



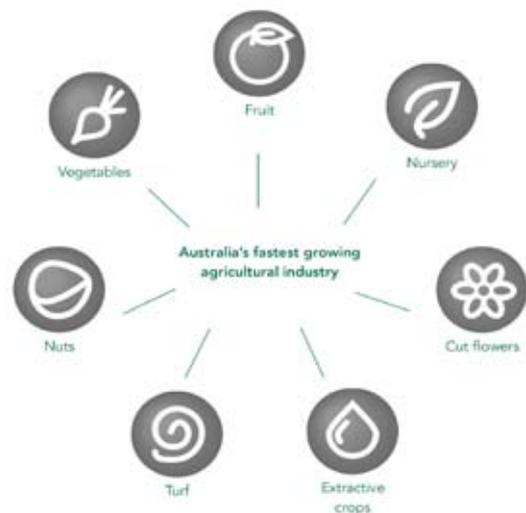
# Signposts for Australian Agriculture



## The Australian horticulture industry

- Horticultural production in Australia is extremely diverse, comprising fruit, vegetables, nuts, nursery products, extractive crops, cut flowers and turf (shown in Figure 1).
- Horticulture Australia Limited's (HAL) membership includes more than 30 specific industry bodies covering edible and non-edible products.
- Horticultural production is dispersed widely in all states and territories and across climatic zones from cool temperate to tropical.
- Horticulture is Australia's third largest agricultural industry with an estimated gross value of production of \$7.1 billion in 2006–07.

**FIGURE 1 AUSTRALIAN HORTICULTURE INDUSTRY WITHIN THE HAL PORTFOLIO**



Source: [http://www.horticulture.com.au/industry/overview\\_horticulture1.asp](http://www.horticulture.com.au/industry/overview_horticulture1.asp)



A RANGE OF VEGETABLES GROWN IN AUSTRALIA.  
SOURCE: DAFF.

Signposts for Australian Agriculture (Signposts) is a partnership between industry, government and research organisations. It provides access to economic, social and environmental data specific to an industry in order to inform policy development, strategic decision making and research priorities.

Signposts reports on the contributions of agricultural industries to ecologically sustainable development. It does this by examining how an industry's assets are changing over time and how the industry is affecting assets held by others. This factsheet provides a summary of key information extracted from the *Signposts for Australian Agriculture — The Australian horticulture industry* report, published by the National Land & Water Resources Audit, 2008.

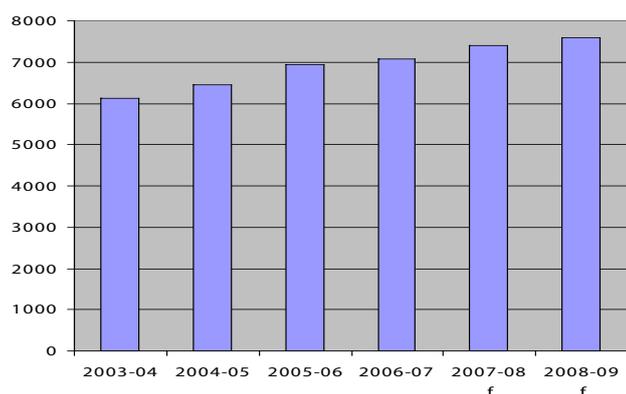
The Audit provides data, information and nationwide assessments of Australia's land, water and biological resources to support sustainable development

## Economic overview

### Condition of industry assets

- The horticulture industry's gross value of production (GVP) increased by an average of 5% per year from 2003–04 to 2006–07. The two largest product sectors of horticulture, fruit and vegetables, have generally achieved increasing GVPs since 1999–00.
- Since 2000–01, the main constraint on the industry's productive capacity has been climate variability and the impact of two severe droughts in quick succession on production and farm profitability. Low water availability from natural rainfall and restricted irrigation water allocations have been key production-limiting factors.
- Total farm capital was \$2.5 million in 2004–05 and \$3.1 million in 2006–07.
- Net worth indicators for vegetables show sound underlying position for farm capital, equity and rates of return.
- There have been rapid rises in input costs, particularly fertiliser and fuel.

**FIGURE 2 GROSS VALUE OF PRODUCTION IN HORTICULTURE, 2003–04 TO 2008–09 (FORECAST)**



f = columns are based on ABARE forecast data

Source: ABARE (Australian Bureau of Agricultural and Resource Economics) (2008). *Australian Commodity Statistics*, March, 08. 1, ABARE, Canberra.

### Impact of the industry on assets held by others

- The average rate of return to capital (excluding capital appreciation) among vegetable growers was 3.2% compared with 0.6% for broadacre farmers.
- Australia's trade performance in horticultural products has been weak. For the two major horticulture sectors, Australia became a net importer of fruit in 2006–07 and has been a net importer of vegetables since 2002–03.
- Australian exports account for only 0.1% of the world's traded fruit and vegetables. This is from a production base of approximately 1% of world production. For the other major agricultural industries, Australia's share of world trade greatly exceeds its production base expressed in world terms.

