Cattle Council of Australia
Australian Lot Feeders' Association
Sheepmeats Council of Australia
Meat & Livestock Australia Ltd

Submission to
Senate Select Committee on Agriculture and Related Industries
Inquiry into Food Production in Australia

Preamble

The Cattle Council of Australia (CCA) is the peak producer organisation representing Australia's beef cattle producers. The objective of the Council is to represent and promote the interests of Australian beef cattle producers through wide and regular consultation with, and policy advice to, key industry organisations, relevant Federal Government Departments and other bodies regarding issues of national and international importance. The Council has seven member organisations including the NSW Farmers' Association, AgForce Cattle, the Victorian Farmers' Federation, the Western Australian Farmers' Federation, the Pastoralists' & Graziers' Association of WA, the Tasmanian Farmers' & Graziers' Association and the Northern Territory Cattlemen's Association.

The Australian Lot Feeders' Association (ALFA) is the peak national body for the feedlot industry in Australia. ALFA's mission is to lead the industry in a manner that fosters excellence and integrity; improves the feedlot business environment; and ensure its community standing. The Association directly represents its members and does not have State branches or a hierarchical structure.

The Sheepmeat Council of Australia (SCA) is the nation's peak body representing and promoting the national and international interests of lamb and sheepmeat producers in Australia. SCA's goal is to deliver professional policy development and lobbying outcomes that enhance the integrity, profitability and sustainability of the Australian Sheepmeat industry. SCA's members are the State Farm Organisations.

Meat & Livestock Australia (MLA) is a producer owned company serving the beef, sheepmeat and goatmeat industries. MLA works with industry and government in providing marketing, research and development, and market access programs for the benefit of the Australian industry and community. MLA's membership is over 45,000 levy paying cattle, sheepmeat and goatmeat producers.

As red meat production is Australia's largest agricultural pursuit in terms of economic contribution, export income, employment and land use, the red meat industry has a major role to play in any consideration of the future of food production in Australia.

Summary

Global demand for meat is projected to double by 2050, with this growth highly concentrated in developing Asian countries. Even after accounting for growth in domestic production and competing supplies of white meats a significant gap in this growth in demand must be filled by imports of red meats (beef, veal, mutton, lamb, and goatmeat). Australia is the world's number two red meat exporter, so this represents a major commercial opportunity. It also represents a major responsibility to provide a highly nutritious, affordable, sustainable and secure food source for the people of the developing world.

Red meat is an important source of nutrients that are essential in the human diet, ensuring optimal growth, development, health and wellbeing throughout the human life cycle. Diets that include red meat contribute to improvements in key public health outcomes especially in the areas of childhood development and weight management. Red meat is nutrient dense, a fact that must be considered when comparing it with other foods in terms of energy in the diet, greenhouse gas emissions, and food cost.

Red meat continues to be an affordable and popular source of high quality protein, with a diversity of offer that is valued by and meets the needs of all socio-economic groups in Australia. However, under the weight of input cost increases, further productivity growth will be critical in maintaining affordability for consumers and viability for Australian livestock producers.

Extensive livestock grazing is a major user of Australia's land and other natural resources. Production systems have evolved in response to Australia's distinct landscape and climatic conditions and they differ in significant and important ways from systems used in many other countries. The Australian livestock industry is fully aware that it must maintain environmentally sustainable production practices that consider all aspects of natural resource management, especially in the context of climate change.

It is important when assessing the overall environmental impact of a particular food production system that all elements of the environment are taken into account, including water use and quality, fossil fuel use, impact on biodiversity and soil fertility, and greenhouse gas emissions. Although the current measurement and accounting standards for net greenhouse gas emissions from livestock are underdeveloped, the red meat industry acknowledges that emissions is an issue for the industry to further research. Almost all of the emissions from livestock are in the form of methane released during the digestion of feedstuff in the rumen of cattle and sheep. A key to reducing emissions is to maximise an animal's growth rate through converting as much as possible of the energy lost through methane emissions into meat – i.e. through more efficient feed conversion. The challenge for the Australian red meat industry is to meet the world's growing demand for food that is affordable and nutritious while minimising its impact on the environment.

Australia's red meat industry is internationally competitive, with strong productivity growth and very low levels of Government support. As a result, although Australia accounts for only four percent and seven percent of global production of beef and sheepmeat respectively, it accounts for almost 20 percent of the global beef trade and along with New Zealand, most of the global sheepmeat trade. The red meat industry accounts for a quarter of agricultural export earnings and in recent years has become the most valuable agricultural activity in Australia.

The Australian red meat industry has an unprecedented opportunity to take advantage of the projected strong growth in demand for meat from developing economies in Asia over the next few decades. Red meat producers have shown a real commitment to ensuring their long term sustainability and mitigating their impact on the environment. The industry has demonstrated strong productivity growth, is globally competitive and already a major supplier of internationally traded beef and sheepmeat.

However, if the industry is to take full advantage of this opportunity a number of critical issues must be addressed by the industry and by Federal and State Governments:

i. Investment in R&D must be accelerated to further improve productivity and sustainability;

ii. Governments must avoid the introduction of policy measures that distort land and resource use away from red meat production or reduce the red meat industry's global competitiveness;

iii. Governments must accelerate investment in land transport infrastructure and reduce the regulatory burden on the industry;

iv. Barriers to meeting global meat demand must be reduced through both multilateral and bilateral trade agreements.

