Agricultural Competitiveness White Paper Submission - IP500
Australian Chicken Meat Federation Inc.
Submitted 17 April 2014

Australian Chicken Meat Federation (ACMF) Inc

Submission to the Agricultural Competitiveness Taskforce

17 April 2014

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17 April 2014

Agricultural Competitiveness Taskforce
Department of the Prime Minister and Cabinet
PO Box 6500
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ACMF Submission

The Australian Chicken Meat Federation (ACMF) is pleased to provide the Taskforce with our submission to the White Paper on the Competitiveness of the Agriculture Sector.

The Federation believes that the outlook for Australian agriculture is positive, but capturing the opportunities is not assured without a strategic and co-ordinated response by industry and government. As such, we welcome and strongly support the Government's initiative with the White Paper on Agriculture.

The chicken meat industry has achieved sustained, strong productivity growth over several decades, placing it at the forefront of Australian consumer preference relative to other meats.

The Federation considers that the industry is well-positioned to make a continued and vital contribution to economic growth, innovation, productivity and regional communities.

We look forward to engaging with the Taskforce to help create a strategy for government and industry to implement cooperatively.

Yours sincerely

Dr Andreas Dubs
Executive Director

Executive Summary

Introduction

Australia's chicken meat industry has grown from an extension of egg production in the 1950s to become a major agricultural industry, accounting for almost a quarter of all meat produced in Australia.

Today, 90 per cent of the population eats chicken meat at least once per week and a third of Australians eat it three or more times per week. It is by far the most popular meat in Australia, with per capita consumption now almost 40 per cent more than beef.

Industry success has been underpinned by investment in world's best technology across the value chain and the highly effective conversion of investment in research, development and extension into sustained growth in productivity.

The chicken meat industry is a very efficient user of land and other inputs to production. As a result, it has achieved sustained growth for five decades with significant and growing contribution to regional incomes, jobs and sustainable regional economies and communities.

The chicken meat industry is well placed to make an increasing contribution to food security. Its potential to continue to expand production in a cost effective way and its capacity to convert feed into meat protein is unmatched by other agricultural industries. However, the future economic growth and contribution of the industry is not assured. It will require strategic investment and commitment by both the industry and by the government.

We propose several high priority strategic actions that the government and industry need to pursue over the next few years to secure the benefits for industry and Australia.

High priority strategic actions

Food security

Global food security is improved by greater food production. At the same time, growing demand and finite natural resources mean that future food production must involve higher productivity, with use of less water and land per unit of output. A key implication is that agricultural industries face major challenges in making the transition. Further, governments have a critical role in fostering the conditions for business investment and growth and facilitating structural change.

Australian agriculture will need to expand significantly. The strategy of accelerating development of highly efficient, intensive production systems such as modern chicken meat offers immediate and long term benefits for food security.

Australia remains relatively free of serious poultry diseases, in contrast to virtually every other major chicken meat producing country. The incursion of diseases currently exotic to Australia, such as very virulent infectious bursal disease, would impose a significant burden on the cost of production and undermine product integrity and consumer confidence.

A high priority for both the industry and government must be to defend Australia from both disease and pest incursions. Important benefits arise from protecting animal health and welfare and the integrity of meat produced for domestic consumption. Furthermore, Australia is well recognised internationally for its high quality product and enviable flock health status, and this can provide the basis of the industry's market positioning as it seeks to grow exports and capture the opportunities offered by increasingly affluent consumers in Asia. The industry's animal health status is a significant and long term strategic asset.

What ACMF wants the Government to do

1. **Follow through on the government's election commitment to develop a comprehensive framework for import risk analysis and quarantine arrangements that better integrates science in quarantine decisions and minimises the risk of exotic pests and disease incursions.**

2. **Ensure the integrity of the import risk assessment proposed in the new biosecurity legislation that is now being considered by the government is strengthened by formalising the role of the Eminent Scientists Group as a vital part of the assessment process.**

3. **Ensure that the industry is fully informed and engaged in any intergovernmental negotiations and forums that have implications for the industry's biosecurity status.**

Reducing inefficient regulations

The chicken meat industry operates in all states and therefore is required to comply with a large number of regulations administered by local, state and federal governments. The Federal Government recognised the challenges faced by Australian agriculture in dealing with local, state and federal governments in its election policies. In relation to the administration of drought related programs, for example, it committed to collaborate closely with state and territory governments to ensure the effective delivery of programs. The government's commitment to a collaborative approach with the States on program delivery should be extended to its commitment to cut red and green tape. Such an approach would be the most effective means of cutting the cross-jurisdictional regulatory burden on the chicken meat industry.

One outstanding example of excessive and unnecessary compliance costs can be found in the application of the Australian Building Code where frequently current practice classifies poultry sheds not as "a non-inhabitable building being a private garage, shed, or the like" but rather as a building where goods are stored or wholesaled (e.g. a warehouse) or where a process takes place (e.g. factory, workshop).

Other examples of regulatory impediments relate to land use, planning and environmental regulations. These represent significant impediments to continuing industry expansion—indeed, the industry is having difficulty in bringing on line new capacity, particularly for free-range chicken meat, to keep up with growth in consumer demand.

As a starting point, a sound understanding of the regulatory costs placed on chicken meat industry businesses would provide valuable insights for policies and collaborative action to facilitate continued industry growth. Critically, it would also facilitate the government quantifying red and green tape costs, as well as assisting in the design, implementation and performance measurement of the deregulation reform agenda.

Investment by government and industry in understanding regulatory imposts is only of value if this reform initiative is tightly focused and the findings are prioritised and implemented systematically. It requires a tailored, collaborative approach that, from its inception, involves those responsible for taking action along with regular investment to measure and monitor performance.

What ACMF wants the Government to do

4. **Prioritise the work program of the Department of Agriculture special deregulation taskforce to ensure its focus is on those industries, such as the chicken meat industry, where the greatest returns can be realised from the Government's reregulation strategy. The chicken meat industry stands ready to participate and contribute to this undertaking.**

5. **Direct the taskforce to lead a collaborative approach across governments and industry to identify, and prioritise reform of, cross jurisdictional regulatory imposts that add unnecessary costs and stifle the growth of the chicken meat industry.**

    - **The task force should take a value chain approach starting from the market (export and domestic) all the way back to the farm gate and suppliers to chicken farming businesses.**

    - **The work of the task force could be informed by a targeted R&D project funded from the additional $100m the government has committed to rural R&D funding.**

    - **The taskforce should focus on those areas where removal of red and green tape would have the greatest impact.**

    - **The task force findings would provide a benchmark against which the industry can invest in annual evaluation and reporting on progress. High priority targets for reform would include those state and local government regulations that vary across jurisdictions, thereby imposing additional cost burdens on the industry. The development of a nationally consistency regulatory regime that reflects the cross-jurisdictional nature of the chicken meat industry would be a key objective.**

6. **Encourage the Australian Building Codes Board to give priority to a review of the classification that applies to farm buildings used for housing chickens, noting that recent practice puts unreasonable compliance demands on these structures, increasing the time and cost involved in obtaining approval as well as substantially increasing building costs.**

Increased competitiveness of the chicken meat industry and its value chains

Australia's chicken meat businesses and the industry invest in research and development, mechanisation and the application of technology in order to increase efficiency and reduce costs at all stages of production, and consistently providing products which meet consumer demand. Furthermore, the industry constantly searches overseas for new ideas and world's best practice that can be adopted by businesses in its value chain. These strategies have underpinned the industry's track record of achieving high and sustained levels of productivity growth for more than five decades, and have resulted in a substantial increase in the affordability of chicken meat by Australian consumers through a long term reduction in the real price of chicken meat.

The industry therefore welcomes the Government's election commitment to provide $100 million in additional funding for Rural Research and Development Corporations so that they have greater capacity to deliver effective research outcomes.

What ACMF wants the Government to do

7. **Retain the current rural research and development regime to support sustained growth in the medium and long term.**

8. **Ensure a strong emphasis continues to be placed on prioritising the allocation of resources to research projects that deliver productivity gains, commercial returns to the industry and value to consumers.**

Enhancing exports

The chicken meat industry is committed to building exports via a niche strategy that leverages Australia's distinctive health status and the integrity of its production systems. In particular, the industry considers that opportunities exist in South East Asia and China for high quality products for affluent consumers.

What does ACMF want the Government to do

9. **Secure the nation's competitive advantage—overseas recognition of Australia's high quality and disease free status—that underpins the chicken meat industry's potential to expand into export markets, by strengthening biosecurity measures which reduce the risk of incursions of infectious diseases or other agents that would undermine our health and quality status.**

10. **Chicken meat exporting companies value the on-going close working relationships and support provided by government entities—principally, the Australian Department of Foreign Affairs and Trade, Austrade and the Department of Agriculture. The industry wishes to:**

    - **Continue developing these working relationships, including through its participation in high level Australian government trade delegations to the priority markets of China and South East Asia.**

    - **Develop closer relationships with the Federal Government to enable resolution of priority market access issues.**

Enhanced agricultural contribution to regional communities

A growing chicken meat industry will contribute to healthy regional economies and strong and sustainable regional communities. The industry is already a significant contributor at the regional level and its contribution will be magnified as the industry develops. For example, the meat poultry industry in the greater Sydney region contributed 1183 jobs and a gross value of $297.5 million of greater Sydney's total regional agricultural output of $748.5 million (Jones, 2013). The industry has a strong presence in regional Australia, with substantial investment and on-going activity in centres such as Griffith, Bendigo and Tamworth to name just a few.

Improved competitiveness of inputs into the supply chain

The chicken meat industry has been very effective in competing for resources, as reflected in its high rates of productivity growth and the systematic development of a dominant share of domestic meat consumption over the past five decades.

What does ACMF want the Government to do

11. **Create the right economic environment to enable the more efficient allocation of resources that are essential to sustained industry growth.**

- Establish ***a more transparent feed grain market*** **through a comprehensive reporting system of production and relevant grain stores, in order to facilitate the efficient allocation of this key input to chicken meat production.**

  Feed grain is a major input, accounting for some 60 per cent of on-farm production costs. The more informed a market the more efficiently it operates. That is very much the case for the Australian feed grain sector.

  The Minister for Agriculture has agreed to establish a system for reporting grain stocks in response to a recommendation by the Wheat industry Advisory Taskforce, but the proposed system must be broadened to take into account the needs of intensive livestock industries including the chicken meat industry.

