Central West Region Pilot Area
Intensive Animal Profile

FACTSHEET NO.8

This profile identifies important agricultural resources, critical features of the regions industries, their development potential and land use planning issues for intensive animal developments across the central west study area as shown in Figure 1.

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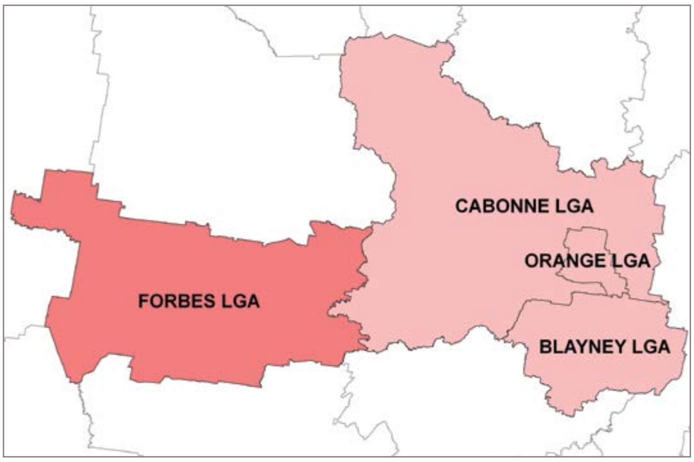

Figure 1- Central West Study Area covered by this profile

Introduction

The Department of Primary Industries is developing a consistent method for mapping important agricultural lands.

The pilot mapping project aims to guide local councils with strategic land use planning; and support sustainable industry development.

A case study approach was adopted to identify the location criteria for a range of agricultural industries within six local government areas (LGAs). They include: Orange, Cabonne, Blayney and Forbes in the central west; and Singleton and Muswellbrook in the Upper Hunter. Those areas were chosen to cover a variety of agricultural landscapes and industries.

No maps have been produced in this intensive animal industries profile as a range of locations could suit these industries. Documenting location criteria was considered to be more important.

Intensive Animal Production – Highlights

Intensive animal industries in the study area are small in number and include egg, poultry meat and pig farms. There are also a number of intensive beef feedlots and prime lamb feedlots of home bred lambs. They have been included within the profiles on beef and sheep meat production.

Eggs and Poultry Meat

Eggs and poultry meat are produced in the Cabonne and Forbes LGA, with present production being small. The ABS (2006) statistics (Table 2) reported 5 egg farms in Cabonne Shire and one in the Forbes LGA. Egg production in the two shires represents 2.2% of the value of NSW production (ABS, 2006).

For poultry meat farming, distance limits of approximately 200km to processors in Sydney are supported by the poultry meat industry due to economic and welfare considerations. As the City of Orange is right on the 200km limit, future meat poultry farms would need to be located east of Orange. Egg farms have a much greater distance tolerance to egg handling facilities and given the advantage of close proximity to feed mills in the Central West, there is potential for egg production in the study area to expand.

Figure 2- Poultry sheds located on a ridgeline surrounded by thick vegetation (Photo: NSW DPI)

Pig Production

There are a small number of pig farms in the study area, mostly in the Forbes and Cabonne LGAs. Pig farming is undertaken as part of the mixed farming system that incorporates both livestock and cropping, rather than as an individual enterprise. The ABS (2006) statistics reported 48 pig farms with a total of 15,605 pigs in the study area (Table 3).

The limiting factor for pig production in the study area is distance to the abattoir. The nearest abattoir for the domestic market is Cowra and Wollondilly, and for the export market, the nearest abattoir is Benalla in Victoria or Casino in northern NSW. Existing piggeries will travel extensive distances to abattoirs, but it does have an impact on input costs. For the establishment of new piggeries, the distance to travel to the abattoir for the export market would be a key cost consideration.