Discussion

1. Global demand for food, including high quality protein, will grow to meet the needs of a growing global population, increased urbanisation and higher incomes.

The global population is projected by the United Nations (UN) to grow by 40 percent from 6.5 billion in 2005 to 9.1 billion by 2050 (UN, 2005). Almost all of this growth is expected to occur in countries with developing economies.

Projections to 2030 by the Food and Agriculture Organisation of the United Nations (FAO) indicate that all future population growth will occur in urban areas (FAO, 2006a; FAO, 2006b). This is significant as evidence from increasing urbanisation in China is that it has had a positive impact on meat consumption, and a negative impact on grain consumption (Rae, 1998; Zou et al, 2003).

Demand for meat is positively responsive to growing per capita income, and the rate of growth in demand is most rapid at low to middle income levels – i.e. in developing economies (World Bank, 2006; FAO, 2006b; Delgado et al, 1999). Growth in Gross Domestic Product (GDP) per capita in developing economies is projected by the World Bank and the FAO to be two to three times higher than for developed economies through to 2030 (World Bank, 2006; FAO 2006a). Notably from Australia's perspective, projected GDP per capita growth is highest in the Asia Pacific region.

Global consumption of meat is expected to double by 2050 as a result of these compounding factors of population growth, increasing urbanisation, and increasing per capita incomes especially in developing economies (FAO, 2006c). Virtually all of this growth in consumption of meat will occur in developing economies, and most of it will be in Asian countries that already import red meat and livestock from Australia. A report published recently by the Australian Farm Institute (AFI) estimated the increase in consumption and imports, by 12 Asian countries, of the different animal proteins for the period between 2007 and 2020 (Dalton, G. and Keogh, M., 2007). Over that period beef consumption in Asia is projected to increase by 50 percent. Even with domestic production supplying the bulk of this increase in consumption, and despite projected increases in pork and chicken consumption of 30 percent and 40 percent respectively, beef imports are projected to increase by 1.9 million tonnes by 2020. This is a massive increase given that in 2007 Australia produced a total of 2.2 million tonnes of beef, of which 1.4 million tonnes (carcase weight equivalent) was exported globally and 854,000 tonnes was exported to Asia.

In addition to this huge increase in demand for beef there is also likely to be a significant increase in demand for sheepmeat as per capita GDP growth rates in the Middle East and North Africa, through to 2030 are expected to be well above the world average, second only to growth rates in Asia (World Bank, 2006; FAO, 2006a).

- Global demand for meat is projected to double by 2050, with this growth highly concentrated in developing Asian countries.
- Even after accounting for growth in domestic production and competing supplies of white meats in these countries, there is a significant gap to be filled by imports of red meats.
- Australia is the world's number two red meat exporter, so this represents a major commercial opportunity.
- It also represents a major responsibility to provide a highly nutritious, affordable, secure and environmentally sustainable food source for the people of the developing world.

2. Red meat is an important source of essential nutrients necessary for human health and plays an important role in population health outcomes

Red meat is an important source of nutrients that are essential in the human diet, ensuring optimal growth, development, health and wellbeing throughout the human life cycle. Red meat is a nutrient dense food. It is a high protein food, but it is also rich in iron, zinc, vitamin B12, niacin, vitamin B6 and phosphorus, and a source of omega 3 fatty acids and a number of other key nutrients (Williams, 2007).

Consequently, red meat makes an important contribution to the intake of key nutrients in the Australian diet (Baghurst, 2000). It contributed 20% of the daily protein, 14% of the iron (52% of haem iron), 27% of the zinc and 24% of vitamin B12 but only 6% of total energy and only 8% of total fat intake. More recent analyses have shown that red meat makes an important contribution to intake of long chain omega 3 fatty acids. After fish, red meat is the second largest contributor to long-chain omega-3s in the Australian diet (Howe, 2006).

This nutrient density makes red meat unique and difficult to replace within the human diet, particularly when energy intake is low (e.g. during weight management, and with the elderly and toddlers). While plant-based alternative foods may provide protein they are generally poorer sources of bioavailable iron and zinc and do not contain omega-3s or vitamin B12 (Shrapnel, 2007). Compared with white meats, red meat is higher in protein, has at least twice the levels of iron, zinc and omega 3 fatty acids and lean beef and lamb is at least as low in saturated fats as skinless chicken or lean pork.

Red meat's importance as a key contributor of iron is highlighted by studies reporting a strong correlation between red meat intake and iron status. Iron deficiency is an important public health issue in Australia, especially in young women. A Western Australian survey of women, 15-30 years, found that 7.2% were iron deficient and 4.5% had iron deficiency anaemia. A large proportion of the women classified themselves as vegetarians (13%) or semi-vegetarians (17%) and consumed minimal amounts of red meat (Rangan, 1997). A cross sectional study in 305 female students found 36% were iron deficient despite meeting the Australian Guide to Healthy Eating requirements for vegetables, fruits, dairy and the 'meats and alternatives' group. Food choices from the 'meats and alternatives' group was largely from nuts and eggs rather than red meat, chicken or fish (personal communication, Associate Professor Samir Samman, University of Sydney, 2008).

