

# Bendigo Region Poultry Cluster: Newsletter

## Poultry Cluster Moving Ahead

A feasibility study to investigate the formation of a poultry cluster in the Bendigo Region commenced in July, 2005 with support from Regional Development Victoria. A cluster is "a group of like minded enterprises (and their suppliers and customers) across a region, that agree to work together for mutual commercial benefit".

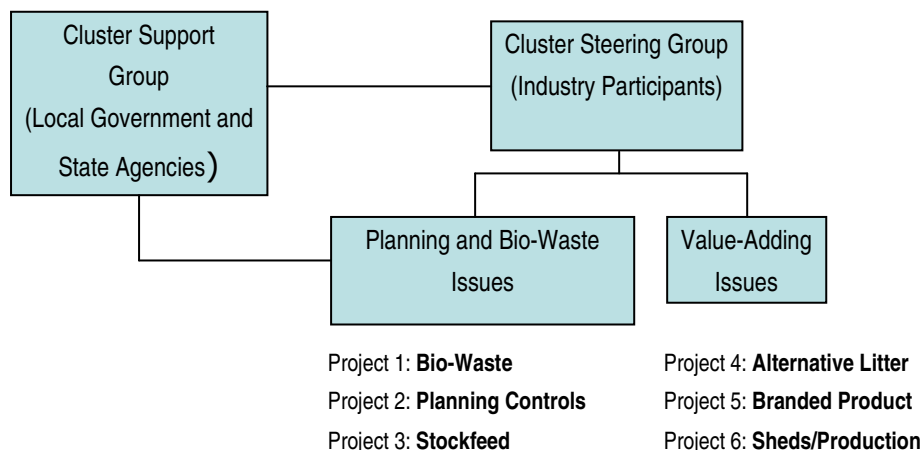
The purpose of the feasibility study has been to determine whether businesses in the poultry sector are prepared to work together and to identify commercial opportunities and how they can best be implemented. Further financial support from Regional Development Victoria is expected as implementation work progresses.

Initially the poultry cluster was directed by a "project support group" comprising representatives from the poultry industry, Regional Development Victoria, and Council staff from Bendigo, Campaspe and Loddon. However, this group has now been expanded to include wider representation from state and local agencies and from businesses in the region. Small working groups/reference groups have also been formed to deal with progress on each of six cluster project areas. These are

- Project 1: Biowaste Facility – A joint waste processing facility (for fertiliser and power products)
- Project 2: Planning Controls – coordinated and common planning controls and approaches across the region
- Project 3: Strategic partnerships in stockfeed
- Project 4: Alternative litter product development
- Project 5: Commercial value adding directions: development of cooked branded product and retail programs
- Project 6: Shedding and systems for smaller growers

Any poultry business operator or other stakeholder who is interested in being involved in one or more of the cluster working groups should contact the Cluster Feasibility Project Manager, Wayne Street (Street Ryan and Associates Pty Ltd) by phone on 5428 1488 or email [wayne.street@streetryan.com.au](mailto:wayne.street@streetryan.com.au) or Bryan McEwan at Regional Development Victoria on 5442 4100 or [bryan.mcewan@rdv.vic.gov.au](mailto:bryan.mcewan@rdv.vic.gov.au).

## Managing the Poultry Cluster



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### Cluster Working Groups

Project 1: Bio-waste Project  
Peter Mitchell, Loddon Shire  
Bryan McEwan, RDV  
Tony Nesci, Loddon Valley Eggs

Project 2: Tony Nesci, Loddon Valley Eggs  
Peter Hazeldene, Hazeldenes  
Brian Stephens, Grower  
Jeff Bothe, City of Greater Bendigo

Project 3: Bryan McEwan, RDV  
Katrina Tehan, Campaspe Shire  
Peter Hazeldene, Hazeldenes

Project 4: Brian Stephens, Grower  
Graeme Harris, Buloke Shire  
Ian Farran, Poultry CRC

Project 5: Bryan McEwan, RDV  
Mike Cowie, (Bendigo Poultry and Game)  
Dean Russell (Moir Mac)  
Brendan Goddard (Champion's IGA)

Project 6: Mike Cowie (Bendigo Poultry and Game)  
Glen Reidy (Redpath Ideal)  
Bryan McEwan (RDV)

Executive Support to all Groups:  
Wayne Street, (Street Ryan)  
Please contact Wayne if you would like to be involved.

