

## R D & E on commercial farms – the rewards of farm-based research

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RD&E on farms

Technology  
produced

(knowledge,  
products,  
services)

RD&E on farms

Technology  
produced

(knowledge,  
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services)



Practice  
change

RD&E on farms

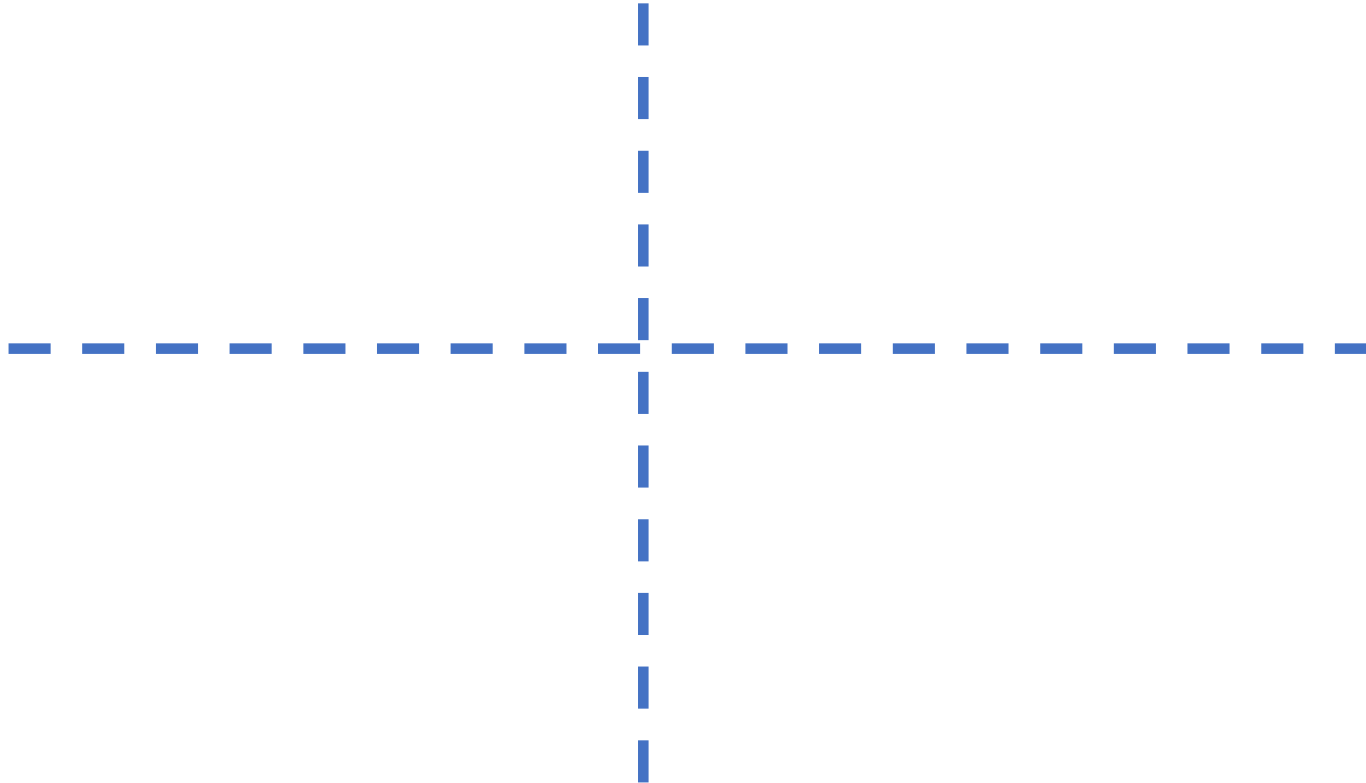
Physical farm / herd

Technology  
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(knowledge,  
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Practice  
change