Mean daily intakes of red meat, as consumed, reported in the 1995 National Nutrition Survey were around 88g for men and 45g for women. These levels were lower than those reported in the 1983 National Survey (Baghurst, 2000). Results from recent studies suggest that levels have not changed significantly over the last 10 years. Red meat is consumed lean - 89% of consumers report either purchasing lean red meat or removing some or all of the fat prior to consumption. (Meat Expectations Study, 2007; Baghurst, 2000)). Red meat consumption is also

associated with increased vegetable consumption. Consequently, the consumption of lean red meat is consistent with the official Australian Dietary Guidelines.

Obesity, cardiovascular disease and diabetes are key public health issues in Australia. There is increasing evidence that higher protein diets are effective for weight management and also provide important metabolic benefits (Noakes, 2007). Protein is more satiating than carbohydrates, and higher protein diets deliver adequate levels of key nutrients at lower levels of calorie intake. In addition, higher protein diets contribute to improvements in lipid and glucose markers, and in blood pressure (Hodgson, 2006) . Red meat is therefore an important part of a diet and lifestyle pattern for the prevention of chronic diseases.

The contribution of a food to public health should consider its contribution from a nutritional, behavioural, food security as well as an environmental point of view. Nutrient density is a good indicator of a food's affordability (Drewnoski, A., 2008). Similarly, where less food is required to meet nutrient requirements, nutrient density must be beneficial from an environmental perspective.

- Red meat is an important source of nutrients that are essential in the human diet, ensuring optimal growth, development, health and wellbeing throughout the human life cycle.
- Red meat makes an important contribution to the intake of key nutrients in the Australian diet.
- Red meat consumption patterns are consistent with the Australian Dietary Guidelines.
- Red meat can be an important part of a diet and lifestyle pattern for the prevention of chronic disease.
- Red meat is nutrient dense, a fact that must be considered in evaluating its nutritional, environmental and food security credentials.

3. Red meat continues to be an affordable, popular and high quality food source, valued across all socio-economic sectors.

Red meat represents a significant and valued part of household budgets. The 2003-04 Household Expenditure Survey by the Australian Bureau of Statistics shows that red meat (including sausages, mince, beef & veal and mutton & lamb) averages $8.86 per household per week. This represents 5.8% of average household expenditure on food and non alcoholic beverages. This increases to 7.6% of the lowest quintile households, reflecting the strong value recognition for red meat within these households. Even so, expenditure on red meat lags behind spending in other more discretionary food categories such as confectionery and out-of-home meals.

Household expenditure on selected categories	GROSS HOUSEHOLD INCOME QUINTILE					All households
	Lowest	Second	Third	Fourth	Highest	
Red meat	5.93	7.28	8.82	9.66	12.63	8.86
Other meats	6.61	9.27	10.50	13.11	16.28	11.15
Total meat	12.54	16.55	19.32	22.77	28.91	20.01
Bakery	9.69	13.21	15.22	19.35	22.87	16.06
Fish & Seafood	2.50	2.92	3.59	4.12	6.16	3.85
Dairy	6.86	9.52	11.01	13.29	15.67	11.27
Fruit & Nuts	6.49	8.10	8.88	10.57	14.82	9.77
Vegetables	6.93	8.93	9.88	11.94	15.38	10.61
Confectionery	4.46	7.24	9.02	12.77	15.02	9.70
Meals out & fast foods	13.11	22.52	39.70	51.59	83.66	42.10
Total food & non-alcoholic beverages	78.36	111.72	145.73	181.56	247.25	152.87

Source: ABS household expenditure survey 2003-04

However, more recent MLA data indicates a surge in consumer expenditure on red meat over the last seven years, growing from an estimated $6.0bn in 2000-01 to reach $9.1bn in 2007-08. While supply and demand forces have driven average retail prices up by 40% on beef and 63% on lamb, domestic consumption has also increased, with volumes up by 10% and 9% respectively. This is the result of consumer choice, considered largely attributable to significant improvements in eating quality, improvements in retail presentation and to the growing appreciation of red meat's importance in healthy diets.

In spite of this growth of prices and expenditure, red meat remains the basis of an affordable, enjoyable and high quality meal. Average retail prices for lamb range from $9/kg for lamb shanks up to $27/kg for lamb cutlets. Average retail prices for beef range from $9/kg for beef mince up to $35/kg for fillet steak.

Average retail prices for red meat cuts in Australia ($/kg)

BEEF				LAMB	
	non MSA	MSA			
cube roll	26.05	29.46		cutlets	27.13
knuckle	13.66	14.54		forequarter chops	10.35
sirloin steak	24.24	25.96		chump chops	16.65
T-bone steak	19.41	21.39		loin chops	17.96
rump steak	19.61	20.69		lamb shanks	9.16
fillet steak	32.78	35.67		easy carve leg	14.34
silverside steak	12.54	12.90		mini roast	16.65
blade steak	12.17	12.27		diced lamb	16.82
mince (regular)	9.15			leg roast	10.88
mince (premium)	11.22			mince	13.85
diced beef	12.98	13.57		**VEAL**	
stir fry beef	14.66	15.73		veal schnitzel	22.50
sausage (regular)	7.44			veal stir fry	19.54
sausage (premium)	9.38			veal roast	17.10

Source: Millward Brown Aug 2008

No other food category offers this diversity in pricing and value to meet the needs of every sector of Australian households.

The major challenge for the industry is to continue to meet the value needs of contemporary and demanding consumers while under the pressure of increased input costs.