## BIO-ENERGY TECHNICAL ASSESSMENT

The Poultry Cluster Group, in partnership with Sustainability Victoria, has developed a brief for a technical assessment for establishing a world-class bio-energy facility within Loddon Shire, utilising waste product (predominantly used litter) from the region's poultry industry.

It is expected that the volume of litter based waste available to a bio-energy plant will be in excess of 200,000 tonnes per annum. This could be extended by other waste product from the industry (eg spent layers, feathers, bones and offal) and from other agribusiness industries (including piggeries and horticultural activities).

Disposal of poultry litter has been a problem for the poultry industry for many years. Most producers in Central Victoria spread the waste as a fertiliser or compost, although some is taken to land fill. The emissions created by decomposition of litter contribute to greenhouse gases (carbon dioxide and methane) unless the biogas is captured. However, this form of disposal is becoming more unacceptable in an environmental context as well as a cost to the industry.

European experience suggests that litter based poultry waste has a calorific value of 13.5 gigajoules per tonne for air dried samples (close to the calorific value of wood).

A poultry litter fuelled power station in the United Kingdom generates 12.7 megawatts of electricity and supplies this power, through the local utility, to the national electricity grid. The poultry litter is made up of excrement (about 90%) and straw or wood shavings (10%). This would be similar to the Central Victorian situation at present. Litter is collected from several poultry producers located within a radius of 50 kilometres of the power plant. Litter is delivered by road in specially designed vehicles. The plant provides storage space for about seven days operation (at full power). About 130,000 tonnes of litter is processed annually. The boiler unit is rated at 56 megawatts (thermal) and produces steam at 65 bars and 450° C. Depending on quality, up to AUD \$23 per tonne is paid to poultry producers for waste under supply contracts.

Further income may be generated from the bioenergy operation from fertiliser products.

The technical assessment will make several steps towards determining whether the bio-energy facility can be justified in terms of potential throughput, energy to be generated, investment and equipment requirements, and bi-products (for use in other agricultural applications). The technical assessment will

- provide an estimate of the energy availability from an anticipated biomass resource to be obtained primarily from poultry production and processing businesses in the region (possibly supplemented by piggery and other agribusiness operations).
- assess the most appropriate technology for bio-energy generation at the site on the basis of the predicted biomass availability. This should include consideration of risks/issues associated with implementing the recommended technology e.g. emissions, plant scale, and operation of the facility.
- develop an innovative bioenergy generation concept design for the site.
- prepare indicative costings and a business case for development of the facility.

## ALTERNATE POULTRY LITTER?

Rice hulls, the preferred type of material for poultry litter, is in increasingly short supply. Current trends in Australia's rice industry suggest that this is unlikely to change in the future. Many local growers in the region have already begun using straw or sawdust/wood shavings as an affordable alternative to rice hulls.

A newly formed Australian Poultry Cooperative Research Centre (which is supported by the Commonwealth Government and the Universities of New England and Melbourne) is interested in partnering a commercial group to research alternatives for poultry litter, if the group becomes a partner or affiliate to the Poultry CRC. The Bendigo Region Poultry Cluster could become a CRC Partner, and discussions have been initiated.

The Poultry CRC is already undertaking a research project on poultry litter, in partnership with Inghams. This project is focused on recycling rice hull based litter.

### NEWSLETTER KEY POINTS

- *The Poultry Industry is Important to the Regional Economy*
- *There is strong Industry, State and Local Government Support for the cluster*
- *The cluster feasibility is moving towards implementing commercial projects*
- *The cluster is aiming to promote the region as "poultry friendly"*

## AN IMPORTANT REGIONAL INDUSTRY

The Bendigo region's poultry industry is diverse and includes businesses at every level in the supply chain. Poultry has been an important part of the Central and Northern Victorian economy for around 80 years.

