routine' or 'non-routine' basis, depending on the complexity of the issues involved, but either way there is opportunity for extensive consultation with stakeholders who may lodge appeals if not satisfied that the process — as set out in the *Handbook* — has been followed. Routine IRAs are handled 'in-house' by Biosecurity Australia, with scientists and other experts within AFFA and AQIS and outside being consulted, as required. More complex proposals (non-routine risk analyses) involve the establishment of an expert panel (called a risk analysis panel or RAP) to conduct the IRA. Staff of Biosecurity Australia are responsible for assigning priorities to import requests, conducting IRAs, developing risk management options and making recommendations to the Director of Animal and Plant Quarantine as to which option meets Australia's appropriate level of protection (ALOP) or level of manageable risk in the least trade restrictive way. These staff are also responsible for arranging stakeholder consultations and the negotiation of the final import protocol with the exporting country's relevant agency.

4.3 Transparency and the appeals process

The transparency of the overall process has increased since the publication of the *Handbook*. In addition, Biosecurity Australia maintains public files for all IRAs (accessible to all parties), a register of stakeholders is established for each IRA and registered stakeholders receive progress reports on the IRAs.⁹ As of mid-2000, 26 IRAs have been completed under the new procedures that were implemented in 1997. A further 46 IRAs are in process and over 150 requests for import market access — some dating from the early 1990s — await consideration. The delays by Australia in addressing import access requests is a source of considerable aggravation to trading partners.

⁹ Biosecurity Australia is developing a publication on the technical guidelines used in undertaking an IRA and developing risk management procedures to complement the *Handbook* and to make the overall process more

Experience with the new IRA process suggests that the majority of IRAs — particularly those involving products that do not compete directly with Australian industry or provide new genetic material — are not controversial. Criticism of AQIS and the new IRA process has often come from industries that perceive their economic interests are threatened by entry of competing product from overseas if quarantine restrictions were lessened or removed. Of the IRAs completed under the new process, the IRAs on table grapes and durians have been particularly contentious. Since the right to appeal was introduced, there have been appeals in 12 IRAs, with the stakeholder concerns ranging from the priority accorded the IRA and the composition of the Risk Analysis Panel to criticisms of the risk analysis itself. Major criticisms by stakeholders include claims that AQIS:

- failed to attach sufficient weight to scientific evidence submitted by domestic industry (or judgments of their nominated experts);
- lacked sufficient scientific basis for the conclusions reached;
- failed to explain adequately how it reached its conclusions both about the assessment of risk and the efficacy of the proposed risk management procedures for reducing the risk;
- was not sufficiently conservative in interpreting the ALOP; and
- did not consult widely enough when the routine process was used (Tanner 2000).

The two Import Risk Analysis Appeal Panels (IRAAPs) that considered the appeals on durians and table grapes each concluded that AQIS did not fail to consider significant bodies of relevant scientific evidence but that AQIS had failed to provide sufficient transparency in respect to certain technical matters. Notwithstanding these criticisms, the process exhibits a higher degree of transparency and stakeholder involvement, compared with the earlier process used by AQIS and the IRAs conducted by major trading partners. Nevertheless, there is still room for greater understanding by stakeholders of the underlying principles of the IRA process and the international framework within which Australia operates, greater transparency in the risk analysis itself and more consultation with stakeholders in the early stages.

transparent. The method of analysis used by Biosecurity Australia is based on the international standards produced by the OIE and the IPPC and are consistent with the requirements of the SPS Agreement.

4.4. Overall assessment

The changes that have been made to the IRA process, together with additional funding, have enhanced the technical capacity of Biosecurity Australia to undertake IRAs and ensured that the six fundamental principles of risk analysis enunciated by the Nairn Review are met. The process is clearly structured, transparent and consultative. It is common practice to involve outside experts in both routine and non-routine IRAs, thus ensuring a strong scientific and technical basis for risk analysis and quarantine decisions to satisfy the SPS requirements. The salmon case has demonstrated that Australia's ALOP is articulated with sufficient precision and that Australia's approach to risk assessment is consistent with the SPS framework (Deady 2000). The salmon dispute has also shown that 'the SPS Agreement, backed by the WTO dispute settlement procedure, is capable of exerting very substantial discipline over the design and implementation of quarantine restrictions by WTO member countries' (Gascoine 2000, p. 108). Experience with the salmon case has further demonstrated the high cost of defending such cases and the potential cost to export industries if a country is penalised for failing to comply with the SPS requirements.