Recent cost increases include:

- Fertiliser and chemical prices have more than doubled in the past 12 months;
- Labour wage rates have lifted on the back of 30 year lows in unemployment;
- Fuel prices have increased more than five-fold since 2003. Since the start of 2008, the international diesel cost has risen by approximately 40% according to ACCC.
- Official interest rates have lifted by three percentage points since 2002 and have been combined with unilateral increases by the major banks.

On top of these input costs, the Australian dollar has appreciated by over 45% since 2003. With 70% of all Australian agricultural production destined for export markets, this has made it significantly more difficult for Australian farmers to compete on global markets.

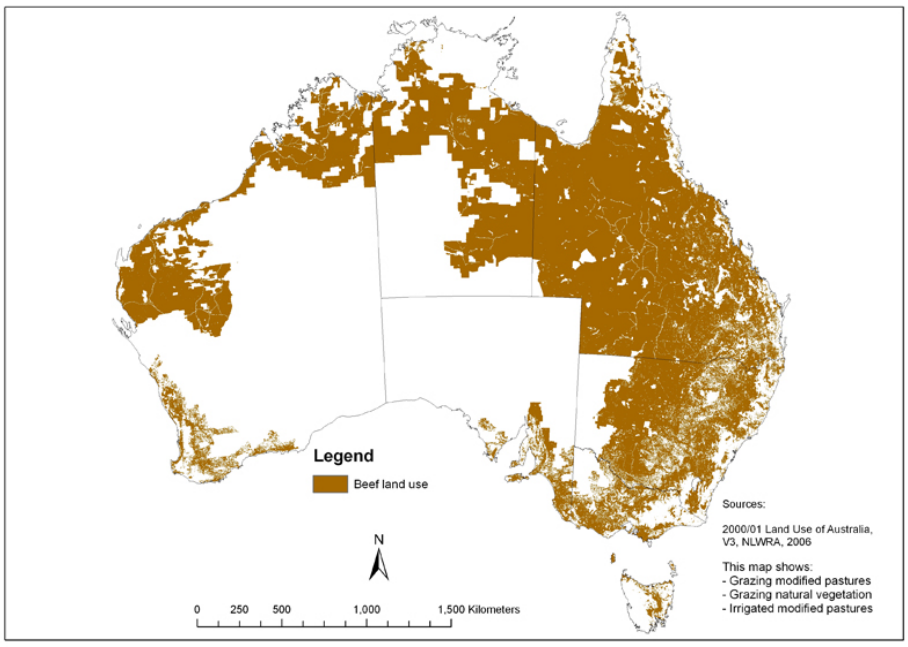
Thus, whilst the revenues for some agricultural sectors have increased since 2001/02, this same increase is not reflected in profit margins, and productivity improvement continues to be a major focus of industry R&D investment In 2008-09, MLA plans to invest 55% of its on-farm R,D&E budget on Productivity R&D, 20% on Sustainability issues, 20% on Communication and Adoption, 3% on Welfare and 2% on improving Product Quality.

- Red meat remains an affordable and valued part of the Australian diet, representing a significant part of weekly household expenditure, particularly among lower income households.
- Both prices and volumes have been growing in recent times, reflecting improvements in quality, in nutritional appreciation, and in retail presentation
- The red meat category is unique in its value offer to consumers with a very wide spread of cuts and prices all of which can deliver high quality and popular family meals
- Rapidly rising input costs and the high Australian dollar are severely impacting on producer margins and viability.
- Further productivity improvements are essential to maintain affordability for consumers and viability for producers.

4. Red meat production in Australia is an efficient, effective and responsible use of Australia's natural resources

Cattle, sheep and goats can be found on half of the Australian land mass – almost everywhere that is not desert (25 percent of the land mass) or urbanised. However most cattle are grazed in areas unsuitable for any other form of agriculture. A proportion of the cattle herd, and most of the sheep flock are in areas suitable for cropping because there is a complementary relationship between livestock and crop production. For example, after harvesting grains, livestock graze on crop stubble and legume based pasture is grown in rotation with grain crops to replenish soil nutrients. Integrating paddock use in this way maximises productivity and enhances soil health.

The map below shows the distribution of cattle across the broadacre zones of Australia. Cattle are concentrated in central and south west Queensland and northern and central New South Wales. They are grazed across north Queensland Northern Territory, and northern Western Australia at relatively light stocking rates, where cattle are the only agricultural land use.

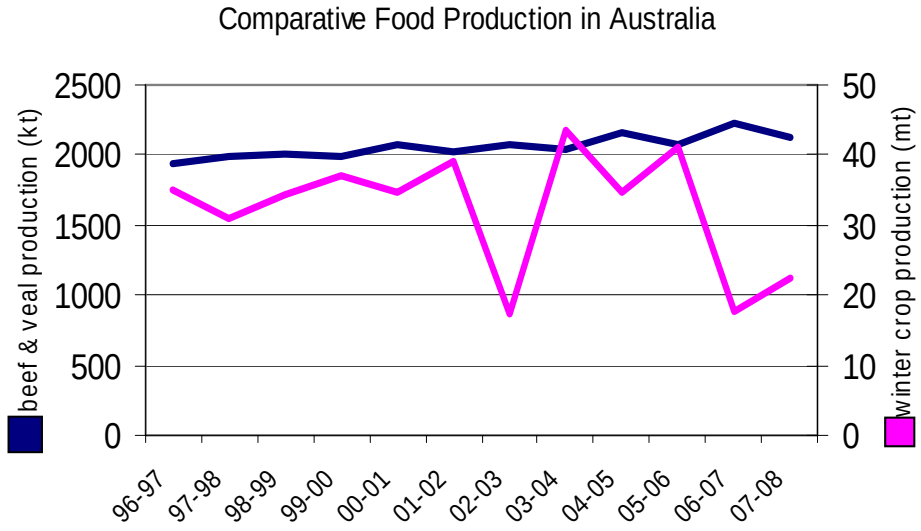


Sheep are concentrated in central and western New South Wales, western Victoria, southern South Australia, and the south western corner of Western Australia.