Economic Contribution

Eggs and Poultry Meat

Poultry meat production is the third largest agricultural industry in NSW with a gross value of $899.5 million per annum (ABS, 2006). Meat poultry farms also have significant benefits for the local communities including:

- the value of infrastructure investment, typically worth over $4 million
- stable cash flow, particularly in times of drought
- inputs such as wood shavings, gas, poultry feed
- value of waste material (poultry litter) as a fertiliser for pastures and crops.

Additionally, poultry meat generates on and off farm employment. As shown in Table 1, 18 people were recorded in the ABS (2006) agricultural census as being directly employed by the meat poultry industry. Employment is also generated from services provided to the farm and includes services from electricians, builders, produce and farm supply stores and feed mills.

At present meat poultry production is small compared to production in NSW and has small significance as part of the region's agriculture. However, it does have an important local and regional economic contribution.

Table 1- Central West Meat Poultry Data (ABS data 2006)*

Local Gov't Area	*Est. value of Meat Poultry Production ($mill)*	*Prod'n of Meat Poultry as a % of NSW Total*	*No of Farms*	*Employ-ment*
Cabonne	$0.2m	0%	0	18
Forbes	$0.02m	0%	0	0
Blayney	$0m	0%	0	0
Orange	$0m	0%	0	0
Total	$0.22m	0%	0	18
NSW Total	$899.5m	100%	255	205

The notes on ABS in this table are applicable to all 3 tables in this factsheet.

* changes may have occurred since this data was collected

ABS data estimates the wholesale value of unprocessed agricultural products. These figures do not capture the flow on contribution of agriculture to other businesses in NSW. An estimate of the overall contribution of agriculture to the NSW economy, as presented in table 1, is obtained by multiplying the wholesale value of agriculture by the standard ABS multiplier for agriculture production which is 2.178.(I&I NSW, 2011)

An indication of the overall contribution of agricultural jobs to NSW employment was similarly obtained by multiplying employment in a particular industry sector by the standard ABS multiplier for agricultural employment of 1.828 (I&I NSW 2011).

Egg production is similarly significant as shown in Table 2, with Cabonne LGA directly contributing $5.2 million to the NSW economy representing 2.2% of the value of production (NSW DPI, 2011). While production is small at present, the contribution is important at the local and regional scale and there is potential for the industry to expand.

Table 2- Central West Egg Production Data (ABS data 2006)*

Local Gov't Area	*Est. value of Egg Production ($mill)*	*Prod'n of Eggs as a % of NSW Total*	*No of Farms*	*Employ-ment*
Cabonne	5.2m	2.2%	5	7
Forbes	$0m	0%	1	0
Blayney	$0m	0%	0	0
Orange	$0m	0%	0	0
Total	$5.2	2.2%	6	7
NSW Total	$235.2m	100%	405	669

Pig Production

As shown in Table 3, Forbes LGA has the highest production value for pigs in the study area, with the value of production being $8.7 million (NSW DPI, 2011). The study area in total contributes $14.7 million to the NSW economy equating to 2.5% of the states production (NSW DPI 2011).

Historically free range and small intensive pig production has been an integral part of the mixed farming cropping and livestock system. This system of pig production continues today although at a much smaller scale of production. The versatility provided by farming a range of crops and livestock, including pigs, enables farmers to adapt to changing market conditions and climate.

Local employment created from pig production is small, with the 2006 census recording 25 people directly employed in this industry (NSW DPI, 2011).

Table 3- Central West Pig Production Data (ABS data 2006)*

Local Gov't Area	Est. value of Pig Production ($mill)	Est. value of Pig Productionas a % NSW	No of Farms	Employ-ment
Cabonne	$6m	1%	21	0
Forbes	$8.7m	1.5%	25	18
Blayney	$0m	0%	2	7
Orange	$0m	0%	0	0
Total	$14.7m	2.5%	48	25
NSW Total	$581m	100%	792	1,495

Industry Challenges

A critical challenge to the egg, poultry meat and pig production industries is people's perception of animal welfare issues and the impact that has on consumer trends and market demands.