The poultry industry is spread across the City of Greater Bendigo and the Shires of Loddon, Central Goldfields, Northern Grampians and Buloke. This activity is generally bounded by the centres of Bendigo, Maryborough, St. Arnaud, Wycheproof, Bridgewater and Bagshot (North of Bendigo). The main centres of broiler and egg production and processing are concentrated within the Lockwood area to the West of Bendigo, Bridgewater (Northwest), Bagshot to the North of Bendigo, and the southern section of Buloke Shire. More diversified poultry sector production, including turkeys, ducks, and squab is concentrated in Buloke Shire and in the north of Loddon and Northern Grampians Shires.

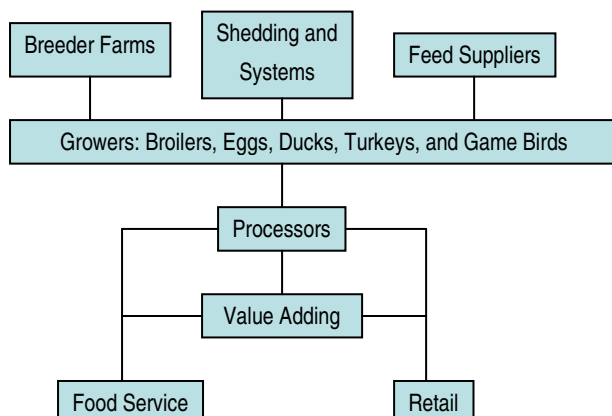
Initially focused on egg production, the industry has experienced significant growth within the last 10–15 years in breeding, growing and processing of poultry for meat production. The regional poultry industry is poised for further growth!

As residential development and environmental pressures mount on poultry producers located in metropolitan-rural fringe areas, the Bendigo region (Loddon-Campaspe and Southern Mallee) offer excellent opportunities for an integrated industry. The region has the potential to be promoted as a location solution for producers and processors concerned by

- the need for bio-security controls
- constraints to future growth
- access to feed supplies
- supply chain linkages.

There are around 40 poultry growers in the region, 5 processors, 2 product manufacturers, 4 stockfeed suppliers, and a wide range of logistics providers to the industry.

### The Regional Poultry Industry



## CLUSTER WORKSHOP

The next Poultry Cluster workshop will be held in late November and is expected to include presentations on

- Bio-security: How Real is the Avian Bird Flu Threat?
- Poultry CRC: How can it help the Regional Industry?
- An update on Poultry Cluster Initiatives.

Email invitations will be sent to stakeholders. Please contact Wayne Street if you are interested in attending.

## PLANNING CONTROLS: A POULTRY FRIENDLY REGION?

Outbreaks of Newcastle disease in NSW and Victoria and the recent publicity on avian influenza in Europe and Asia have heightened attention on the large economic risks associated with these diseases. *“As part of new arrangements between government and industry for sharing emergency disease response costs, poultry producers are expected to implement on-farm bio-security programs and follow them on a daily basis to reduce the risk of transmission of disease onto and between poultry farms”*

Some representatives of the poultry cluster are working towards a presentation to Local Government Chief Executive Officers and Planning Managers to help them understand the significance of the poultry industry to the region and to solicit their support in branding and marketing the region as “poultry industry friendly”. The poultry industry is hopeful that the Councils may be able to promote the review of the various planning codes that impact on growth of the industry (Broiler Code, Egg Code, Breeder Code, and Free Range Code) in order to work towards consistent planning controls for the industry, across the region. The Broiler Code (first drafted in 1999) is now due for its first “five yearly” review.

Concerns within the industry over planning controls include

- A need to provide planning protection from residential development (and residential objections) for the poultry businesses
- The existing 400 metres buffer zone can be insufficient on some occasions, but on others it can constrain a business from expansion
- The broiler code prohibits industry development around the state.
- Broadacre growers often cannot expand operations due to lack of water and infrastructure
- Power supply is an issue; sometimes producers/processors have to load-share (but sheds have to maintain temperatures of 19-22 centigrade)

<sup>1</sup> Hugh Millar, DPI, 2004