Most beef cattle and sheep are grazed on pastures of native grasses or improved pastures. Some are fed grain, hay or silage, however this is generally for a short period of their life. For example, 70 percent of cattle are totally grass-fed. The remainder are also typically raised on pastures for most of their lifetime (around 17 to 21 months) but are then grain-fed for between two and four months. On this basis Australian cattle are over 90 percent fed on grass.

Extensive livestock grazing is a major user of Australia's land, water and other natural resources. Production systems have evolved in response to Australia's distinct landscape and climatic conditions and they differ in significant and important ways from systems used in many other countries. The Australian livestock industry is fully aware that it must maintain environmentally sustainable production practices that consider all aspects of natural resource management, especially in the context of climate change.

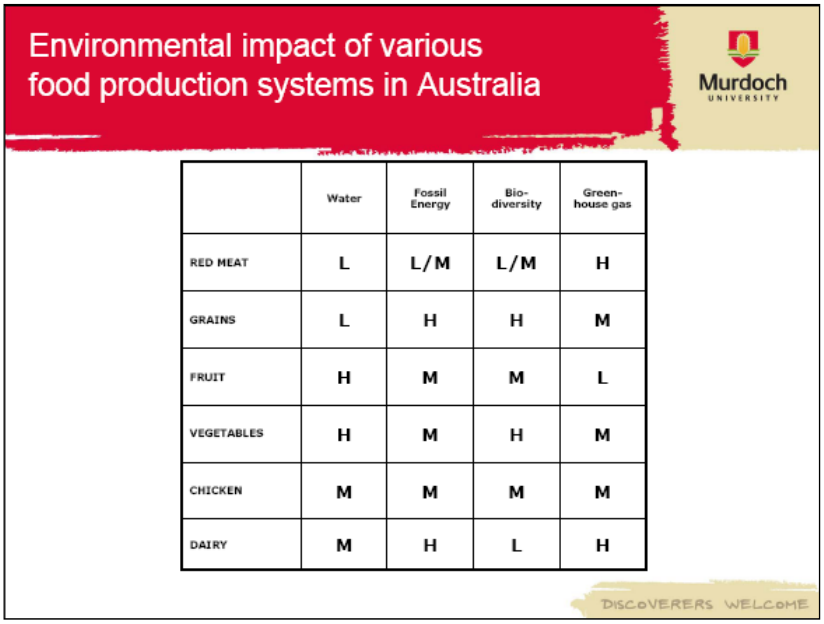
Red meat production in Australia provides a high degree of security in food production against the climatic extremes we experience in Australia. This is illustrated in the graph below that shows annual beef and veal production versus annual winter crop (wheat, barley, oats, etc) production over the period 1996-97 to 2007-08. Winter crop production was halved during the droughts of 2002-03 and 2006-07, whereas beef production was barely affected.



Source: ABS, ABARE

The challenge for the Australian red meat industry is to meet the world's growing demand for food that is affordable and nutritious while minimising its impact on the environment.

The production of all food types has an impact on the environment in a number of ways: use of fresh water; use of energy from fossil fuels; the reduction of biodiversity; and the emission of greenhouse gases. However the production of different foods impacts on these various elements of the environment to significantly varying degrees. It is important when assessing the overall environmental impact of a particular food production system that all elements of the environment are taken into account. The following table illustrates this point



	Water	Fossil Energy	Bio-diversity	Green-house gas
RED MEAT	L	L/M	L/M	H
GRAINS	L	H	H	M
FRUIT	H	M	M	L
VEGETABLES	H	M	H	M
CHICKEN	M	M	M	M
DAIRY	M	H	L	H

Source: Costa, 2008

While the impact of red meat production in terms of greenhouse gas emissions is rated high, it rates better than fruit and vegetable production in its impact on the environment in terms of fresh water use, use of energy from fossil fuels, and reduction in biodiversity. Grain production has a much bigger impact on the environment than red meat production, in terms of use of energy from fossil fuels, and the reduction in biodiversity.

Although problems with measurement and standards remain, there is no doubt that the main environmental issue for red meat production is greenhouse gas emission. Cattle (both beef and dairy) and sheep accounted for approximately 10 percent of net green house gas emissions in Australia in 2006 (Australian Government Department of Climate Change, 2006).

Almost all of the emissions from livestock are in the form of methane released during the digestion of feedstuff in the rumen of cattle and sheep. Methane emissions vary depending on an animal's diet, size and other variables. A key to reducing emissions is to maximise an animal's growth rate through converting more of the energy lost through methane emissions into meat – i.e. through more efficient feed conversion. This can be achieved through more selective breeding for this trait as well as improved feed management.

