



PRODUCER **I**NITIATED **R**ESEARCH **D**EVELOPMENT

Full Application Form

1. Group Contact Details

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2. Group Background

All participants are lamb producers on range land pastoral areas and sell a portion of their product into the organic market. Most producers have South African meat breeds consisting of Dorper and Damara, either straight or x-bred. There are also Wiltshire and Merino.

The type of stock and country is well suited to the organic market due to minimal requirements for any chemical applications to stock and their wool shedding characteristics. The country delivers sufficient native pasture for breeding and prime lamb turn off when the season allows. The Western area of NSW is the largest producer of certified organic lamb in Australia. Currently only 35% of all organic lamb produced is sold as organic with 65% being sold into the conventional market.

This is due to the fact that 35% is prime at any one time for slaughter in a season. A season is any 3-4 months following rain. Rain is any time it wishes to fall.

The group was formed in 2005 with some participants working together well before that. Since forming as a group we have developed a delivery schedule to a processor and now intend to develop an organic grain supplement program to enable us to regularly turn off prime stock regardless to climatic conditions within organic guide lines. This would assure our processors continuity of product on a regular basis, expanding our valuable domestic market and more importantly the lucrative export.

The group members will be holding the trials on each of the properties indicated as trial properties (5), and between them, they currently produce 25,000 lambs per annum.

What the group has in common:

- organic lamb production
- cooperative marketing
- rangelands nutrition (limited feed supply)
- all year round supply of branded product

3. Project Title

Organic Lamb in pastoral areas

4. Problem Definition

Consistent feed supply is currently the main limiting factor to the further development of the organic prime lamb market. The feed is sufficient to hold and grow a healthy lamb yet insufficient to produce a prime lamb.

No organic irrigation available for finishing lambs

Organic feedlots not allowed under organic guide lines. Stock are required to have access to open free range grazing.

Freight costs versus prime lamb numbers ,the requirement of large shipments of prime lambs to reduce costs per head due to the many kilometres between origin and kill. Eg 460 lambs costs .32 cents per kg apposed to 200 lambs @ .54 cents per kg delivering a saving of \$ 4.84 per head.

5. Project Overall Aim

- To develop a complementary feeding program to facilitate all year round supply of organic lamb regardless of seasonal conditions from pastoral NSW with project results being relevant to Western QLD, SA and WA.
- Increase fertility in young ewes by delivering a level of nutrition to them as lambs allowing their reproductive system to be more productive for their entire life. Therefore less total ewes more total lambs
- Create a feed system that delivers a premium per kg of lamb that enables the producer to carry less stock for the same dollars in return, lessening the impact on the environment.

6. Objectives

- To increase the kgs of lamb reaching the organic lamb market from 35% to a modest 65%

Blue Ribbon Organics group		No of lambs	Carcase weight	Price per kg	Total
Current total lamb production		22,000			
Current organic sales	35%	7,700	22	\$5.50	\$931,700
Current conventional lamb sales	65%	14,300	Average combined weight 22	\$3.00	\$943,800
Current value total lamb production					\$1,875,500
Target organic sales	65%	14,300	22	\$5.50	\$1,730,300
Target conventional lamb sales	35%	7,700	Average Combined weight 22	\$3.00	\$508,200
Target value total lamb production					\$2,238,500
Cost benefit					\$363,000

- To establish the cost efficiency of two supplementation strategies on the production of organic lamb; lupins vs wheat vs current cost (\$1.57 per kg carcass weight) of production per kg of lamb produced
- To improve producers ability and confidence in feeding grain safely and appropriately to sheep
- To enable producers to become familiar with the nutrient requirements of their stock and the nutritive value of the native 'feed' on offer
- To maintain growth rates on lambs to deliver increased fertility in the females
- Deliver more options of selling the male into a conventional feedlot or grass feeding on agistment if available
- To test the accuracy of the NV data compiled by SJ Muir in 1990 to determine if it is a satisfactory tool on which to base supplementation strategies
- To improve the nutritional knowledge of the base members of the co-operative such that they can become mentors for new group members as the supply chain develops
- To increase the growth potential of complementary fed lambs in western NSW; currently 40kg at 20 weeks to 50kg at 20 weeks
- To determine any breed differences (Damara x Dorper vs Damara vs Merino) in response to supplementary feeding
- Record lambing percentages in maiden ewes in 2007 to use as a benchmarking tool for increasing productivity in 2008