- **Ensure** ***a more efficient labour market*** **across the value chain, through increased flexibility and better access to skills, including complementing the domestic skills base through mechanisms such as 457 visas.**

- **Review the depreciation regime to** ***facilitate a more efficient use of capital*** **in the industry, by better reflecting the pace of technological progress in the industry.**

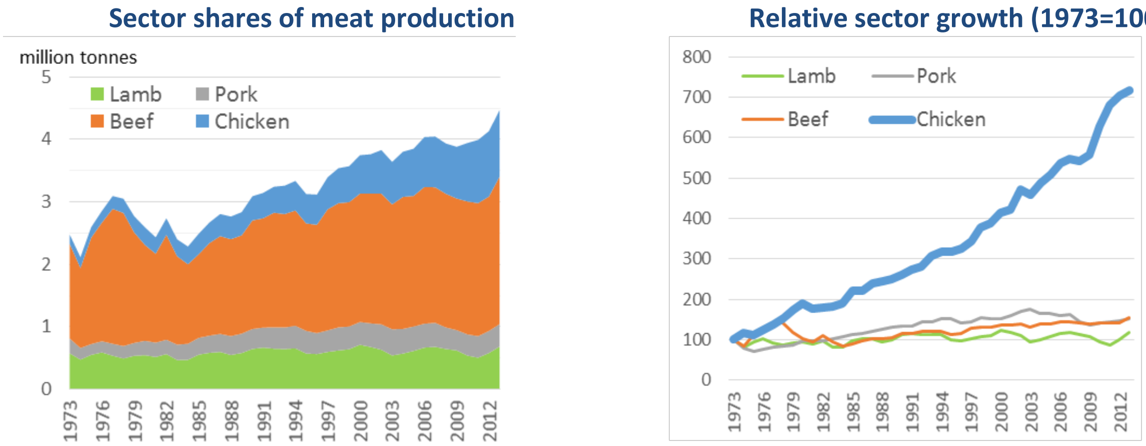
- **Provide access for chicken value chain businesses to** ***schemes mitigate the rising costs of energy*****.**

Overview of the chicken meat industry

Australia's chicken meat industry is a large, growing and successful agricultural industry. Australian chicken meat production reached 1.05 million tonnes in 2012–13 and now comprises 24 per cent of total Australian meat production (including production which is exported) compared with 14 per cent two decades ago.

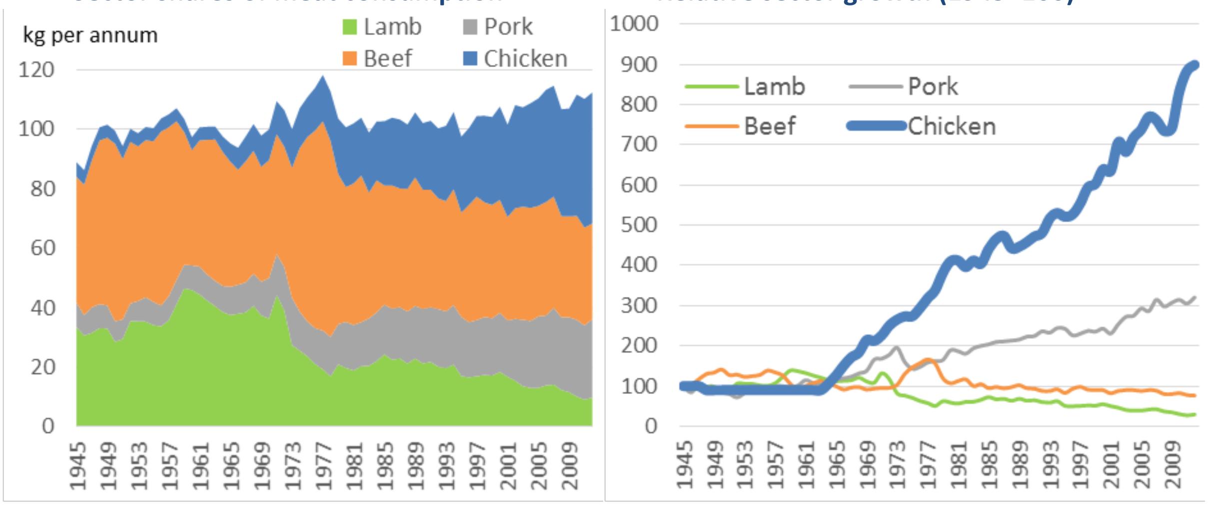
In terms of total meat production, the industry is second only to the beef industry and it produces more tonnage than the lamb and pork industries combined (Figure 1). The industry has had an average annual rate of growth in production of around 4 per cent or more in every decade since the 1960s.

Figure 1: Sector shares of Australian meat production, 1973 to 2012



Source: ABS Cat. No. 7215.0 (chicken) and 7218.0 (other)

Figure 2: Sector shares of Australian meat consumption, 1945 to 2012



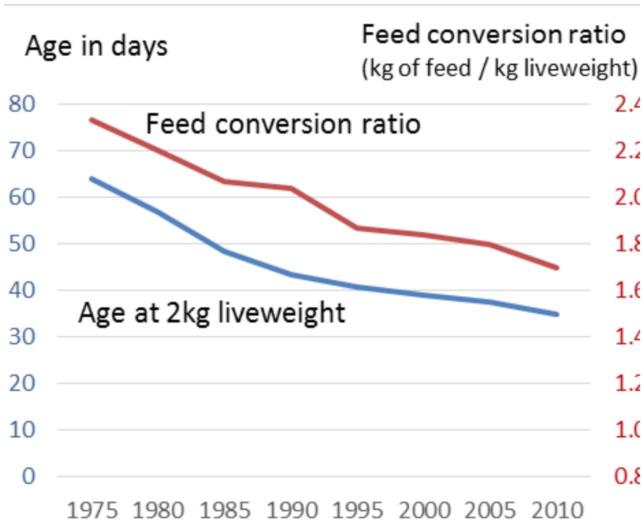
Source: ABARES Australian Commodity Statistics

When considered in terms of meat consumption, the chicken meat industry has been even more successful. Today, chicken is well recognised by Australians for its health benefits—it is an excellent source of protein, chicken breast has the lowest total fat content when compared with other meat sources (Charlton et al, 2008), and there are no added hormones in Australian chicken. These health benefits, complemented by the superior and consistent quality of chicken meat products and excellent price competitiveness, has resulted in chicken becoming Australia's most consumed meat (Figure 2). This is a remarkable outcome considering the rather humble position of chicken meat production and consumption at the beginning of the 1960s.

Very strong productivity growth has been at the heart of the industry's success. This has been achieved by a very effective conversion of investment in research, development and extension into increased production through sustained growth in productivity. High rates of mechanisation and investment in RD&E have been the drivers for improving rates of technical efficiency (Figure 3).

Consumers have also benefited from this technical efficiency, with productivity improvements keeping the price of chicken low compared with other meats. Chicken is less than half the prices for comparable types of meat (Figure 4).

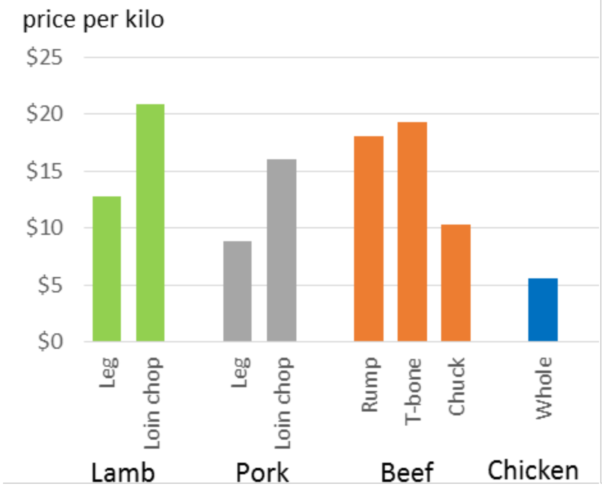
Figure 3: Improved productivity, 1975 to 2010



Source: Australian Chicken Meat Federation

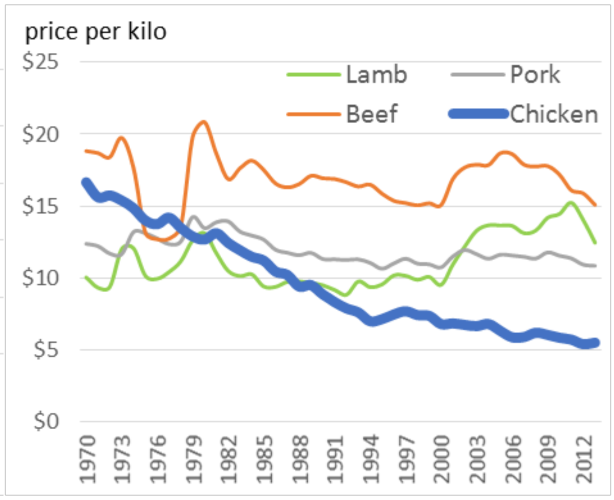
Furthermore, while Australian chicken meat is high quality and valued by Australian consumers, its price has consistently been declining in real terms—by more than 60 per cent since 1970—in stark comparison to the other types of meat (Figure 5).

Figure 4: Price per kilo for fresh meat, 2011



Source: ABS Cat. No. 6403.0.55.001
Note: Average capital city prices, June 2011

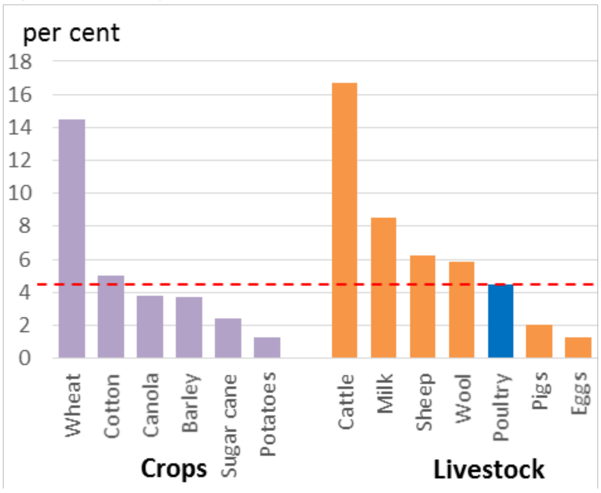
Figure 5: Meat prices in constant (2013) dollars



Source: ABARES Australian Commodity Statistics

The industry is the seventh largest contributor (in terms of value) to total Australian agricultural production (Figure 6). As chicken meat producers are located mainly in peri-urban and regional areas, our industry continues to make an important and growing contribution to regional incomes, jobs and sustainable regional economies and communities.

Figure 6: Sector contributions to total value of agricultural production, 2011-12



Source: ABS Cat. No. 7503.0

About the ACMF

The Australian Chicken Meat Federation Inc. (ACMF) is the peak industry organisation representing all elements of the chicken meat industry in Australia, including chicken growers and processors at the national level.

As such, ACMF and its members have a strong interest in ensuring the sustainability and viability of the Australian agricultural sector. We welcome the Government's foresight in involving the industry in informed debate and involving the public in this important discussion to ensure future profitability and sustainability of Australian agriculture.