Biosecurity issues have the potential to impact on both individual farms and the industry as a whole. Exotic diseases, such as avian influenza and Newcastle disease for poultry production and foot and mouth disease for the pig industry, can create significant threats and economic impacts.

Egg and Poultry Meat Industries

These farming industries currently do not have significant competition from imported products despite imports being permitted by the Australian Government since 2009 from any country. Impacts on the industry could be significant if imported chicken increases.

Pig Industry

For the study area, the biggest local challenge has been the closure of the Young abattoir for pig killings. The existing pig farms will absorb higher input costs as a result of higher freight costs to more distant abattoirs, but it would be a significant impediment for any new piggery to establish. The study area will mainly serve the domestic market because of distance to the export abattoirs at Benalla and Casino.

Climate Change

Impacts of climate change and variability on intensive animal industries within the study area will include increased risks of storms and flooding as well as reducing the reliability of water supplies.

Feed shortages, reduced water reliability and impacts on the costs of other farm inputs such as bedding material (pig production), grain, fuel and energy are likely to be key threats. Increased farm inputs will reduce profit margins or increase farm gate prices for egg, poultry meat and pig farmers.

The impacts of climate change on water quantity and quality will become more significant, particularly in the Forbes LGA, which currently receives the lowest rainfall and the highest temperatures in the study area.

The capacity to store water to provide the quantity and quality of water required will be increasingly important for intensive animal industries that require large quantities of good quality water. However, given intensive animal industries are more able to be regulated and climate controlled, farmers could potentially expand these intensive animal industries in response to climate change as extensive industries may be less resilient.

Figure 3- Pen of weaner pigs in an intensive pig operation (Photos: NSW DPI)

Infrastructure requirements

Egg and Poultry Meat Production

Egg and poultry meat production require major long term capital investment (for at least 25 years) in the form of poultry sheds and feed mills within 200 to 400kms of egg or poultry meat farms. The region is well serviced by feed mills under 200kms including at Manildra, Eugowra, Forbes, Young, and West Wyalong.

A three phase power electricity supply is also required in order to be able to run machinery for feeding, supplying water, cooling and other ancillary equipment, unless the industry is free range.

A good reliable source of clean water is also important to be able to water birds and pigs and reduce the risk of diseases.

The study area is well serviced by roads that enable access to ports, local and regional farms for grain, processing facilities as well as major cities and towns for domestic consumption and for export. Important access roads in the study area include; the Newell Highway, Lachlan Valley Way and Henry Lawson Way (that connects with the Mid Western Highway).

Pig Production

The key requirement for pig farms is the ability to access the market. Infrastructure such as abattoirs and sale yards are critical to the industry as well as a good transport system to access those facilities.

Development Prospects

Egg and Poultry Meat Production

Egg production in the study area is growing in its contribution to NSW production. In the Cabonne LGA, egg production increased from 1.9% of the value of NSW egg production in 2000 to 2.2% in 2006 (ABS, 2006).

Given the advantages of a good water source, access to high quality grain and feed mills as well as access to the major Sydney market, egg production in the study area is well placed to continue to grow.

The free range organic egg market is growing rapidly and could be an opportunity to support and attract that industry.

While available transport and access to grain make the area desirable for poultry meat production, there are economic and welfare constraints that limit the distance that poultry meat can travel to processors in Sydney. Increasing the distance beyond those limits will increase input prices and reduce profits. Therefore, future meat poultry farms would need to be located east of Orange.

Pig Production

While existing pig production will continue in the region, the absence of an abattoir is one of the key limiting factors for any significant industry expansion. However, since feed is the major cost of producing products from pigs, a key region for industry growth and expansion is logically the Central West of the state which is an important grain producing region of NSW.

