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JANUARY 2010 PRIMEFACT 912 (REPLACES AGNOTE DPI-410)

The potato industry in New South Wales

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Introduction

Potatoes (*Solanum tuberosum* L.) are the largest vegetable crop in New South Wales (NSW). The NSW potato industry grew 139,544 t of potatoes, worth $53.3 million, on 5,845 ha in 2005–06. NSW grows one tenth of the Australian potato crop.

Potato production

Potatoes are a cool season vegetable, which require a mild, frost-free growing season with regular rainfall or irrigation. They are grown in the coastal, tablelands and Riverina districts of NSW.

The coastal districts

The coastal potato growing districts are located between the Great Dividing Range and the Tasman Sea. They grow one tenth of the NSW potato crop.

Table 1. The Australian potato industry (2005–06).

State	Gross Value ($)	Production (t)	Area (ha)	Growers
Victoria	146,998,150	342,332	10,743	293
South Australia	143,012,345	372,898	10,078	134
Tasmania	88,310,618	317,236	7,075	489
NSW	53,314,313	139,544	5,845	149
Queensland	47,956,761	95,137	3,848	179
Western Australia	45,961,153	102,356	2,554	97
Australia	525,553,340	1,369,503	40,143	1,341

Source: Australian Bureau of Statistics (ABS) (2008).

Table 2. The NSW potato industry (2005–06).

District	Gross Value ($)	Production (t)	Area (ha)	Growers
Coastal	3,716,226	9,478	410	59
Tablelands	12,247,070	27,971	1,171	70
Riverina	37,351,017	102,095	4,263	21
NSW	53,314,313	139,544	5,845	149

Source: ABS (2008).

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These districts have temperate or sub-tropical climates. Two crops a year are grown for the fresh and crisping potato markets.

An early crop is planted in winter and harvested in spring and summer. A late crop is sown in summer for harvest over winter.

The coastal potato crops are grown in market gardens, irrigated cropping and mixed dryland farms on red or grey clay, silty loam or sandy soils.

Windsor, Maitland, Kempsey, Bellingen and Grafton are the main potato centres along the NSW coast.

The tablelands districts

The tablelands potato growing districts are found along the Great Dividing Range. They grow one fifth of the NSW potato crop.

These districts have a cool temperate climate. One crop a year is grown for the fresh, crisping and seed potato markets.

In the lower elevation areas, such as Robertson and Dorrigo, a mid-season crop is planted in winter and spring for a summer and autumn harvest.

In the higher altitude districts, such as Batlow and Orange, a late crop is sown in spring and summer and harvested from summer to the next spring.

The tablelands potato crops are grown on mixed dryland farms with red or grey clay soils, which can require supplementary irrigation in dry seasons.

Batlow, Crookwell, Robertson, Orange, Comboyne, Dorrigo and Guyra are the main potato centres in the tablelands districts.

The Riverina district

The Riverina district is located between the Murrumbidgee and Murray Rivers in southern NSW. The area produces over two thirds of the NSW potato crop.

The Riverina has a dry temperate climate. Three crops a year are grown for the fresh, crisping and French fry potato markets.

An early crop is sown in winter and harvested in spring and summer. The mid-season crop is planted in spring for harvest in summer and autumn. A late crop is sown in summer and autumn and harvested in winter and spring.

The Riverina potato crops are grown on large-scale irrigation farms with sandy and sandy loam soils.

Berrigan, Oaklands, Coleambally, Narrandera and Hillston are the main potato centres in the Riverina.

The Murray–Darling Basin

The Riverina and most of the tablelands districts are also located within the Murray–Darling Basin, which grows four-fifths of the NSW potato crop.

Figure 1. The NSW potato growing seasons.