People / making decisions



RD&E on farms

Physical farm / herd

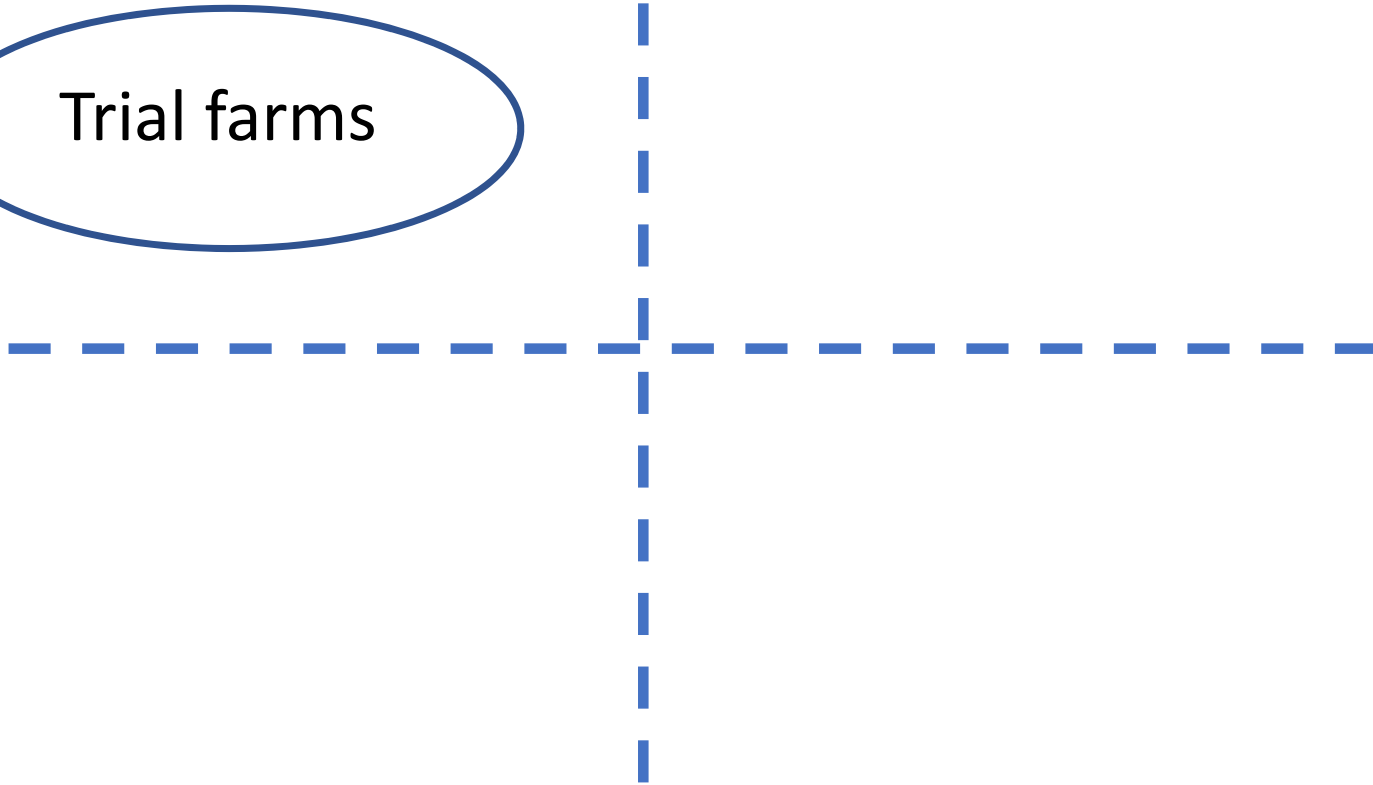


Technology  
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## Trial farms

e.g. collecting data, record keeping, following specific protocols, split farm/herd comparisons, treatment & control groups.

Technical research team on the farm.