Current methane-specific research co-funded by MLA and the Dept of Climate Change includes understanding alternatives to methane production in rumen bacteria (2 projects with CSIRO and Queensland DPI&F), improving measurement systems for greenhouse gas emissions in feedlots (Univ Melbourne, CSIRO, LWA, Agriculture Canada and Univ Wollongong), and assessing the ability of specific feed supplements to reduce methane in cattle eating tropical grasses (Queensland DPI&F).

Notably in the period 1990 to 2006 (1990 is the base year for emissions reporting under the Kyoto agreement) total emissions from livestock have declined by almost five percent. While much of this decline can be attributed to the fall in sheep numbers, there has been significant improvements in management practices and production efficiencies. This improvement is evident from the 12 percent reduction, since 1990, in emissions per tonne of meat produced.

The record of the extensive livestock industry is even more positive when account is taken of the big reduction in emissions as a result of the cessation of land clearing and from tree planting. This reduction in emissions more than offsets all emissions attributed to the livestock industry. Cattle and sheep producers have largely carried the cost of this reduction in emissions because it comes from changes that have occurred largely on grazing land. In fact it is only this major reduction in emissions related to agriculture that enables Australia to claim that it will go close to meeting its Kyoto target.

Red meat production is one of many industries contributing to greenhouse gas emissions. Our industry's contribution must be balanced by:-

- Firstly, as outlined in section 2, red meat is a high quality protein source rich in nutrients that are essential in ensuring optimal growth, development, health and wellbeing throughout the human life cycle. Red meat is rich in iron, zinc and Vitamin B12, essential nutrients that are difficult to source from other foods because they are either present in much lower amounts or poorly bioavailable, or both. The high nutrient density of red meat means it is relatively affordable and environmentally beneficial food source.

- Secondly, red meat's impact on the environment, in all its dimensions, needs to be taken into account. Red meat is a low user of diverted water, comparatively low user of fossil fuels, has a low impact on biodiversity, and has an important role in sustaining soil health in mixed farming systems.

- Thirdly, almost all land that is currently used for grazing cattle or sheep cannot be used for other purposes because of a combination of factors including topography, water availability, soil fertility and infrastructure. On mixed farms livestock are complementary to crop production, maximising the productivity of food (both crops and meat) and enhancing the environmental sustainability of these farms.

- Fourthly, nearly every agricultural product is facing shortages, raising serious concerns about the world's food and nutrition situation, especially among the poor in the developing world (International Food Policy Research Institute, 2008). This has fuelled global inflation and – in some countries –caused civil unrest. Any limitation on food production runs the risk of unforseen consequences on social and geo-political stability.

- Fifthly, as outlined in section 1 above, global meat demand is projected to double by 2050 to meet the food and nutrition needs of the developing world. Australia is among the most efficient and environmentally sustainable producers of safe meat and must expand red meat production to help supply this growing demand.

- Finally, properly managed livestock production may help limit other sources of greenhouse gases including termites and destructive wildfires. Livestock is part of a natural system that has been in balance throughout human history.

- Extensive livestock grazing is a major user of natural resources.
- Livestock production systems in Australia have evolved and they differ in significant and important ways from systems used in many other countries.
- The Australian livestock industry is fully aware that it must remain environmentally sustainable especially in the context of climate change.
- It is important when assessing environmental impact that all elements of the environment are taken into account, including water, fossil energy, bio-diversity and soil health.
- Despite problems with measurement the main environmental concern for red meat production is greenhouse gas emissions.
- The key to reducing emissions is through more efficient feed conversion.
- The challenge for the Australian red meat industry is to meet the world's growing demand for food that is affordable and nutritious while minimising its impact on the environment.
- Livestock is part of a natural system that has been in balance throughout human history.

5. Further development of the red meat industry can provide an economic windfall for Australia.

In 2006-07 the gross value of Australia's cattle and sheepmeat production was just over $10 billion, approximately one percent of Australia's total GDP. Red meat production is Australia's most valuable agricultural pursuit. By comparison the gross value of other rural products in 2006-07 was: combined pig and poultry production, $2.2 billion; wool production, $2.3 billion; milk production, $3.2 billion; fisheries products, $2.2 billion; all grain and oilseeds production $5.1 billion (a drought year – usually around $8-9 billion); and all horticulture production, $8 billion.

Exports by Australia's red meat industry totalled $6.6 billion in 2006-07, by far the major agricultural contributor accounting for almost a quarter of all agricultural exports.

Australia exports over 60 percent of beef production and over 50 percent of sheepmeat production. As a result, although Australia accounts for only four percent and seven percent of global production of beef and sheepmeat respectively, we account for almost 20 percent of the global beef trade and along with New Zealand almost all of the global sheepmeat trade.

Agricultural productivity growth in Australia has been strong, growing at almost four times the rate of the economy as a whole. (Mullen, 2007). Within the agricultural sector, productivity growth in the beef industry has been second only to that for cropping since the 1970s. Over the period 1989 to 2004 the productivity of beef specialists has grown by an average of 2.5 percent per annum. The rate of productivity growth is accelerating, is significantly higher among northern producers, and higher among larger producers (Mullen, 2007). It is difficult to get a clear measure of productivity growth among sheepmeat producers because figures for the sheep industry take into account the steep decline in the wool industry since the late 1980s. Productivity growth among sheep specialists and sheep-beef producers is generally fixed at less than half of that for cattle producers. However there is little doubt that productivity among meat lamb producers has increased strongly over the last couple of decades. Average carcase weights of lambs processed for meat has increased from 16 kilograms to over 20 kilograms – almost 30 percent – since 1990. Lamb production reached a record level last fiscal year despite that the sheep flock is less than half its peak size in 1970.