5. Changes in Market Access¹⁰

The implementation of the SPS Agreement has had a major impact on Australia's agrifood exports and its influence is likely to continue to be significant as Australian exporters expand into non-traditional markets.¹¹ As noted by McKinnon (2000b, p.212), 'Australia now provides around one-third of Singapore's pork imports', fresh tuna exports to Japan are worth in excess of A\$67 million per annum, Australia's dairy exports are worth A\$2.4 billion and fresh salmon exports to Japan exceeded A\$7 million last year. Australia is in a strong position to expand agrifood exports because production is counter-seasonal — for most significant markets — and Australia is relatively free from most diseases of international concern. This also assists in marketing Australian products as 'clean and green'. However, Australia is not free from all serious diseases and there are few instances where the opening up of agrifood markets does not involve SPS (or TBT) issues. Most of Australia's technical market access work is now carried out by staff of Biosecurity Australia but some areas, such

¹⁰ I am grateful to Slava Zeman for her contribution to this section.

¹¹ See Frawley et al. (2000) for a discussion of the structure of Australia's agrifood exports, the operation of the *Export Control Act 1982* and the government requirements of importing countries. It should be noted that some agrifood exports, such as sugar and wine, are not covered by the *Export Control Act*.

as food, have remained with AQIS after the restructuring. AQIS is responsible for export inspection and certification of Australian agrifood exports to ensure that they meet the requirements of overseas markets. Increasingly, AQIS is introducing co-regulatory and third-party arrangements with industry, subject to regular audit by AQIS.

The growth in technical market access achievements — or 'wins' — that has occurred since the SPS Agreement was implemented in 1995 is demonstrated in Figure 1. However, caution needs to be exercised when comparing the years prior to the SPS Agreement with those following its implementation because of changes that have occurred in data collection. Formal recording of market access outcomes only commenced in 1996–97. Data for the earlier years have been constructed from files and the recall of staff, resulting inevitably in some under-reporting. Notwithstanding these deficiencies, there are some discernible trends in the market access data:

- new and improved market access is continuing to grow;
- growth in food market access outstrips growth in either plant or animal product access; and
- market maintenance activities have shown a significant increase in the past two years.

Market maintenance work is particularly important because it often relates to Australia's high-value traditional export markets; for example, the recent threat of closure of all beef markets following detection of endosulfan and chlorofenvinphos residues. In contrast, new market access often applies to new industries gaining access to niche markets, such as wild deer meat to the European Union and kosher meat to the ASEAN countries and Pacific Islands. Consequently, new market initiatives are often of lesser economic significance than market maintenance activities.

5.1 Impact of the SPS Agreement

The implementation of the SPS Agreement in 1995 by developed countries has resulted in a spike in new market access in 1995–96. The discipline provided by the SPS Agreement required WTO members to enter into negotiations after access requests were made — rather than simply stalling as had occurred previously — and to apply OIE, IPPC and Codex standards or, where different standards are applied, to justify them based on scientific risk assessment. This has allowed AQIS to be more effective in concluding negotiations and numerous market gains have been recorded, for example, citrus to the United States, pork to

New Zealand, emu meat to the United Kingdom, Belgium and Finland, and wild boar meat to France. The SPS (and TBT) Agreement has stimulated countries to review and revise their quarantine and food safety protocols and this has required AQIS to enter into negotiations to maintain market access for Australian products (Biddle 2000).

The regular meetings of the SPS Committee in Geneva have increased the transparency of countries' SPS policies and procedures. Raising a complaint — or threatening to do so — is a useful ploy to encourage countries to comply with the SPS rules. This approach was used by Australia to bring the market access negotiations for UHT milk to Korea to a successful conclusion.

The expiry of the five-year period of grace for developing countries to comply with the SPS Agreement has contributed to increased market access activity in 1999–2000 as AQIS worked to ensure that market access was maintained or improved. In addition, the accession of countries to the WTO creates obligations for those countries to comply with the SPS rules. This has frequently resulted in changes to SPS protocols and the need for AQIS to renegotiate access to markets such as Saudi Arabia and China to maintain (or improve) Australia's export access. As might be expected, experience with the SPS rules has encouraged countries, both developed and developing, to invent new ways of imposing technical market barriers and this has led to growth in market access work. For example, the European Union and the United States regularly review inspection and certification systems in countries exporting products to their markets and Chile has insisted that only establishments individually approved by Chilean authorities can process and prepare animal and animal products for export to Chile. Despite such impediments, the overall impact of the SPS Agreement has resulted in fairer and better market access for Australian products and less prolonged negotiations.