ACMF was formed in 1964. Our main objectives are:

1. promotion and protection of the interests of the chicken meat industry
2. conduct or support of research on all aspects of the industry
3. securing of representation on appropriate committees, boards and commissions
4. approaching government bodies on all matters of concern to the industry

Our members are the five State Chicken Meat Councils, the Australian Chicken Growers' Council and the Australian Poultry Industries Association, the latter representing the chicken meat processors that produce 95 per cent of Australia's chicken meat.

The chicken meat processing companies are generally vertically integrated businesses that operate across the chicken meat supply chain, including all or some of the following: breeding farms; hatcheries; feed mills; chicken growing farms; processing plants; further processing (cooking) plants; and distribution.

Through its State organisations, ACMF also represents a range of other suppliers to the industry, providers of services to the industry, and customers of the industry, who are involved in the production and distribution of chicken meat in Australia.

The industry representative arrangements have served the industry well, supporting and enabling the significant productivity and efficiency gains that have underpinned the consistent growth and high performance of the sector over the past 50 years.

ACMF is the industry representative body recognised by the Australian Government. In this capacity, ACMF is a signatory to the Emergency Animal Disease Response Agreement and represents the industry at the national level in matters regarding international trade, quarantine, animal health, biosecurity, food standards, food safety and animal welfare.

ACMF is also actively involved in providing strategic direction to industry relevant research and development, in particular to the chicken meat program of the Rural Industries R&D Corporation.

Chicken in the Australian domestic meat market

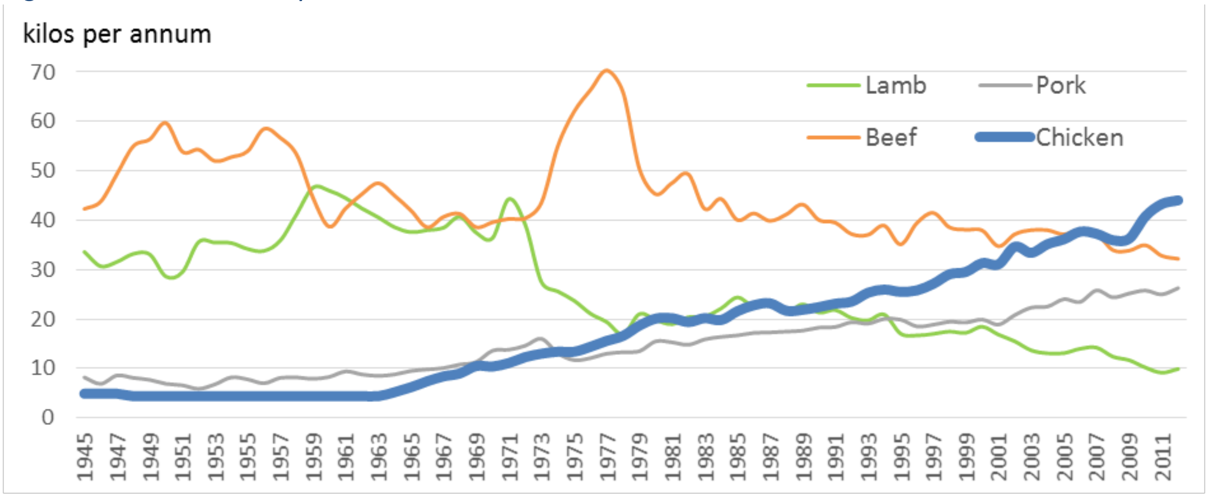
Chicken consumption

The meat consumption preferences of Australians have changed radically over the last 50 years (Figure 7).

- Up until the 1960s, a typical Australian consumed around 50kg of beef and more than 30kg of lamb per year, but less than 10kg of pork and only 4.4kg of chicken.
- Today, the average Australian consumes 44kg of chicken per year—ten times as much as previously—compared with 26kg of pork, 32kg of beef and only 10kg of lamb.

Over this period, total meat consumption has increased from 97kg per year to 112kg today. Chicken's share of that consumption has increased from 5 per cent to 39 per cent.

Figure 7: Meat consumption trends in Australia, 1945 to 2013



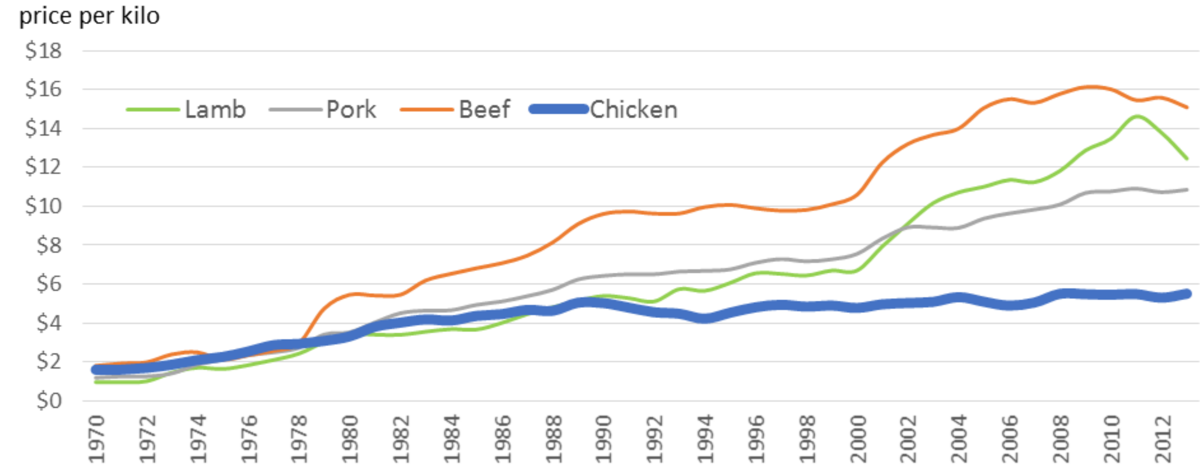
Source: ABARES Australian Commodity Statistics

This stark change in consumer preferences is due to:

- improved price competitiveness of chicken compared to other meats
- greater diversity in the range of chicken products available
- better consistency of quality compared to competitor meats, due to more controlled means of production
- targeted, strongly focused product marketing, at a brand level
- perceived and real health benefits of white meats over red meats

Of these drivers, the price of chicken relative to other types of meat, has been a particularly significant influence on this change in consumer preferences. Chicken prices have increased much slower than for the other types of meat and are now less than half the price of the others (Figure 8).

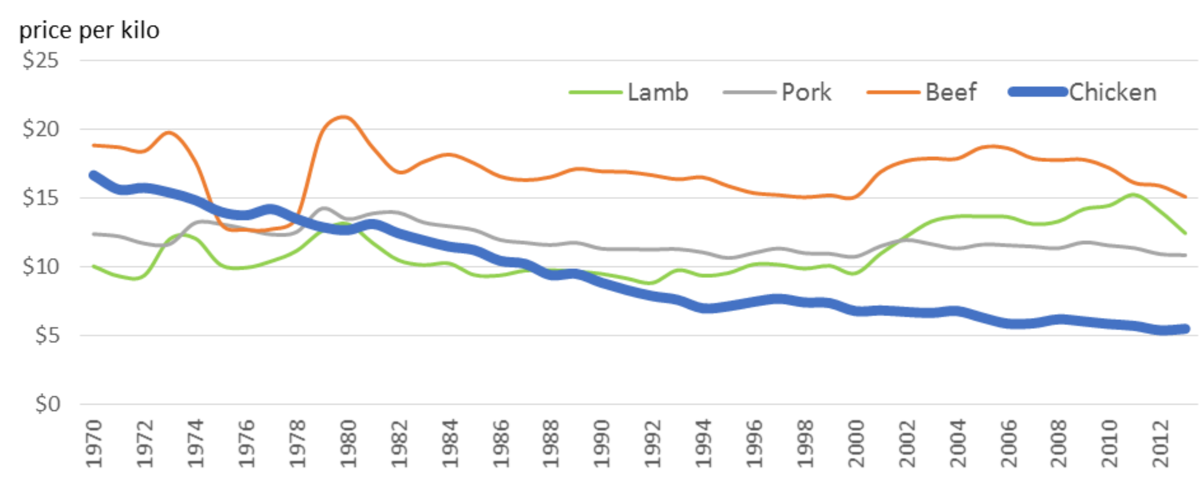
Figure 8: Retail prices of meat in nominal prices, 1970 to 2013



Source: ABARES Australian Commodity Statistics

In fact, the retail price of chicken is largely unchanged over the last 20 years (Figure 8). Consequently, the real price of chicken (that is, adjusted to account for inflation) has declined by more than 60 per cent since 1970, in sharp contrast to the real prices of other meats (Figure 9).

Figure 9: Retail prices of meat in constant (2013) prices, 1970 to 2013



Source: ABARES Australian Commodity Statistics

Several factors have driven very significant productivity improvements in the chicken meat industry, which has underpinned the very competitive position of chicken against other types of meat:

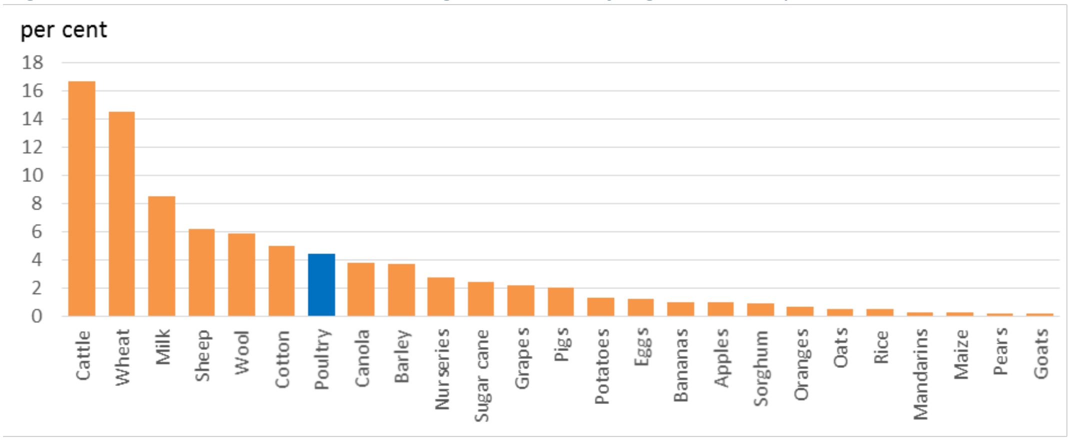
- increasingly automated poultry processing plants
- improvements in how efficiently chickens convert feed into meat due to:
  - improved breeds of chicken more suited to meat production
  - better nutrition
  - improved health management
  - better housing and husbandry strategies

The industry is successful because of its strong culture of pursuing technical efficiencies. Its high rates of productivity growth are a direct result of substantial investments in research, development and extension (leading to ongoing improvements in animal nutrition, health and animal husbandry more generally) and increasingly automated processing plants.