Assisting industry development are Research Officers at the Elizabeth Macarthur Agricultural Institute in Camden providing animal health, nutrition, growth and meat quality research and Extension officers located at Cowra and Tamworth providing general advisory services and information.

Intensive Animal Industry Location Requirements

Intensive animal agriculture enterprises have specific requirements that dictate where they can locate including; access to water, proximity to feed mills, reliable power, access to processing plants / abattoirs, proximity to transport, and sufficiently large holding sizes to manage environmental / amenity impacts. Land within the study area that can satisfy these requirements has the potential to support future egg, meat poultry and pig industry development.

Export abattoirs for pig slaughter and good proximity to processing plants for the meat poultry industry would be the main limiting factors within this region.

Land Use Planning Implications

Land use planning can support sustainable intensive animal industries and facilitate further development by retaining rural lands that meet industry requirements and minimise the risk of land use conflicts between intensive animal developments and other land uses.

For intensive animal industries issues of odour, dust from bedding, traffic and biosecurity issues such as disease contamination from wild birds can cause land use conflicts with neighbouring properties. Land that is sufficiently large enough to minimise the potential impacts from intensive animal developments needs to be set aside in a planned way.

Residential development and rural lifestyle developments should be targeted to locations that are not near to lands that are highly suitable for intensive animal industries.

Additionally as intensive animal industries are major longer term capital investments, land use planning should account for their longevity in planning for industry development and land uses surrounding those industries.

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References

ABS (Australian Bureau of Statistics) 2006, 7125.0- Agricultural Commodities: Small Area Data, Australia 2005-06. accessed from http://www.abs.gov.au/ausstats/abs@.nsf/Products/7125.0~2005-06+%28Reissue%29~Main+Features~New+South+Wales?OpenDocument

ABS (Australian Bureau of Statistics) 2010, Catalogue 3235.0 Population by Age and Sex, Regions of Australia, 2010, accessed from http://www.abs.gov.au/ausstats/abs@.nsf/Products/3235.0~2010~Main+Features~New+South+Wales?OpenDocument

I&I NSW (Industry & Investment NSW), 2011, Contribution of Primary Industries to NSW Economy, agricultural contribution and standard agricultural multipliers, accessed from

http://intranet.dpi.nsw.gov.au/library/statistics/industry/all-industries/key-data-2011.pdf

NSW DPI (Department of Primary Industries), 2011, Analysis of ABS 2006 Census data for agriculture, accessed from http://www.dpi.nsw.gov.au/environment/landuse-planning/agriculture/analysis-census-data

Additional Reading

Agricultural Land use planning guidelines; www.dpi.nsw.gov.au/environment/landuse-planning/agriculture

Gross margins (financials); www.dpi.nsw.gov.au/agriculture/farm-business/budgets/livestock

Hassell and Associates Pty Ltd, 2007. Minimum Lot Size Analysis for Blayney-Cabonne- Orange Rural and Industrial Land Use Strategy, Report to Councils.

NSW DPI 1998. Policy for sustainable agriculture in NSW, http://www.dpi.nsw.gov.au/environment/landuse-planning/agriculture/sustainable

NSW DPI 2004. NSW Meat Chicken Farming Guidelines, http://www.dpi.nsw.gov.au/agriculture/livestock/poultry/poultry-keeping-environment/nsw-meat-chicken-farming-guidelines

NSW DPI 2011. Land Use Conflict Risk Assessment (LUCRA) Guide, http://www.dpi.nsw.gov.au/environment/landuse-planning/agriculture/lucra

NSW DPI 2011. Policy O-104 Maintaining land for agricultural industries, http://www.dpi.nsw.gov.au/__data/assets/pdf_file/0008/396458/Policy-O-104-maintaining-land-agricultural-industries.pdf

Pig advisory information; www.dpi.nsw.gov.au/agriculture/livestock/pigs

Poultry advisory information; www.dpi.nsw.gov.au/agriculture/livestock/poultry

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