RD&E on farms

Physical farm / herd

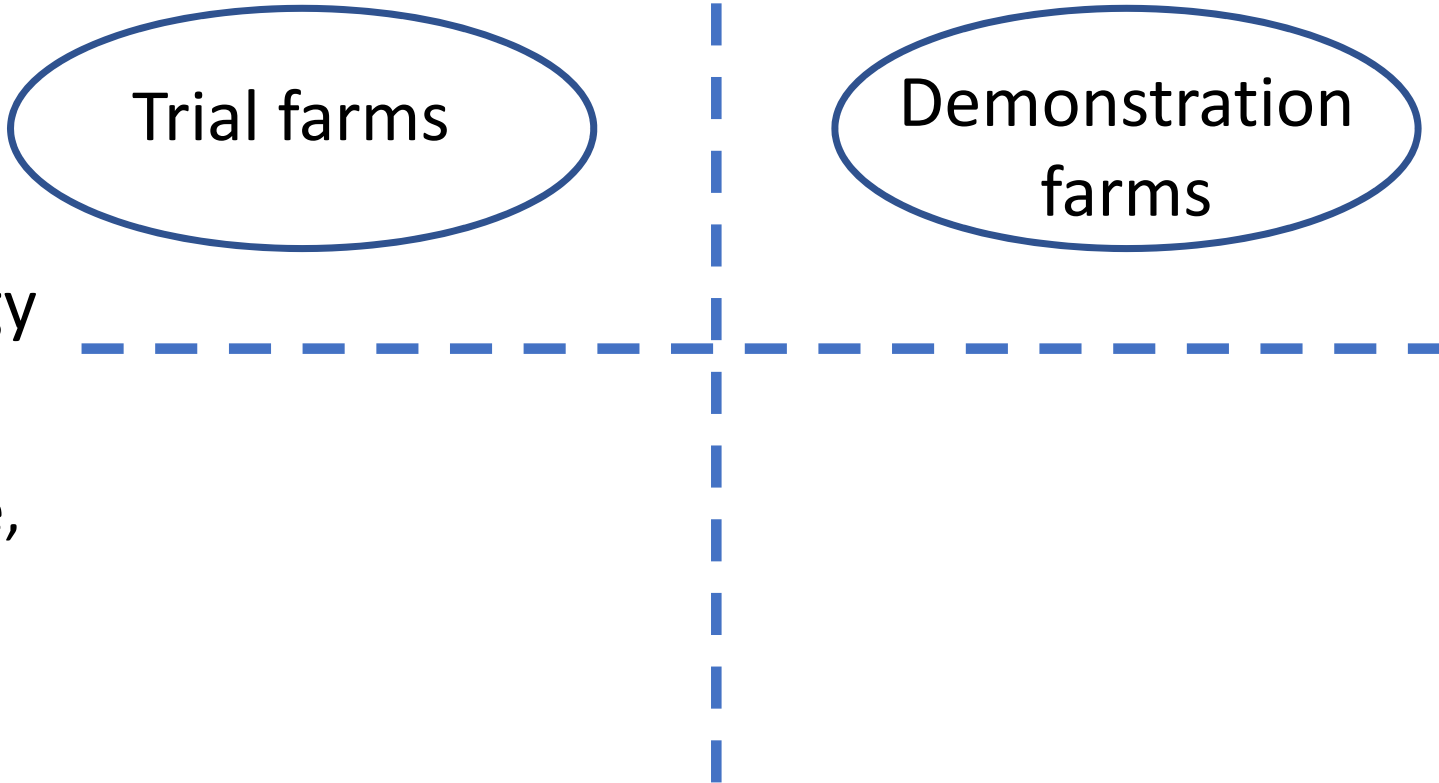
Trial farms

Demonstration farms

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Practice change

People / making decisions



## How genetics is changing our business



*Genetic tools and diversification of the farm business have enabled Jelbart Dairy to create a diverse income stream, providing a valuable buffer against milk price variability.*

### Farm stats (April 2018)

Herd size:	Approx. 1000 cows in a closed herd
Breed:	Transitioning to pure Holstein
Farm size:	870ha of owned and leased land - milking off 360ha
Calving pattern:	Approx. 60% autumn, 40% spring
Dairy:	60-unit rotary with milk meters & automatic cup removers
Staff:	13 full time labour units including family
Feeding system:	Approx. 2.5 - 3.0t concentrate/cow/year to supplement dryland perennial ryegrass pastures. All silage and hay produced on site.

### Our farm

My parents, Max and Barbe, started on the current farm in 1981 with 110ha and 127 cows after taking over from the sharefarmer on the property. In 1985, the old herringbone dairy was expanded from a 9 aside swing over to a 20 aside double up milking around 230 cows. By 1993, they had expanded the

## Demonstration farms

e.g. applying the technology, facilitated discussions, public presentations, media presence.

Public on the farm.