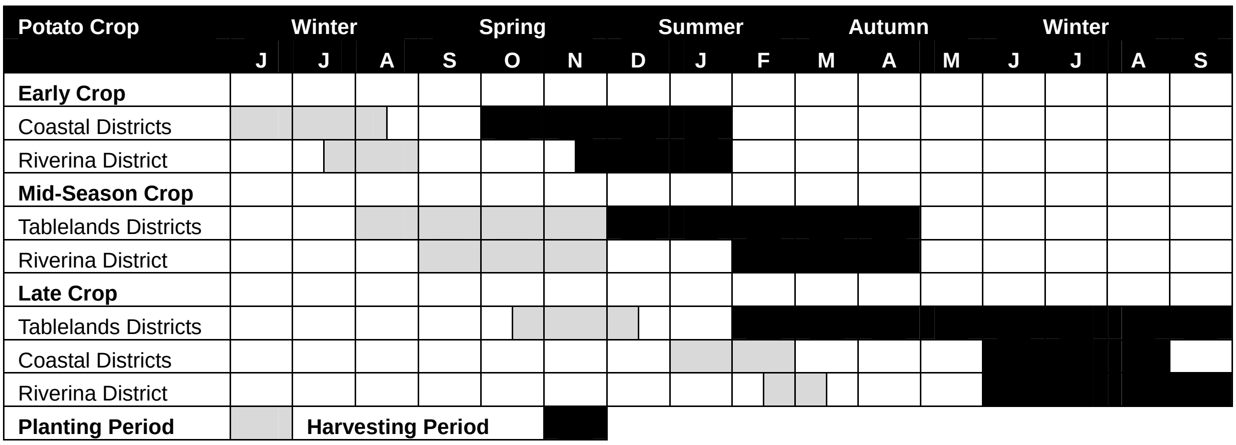

Table 3. NSW potato production in the Murray–Darling Basin (2005–06).

River Catchment	Gross Value ($)	Production (t)	Area (ha)	Growers
Murray–Darling Basin	41,366,047	112,366	4,724	47
Other Catchments	11,948,267	27,176	1,119	101
NSW	53,314,313	139,544	5,845	149

Source: ABS (2008).

Potato consumption

Potatoes are the most popular vegetable in Australia, with an annual consumption of 68 kg per person (ABS, 1998). About 35% of the NSW potato crop is sold fresh, 59% is processed and 6% is used for seed.

Fresh potatoes

The NSW fresh potato industry grew 48,541 t of potatoes, worth $25.6 million, on 2,451 ha in 2005–06.

Fresh potatoes are harvested all year round in NSW. Most of the NSW fresh potato crop is sold at the Sydney markets. The rest is sent to the Brisbane, Canberra, Melbourne and Adelaide markets.

Coliban and Sebago are the main white skinned fresh market varieties, while Desiree and Red Pontiac are the main fresh red skinned varieties. Small areas of speciality varieties such as Kipfler and Pink Fir Apple are also planted.

Processing potatoes

The NSW processing potato industry grew 82,393 t of potatoes, worth $23.7 million, on 2,695 ha in 2005–06.

Potatoes are processed for crisps, French fries, whole peel canning and salad mixes.

Atlantic is the main crisping variety grown in NSW. NSW crisping potatoes are processed at the Snack Brands Australia factories in Sydney and Melbourne and the Smiths Snackfood Company plants in Adelaide and Brisbane.

Shepody is the main French fry variety planted in NSW. It supplies the McCain Foods factories at Ballarat in Victoria and Penola in South Australia.

Whole peel potatoes are produced at the Windsor Farm foods cannery at Cowra. Small processors in Newcastle, Port Macquarie, Sydney and Wagga Wagga also supply the catering trade with French fries, whole peel potatoes and salad mixes.

Seed potatoes

The NSW seed potato industry grew 8,610 t of seed potatoes, worth $3.9 million, on 699 ha in 2005–06.

Certified seed potatoes are grown in the tablelands districts around the towns of Crookwell, Orange and Guyra.

These districts are protected by a NSW Government Quarantine Proclamation, which restricts the entry of potatoes into the seed growing areas. This ensures that the seed growing districts remain free of pests and diseases such as potato cyst nematode and bacterial wilt.