The contribution of chicken meat to Australian agriculture

The poultry industry (most of which is chicken meat) is the seventh largest contributor to the total gross value of Australian agricultural production (Figure 10).

Figure 10: Sector contributions to gross value of agricultural production, 2011-12



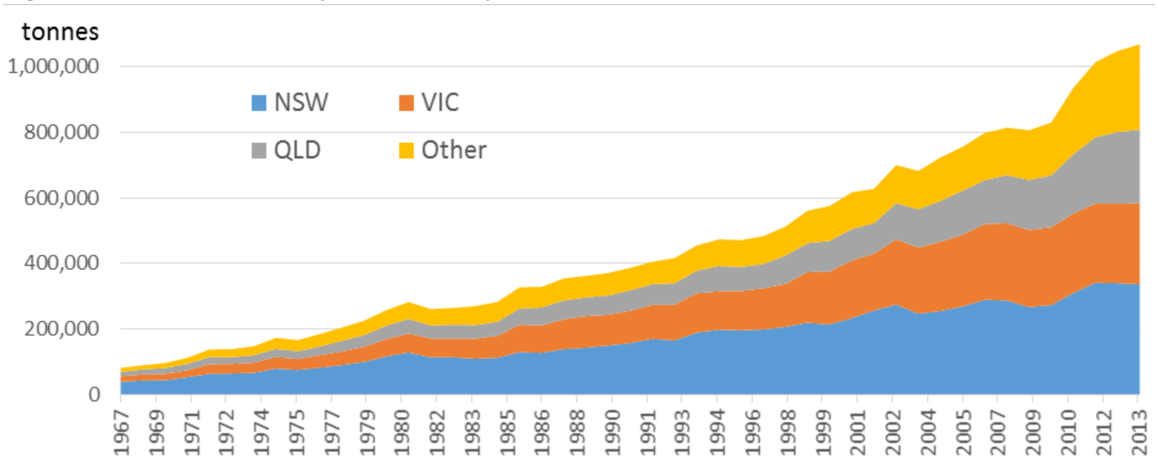
Source: ABS Cat. No. 7503.0

As chicken meat producers are located mainly in peri-urban and regional areas, our industry continues to make an important and growing contribution to regional incomes, jobs and sustainable regional economies and communities. The Australian chicken meat industry has developed steadily over the past five decades to an annual turnover of around $5.5 billion on a conservatively estimated asset base of $6 billion and employs 40,000 people directly, with a further 100,000 Australians relying on the industry for their employment.

Chicken meat production trends

ABS data shows that total chicken meat production has grown strongly since the 1960s, with that growth evident across each jurisdiction (Figure 11).

Figure 11: Chicken meat production by State, 1967 to 2013

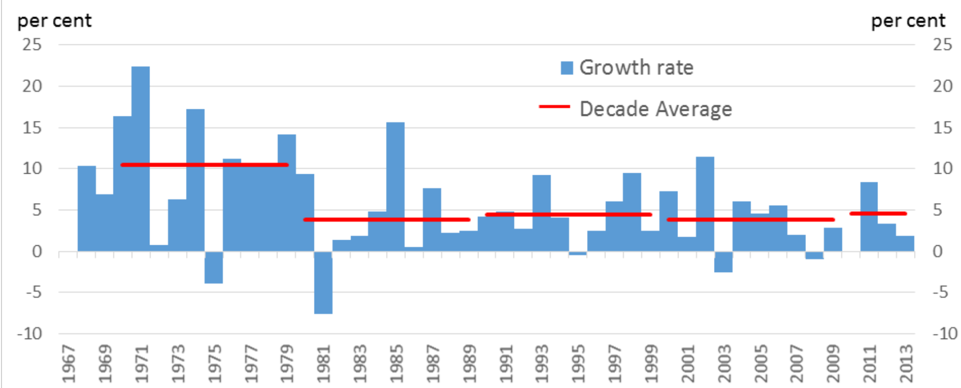


Source: ABS Cat. No. 7215.0

NSW is the largest chicken meat producer, but its share of production has declined from 50 per cent in 1967 to 32 per cent in 2013. The State production shares for Victoria and Queensland are largely unchanged over the period, indicating that State production has mostly grown in line with national production. Production in South Australia, in particular, has grown faster than the national average.

After a decade of significant growth in the 1960s, chicken meat production grew rapidly during the 1970s at over 10 per cent per annum on average (Figure 12). Since then, production has been growing consistently at just under 5 per cent annually on average.

Figure 12: Annual and average decadal growth rates in chicken meat production, 1967 to 2013

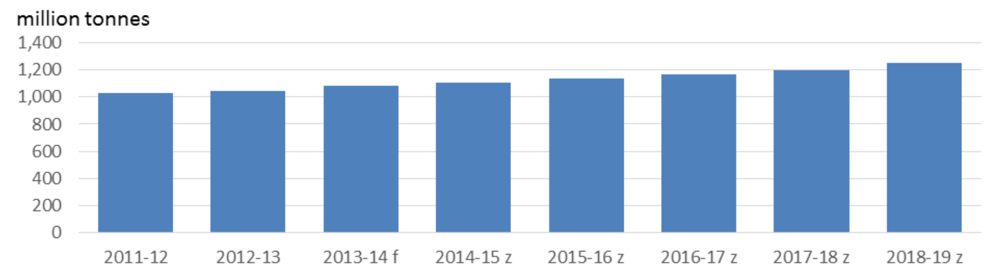


Source: ABS Cat. No. 7215.0

Projected domestic industry growth

Growth in chicken meat production is expected to continue, though perhaps not at historical rates. For 2013-14, ABARES forecasts chicken meat production to increase by 3.3 per cent to 1.08 million tonnes, with a further 2.8 per cent growth in 2014–15 to 1.11 million tonnes (Figure 13). By 2018-19, Australian chicken meat production is projected to be around 1.25 million tonnes.

Figure 13: Forecast chicken meat production, 2011-12 to 2018-19



	unit	2011-12	2012-13	2013-14 f	2014-15 z	2015-16 z	2016-17 z	2017-18 z	2018-19 z
Production a	kt	1030	1046	1080	1110	1140	1170	1200	1250
Consumption per person	kg	44.0	44.1	44.7	45.2	4.7	46.1	46.6	47.7
Export volume b	kt	33.6	29.3	34.0	36.0	37.5	40.0	42.5	45.0
Export value	$m	39.7	39.5	44.9	47.2	49.1	52.4	55.7	59.0

a Carcass weight. **b** Shipped weight. **f** ABARES forecast. **z** ABARES projection.

Source: ABARES 2014

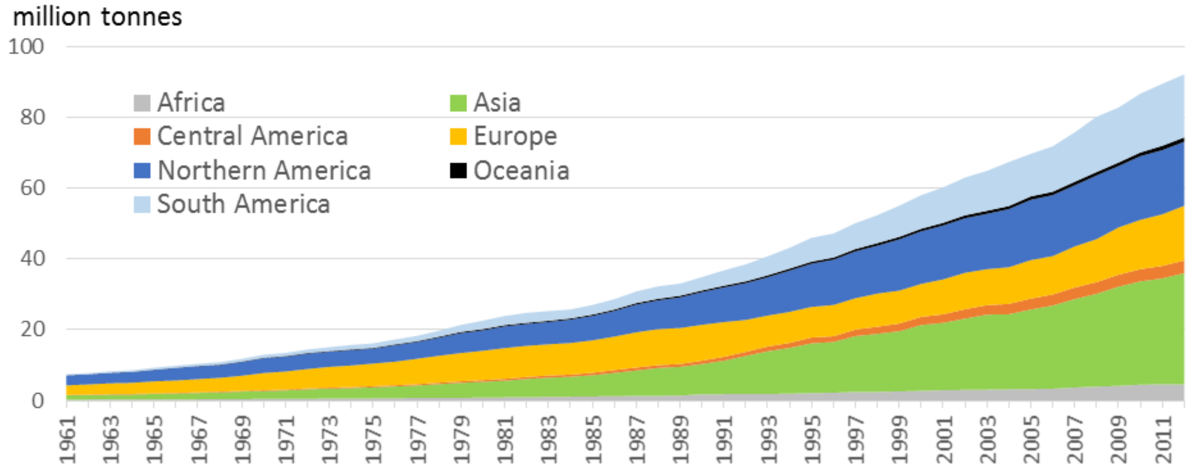
The projected growth in chicken meat production over the next five years can largely be attributed to an on-going increase in domestic consumer demand, as retail prices of chicken meat remain well below prices of alternative meats, with chicken meat on average 21 per cent cheaper than pork, and 22 per cent and 45 per cent cheaper than beef and lamb, respectively over the last five years. Over the medium term, chicken meat is projected to remain substantially cheaper than these competing meats (ABARES 2014).

Australia in the global market for chicken meat

Global chicken meat production

World chicken meat production has grown eleven-fold since 1961—an average annual rate of growth of 7.4 per cent—and by 163 per cent since 1990 (Figure 14). While significant growth has been seen in all regions, it has been most evident in South America (371 per cent since 1990), Central America (275 per cent) and Asia (269 per cent). Growth in Australian production since 1990 has been on average, at 169 per cent. In comparison, growth was only 52 per cent in Europe and 95 per cent in North America.

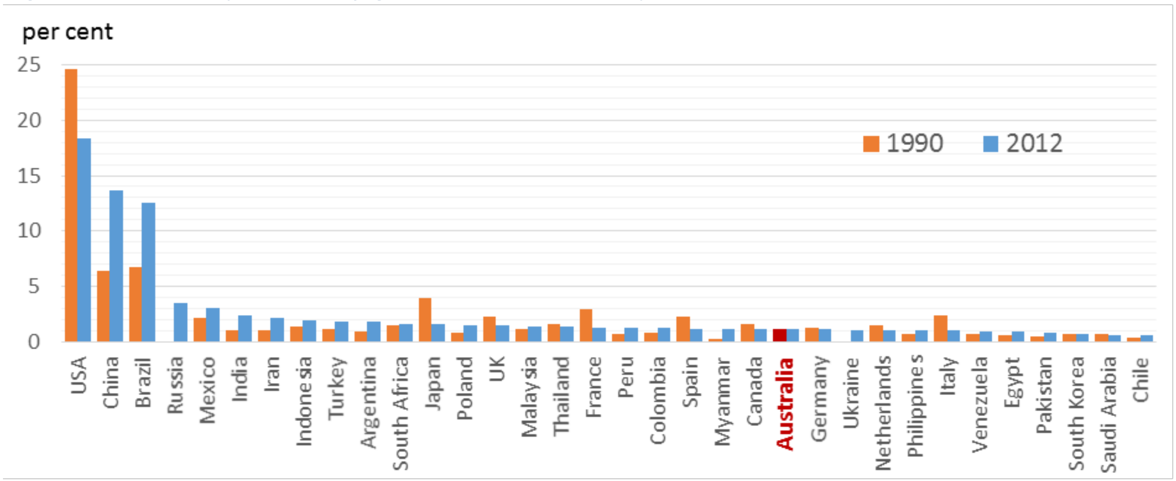
Figure 14: Global chicken meat production by region, 1961 to 2012



Source: Food and Agriculture Organisation
Note: Data is for animals slaughtered by country of origin (i.e. not country of slaughter)

There are three very large global chicken meat producers—the United States, China and Brazil. Between them, they accounted for almost 45 per cent of the world's 105 million tonnes of chicken meat production in 2012. Australia (ranked 23rd largest) produces around 1.1 per cent of global production (Figure 15). Australia's share of global production has not changed much since the 1990s—indicating that Australia's growth in chicken meat production has mirrored average overseas production increases.