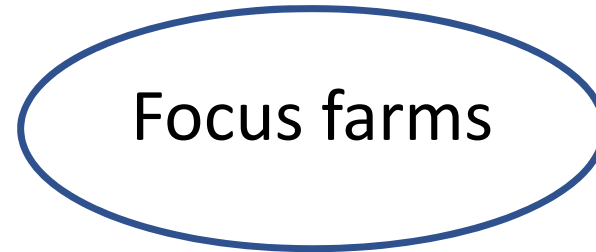
RD&E on farms

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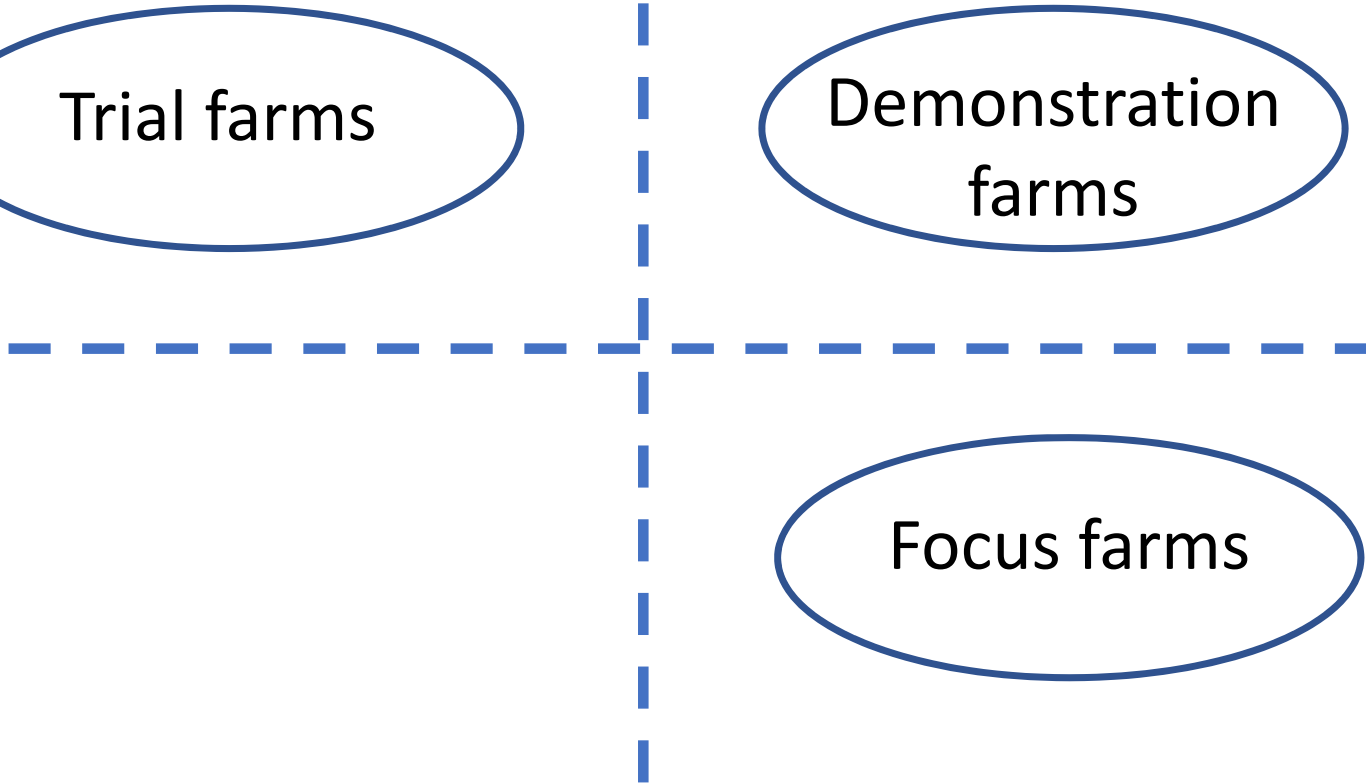


Technology produced  
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Practice change



People / making decisions





## It costs not to herd test

Guy and Leanne Gallatly,  
Gippsland  
Victoria



IMPROVING  
HERDS

### Herd Test Case Study

*Gippsland dairy farmers Guy and Leanne Gallatly have a clear goal with herd testing – they want information on their cows so they can make better management decisions.*

"Herd testing is a tool I need," Guy Gallatly said. "It helps me identify animals to cull for mastitis or production, and lets me assess the performance of our younger stock and refine our breeding program by making it easy to monitor the improvements in our Production Index with each new group of young cows coming into the herd.

"It does involve a cost but there is cost in having cows with subclinical mastitis, or feeding cows in the bail that aren't producing.

"You can think you know what your cows are doing, but you don't really know unless you have their herd test results."

#### ImProving Herds Focus Farm

The Gallatlys were one of seven ImProving Herds Herd Testing Focus Farms in the 2015/16 season.

#### Farm stats (March 2018)

**HERD SIZE**  
Up to 310 cows

**BREED**  
Mainly Holstein, some Jersey and cross  
breds

**FARM SIZE**  
102 ha main farm plus two other blocks  
(16 ha 2/3 spring, 1/3 autumn)

**DAIRY**  
44-unit rotary

**STAFF**  
1 full-time worker, 2 casual milkers and  
half a labour unit

**FEEDING SYSTEM**  
4 kg year round in dairy

e.g. exploring decisions and outcomes over time, working hard to understand 'why'. Often with advisers.

Other farmers, social research team on the farm.

