

5S Lean Improvement Programme

Point of production: Sow / Finishing
Country of origin: Ireland



Techniques used to drive continuous improvement in manufacturing are commonplace. Agriculture, arguably a manufacturing sector of sorts, has less experience with these methodologies.

In particular, lean management and Six Sigma have been shown to offer a method of reducing costs and maximising efficiency, which would be of benefit to the EU pig industry.

The solution – Best practice

To improve farm work efficiency, a 5S lean programme was developed as an introduction to lean management. This led to a programme of continuous improvement underpinned by lean principles across the entire business.

As part of the 5S exercise, this was done by mapping of areas, training of staff, implemented programme, monitored progress (checklists and audits) and addressed areas for improvement. A control chart is used and is numbered and colour coded.

Once staff had engaged with the lean process, a value stream mapping exercise identified areas of 'waste' on the farm and engaged staff with improvement activities to reduce or remove that waste. This included reducing breeding group numbers to remove weaned piglets as a product as the business was losing money. The increased space allowed increased stocking density in finished pigs without needing additional construction. Feed waste was reduced to just 2% of feed and further improvements were made across the business, leading to an estimated reduction in labour and a saving in cost of production.

Points to consider and additional information

The use of lean management processes and associated methodologies is often attempted in part and then fails. This leads people to assume 'lean' is not for them.

When using process control, it has to be embedded fully from management to the stock person and often is supported by a management specialist in a consultancy role.



Maintenance Store – Before 5S



Maintenance Store – After 5S

Cost/Benefit analysis

Costs:

Lean consultant - €1000 per day approximately

Benefits:

- Labour: 1 hour per day per person (€10,875 per year)
- No longer selling weaners due to poor return: Reduced slurry and labour costs (€10,980)
- Additional space: 348 finishers @105kg (€36,540)
- Dashboard system to document basic production data: Excel system on office computer to reduce labour (€6,500)

Plus, other improvements:

Total cost savings - €30,755pa

Total extra output - €36,540pa

Further research & Project links

<https://eupig.eu/>

Link to technical report
Becoming Lean - A Guide for Pig Farmers

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