Figure 15: Country shares of global chicken meat production



Source: Food and Agriculture Organisation
Note: Data is for animals slaughtered by country of origin (i.e. not country of slaughter)

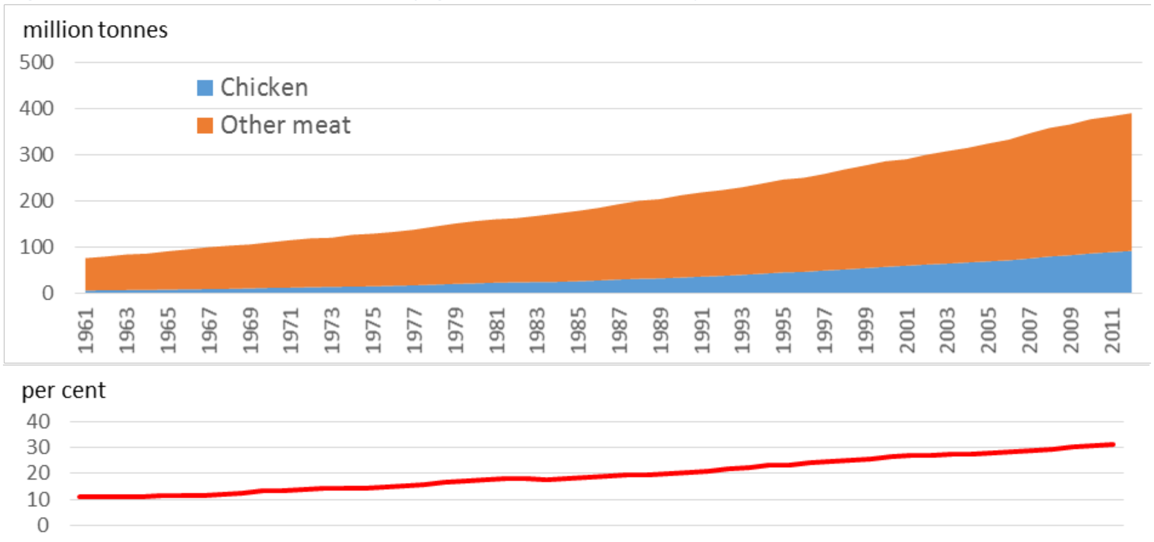
While the United States' production doubled between 1990 and 2012, its share of global production declined significantly from 23 per cent to 16 per cent. There were also substantial declines in market shares for Japan, France, Spain and Italy—countries where production has seen low rates of growth.

In comparison, production increases have been stellar in China (465 per cent), Brazil (392 per cent), India (513 per cent), Iran (416 per cent), Argentina (426 per cent), Poland (412 per cent) and Peru (379 per cent).

Chicken in the context of total meat production

In 1990, the global production of meat was 213 million tonnes, of which chicken meat made up 20 per cent. In 2012, the annual global production of meat was 390 million tonnes, with chicken meat now comprising 31 per cent or 93 million tonnes (Figure 16).

Figure 16: Chicken meat share of global annual meat production

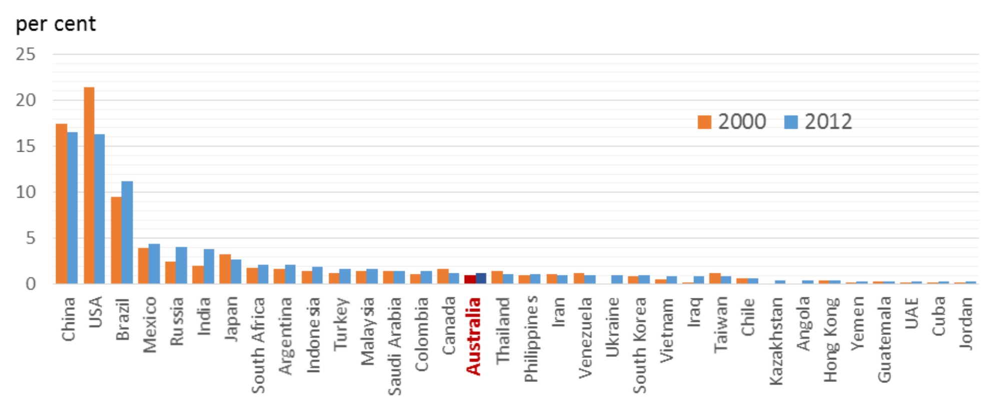


Source: Food and Agriculture Organisation
Note: Data is for animals slaughtered by country of origin (i.e. not country of slaughter)

Global chicken consumption

Mirroring global chicken production, there are three very large chicken meat consumers—the United States, China and Brazil. Between them, they consumed 44 per cent of the world's chicken meat in 2012. Australia (ranked 16th largest) accounts for around 1.2 per cent of global consumption (Figure 17).

Figure 17: Country shares of global chicken meat consumption

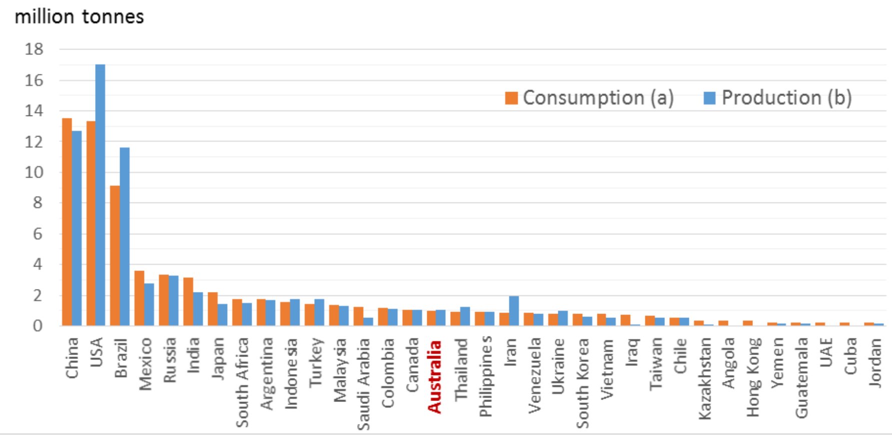


Source: Foreign Agricultural Service 2014b

Among the larger countries, the greatest increases in chicken consumption since 2000 have been in India (192 per cent), Russia (145 per cent), Turkey (115 per cent), Indonesia (88 per cent), South Africa (86 per cent) and Brazil (79 per cent). In comparison, Australian consumption grew by 69 per cent.

Domestic demand for chicken meat is the most important influence on the level of a country's chicken meat production (Figure 18). Australia is typical in this respect, where imports and exports are a very small proportion of consumption and production respectively. However, there are some deviations from this pattern—the United States, Brazil, Iraq and Thailand produce significantly more chicken meat than is consumed domestically, while China, Mexico, India, Japan and Saudi Arabia are all significant importers. Overall, the implied level of trade—the sum of imbalances between domestic production and consumption—was 19 per cent in 2012 (but there are significant data limitations which require caution in interpreting this statistic).

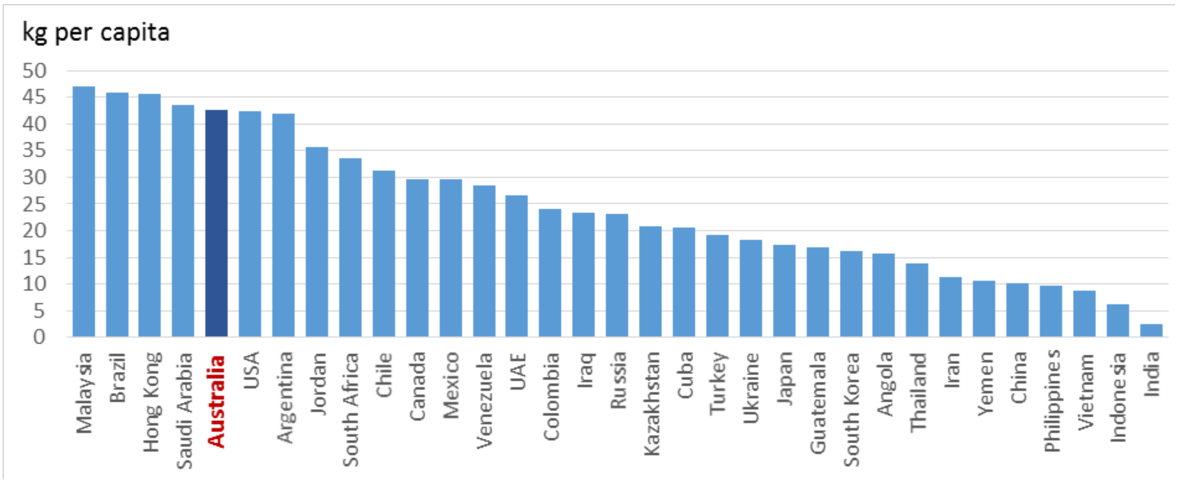
Figure 18: Comparison of global chicken meat consumption and production, 2012



*Source: **a** Foreign Agricultural Service 2014b (consumption) **b** Food and Agriculture Organisation (production)*

While the Australian industry is relatively small compared to the largest global producers, Australians remain significant per capita consumers of chicken meat—in 2012, Australia ranked fifth largest in terms of chicken meat consumed per person (Figure 19).

