



Know-how for Horticulture<sup>SM</sup>

The Secretary  
Senate Select Committee on Agricultural and Related Industries  
PO Box 6100  
Parliament House  
CANBERRA ACT 2600

## **Senate Inquiry**

### **Public submission to Australian Government's Senate Inquiry into Australia's food production**

**Submitted by Horticulture Australia Limited on 15 August 2008**

*SENATE INQUIRY INTO AUSTRALIA'S FOOD PRODUCTION (FED)  
The Senate Select Committee on Agricultural and Related Industries will examine how Australia can produce enough food for itself and maintain its major export capacity in the face of global warming. The inquiry will be chaired by Senator Bill Heffernan, Liberal senator for New South Wales. The terms of reference will focus on Australia's food production - in particular, the question of how to produce food that is affordable to consumers, viable for production by farmers and with a sustainable impact on the environment and any other related matters.*

Horticulture Australia Limited (HAL) is making this submission to provide the Australian Government with an overview of the production of horticultural foods and on the significance of the economic, environmental and social impacts of food production especially horticulture to Australia.

Horticulture Australia Limited (HAL) is a national research, development and marketing organisation that works in partnership with the horticulture sector to invest in programs that provide benefit to Australian horticulture industries.

HAL invests almost \$80 million annually in projects in partnership with the horticulture sector. During the year HAL runs more than 1200 research, development and marketing projects covering a diversity of topics including: market access, market research, export marketing, domestic marketing, supply chain management, quality assurance, food safety, skills development, industry communication, biotechnology, biosecurity, breeding, plant health, pesticide regulation, agronomy, crop regulation, physiology, irrigation and sustainable practices.

HAL does not conduct research and development itself. It contracts organisations such as state departments of agriculture, universities and the CSIRO to undertake the research and development work. HAL conducts some activities within the marketing program but also engages external suppliers to undertake marketing activities.

As part of the Australian Government's commitment to rural research and development, horticulture industries can access matching Commonwealth funding through HAL for research and development activities.



This submission is for consideration by the expert panel appointed by the Minister for Agriculture, Fisheries and Forestry, the Hon. Tony Burke MP, to examine the importance of Australian Food production and the value of this industry.

### **Australian Food Production**

Australian food production covers a wide range of industries, ranging from grain crops, through horticulture, sugar cane, to beef, sheep, poultry, pork, seafood, dairy, honey production and bush foods. Food production industries, businesses and operations impact upon a significant proportion of the Australian community bringing both economic and social benefits.

In terms of land use for food production, the Australian Agriculture Census 2005-06 reported that around 53% of Australia is used for, or associated with, food production related activity including open rangelands for grazing, farm owned land, land for crop production and areas under fallow (Agricultural Commodities 2005-06).

Economically, food production industries contribute around 5% to the Gross Domestic Product (GDP) with grains and crops, horticulture and beef cattle industries being by far the largest by value. Table 1 displays the relevant contribution of food industries in 2007-08.

**Table 1 - Gross Value of Production (GVP) Across Food Industry**

<b>Food Industry</b>	<b>Gross Value of Production (GVP) 2007-08 (\$billions)</b>
Meat	12.1
Grains and Crops	8.8
Horticulture	7.4
Dairy	4.1
Seafood	2.2

**Source: ABS & ABARE**

### **Horticultural Food Production**

Australia possesses a diverse and progressive horticulture industry with production in over 40 individual industries including vegetables, fruits, nuts, berries, nursery, turf and cut flowers.

The horticulture industry is the third largest food producing industry in Australia and is the fastest growing sector in agriculture with around 18,000 enterprises or approximately 12% of all agricultural business.

In terms of gross value of production (GVP), the total farm gate value of the Australian horticulture industry has continued to grow in the face of often significant environmental, trade and economic challenges.

In recent years, especially with ongoing drought conditions in many areas and the ever increasing impacts of globalisation, Australian horticulture has done well to maintain its productive capacity and output. Underlying the overall success, however, in many communities impacts from these factors is affecting livelihoods and social morale.

To maintain or improve their productive capacity and market position will require innovative enhancements and smart investment often facilitated through collaborative projects by industry, enterprise and Government.

Table 2 displays the last five years farm gate GVP for Australian horticulture indicating the continued value growth on an annual basis.