The Productivity Commission notes that in the period that it measured productivity growth – 1977-78 to 2001-02 – agriculture performed better than all other sectors of the Australian economy except telecommunications (Productivity Commission, 2005). It attributes this strong performance to three main factors:

- New knowledge or technology that creates more output from a given amount of inputs;
- Better organisation of production within farms and between agricultural industries; and

- Incidental effects that arise from increases in farm size, shifts in enterprise mix and the exit of lower performing farmers.

The Commission notes the importance of "institutional" research and development (R&D) – i.e. research by rural Research and Development Corporations - in the creation of new knowledge and technical advances in agriculture, and cites an observation from the OECD that "there is growing agreement that R&D is a crucial determinant of agricultural productivity" (OECD, 1995).

This solid growth in productivity, allied with relatively stable terms of trade since the early 1990's has undoubtedly improved the competitiveness of red meat exports from Australia. This competitive position has been enhanced by very low levels of government assistance provided to red meat producers. The Productivity Commission estimated an effective rate of assistance of 3.3 percent for the cattle and sheep industries in 2003-04 (Productivity Commission, 2005). This assistance is made up almost entirely of research and development support, drought assistance and taxation concessions. By comparison, the average rate of assistance for beef producers across OECD countries was over 35 percent and as high as 75 percent in the European Union and South Korea (OECD, 2003).

- Australia's red meat industry is internationally competitive, with strong productivity growth and very low levels of Government support.
- Although Australia accounts for only four percent and seven percent of global production of beef and sheepmeat respectively, we account for almost 20 percent of the global beef trade and along with New Zealand, almost all of the global sheepmeat trade.
- The red meat industry accounts for a quarter of agricultural export earnings and in recent years has become the most valuable agricultural activity in Australia.

6. The red meat industry can take advantage of the opportunity, as well as fulfil its responsibilities in meeting the projected strong growth in demand for meat in the developing economies in Asia.

The industry has demonstrated strong productivity growth, is globally competitive and is already a major supplier of internationally traded beef and sheepmeat. Red meat producers have shown a real commitment to ensuring their long term sustainability and mitigating their impact on the environment.

However, if the industry is to take full advantage of this opportunity a number of critical issues must be addressed by the industry and by Federal and State Governments:

I. Investment in R&D must be accelerated

Productivity growth in the red meat industry has been critical in maintaining and enhancing the industry's global competitiveness in the face of flat to declining terms of trade, over recent decades. It is also a major factor in improving the industry's environmental sustainability – allowing it to produce more food while consuming less resources. A major contributor to this productivity growth has been R&D by both the private and public sectors. The private sector rarely accounts for more than 10 percent of annual rural R&D expenditure, although there is a very significant contribution by agricultural industries to public R&D expenditure via the rural Research and Development Corporations (RDCs). Rural RDCs account for approximately half of public expenditure on agricultural R&D (Mullen, 2007).

Public expenditure on rural R&D grew strongly from the 1950s through until the late 1970s but has been flat (on a constant dollar basis) since then. As a percentage of agricultural GDP, public expenditure on rural R&D has declined from five percent in 1986 to three percent (Mullen, 2007). Notably, the contribution of rural RDCs to public rural R&D expenditure has grown from 15 percent in the 1980s to currently 50 percent. This indicates that there has been a very significant decline in direct expenditure in rural R&D by Federal and State Governments. If, as is likely, trends in expenditure on R&D in the red meat industry reflect those in agriculture overall, then given the long lags involved in the take up of R&D results there is a real possibility that the acceleration in productivity growth achieved over the past 10 to 15 years may not be maintained in future decades.

Substantial additional investment is required for the industry to reduce its methane emissions. Significant research into methane reduction from livestock is expensive and high risk and beyond the short term resources of industry without unbalancing its overall research effort.

If the Australian red meat industry is to take advantage of the opportunity offered by growth in global demand for meat over the next few decades then the relative

decline in expenditure on R&D, especially by Federal and State Governments, must be reversed to ensure productivity growth is at least maintained.

ii. Governments must avoid the introduction of policy measures that would distort land and resource use away from red meat production or reduce the red meat industry's global competitiveness

The red meat industry does not underestimate the challenge of global warming, or the difficulty of accurately calibrating measures to address that challenge. The industry fully accepts its responsibility to reduce its impact on the environment, especially through reductions in green house gas emissions. However, the red meat industry is especially concerned to ensure that mistakes are not made when implementing the proposed Carbon Pollution Reduction Scheme (CPRS).

Firstly, the red meat industry is concerned that the calibration of the CPRS may be unduly influenced by the emotive attraction of re-forestation and biofuels, rather than accurately reflecting their (undoubted) contribution to emissions reduction. Similarly the industry is concerned that carbon accounting systems do not reflect the important contribution that livestock production makes to carbon capture. This would distort the allocation of land and other resources away from food production. The impact on global food grain supply and prices resulting from the ill-advised subsidization of ethanol production by United States and European Governments is ample evidence of the dangers of such distortions.