Figure 19: Per capita chicken meat consumption for selected countries, 2012



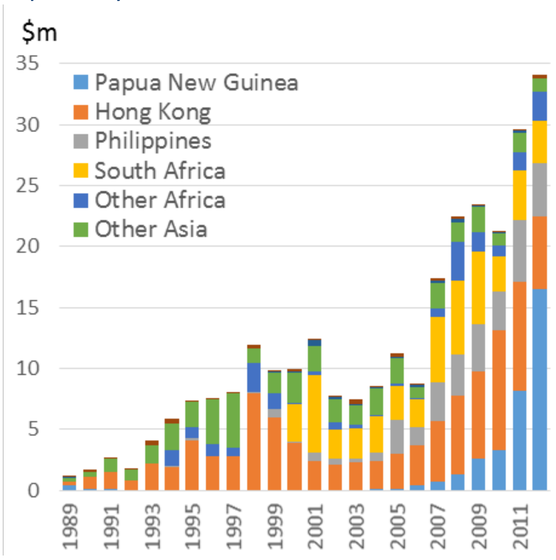
*Source: **a** Foreign Agricultural Service 2014b (consumption) **b** World Bank (population)*

Australian chicken meat exports

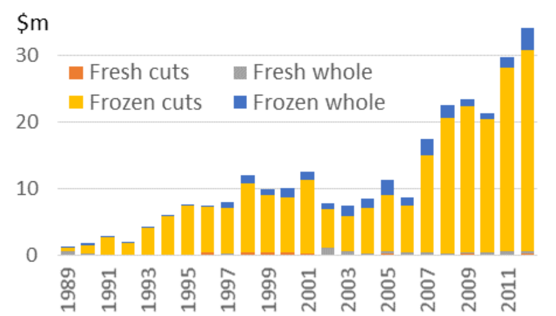
Only around 3 per cent of tonnage produced is exported, but this has grown from negligible levels in the early 1990s (Figure 20). The bulk of chicken meat exports have been made up of frozen cuts and edible offal (including any parts of the chicken that are suitable for human consumption such as feet, liver, kidneys etc) for which there is limited domestic demand.

Figure 20: Australian chicken meat exports in constant (2013) prices,1989 to 2012

Exports by destination



Exports by type



Export share of production (by quantity)

*Source: **a** Foreign Agricultural Service 2014a (exports) **b** ABS Cat. No. 7215 (production)*

Hong Kong has been an important export market, taking an average of $7m of exports annually since 2007. Papua New Guinea has emerged recently as the largest export market, taking almost 50 per cent of exports by value in 2012 ($16m). The Philippines and South Africa are also important markets, and numerous other African countries take significant exports.

To date, the Australian chicken meat industry has been focussed principally on supplying quality product into the Australian market. The growth potential in the domestic market has absorbed most of the industry's capacity, so exports have largely been a by-product of production for domestic consumption.

That may well need to change looking forward. There is a question as to how much further chicken can increase its share of domestic meat consumption, as well as the capacity for further growth in the domestic meat market. The industry is giving consideration to a more strategic role of exports in coming years. However, there are significant logistical and marketing issues—around the current focus on fresh, quality product sourced close to market—which require resolving. And, importantly, international demand for chicken meat imports is already largely met by countries which benefit from a lower cost base than Australia's producers and are, in some cases, supported by government subsidies.

Chicken meat imports

Chicken meat cannot be freely imported into Australia due to strict quarantine requirements in place to protect both local commercial poultry and native birds from disease and consumers from certain food safety hazards. Quarantine conditions focus on nine diseases and pathogens of concern, and any chicken meat products from regions which are not free of all of these diseases needs to be cooked to various extents depending on the disease in question and in accordance with the relevant import protocol.

As a result, Australia is not a significant importer of chicken meat. The chicken imported to Australia is generally as dinned or fully retorted product, such as canned chicken meat, which has had a prolonged exposure to high temperature and pressure while in its container. Over the past five years, there has been some growth in imports of frozen cooked chicken meat from New Zealand which has a similarly advantageous animal health status to our own. Even so, imports still represent only around half a percent of total domestic consumption.

The Australian chicken meat industry

The development of Australia's chicken industry

Australia's chicken meat industry is a relative newcomer compared to other major livestock industries. As official records were not kept until the mid-1960s, it is not certain when intensive poultry production began. Industry sources estimate that 3 million broilers were produced in 1950-51, compared with around 52 million by 1966 and 563 million in 2013 (ABS Cat No. 7215).

1950s

- The poultry industry expanded rapidly as demand escalated, growing almost seven-fold.
- Most production was in the hands of 'backyard' producers and larger family operations, which tended to produce chickens as an offshoot to egg production, while also producing or distributing other agricultural commodities.
- Commercial production started in the outer Sydney metropolitan area, and other centres of commercial production quickly sprang up around major population centres.
- The first real efforts to develop an Australian meat chicken breed resulted in the release of Australia's first scientifically bred meat chicken strain in 1959.
- Chicken processing became faster and more efficient as continuous chain processing systems were introduced, leading to a rapid drop in the price consumers paid for chicken.

1960s

- Chicken meat consumption increased five-fold.
- The commercial chicken meat industry continued to grow.
- The 'integrator' emerged in the industry. These vertically integrated companies were fashioned on a highly successful US meat chicken company model. They owned chicken breeding and hatching operations, feed mills and chicken processing plants and either owned or contracted the growing of chickens from day-old to slaughter weight. This continues to be a successful model in the Australian market.
- Kentucky Fried Chicken opened its first Australian store in 1968. Its expansion provided a major impetus to chicken consumption.

1970s

- In just 12 months, as 75 Kentucky Fried Chicken stores opened, Australian production of chicken increased 38 per cent.
- Production more than doubled again in the 1970s because of improvements in the genetic material available, refinement of the nutrition and husbandry of broiler chickens, improvements in processing technologies and further growth in demand.

1980s

- Production and consumption of chicken continued to grow, although less spectacularly.

- Animal welfare starts to come into focus. The industry works with governments to develop one of the first Model Codes of Practice for the Welfare of Animals(the Domestic Poultry Code, Edition 1).

1990s

- New breeding strains entered the market as importation requirements changed. This opened up new opportunities for significant productivity gains through the use of superior genetics.

- Introduction of improved environmental control within chicken sheds (tunnel ventilation) leading to enhanced animal welfare and increased productivity.

2000s and onwards

- Rationalisation of the industry continues, with consolidation of the number of players through mergers and acquisitions.

- Significant growth in the free range sector of the industry (currently at approximately 15 per cent of the total market), demonstrating the industry's ability to respond to market signals and consumer demands.

- Widespread adoption of superior housing technology—tunnel ventilation shedding, in particular.

- Focus on resource use efficiency sees the industry adopting a range of strategies resulting, in particular, in significant reductions in water used.

- Increasing demands for demonstrating compliance with national or customer-specific standards, resulting in a range of accreditation and auditing programs being adopted on farm and in plants.

Breeding chickens for meat

From the late 1940s until the late 1980s, importing live poultry, eggs for hatching or sera was prohibited. For this reason, local breeders developed their own strains of chickens, looking to develop growth and meat producing characteristics.

From the late 1980s, breeder birds could be imported through quarantine facilities at Torrens Island in South Australia and at Spotswood in Victoria. The first commercial meat chicken hatching eggs were introduced through Torrens Island in August 1990. Today, virtually all broiler chickens used in commercial production are derived from imported eggs, through either the government's quarantine facility at Torrens Island or company-owned quarantine facilities. Only a few thousand fertile eggs are imported each year, providing the new genetic material which, through a number of generations of multiplication, ultimately result in the production of over half a million meat chickens some three to four years later.

As a result of selective breeding techniques, chickens used for meat production and egg production are very different birds. Despite community perception, birds used for egg production are not generally used for meat.

Regional distribution of production

Poultry processing plants have developed close to markets and labour sources, with many of the largest operations within 50km of a capital city. This keeps distribution and transport costs down and ensures labour and other services are available.

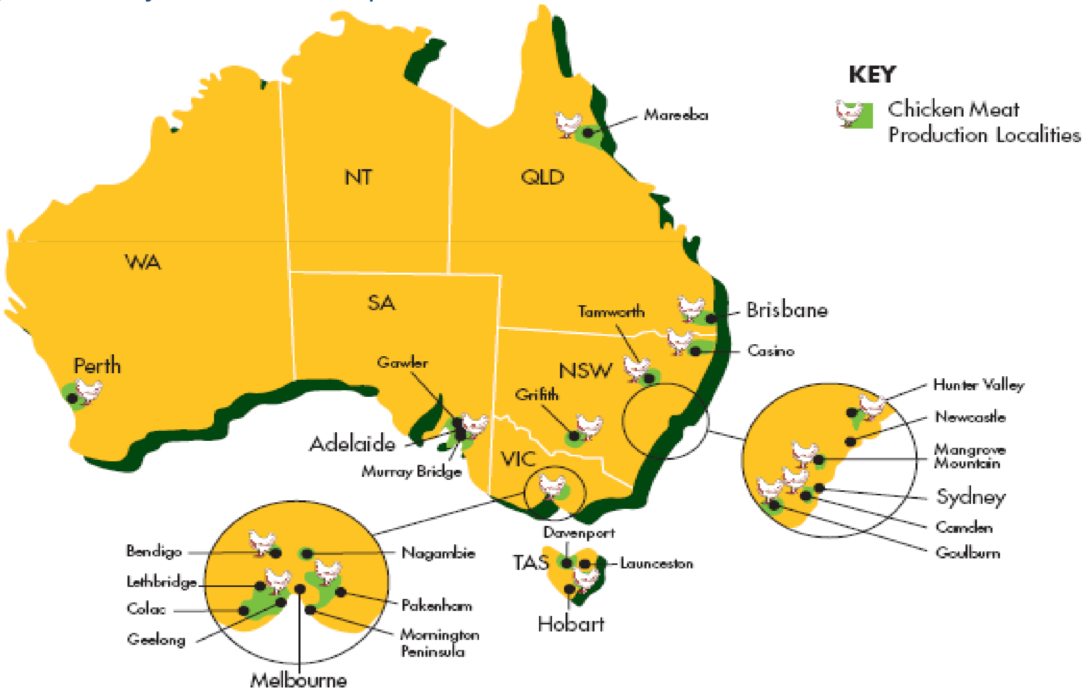
Chicken grow-out farms, where chickens grow from day-olds until they are ready for processing, are generally within 100km of the processing plant. Growers look for:

- reliable water supply
- reliable three phase electricity supply
- access for heavy transport for feed and live poultry
- available labour supply
- available services such as tradesmen.