Seed potato production is carried out under the NSW Certified Seed Potato Scheme. Virus-free tissue cultured plantlets are used to grow the potato seed. This seed is multiplied in the field for four years, with each crop being inspected for disease by Regulatory Officers from Industry & Investment NSW.

Coliban, Sebago, Desiree, Red Pontiac, Atlantic and Kennebec are the main varieties grown for seed. Seed potatoes are sold to NSW, Queensland and South Australian growers and exported to South-East Asia.

Table 4. NSW potato market sectors (2005–06).

Market Sector	Gross Value ($)	Production (t)	Area (ha)	Growers
Fresh	25,609,283	48,541	2,451	122
Processing	23,729,126	82,393	2,695	40
Seed	3,975,904	8,610	699	77
NSW	53,314,313	139,544	5,845	149

Source: ABS (2008).

Table 5. NSW potato industry performance (2005–06).

Market Sector	Price ($/t)	Yield (t/ha)	Productivity (t/grower)	Gross Returns ($/grower)
Fresh	528	20	398	209,912
Processing	288	31	2,060	593,228
Seed	462	12	112	51,635
NSW	382	24	937	357,814

Source: ABS (2008).

Potato industry trends

New South Wales

From 2000–05 NSW potato production fell from 166,381 to 139,544 t, mainly due to the drought.

The prices paid to NSW potato growers decreased from $447 to $382 a tonne, a drop of 14% over the period. To maintain their incomes, NSW potato growers increased their crop yields by 4% and their productivity by 31%.

Although these achievements lifted the growers' gross returns by 12%, 83 growers left the NSW potato industry during 2000–05.

While NSW potato production has fluctuated from 1995–2005, due to changing climate and market conditions, the long term trend has been towards increasing grower productivity and gross returns.

When potato prices, yields, productivity and gross returns are compared across the states, the NSW potato industry is an average performer for most of these factors.

Table 6. Potato varieties grown in NSW.

Variety	Tuber Shape	Skin Colour	Flesh Colour
Atlantic	round	buff	white
Coliban	round	white	white
Desiree	oval	pink	pale yellow
Kennebec	pear	white	white
Kipfler	cigar	yellow	light yellow
Pink Fir Apple	cigar	light pink	cream
Red Pontiac	round	red	white
Sebago	oval	white	white
Shepody	oval	white	white

Source: Wilson, G. (1999) and Henderson *et al* (2000).

Figure 2. A certified seed potato crop growing near Crookwell in the southern tablelands.

Source: Eric Elliot, NSW Department of Primary Industries (2008).

Australia

From 2000–05 Australian potato production fell from 1,413,122 to 1,369,503 t, though the drought losses were partly offset by an 11% lift in the South Australian crop.

The prices paid to Australian potato growers increased from $357 to $384 a tonne, a rise of 7% over the period. To improve their incomes, Australian potato growers increased their crop yields by 9% and their productivity by 51%.

Although these achievements raised the growers' gross returns by 63%, 754 growers left the Australian potato industry during 2000–05.

Further advice

For more advice on the NSW potato industry, please consult your local District Horticulturist (Vegetables), Division of Primary Industries, Industry & Investment NSW.

Table 7. NSW potato industry trends (2000-05).

NSW Potato Industry	2000-01	2005-06	Change (%)
Gross Value ($)	74,303,568	53,314,313	-28
Production (t)	166,381	139,544	-16
Area (ha)	7,250	5,845	-19
Growers	232	149	-36
Price ($/t)	447	382	-14
Yield (t/ha)	23	24	4
Productivity (t/grower)	717	937	31
Gross Returns ($/grower)	320,274	357,814	12

Source: ABS (2008).

Table 8. Long term NSW potato industry trends (1995-2005).