Secondly, as the red meat industry is highly trade-exposed, it would be a mistake to introduce measures to reduce emissions from cattle and sheep production within Australia's CPRS if other countries that are major meat producers do not introduce equivalent measures. Otherwise there would most likely be an expansion of production in less efficient meat producing countries that would result in a net increase in global greenhouse gas emissions The industry acknowledges that the CPRS will not encompass agriculture at its commencement, and that when it does, cattle and sheep production will initially be eligible to receive free permits to cover 90 percent of emissions. However the timing of the inclusion of agriculture within the CPRS and the rate at which the percentage of emissions eligible for free permits is reduced for the Australian red meat industry must parallel the introduction of measures for other major meat producing countries. The concern of the red meat industry is heightened by the knowledge that increased production to supply the projected growth in meat consumption in Asia in the first half of this century is expected to come from China, Brazil and India. The commitment of these countries to the introduction of effective measures to reduce green house gas emissions is by no means certain at this time.

iii. Governments must accelerate investment in land transport infrastructure, and reduce the regulatory burden on the industry,

The red meat industry is incurring unnecessary additional costs as a result of the failure of Governments in the key areas of infrastructure and regulation.

Firstly, Governments have been slow to upgrade land transport infrastructure to keep pace with improvements in sea transport. In particular road transport infrastructure has not been upgraded to accommodate the change from 20 foot to 40 foot containers that has been implemented by the globalised shipping industry. In addition, a failure to standardise regulations across State jurisdictions has impeded the transportation of livestock around Australia. This significantly increases costs for producers, feedlotters, and meat processors in Australia. New South Wales is a particular problem with respect to both infrastructure and regulations.

Secondly, the red meat industry has made submissions to the Productivity Commission detailing its concerns that "(t)he 'total weight' of regulation is a compounding, and serious, issue that needs to be addressed . . . the cumulative impact of many regulation regimes plus variations across jurisdictions, is a substantial and real regulatory burden, with effects on motivation, innovation and investment." (Red Meat Industry Submission to the Productivity Commission (part B), 2007). Four areas were identified by the industry as priority areas for reduction of regulatory burdens:

- Agreement to uniform national animal welfare standards must be expedited
- Current and proposed road transportation regulations must be unified across State and Federal jurisdictions
- Environmental standards and reporting requirements need greater certainty and cost effectiveness
- The regulatory burden on live exports has been increased with little or no evidence of improved animal welfare outcomes or improved risk management

Governments must address these areas of regulatory burden if the red meat industry is to efficiently and sustainably meet growing global meat demand.

iv. <u>Barriers to meeting global meat demand must be reduced through both multilateral and bilateral trade agreements.</u>

Currently over 60 percent of beef production and 50 percent of sheepmeat production is exported. This dependence will only increase if the industry is to supply the projected strong growth in demand for meat in developing Asian economies over the next few decades. To meet growing global demand for meat, the red meat industry depends critically on access to these markets.

There have been significant improvements in access to key export markets for the red meat industry over the past 20 years, in particular significant liberalisation of the Japan, Korea and USA markets for beef.

Despite these improvements, significant impediments to access to key export markets remain:

- Tariffs on beef exports to Japan and Korea remain high – 38.5 percent and 40 percent respectively
- A tariff quota remains in place for beef exports to the USA
- Access for sheepmeat to the European Union is severely quota restricted

The failure of the WTO Doha Round of multilateral negotiations is a major setback to the efforts of the Australian Government and the red meat industry to remove the trade impediments outlined above. However efforts must continue to both revive the Doha Round, and to negotiate bilateral free trade agreements. A particular priority is an FTA with South Korea to negate the advantage obtained by the US beef industry as a result of the recently concluded FTA between Korea and the USA.

- The Australian red meat industry has an unprecedented opportunity to take advantage of the projected strong growth in demand for meat from developing economies in Asia over the next few decades.
- Red meat producers have shown a real commitment to ensuring their long term sustainability and mitigating their impact on the environment.
- The industry has demonstrated strong productivity growth, is globally competitive and already a major supplier of internationally traded beef and sheepmeat.
- If the industry is to take full advantage of this opportunity a number of critical issues must be addressed by the industry and by Federal and State Governments:
  (i) investment in R&D must be accelerated to further improve productivity and sustainability;
  (ii) Governments must avoid the introduction of policy measures that would distort land and resource use within Australia, or distort global meat production;
  (iii) Governments must accelerate investment in land and transport infrastructure and reduce the regulatory burden on the industry; and
  (iv) access to global markets must be improved through both multilateral and bilateral trade agreements

Conclusion

With global demand for meat projected to double by 2050, Australia has an outstanding opportunity as well as a pressing responsibility to help provide the people of the world with their basic food needs. Red meat has been and continues to be a major source of essential nutrients in the human diet.

Red meat production in Australia is an environmentally responsible and appropriate use of Australia's natural resource base, producing high quality protein largely from land which is unsuitable for alternate food production. Further, in mixed farming regions, red meat production is complementary with cropping, not only maximising food production but also enhancing overall environmental sustainability.

However the industry does recognise the need for continued improvement in environmental performance and seeks Government support and policies which enhances the capacity of Australia's producers to improve both productivity and sustainability.

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