While major centres of chicken meat production have developed near major capital cities, the industry is becoming more regionalised as urbanisation spreads (Figure 21). Major areas of meat chicken growing are:

- NSW—outskirts of the Sydney metropolitan area, Mangrove Mountain / central coast, Newcastle, Tamworth and Griffith areas and Byron Bay
- Queensland—Redland Bay south of Brisbane, and other areas to Brisbane's south, south west and north and in Mareeba (Atherton Tablelands)
- Victoria—Mornington Peninsula, east of Melbourne, and Geelong and Bendigo areas
- South Australia—outskirts of Adelaide and the Murray Bridge, Gawler and Two Wells areas
- Western Australia—Perth's outer metropolitan areas
- Tasmania—outer metropolitan areas

Figure 21: Major chicken meat production centres

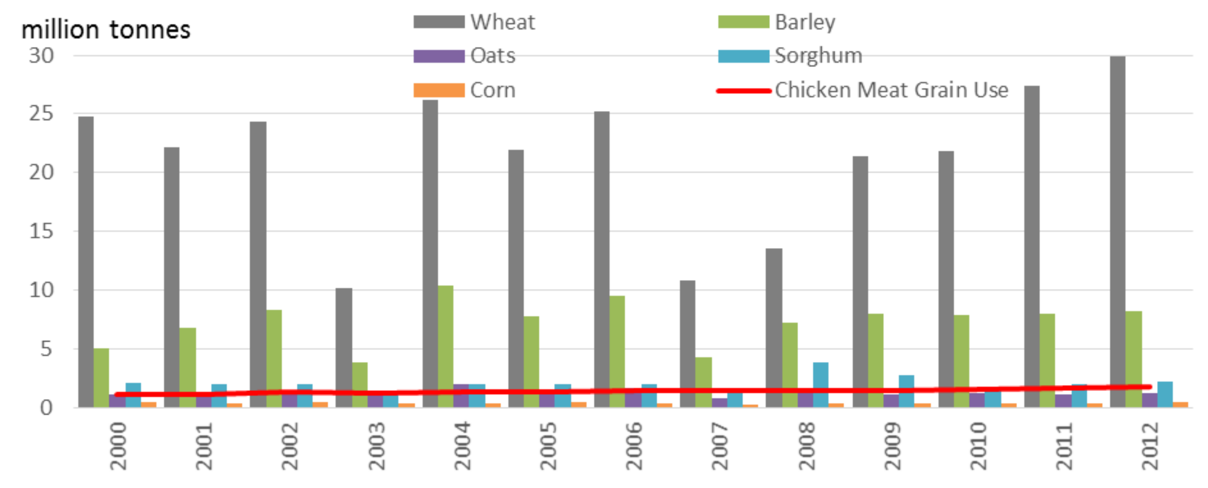


Source: Australian Chicken Meat Federation

Industry input costs

Grain is a substantial input into the production of chicken meat. The industry purchases over 5 per cent of all grains produced on average in Australia. The industry used around 1.7 million tonnes of grain in 2012. Wheat and sorghum are the predominant grains used in the Australian chicken meat industry. The industry's total grain use against production of the major grains is shown in Figure 22.

Figure 22: Australian chicken meat industry use of grain in context of total grain production, 2000 to 2012



Source: ABARES Australian Commodity Statistics and ACMF estimates

As a major user of grain, the chicken meat industry has a direct interest in ensuring the efficient operation of the grain market in Australia. It also has a need for access to timely and reliable information on stocks of feed grain.

Industry structure

The chicken meat industry is predominantly vertically integrated. This means that, generally, individual companies own most aspects of production—which may include breeder farms, hatcheries, feed mills, some broiler growing farms, and processing plants. This makes the chicken meat industry different to many other rural industries, which typically operate through a more complex supply chain.

Two large integrated national companies supply more than 70 per cent of Australia's broiler chickens—Baiada and Inghams Enterprises. Baiada (whose brands are Steggles and Lilydale) and Inghams operate nationally, with farming and processing operations in most States. The third-largest processor, Turi Foods (which markets under the La Ionica, Golden Farms and Bannockburn brands) is based in Victoria and has a market share of over 10%.

The balance of the market is supplied by another four medium-sized, privately owned companies—each supplying between approximately 3 per cent and 6 per cent of the national market—and a myriad of smaller processors.

Growing broiler chickens, from day old chicks to the day of processing, is generally contracted out by processing companies to contract growers. Some 700 growers produce around 80 per cent of Australia's meat chickens under these contracts. Other meat chickens are produced on large company farms, or on farms owned and managed by 'intermediary' companies which own a number of farms, each managed by a farm manager, and who enter into contracts with processing companies to grow out chickens on a larger scale.

Typically, contract growers own the farm and provide the management, shedding, equipment, labour, bedding and other inputs to rear chickens. The processing company retains ownership of the birds and provides feed, medication and technical advice to the grower.

Other industry features include:

- some poultry processors also own breeding farms, supplemented by some contract operators, and supply eggs to their company's hatchery
- the major processors also own feed mills
- the major processors have their own laboratories to test samples for common poultry pathogens and other bacteria
- several processors have their own research farms
- a number of processors also own parent breeding farms and, in some cases, hatcheries

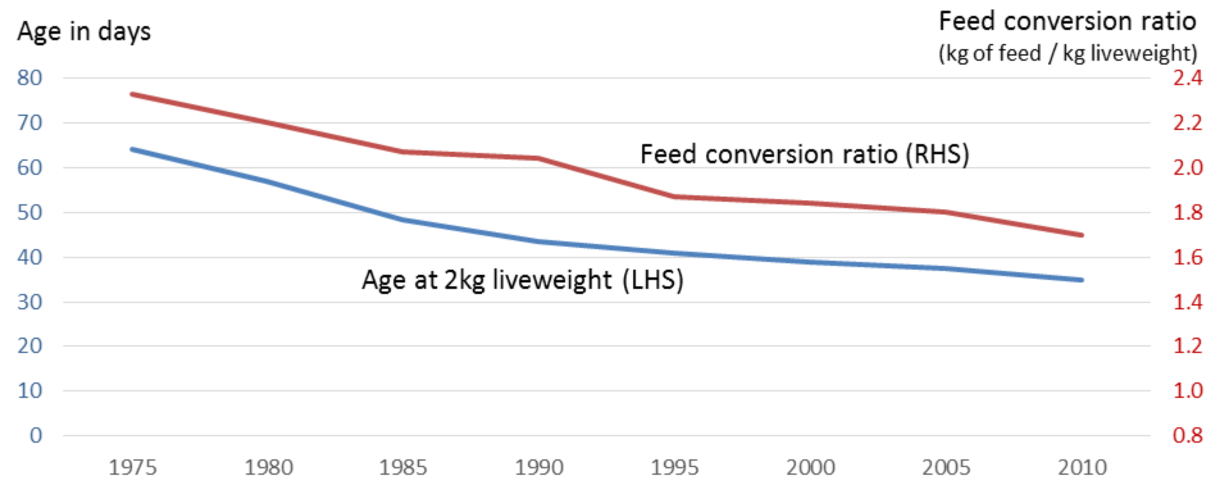
The larger processors also have product research and development facilities.

Productivity growth

Strong productivity growth, driven by high rates of mechanisation and extension of research and development, has been a key driver in the growth of chicken meat production and the downward movement of the real price of chicken meat for Australian consumers.

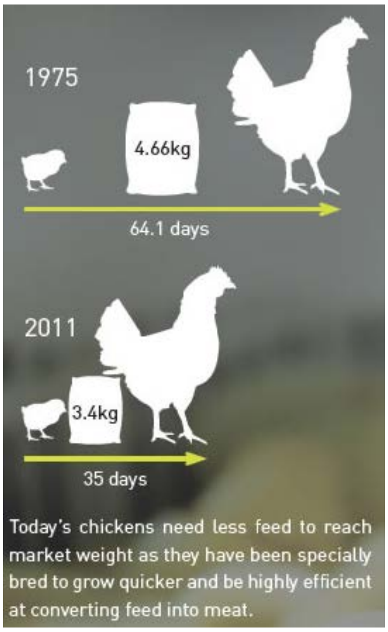
In 1975, it took 64 days and 4.7kg of feed to grow a chicken to 2 kilograms. In 2011, it takes just 35 days and as little as 3.4kg of feed (Figure 23).

Figure 23: Efficiency improvements in Australian chicken meat production



Source: Australian Chicken Meat Federation 2011

Breeding



Most of the genetic stock for Australia's chicken meat industry comes from specialist breeding companies in the USA and Europe. Breeding companies select for characteristics such as robustness, disease resistance, growth, meat yield and more efficient feed conversion, in order to help production and cost efficiencies. Change is achieved through conventional selective breeding techniques, not genetic engineering.

Feed conversion

Today's chickens need less feed to reach market weight, due largely to improvements in the breeds used, that have been developed through targeted breeding programs, as well as improved animal husbandry and bird nutrition. There has been a strong research focus on chicken nutrition directed towards determining the best mix of nutrients to optimise growth and the efficiency with which feed is converted into meat for current meat chicken breeds, while maintaining optimal bird health. Nutrition specialists design diets to meet the bird's precise nutrient requirements as it grows.

Shed types

Birds are kept on the floor in large, well-ventilated sheds—not in cages. Newer sheds will typically have sophisticated ventilation systems, with fans at one end of the shed which draw air into the shed through cooling pads in the walls, over the chickens, and out the far end of the shed. They may be capable of completely renewing the air within a shed in under a minute. Temperature, humidity and air quality conditions in these sheds are monitored and managed by computerised systems which automatically adjust the fans, heating and cooling settings to optimise bird comfort.

Changes to processing

Increasing automation and computerisation have increased the capacity of chicken processing plants and reduced the labour required, while improving occupational health and safety. Food safety, shelf life improvements and minimising waste are also of primary focus for the industry.

Managing waste for productive outcomes

The industry minimises wastage across its production and processing operations by reusing or recycling a wide range of materials. For example, on the farm, spent shed litter—that is, bedding and manure—is often collected for use as fertiliser after the birds leave the farm or increasingly is being reused for further batches, following treatment. At processing, all parts of the chicken are used, with approximately 70 per cent of the chicken going to human consumption while the rest is used as pet food or as ingredients in products such as blood and bone fertiliser.

Research and development

The industry invests substantial funds into research and development (R&D). In 2012-13, the Australian Government collected $1.143 million in levies from the chicken meat industry for R&D purposes, and augmented that industry levy with an additional $1.496 million in government contribution. These funds are then administered by the Rural Industries Research and Development Corporation (RIRDC). Current research priorities include husbandry, nutrition, disease management and physiology issues that constrain production and productivity in the industry or which result in adverse animal welfare outcomes, food safety and environmental sustainability.

Most of the vaccines used in the chicken meat industry were developed with the support from RIRDC (and its predecessors), and these have allowed the significant improvements in key performance criteria referred to elsewhere in this document to be achieved. Two of these vaccines are leaders in the market globally, with royalties from sales flowing back to RIRDC. Previous benefit cost analyses on specific RIRDC Chicken Meat Program funded projects have demonstrated benefit-cost returns on investments of up to 69.