Focus farms

RD&E on farms

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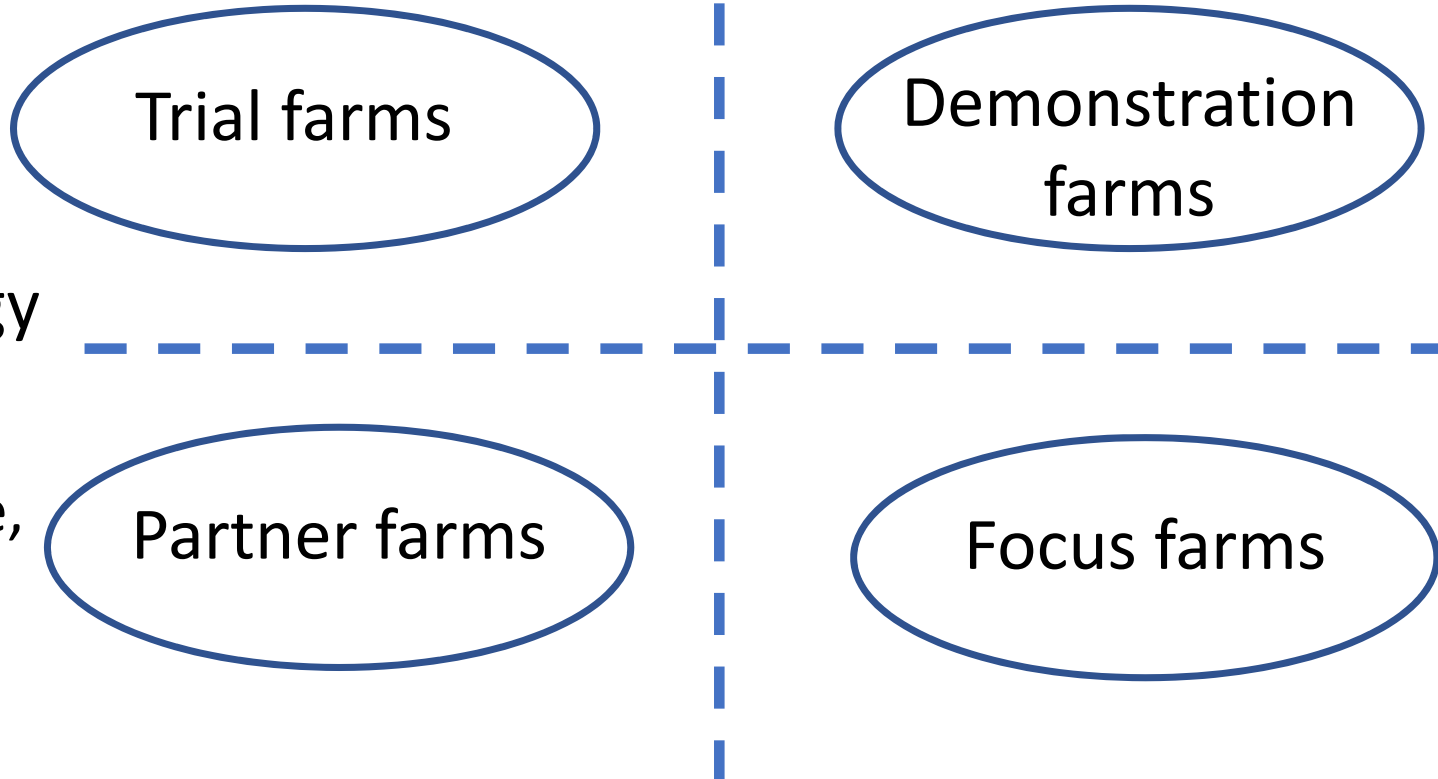
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Practice change

Partner farms

Focus farms

People / making decisions





## Partner farms

e.g. partners driving the RD&E effort. Interaction with funding bodies. Technical and social research teams on the farm.

### Some of the MDF projects conducted since 2000:

1. Profitable Dairy Farming Systems Demonstration (High vs Moderate input feeding systems);
2. Whole-Farm Irrigation and Nutrient Management and Nutrient Reduction Plan (main site for a national project on nutrient and water movement on and off the farm)
3. Demonstration of Fixed Sprinkler Irrigation
4. Community Water Grants project to reduce drainage losses from the farm
5. Perennial Ryegrass evaluation trial
6. Demonstration of Occupational Health and Safety on the farm
7. Sub-surface drip irrigation for dairy pastures project.
8. Assessment of carbon emissions generated by the farm and an exploration of carbon mitigation and carbon offset options.
9. Protection of ancient redgums

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## Sharing experiences

Snapshot of our farming enterprise

3 - elements of on-farm research we have been involved in

2 - pearls of wisdom

1 - thing I'll never forget