5.2 Other factors

It would be misleading to suggest that all of the increased market access activity and improved market access is due to the SPS Agreement. Other factors, which have contributed, include the following:

- Lower tariffs as a result of the Uruguay Round have encouraged industry to ask the Government to request access to markets which had previously been effectively closed because of high tariffs or quotas.
- Additional funding through the Supermarket to Asia program has provided for additional staff to undertake technical market access negotiations (including one based in Seoul and

one in Tokyo), and has enhanced contact between industry representatives and the staff involved.

- Developments in AQIS export inspection and certification programs have meant that their acceptance must be negotiated with importing countries.
- Emergence of 'sensitive issues' — GMOs, residues and irradiation — has resulted in new conditions being imposed on exports, requiring negotiation by Biosecurity Australia to ensure that access is maintained. For example, a number of countries — Saudi Arabia, Taiwan, Indonesia and Korea — are planning to impose GMO certification and labelling for products imported into these countries.
- Outbreaks of Newcastle disease and avian influenza, and concerns over chemical residue contamination of a number of products, required intense market maintenance activity in the past two years. The increase in market maintenance work required the reallocation of staff and resulted in the decline in new market access in 1998–99 and 1999–2000 shown in Figure 1. The area freedom provisions of the SPS Agreement have proved to be very effective in limiting the market impact of disease occurrences.
- In the European Union, the European Commission is progressively harmonising food, plant and animal health requirements across all EU member countries, resulting in the need for Australian access to be renegotiated.
- Increased accountability by Government across all agencies, together with decreased funding, has led to better reporting than in the past but sometimes there may be pressure to over-report.

6. Conclusion

The reforms that have been made to Australia's quarantine system have formalised the IRA process, making it more transparent and consistent, and have reinforced the scientific basis of quarantine decision making — this is consistent with Australia's obligations under the SPS Agreement. Because Australia is heavily reliant on agricultural exports, the SPS Agreement is vital to Australia's national interest. The discipline provided by the rules-based system restricts the use of unjustified quarantine measures by countries seeking to protect their domestic producers from competition. The operation of the SPS Agreement will become increasingly important as trade liberalisation proceeds. Since the Agreement's implementation, there have been some 240 new market successes for Australian animal, plant and food exports and an additional 100 instances of improved market access. These market openings represent significant benefits to the agrifood sector and assist Australian exporters who are frequently competing against subsidised exports.

Despite the reforms that have been made to Australia's quarantine system and the

implementation of the SPS Agreement, some decisions continue to attract controversy. Various sectors of the Australian community — the media, domestic industries and State governments — fail to recognise that Australia must abide by the scientifically based SPS rules in order to obtain the benefits of increased market access. The alternative would result in increased trade tensions, protracted market access negotiations, market closures and a net welfare loss to the Australian economy.

In the preparatory discussions for the new WTO negotiating round, the European Union has suggested that the SPS Agreement needs to be renegotiated 'to reflect their preferred approach on issues such as animal welfare, biotechnology, food safety and the precautionary principle' (McKinnon 2000b, p 212). Such pressure should be resisted because any renegotiation of the Agreement is likely to lead to the weakening of its main principles and would not be in the interests of Australian agrifood exporters.