In addition, each of the major companies operating in the industry invests significant funds into in-house R&D, particularly in the areas of product development, marketing and market development, processing technologies, quality control procedures, distribution and packaging.

Key policy issues

Biosecurity

Biosecurity is an extremely important aspect in ensuring Australia's ongoing food security. In the chicken meat industry, there are two main areas of biosecurity activity—global and on-farm biosecurity.

Events such as the global spread of H5N1 avian influenza (Australia being one of only a very few countries not to have experienced it) have demonstrated the impact that disease, and particularly zoonotic disease, can have on both the supply of food products and consumer acceptance and confidence in their food supply. This has implications in terms of protecting our own supply base, but also in terms of the risks such events pose for Australia's food security should we hope to rely on imported food products—particularly from countries for which veterinary services, biosecurity arrangements and preparedness for a disease incursion may be of a lower standard than our own.

It is therefore vitally important that the current *Acceptable Level of Protection* policy, which underpins the development of importation protocols, through Australia's import risk assessment processes, is maintained. Australia is relatively blessed with regards the disease challenges faced by our local poultry industry. Failure to maintain Australia's favourable animal health status has the potential to severely limit the future productive capacity of food production in Australia. In the case of the chicken meat industry, failure to maintain our favourable flock health status would remove part of our natural competitive advantage and diminish our long term food security. Disease incursions into our livestock industries would almost certainly have a major impact on consumer confidence in the foods derived from those industries. This is expected to be especially the case should we have an incursion of a zoonotic disease, such as H5N1 avian influenza into our commercial poultry flocks, where the greatest impact would almost certainly be one of adverse consumer reaction—as particularly evidenced with the reaction to BSE in cattle herds.

Likewise effective border controls must be maintained to minimise or prevent the incursion of pest and disease.

In mid-2007, the Federal Department of Agriculture and AHA sponsored an initiative to develop a National Farm Biosecurity Manual for the Poultry Industry more generally, covering not only meat chickens but also the egg industry, ducks, turkeys, game birds, emus and ostriches. The Biosecurity Advisory Group established to develop the manual comprised representatives from all the industry sectors as well as DAFF, AHA and some State DPI representative. This manual was launched in June 2009 and has been adopted right across the chicken meat industry through the contractual arrangement between growers and their processors.

Access to animal health products

The use of vaccination is an important element in the prevention, introduction and spread of disease, within and between chicken growers.

Antibiotics are an invaluable resource for the industry to ensure that chickens keep or regain their health. Both in human and in animal health applications of antibiotics, development of resistance to antibiotics is of concern. For this reason, antibiotics of importance in human health are generally not registered for use in livestock, and use of any antibiotics in animals has to be approved by the Australian Pesticides and Veterinary Medicines Authority (APVMA). The industry has adopted an antibiotics policy which sets out the responsible use of antibiotics that it advocates.

Associated with the use of antibiotics are often questions regarding possible residues on chicken meat and the concern that antibiotic resistance may develop. Antibiotics may be used in chicken production under veterinary advice. Regular independent surveys are undertaken and have never found any residues of antibiotics. Antibiotics registered for use in poultry have been in use for a long time and yet remain effective, with no significant resistance developing. This is largely due to their judicious use by the industry. A review by Dr Stephen Page, undertaken on behalf of the Australian chicken meat industry, provides further information on the judicious use of antibiotics in the Australian poultry industry.

Animal welfare

Chicken meat growers take the welfare of their birds seriously:

- out of respect for the birds themselves, so they do not suffer
- so that they grow as well and efficiently as possible and they are not damaged in the process
- in recognition of, and respect for, community attitudes and expectations with respect to the humane treatment of livestock farmed specifically for their consumption

It makes economic sense to ensure that flocks are maintained in an environment where they are comfortable, protected from injury, fed optimally and kept healthy. For example, feeding a chicken represents more than 60 per cent of the cost of raising a bird. Most feed is consumed in the latter stages of a bird's growth when it is bigger and consuming more each day. It isn't acceptable on welfare grounds, and nor does it make economic sense, to raise a bird to an advanced stage for it to die of disease or be injured en-route to the processing plant.

It is important that sick or injured birds receive prompt and appropriate treatment and that they do not suffer unnecessary pain, distress, fear or physical injury. If a sick or injured bird cannot be treated, they should be culled quickly and humanely so that they do not suffer. All birds are stunned and rendered insensible to pain prior to slaughter.

Conditions for the housing and management of chickens bred for meat (known as 'broilers') are set down in Government and industry-endorsed codes of practice designed to safeguard their welfare.

The industry has developed welfare standards (over and above those minimum standards established in the codes of practice) and a model welfare audit program which covers hatchery, breeder rearing, breeder laying, grower, and the pick-up, transport and processing sectors. Several processing companies have incorporated elements of this welfare audit in their own quality plans. All companies incorporate elements of good practice for bird welfare in their grower manuals.

Research, development and extension

All chicken meat processing companies invest significant funds into in-house research and development, focusing on processing technologies, quality control procedures, distribution, packaging, product development and marketing, and market development.

In addition, research of a pre-competitive nature or with a significant public good component is being undertaken in a range of public and private organisations. Industry participates actively and provides funding through the RIRDC research program and the Poultry Collaborative Research Centre (CRC).

Rural Industries Research and Development Corporation

RIRDC, through its chicken meat program, coordinates, funds and manages research, development and extension activities provided by public and private research organisations, including universities, CSIRO and state departments.

The chicken meat industry has long recognised the value of research and development and, in 1969, was one of the first of Australia's agricultural industries to establish an industry levy for research. This levy, originally established under the *Chicken Meat Research Act 1969*, is matched with research funding provided by the Australian Government. Today, the RIRDC chicken meat program allocates over $3 million in research funding each year.

Distribution of RIRDC funding for research projects is guided by a five year R,D&E Plan, which is developed with significant input from a range of stakeholders and is managed with the assistance of a largely industry-based advisory committee.

The key goals in the RIRDC Chicken Meat Program's new five year RD&E Plan for 2014–19 are:

Increase the productivity and efficiency of chicken meat production (45% of Program budget)
This objective aims to improve the productivity and efficiency of chicken meat production by addressing feed use efficiency, nutrition, bird health, management of the environment that the birds experience and ensuring access to sustainable supplies of feed ingredients, litter, water and energy. Addressing this objective will add value to imported meat chicken genetics and is a proven driver of Australian chicken meat industry productivity. This objective will target productivity and efficiency improvements in both conventional and the rapidly expanding free range farming sectors.

Deliver safe food and good animal welfare outcomes (20% of Program budget)
Address consumer expectations pertaining to safe food production using husbandry practices that deliver acceptable animal welfare outcomes. Delivering safe food to Australian consumers will include ensuring that effective industry pathogen control systems are informed by up to date research findings. Bird welfare decisions will be informed by science.

Manage the environment for sustainable development (15% of Program budget)
Manage environmental issues so that the Australian chicken meat industry receives both community and planning support and is able to increase production to meet expected growth in demand. Key environmental issues include odour management and litter disposal.

Create foundations for the future, including capacity and market insight (8% of Program budget)
Lay foundations to continue the delivery of important research services post Poultry CRC cessation in 2017. This objective includes human capital creation, dedication of resources to long term blue sky research, understanding future consumer and market demands and ensuring the chicken meat Program is appropriately resourced.

Ensure research adoption via extension and communication (12% of Program budget)
Deliver industry extension through the publication of research findings, preparation of extension materials, development and support of training courses and workshops. Technology transfer targets policy makers as well as the production and processing components of the industry.

As research priorities also reflect the intentions behind the investment of the Australian government, it is also important that the research undertaken contributes to the public good and is in the broad interest of the Australian population.

Poultry CRC

The chicken meat industry strongly supports the Poultry CRC, both through direct company membership of the CRC and through the RIRDC Chicken Meat Program's involvement as an essential participant. This support has been ongoing: following its initial establishment in 2003, the Poultry CRC was renewed for a further seven and a half years in 2010 with funding of million from its participating organisations, including a million dollar cash grant from the Commonwealth Government.

The Poultry CRC aims to help achieve sustainable, ethical poultry production in the face of population growth and climate change. To do this, it conducts research and drives education and training, focusing around three key research programs:

- maintaining poultry health and enhancing bird welfare
- bird nutrition and environmental research, to improving resource utilisation and reduce the environmental impact of poultry production
- research to control food safety issues and quality issues

The CRC aims to develop alternative systems to produce healthy chicken products in the face of reduced reliance on antibiotics and chemicals. It endeavours to improve preparedness against emerging diseases and ensure greater responsiveness to more discerning and demanding consumers. This activity reflects the expectation that continuing public demand for a cleaner and greener environment, world trade agreements, and tighter controls over food safety and quality will continue to have significant impacts on the chicken meat industry.

The Poultry CRC is governed by a skills-based board and is based at the University of New England in Armidale, NSW.

Land use planning and environmental regulation

There is an ever increasing problem associated with farming in or around both capital cities and regional centres. While planning schemes do designate rural zones, there is increasingly less understanding by local government and rural zone residents of what a rural zoning was intended for—i.e. agricultural businesses and production. When combined with environmental legislation that is often not appropriate for the land use, and which can also be inconsistent across the States, this creates significant impediments to production and compliance, particularly for national companies (Jones, 2013).

It can take up to two years and cost over $200,000 for development applications to be processed. This is a significant impediment to continuing industry expansion—indeed, the industry is having difficulty in bringing on line new capacity, particularly for free-range chicken meat, to keep up with growth in consumer demand.

There is also considerable pressure brought to bear on existing facilities from those establishing themselves in peri-urban areas with little understanding and acceptance of agricultural enterprises.

As has been attempted in other policy areas there is a strong case for 'harmonisation' of legislation and a clear policy position from all levels of government that reinforces the fact that:

- if land is zoned rural, then it should primarily be for rural production
- agricultural businesses involved in food production should have priority rights for access to land in key areas that are highly suited for this purpose—in the case of the chicken meat industry, this does not necessarily equate with the most 'productive' or highest quality land
- where the food product is highly perishable, has a short shelf life, or has a high and ongoing demand for significant supplies of unskilled or semi-skilled labour, such as is the case for chicken meat production and processing, planning policies should provide for and support the maintenance of production facilities in close proximity to significant population centres
- environmental regulations should not impose significant time delays and unreasonable development and operational costs for food production businesses

For its part, the industry must continue to operate to appropriate standards to ensure that its impacts on the environment and its neighbours are minimised, through the adoption of voluntary and industry ratified environmental management systems and best practice management programs.

The efficiencies introduced over the past decades, in particular the fact that only about 3.4 kg of feed is required to grow a 2 kg chicken, means that chicken is by far the most sustainable land-based meat protein. This places the industry in an ideal position to respond to the combined demand for more meat protein and reduced greenhouse gas emission.

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