NSW Potato Industry	1995-96	2000-01	2005-06
Gross Value ($)	49,803,468	74,303,568	53,314,313
Production (t)	162,456	166,381	139,544
Area (ha)	7,168	7,250	5,845
Growers	196	232	149
Price ($/t)	307	447	382
Yield (t/ha)	23	23	24
Productivity (t/grower)	829	717	937
Gross Returns ($/grower)	254,099	320,274	357,814

Source: ABS (2008).

References

Australian Bureau of Statistics (1998) 4306.0 Apparent Consumption of Foodstuffs, Australia, 1996–97.

Australian Bureau of Statistics (2008) 7125.0 Agricultural Commodities: Small Area Data, Australia, 2005–06 (Reissue).

Henderson, A., Wilson, G., Dawson, P., Western Potatoes & Clayton-Greene, K. (2000) The variety cookbook. Eyes on Potatoes. Volume 9 – March 2000. ISSN 1328-6897.

Wilson, G. (1999) Potato varieties. AG0332 Agriculture Notes, State of Victoria, Department of Primary Industries. ISSN 1329-8062.

Acknowledgements

This Primefact was refereed by Tony Napier, District Horticulturist (Vegetables), Yanco, Industry & Investment NSW.

The author gratefully acknowledges the assistance of Vicky Glover, Librarian, Orange, Industry & Investment NSW in producing this Primefact.

Table 9. Australian potato industry performance (2005–06).

State	Price ($/t)	Yield (t/ha)	Productivity (t/grower)	Gross Returns ($/grower)
Victoria	429	32	1,168	501,700
South Australia	384	37	2,783	1,067,256
Tasmania	278	45	649	180,594
NSW	382	24	937	357,814
Queensland	504	25	531	267,915
Western Australia	449	40	1,055	473,826
Australia	384	34	1,021	391,912

Source: ABS (2008).

Table 10. Australian potato industry trends (2000–05).

Australian Potato Industry	2000–01	2005–06	Change (%)
Gross Value ($)	504,948,763	525,553,342	4
Production (t)	1,413,122	1,369,503	–3
Area (ha)	45,238	40,144	–11
Growers	2,095	1,341	–36
Price ($/t)	357	384	7
Yield (t/ha)	31	34	9
Productivity (t/grower)	675	1,021	51
Gross Returns ($/grower)	241,026	391,912	63

Source: ABS (2008).

Table 11. The NSW potato industry by ABS Statistical Division (2005–06).

ABS Statistical Division	Gross Value ($)	Production (t)	Area (ha)	Growers
Sydney	1,687,989	3,821	142	26
Hunter	524,586	1,169	91	7
Illawarra	1,943,286	4,219	160	15
Richmond–Tweed	236,983	688	44	11
Mid-North Coast	6,968,223	16,018	536	30
Northern	2,638,060	7,350	339	18
North Western	21,725	62	7	2
Central West	71,035	146	10	3
South Eastern	1,871,408	3,976	253	17
Murrumbidgee	18,430,981	40,561	2,371	11
Murray	18,920,037	61,534	1,892	16
NSW	53,314,313	139,544	5,845	149

Source: ABS (2008).

Table 12. The NSW potato industry by river catchments (2005–06).

River Catchments	Gross Value ($)	Production (t)	Area (ha)	Growers
Border Rivers–Gwydir	2,094,724	6,173	207	9
Central West	71,878	164	13	4
Hawkesbury–Nepean	1,946,854	4,313	176	31
Hunter–Central Rivers	557,785	1,232	119	10
Lachlan	13,185,850	27,563	1,605	13
Lower Murray–Darling	1,349,618	4,502	170	1
Murray	16,703,919	54,940	1,637	10
Murrumbidgee	7,945,254	18,995	1,089	9
Namoi	14,804	29	3	3
Northern Rivers	7,716,359	17,820	681	47
Southern Rivers	1,727,269	3,811	143	13
NSW	53,314,313	139,544	5,845	149

Source: ABS (2008).

ISSN 1832-6668

(Replaces Agnote DPI-410)

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Job number 9361 PUB09/157