References

- AQIS (1998), *Import Risk Analysis Process Handbook*, Quarantine Development Unit, AQIS, Canberra.
- AQIS (1999), *Animal Quarantine Policy Memorandum 1999/26*, Australia's Appropriate Level of Protection and AQIS's Import Risk Analysis (IRA) Process, Animal Quarantine Policy Branch, 22 April.
- ANZFA (1996), *Framework for the Assessment and Management of Food-related Risks*, Australia New Zealand Food Authority, Canberra.
- Biddle, R. (2000), 'Market access: Technical barriers to Australia's exports' in *Quarantine and Market Access: Playing by the Rules*, Forum Proceedings, 6–7 September 2000, Canberra, Agriculture, Fisheries and Forestry — Australia, pp. 223–32.
- Deady, S. (2000), 'Lessons for Australia from WTO dispute settlement cases' in *Quarantine and Market Access: Playing by the Rules*, Forum Proceedings, 6–7 September 2000, Canberra, Agriculture, Fisheries and Forestry — Australia, pp. 116–28.
- DPIE (1997), *Australian Quarantine: A shared responsibility: The Government response*, Department of Primary Industries and Energy, Canberra.
- Frawley, P., Makin, L., Nieper, R. and Wilson, B. (2000), *Export Assurance: National Competition Policy Review of the Export Control Act 1982*, AQIS, Canberra.
- Gascoine, D. (2000), 'Lessons learned from the salmon case' in *Quarantine and Market Access: Playing by the Rules*, Forum Proceedings, 6–7 September 2000, Canberra, Agriculture, Fisheries and Forestry — Australia, pp. 106–15.
- McKinnon, A. (2000a), 'A government perspective' in *Quarantine and Market Access: Playing by the Rules*, Forum Proceedings, 6–7 September 2000, Canberra, Agriculture, Fisheries and Forestry — Australia, pp. 45–51.
- McKinnon, A. (2000b), 'The next WTO round and implications for the SPS: A macro perspective' in *Quarantine and Market Access: Playing by the Rules*, Forum Proceedings, 6–7 September 2000, Canberra, Agriculture, Fisheries and Forestry — Australia, pp. 211–15.
- Nairn, M.E., Allen, P.G., Inglis, A.R. and Tanner, C. (1996), *Australian Quarantine: A shared responsibility*, Department of Primary Industries and Energy, Canberra.
- Norton, T.W., Beer, T. and Dovers, S.R. (eds) (1996), *Risk and Uncertainty in Environmental Management: Proceedings of the 1995 Australian Academy of Science Fenner Conference on the Environment*, Centre for Resource and Environmental Studies, Australian National University, Canberra.
- Pauwelyn, J. (1999), 'The WTO Agreement on Sanitary and Phytosanitary (SPS) Measures as applied in the first three SPS disputes', *Journal of International Economic Law*, pp.

641–64.

- Stanton, G. (2000a), 'The multilateral trading system and the SPS Agreement' in *Quarantine and Market Access: Playing by the Rules*, Forum Proceedings, 6–7 September 2000, Canberra, Agriculture, Fisheries and Forestry — Australia, pp. 23–30.
- Stanton, G. (2000b), 'The WTO dispute resolution system' in *Quarantine and Market Access: Playing by the Rules*, Forum Proceedings, 6–7 September 2000, Canberra, Agriculture, Fisheries and Forestry — Australia, pp. 73–81.
- Tanner, C. (2000), 'Australian quarantine reform from an economic perspective', Paper prepared for 'The Economics of Quarantine Workshop' held by AQIS at the Melbourne Business School, 24–25 October, Melbourne.
- Tanner, C. and Nunn, M. (1998), 'Australian quarantine post the Nairn Review', *Australian Journal of Agricultural and Resource Economics*, vol. 42, no. 4, pp. 445–58.
- Wilson, D. (2000), 'International reference organisations and standards' in *Quarantine and Market Access: Playing by the Rules*, Forum Proceedings, 6–7 September 2000, Canberra, Agriculture, Fisheries and Forestry — Australia, pp. 31–41.