### Policy and management responses

- Future Focus' strategic planning initiative is to increase the productive and marketing capacity of Australian horticulture.
- Research suggests that unless the horticultural industry can develop and maintain strong export markets, its growth and prosperity are highly limited and subject to erosion by imports.



TRACTOR WITH ROCK MELON SEEDLINGS, ST GEORGE QLD. BY ARTHUR MOSTEAD. SOURCE: LAND & WATER AUSTRALIA.

## Environmental overview

### Condition of industry assets

- Australian horticulture producers are considered to be quick adopters of technological and management improvements.
- Available data shows excess application of nitrogen and phosphorous in relation to removal by plants for most crops.
- Total water consumption for surveyed periods in 2000–01 and 2004–05 was around 1.1 million megalitres representing almost 6% of national water consumption.
- Soil acidity is an issue in almost half of the horticulture production area.
- Irrigation-induced salinity resulting from both over-irrigation and under-irrigation is a significant issue for the industry.

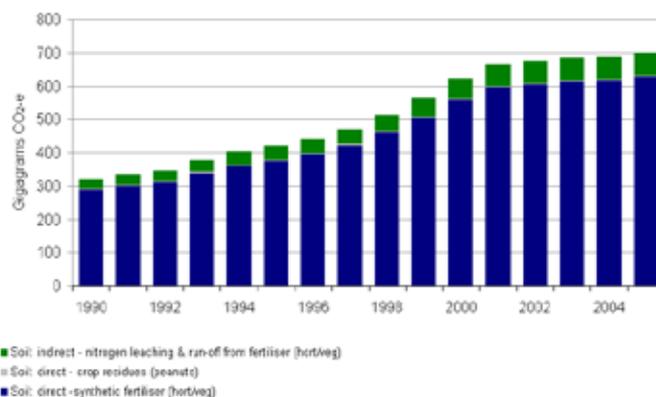
### Impact of the industry on assets held by others

- Low natural levels of nitrogen and phosphorous in soils requires the addition of these elements for optimum production in most regions.
- The horticulture industry is not a significant emitter of greenhouse gas — only 0.8% of total agricultural emissions in 2005 (excluding fossil fuel use).

### Policy and management responses

- HAL established the Horticulture Water Initiative as an industry level strategy in 2003. It has also invested in partnership projects with other national irrigation research and development funders to address key issues facing the industry.
- Best practice fertiliser management through HAL Guidelines for Environmental Assurance in Australian Horticulture.

**FIGURE 3 ESTIMATED GREENHOUSE GAS EMISSIONS (GIGAGRAMS CO<sub>2</sub>E) FROM THE HORTICULTURE INDUSTRY, BY SOURCE**



Compiled by BRS from AGO (Australian Greenhouse Office) (2007). National Greenhouse Gas Inventory 2005: Data from the Australian Greenhouse Emissions Information System, AGO, Canberra.

## Social overview

### Key industry bodies:

- Horticulture Australia Ltd (HAL)
- Horticulture Australia Council Ltd (HAC).

The median age of growers and enterprise managers is 47 years, making the horticulture industry the youngest of the four biggest agricultural industries.



ROCK MELONS BEING PLANTED IN THE KIETH MOONS MOON ROCKS IRRIGATION PROPERTY. ST GEORGE IRRIGATION AREA, QLD. BY ARTHUR MOSTEAD. SOURCE: LAND & WATER AUSTRALIA.

## Impact of the industry on assets held by others

- Nationally, the horticulture industry employed almost 70 000 in 2001, which represented approximately 25% of all employment in agriculture.
- The contributions that the industry makes to social systems at the national scale include employment; the national culture and identity; and the nutritional contribution of fruit, vegetables and nuts that are consumed by all Australians.

## Policy and management responses

- An aspect of the social contribution of the Australian horticulture industry relates to those benefits and costs extending beyond the industry itself. This includes contributions to the national community, regional communities and employees.
- The National Farmers' Federation identified that 'increasing community perception and awareness of Australian agriculture' as one of their main goals. This has driven a comprehensive communications strategy to reposition farming in the mindset of all Australians and overcome many misconceptions about the sector:



FRUIT PICKER ERNIE BOLAT AT THE VERIPODIA ORCHARDS ARDMONA, VICTORIA. BY ARTHUR MOSTEAD. SOURCE: LAND & WATER AUSTRALIA.

**TABLE 1 TOTAL NUMBER OF PERSONS EMPLOYED IN HORTICULTURE PRODUCTION BY STATE AND TERRITORY, 2001**

State	Number of persons employed	% of total
ACT	135	less than 1
NSW	14 849	21
NT	578	1
Qld	18 408	26
SA	11 590	17
Tas	6385	9
Vic	15 438	22
WA	2300	3
<b>Total</b>	<b>69 683</b>	<b>100</b>

Source: ABS (Australian Bureau of Statistics) (2002). *Salinity on Australian Farms*, ABS Catalogue No. 4615.0, ABS, Canberra.



APPLES AND PEARS IN ADELAIDE. SOURCE: LAND & WATER AUSTRALIA.

PRODUCT NUMBER: PN21920