**Table 2- Gross Value of Production (GVP) Horticulture Food Industries 2003 - 2007**

Financial Year	Gross Value of Horticultural Production Farm gate value (\$billions)
2003-04	6.12
2004-05	6.45
2005-06	6.93
2006-07	7.08
<b>Source: ABS &amp; ABARE</b>	

State production values indicate that Australia benefits widely from local horticultural production with four states producing over \$1 billion in value annually. The estimated value of horticultural production by state (including wine grapes) is in Table 3.

**Table 3 - Value of Horticultural Production, by State, 2005**

State Value	(\$ million)
NT	\$54
WA	\$545
SA	\$1,349
TAS	\$222
VIC	\$1,581
NSW	\$1,070
QLD	\$1,534

Source: HAL, Foster & Abdalla, 2004

The horticulture industry in 2006-07 contributed \$7 billion to the Australian economy. In 2008-09 the value will be closer to \$8 billion (ABARE, 2008). Production values of total horticulture have continued to grow with fruits, vegetable, nuts and berry categories achieving positive three to five year growth figures.

**Table 4 - Horticulture Sector Production Value & Growth Rates**

Sector Growth to 2006	Value (\$mil) 2005-06	1yr Growth	3yr Growth	5yr Growth
<b>Fruits</b>	2109	-2.6%	21.1%	8.3%
<b>Nuts &amp; Berries</b>	831	12.9%	27.6%	60.1%
<b>Vegetables</b>	2563	16.9%	17.1%	20.0%
<b>Other Horticulture</b>	1433	n/a	n/a	n/a
<b>Total</b>	<b>6936</b>	<b>8.1%</b>	<b>20.2%</b>	<b>19.6%</b>
<b>Source: ABARE, Australian Food Statistics 2007 &amp; HAL Analysis</b>				



## Production Regions

Due to the extensive range and growing requirements of different horticultural crops production of horticulture is spread widely across Australia.

Major growing regions exist where environmental conditions, infrastructure for production namely water availability and tradition have guided production. These regions include the Goulburn Valley of Victoria, the Murrumbidgee Irrigation Area of New South Wales; the Sunraysia district of Victoria/NSW; the Riverland of South Australia; northern Tasmania; southwest Western Australia, the southern Kimberley region of Western Australia, the central Burnett region of Queensland, the Hunter Valley of NSW, Lockyer Valley of Queensland, Adelaide Hills and Plains, the coastal strips of northern New South Wales and Queensland, and the outer metropolitan areas of Sydney, Melbourne, Brisbane and Perth.

As Australia's supply of quality productive land is increasingly threatened by the demands of development and the impact of climate, methods of ensuring production and maintaining industry will be required. How industry and Government deal with these issues and set aside land for food production purposes will go a long way in determining the sustainability of horticulture as an industry.

## Benefits of Horticultural Food Production

Food security is a critical issue for both the people and economy of Australia. With the economic and social impacts of higher fuel and energy costs, the ability to grow food locally is becoming increasingly important in both ensuring safe and consistent supply and minimizing the cost to the public.

Maintaining strong and economically-viable food production industries will increase in importance in the face of local and global population growth and potential food shortages as is common in countries with less well organized and supported agricultural sectors.

### *Benefits of horticultural production to rural communities*

The benefits to rural communities of horticultural production are diverse and are a component of the society and economic fabric of many regional and semi-rural areas. In fact *"...most of the GDP generated by the Horticulture Economy is produced in regional areas of Australia. Specifically, on average, around 66 per cent of the GDP in the Horticulture Economy, or about \$4.6 billion, was generated in regional areas of Australia each year between 1998-99 and 2003-04"* (Econtech, 2005).

For smaller communities particularly, it is accepted that farming prosperity has a very large influence on the social and economic health of the community at large. Horticulture is of high importance as a regional employer accounting for approximately 26% of all agricultural employment (ABS, Agriculture, Australia).

Horticulture, with its wide range of products, maintains and feeds a large and growing skills base within Australian food industry generally. This aids the development of innovative process and technology improvements leading to products or services which establish revenues in their own right.



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### *Benefits of horticultural production to human health*

Increasing scientific evidence demonstrates that a diet rich in fruit and vegetables not only increases nutrition but is a major contributor to the prevention of health problems such as overweight and obesity and a range of chronic diseases, including cardio-vascular disease (Miller, 2002) and cancer (Marks et al, 2001). According to Dr Derek Yach of the World Health Organisation, "Increasing the consumption of fruit and vegetables is a necessary part of the effort to reduce the growing global burden of chronic diseases." While it is impossible to devise real estimates of cost savings due to decreased health problems as a result of improved diet, it has been estimated that an increase in one serve of fruit and vegetables per person a day could equate to a potential saving of \$513 million in relation to some cancers and cardiovascular disease alone (Miller, 2002).