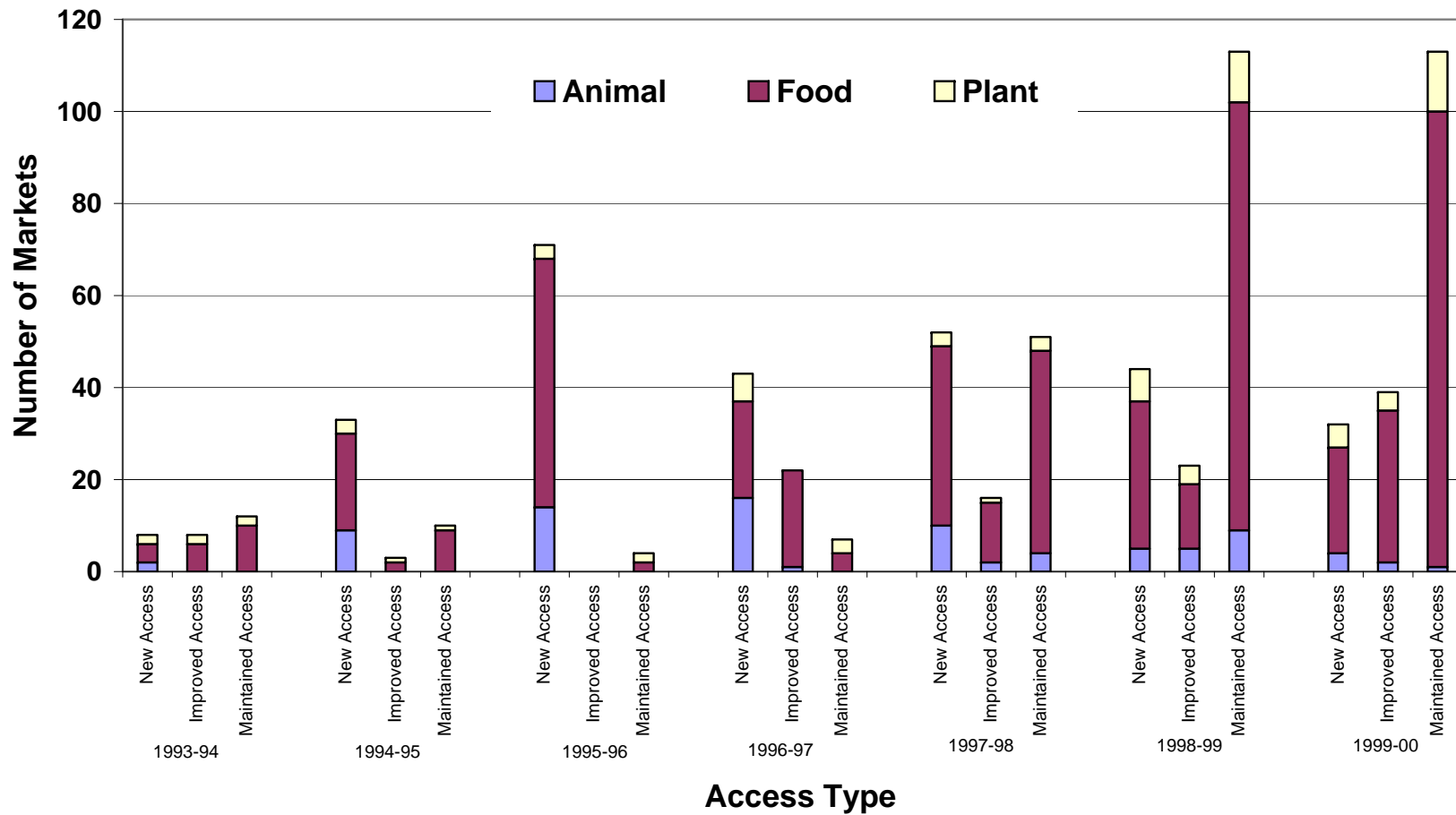
Table 1: Plant and animal quarantine decisions from 1993/1994 to 1999/2000

Number of decisions	1993/1994	1994/1995	1995/1996	1996/1997	1997/1998	1998/1999	1999/2000	Totals
Plant	5	13	11	5	8	7	5	54
Reviews	2	5	5	5	8	1	3	29
IRAs ^a	3	8	6			6	2	25
Animal	15	13	16	20	14	22	20	120
Reviews	9	6	8	16	7	12	5	63
IRAs ^a	6	7	8	4	7	10	15	57
Total	20	26	27	25	22	29	25	174
Reviews	11	11	13	21	15	13	8	92
IRAs	9	15	14	4	7	16	17	82

a. Caution should be used in comparing activity before and after the new IRA process (which was introduced in September 1997). The new process is more extensive, thorough, consultative, transparent and significantly more resource intensive. Before the new process, all the animal quarantine decisions followed a period of stakeholder consultation while for plant issues a large percentage (50%) were based on pre-existing policy and required minimal consultation. Those included above as 'IRAs' are ones that involved new policy and more extensive analysis than those counted as reviews.

Source: Biosecurity Australia

Figure 1: Market Access Achievements 1993-94 to 1999-00



Note: The growth in market access activity since 1994-95 is partially due to better records of such activity during the later years and to a number of issues which have resulted in intense activity to maintain access (including residues, Newcastle disease virus and avian influenza).
Source: Biosecurity Australia