7. Methodology

- run a species identification workshop on a central property (San Jolly, Productive Nutrition & Merri Tohill, PIRSA Pt Augusta) to ensure that producers are able to clearly identify the species to be sampled (previous experience tells us that many names are given to the same species and confusion occurs)
- facilitate a workshop to ensure producers understand the basic nutritional requirements of sheep, the relationship of body condition score to pregnancy outcomes, and to outline the project
- Define spp most often available and preferentially grazed at initial meeting to test and compare with average district spp.
- formulate grain ration based on the average nutritive value (NV) of Western NSW species (Muir, 1990)
- Run a control mob on each property as well as one mob supplemented with organic wheat and one with Lupins. At 6 months the 3 mobs will rotate paddocks to eliminate any potential influence from vegetation in any particular paddock.
- test 4 species on five properties four times per year and compare with average district data (Muir, 1990) (producers) and ensure that the grain feeding program is complementary to the feed on offer in nutritive value
- feed grain ration according to class of sheep (ewes, ewes + lambs, weaners)
- adjust the complementary grain ration upon receipt of the species test if and as required (PN)
- monitor body condition score 4 weeks prior to joining, 6 weeks pre lambing and at weaning
- scan ewes for pregnancy rates
- measure marking percentage
- measure weaning percentage and weights
- weigh lambs monthly after weaning for 3 months, then every 3 months until sale
- follow lambs through the processing works to determine carcass differences (to be facilitated by Will Jeffries, Sanger Organic Meat Company)
- group meetings facilitated on site at commencement and completion of the project

8. Sequence of Activities

Sequence to be determined from group members as all have different lambing systems, but will follow the outline below.

Initial workshops	
1. Nutrition, condition scoring & project outline	Feb 2007
2. Plant ID	Feb 2007
Producer activities	
Ram feeding pre joining	Nov 1 st , 2006
Pregnancy testing	Mid February, 2007
Maintenance of BCS: pregnant ewes	Nov 1 st , 2006
Late pregnancy nutrition	30 th April, 2007
Marking %	Early – Mid July, 2007
Weaning weights	Early – Mid September, 2007
Growth at 6 weeks post weaning	November 1 st , 2007
Final Workshop	
Workshop to deliver and explain findings and to plan for the second year of the project based on findings	March 2008

Feed testing program

There will be 4 plant species tested 4 times per year. The type of plant will depend on when the rain falls determining what season and species this will be most likely to be decided at initial workshop

	<u>Summer</u>	<u>Autumn</u>	<u>Winter</u>	<u>Spring</u>
Belarabon				
Rainbar				
Rowena				
Paringa				
Bella Gelise				

NOTE: Feed analyses provided by S Muir (1990) require verification. To reduce the cost of the project the complementary feeding regime for year 1 will be based on the data provided in the above publication. The group members wish to analyse 4 species per property, 4 times per year. The complementary feeding regime may require adjustment as species analyses become available.

Feeding program per trial property

Timing	Wheat	Lupins
Rams pre joining		100g per head per day
Pregnancy testing		
Maintenance of BCS: pregnant ewes	150g as required	
Late pregnancy nutrition	100g per head per day for 4 weeks	
Marking %		
Weaning weights		
Weight at 6 weeks post weaning	200g per head per day	200g per head per day
Weight at point of sale		

- Feeding regime will be fixed for the weaners & growth responses measured
- Ewes will be supplemented with wheat as required to maintain BCS 3

Reporting Dates

August, 2007	Interim report
March, 2008	Final report

9 Expected benefits to group members

- Have a way of finishing organic lamb
- Deliver continuity of product
- Receive recognition from processors for continuity of product
- Deliver larger lines of lambs for sale cutting down on freight, an average saving per producer of 4,400 lambs @ 4.84 per head = \$ 21,296.
- Higher fertility in ewes deliver more lambs enabling a producer to run less mature ewes. In turn this saves more money due to the cost saving in running the mature unit for the same result. For example 7,000 ewes lambing 6,000 lambs compared to 5,000 ewes lambing 6,000 lambs, a possible saving on running costs of 2,000 sheep at approx \$ 75,000
- Meet our target of being more environmentally sustainable
- Increase the supply of organic lamb turn off from the average of 35% to 65%. An increase of 30% on the average lamb sales of 4400 presents an increase of \$72,600
- Enable growers to develop lucrative and necessary export market so that the domestic trade doesn't become flooded with organic product.
- Have a greater understanding of nutritional requirements for stock delivery a stronger bottom line through our production.
- Benefits other than via direct income will be networking with other producers,

10 Assessment of potential benefit to growers outside the group

- Benefit for the existing individual organic producer will be an increase of approx. \$ 2.50 per kilogram of lamb produced. The average producer making additional income of \$ 72,600 per enterprise
- Benefit to a producer that is presently conventional and converted to organic would be on an average sale of 4400 lambs @ \$ 2.50 per kg premium = \$ 242,000
- Benefit to the outside producer is that they can make an informed decision on organic production after this trial is completed. They could enter the program with confidence that the turn off of prime lambs is achievable and that there will be a step by step procedure to follow with a founding member close by to oversee their initial start.