### **HAL supporting sustainable farm systems and reliable food supply**

HAL, along with Government and industry, has invested significantly in programs to deliver increased productivity, sustainability and enhanced food quality, safety and value.

In the financial year 2007-08 HAL invested \$63 million in research and development projects to assist horticultural food production. In 2008-09 this figure will be closer to \$65 million invested into research and development to maintain and develop the Australian horticultural food industry for the benefit of the Australian people and economy.

In the next five-year planning cycle HAL will invest well over \$400m in strategic R&D and marketing initiatives to benefit individual member industries and the horticulture industry as a whole (HAL Annual Report 2006).

The HAL approach, involving primary production levies and voluntary contributions matched by Government funding, works to increase the sustainability and competitiveness of Australian horticultural producers, food and food technology related researchers, and the horticulture industry as a whole. Investment is aligned with both Government and industry priorities as articulated in individual industry annual investment plans.

With over 1,200 projects spread across 40 industries, the HAL investment model has a wide reaching and positive return to the industry. An example of where HAL investment has delivered significant and ongoing benefit is in the area of water efficiency as outlined below.

#### *Horticulture and Water Use Efficiency in Production*

Horticulture like all industries in food production is dependent upon water. Water availability issues in south eastern Australia have worsened in recent times with drought conditions and rainfall deficiencies persisting for close to a decade.

The past five to ten years of low rainfall and high temperatures in southern and eastern Australia is without recorded historical precedent for the region (Australian Bureau of Meteorology). As a result many industries have suffered sustained and severe impacts to their production capacity and the quality of their produce which then impacts on farm viability and regional centre sustainability.

The importance of water reliability to horticulture is very high which has necessitated the development of innovative programs and technologies to improve water efficiency. HAL supports programs that improve water supply or reduce water use.

The Horticulture Water Initiative (HWI) was established by HAL in 2003 for horticulture industries to collectively respond to water issues. Research and development are critical in improving responsible water use and continued farm profitability.

HAL has invested in water-related projects totaling approximately \$14 million over the past five years focusing on projects which have real outcomes to water use efficiency (Horticulture Water Initiative Data, 2008).

These projects include:

- The management of reclaimed water
- The identification of alternative sources of water for use in horticulture
- Understanding the impact of irrigation on the environment
- Assessing crop water use requirements
- Efficient water supply and irrigation systems
- Water use efficiency on farms
- Guidelines for management under limited water supplies

The industry recognises the demand for good agricultural practice and is leading the way in quality assurance, new technology and adoption of environmentally responsible practices. This along with the need to demonstrate responsible use of water has encouraged the adoption of more water use efficient (WUE) practices. Research and development are critical to the establishment of technology and management practices that will optimize WUE and ensure continued profitability.

HAL is a major funding partner of the National Program for Sustainable Irrigation (NPSI). The HAL Water Initiative links closely to the research activities of the NPSI and maximizes research outcomes for the horticulture industry. Phase 2 of NPSI (Dec 2007) will focus on "Substantial improvement in the environmental and productive performance of Australian irrigation".

In partnership with industry and supported by the Department of Agriculture, Fisheries and Forestry, HAL has developed a project "Drought Information Delivery for Horticulture in the Murray Darling Basin" (MDB) as part of the Australian Government's Irrigation Industries Workshop Program. This project aims to help growers "*Manage Today, Plan for Tomorrow*" through the provision of free, one-on-one assistance to guide growers through their options to manage the business during reduced water availability. The project aims to:

- Provide horticulture irrigators in the MDB with access to good agronomic and financial information to assist in making important business decisions.
- Ensure information provided is specific and tailored to meet the regional needs of horticulture irrigators in the MDB.
- Support horticulture irrigators in the MDB during their decision making process.
- Increase the capacity of the horticulture industry to deal with conditions of water scarcity so horticulture remains a viable industry under those conditions.



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The project is tailored to meet the needs of horticulture irrigators in four key regions within the MDB. They are the Goulburn Valley & Swan Hill, Sunraysia, the Riverland and the Riverina regions.

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