

2020 SALISBURY CASE STUDY ECONOMICS REPORT

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Introduction

Salisbury is located in the Marra region of New South Wales, to the west of the Macquarie Marshes and about 160 kilometres north-west of Warren. The farm is a self-replacing merino flock enterprise. On average, the farm stocks 5000 ewes and 2500 ewe lambs a year. The property was purchased in 1977 by Grant and Cathy MacAlpine. The farm is currently managed by Grant, Cathy and their son Will.

Since the purchase of Salisbury, the MacAlpine family have strived to ensure regenerative farming practices are effectively implemented for the benefit of their property and enterprise. These regenerative practices include:

- Water ponding to maintain productive soils
- Management of stock numbers by adjusting grazing management according to the seasonal conditions. The property is stocked below capacity to ensure a sustainable enterprise.
- The construction of an exclusion fence to improve control of total grazing pressure

Intermittent heavy rainfalls and prolonged periods of drought have created challenges for farms in the Marra region. The regenerative improvements the MacAlpines have made has increased water infiltration and reduced grazing pressure. This reduces the climate difficulties of the region and allows for more pasture growth and sustainability resulting in healthier sheep.

Please note – in the interest of privacy the data throughout this Economic Report has been ‘de-identified’. That is, the data has been reported so that it does not represent the owner’s actual financial position, rather it proportionally highlights the changes of incorporating regenerative farming practices. In particular, we have used an index to proportionally represent the financial figures. Where two datasets are compared, we index both sets of data to the benchmark data.

All data in this analysis is present on the basis of the financial year.

Due to data availability, some years may be missing throughout our analysis.

Report Data Sources:

Industry Benchmarks – MLA Farm Survey Data
(<http://apps.agriculture.gov.au/mla/>)

Financial Data – MacAlpine Financial Accounts

Seasonal Conditions and Rainfall Data – Australian Government Bureau of Meteorology

Loans – Rural Assistance Authority NSW

Industry Insights – Published Industry Reports by:

- Meat and Livestock Australia
- Australian Bureau of Agricultural and Resource Economics
- Department of Agriculture
- Department of Primary Industries
- Rural Bank Australia

Benchmarking

Throughout the analysis, we have compared the financial and production data to relevant industry benchmarks. This illustrates the success of Salisbury and the MacAlpine's management practices. The benchmark data in this report is referred to as the 'Average Farm'.

The primary benchmark used in this report for the Average Farm is a Specialist Sheep Enterprise in the Pastoral Zone (as per the Australian Broadacre Zones & Regions). The data for the Average Farm is published in MLA Farm Survey reports.

Production and Income

The regenerative farming practices that the MacAlpines have implemented on Salisbury have led to significantly increased production levels when compared to the Average Farm. With increased productivity, the income generated on Salisbury is also significantly higher than that of the Average Farm.

The MacAlpines focus on two primary sources of income – Livestock Sales and Wool Production.

The sale of sheep is the primary source of revenue on Salisbury, closely followed by the significant revenue from merino wool.

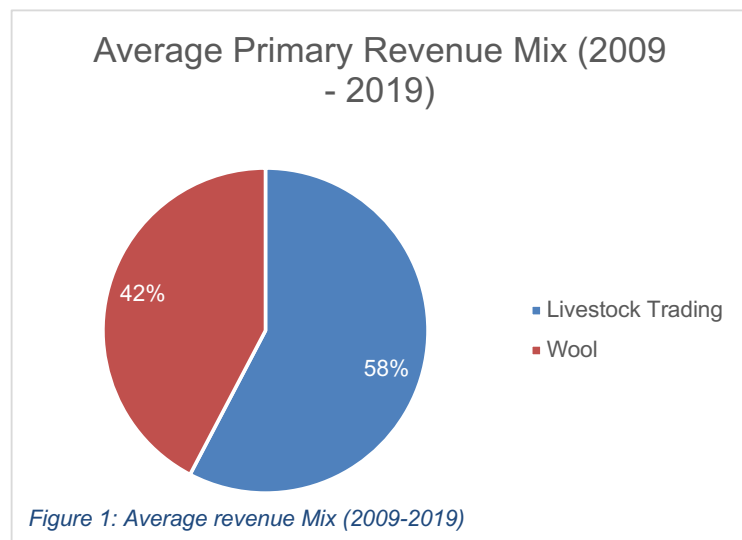
For the MacAlpines, understanding and learning about the landscape has helped them to continually improve their regenerative farming practices, allowing them to excel in production. Over time, the MacAlpines have come to focus on managing ground cover and protecting their pastures. Their main priority is the health and wellbeing of their sheep, and the condition of the landscape significantly influences this.

The MacAlpines have chosen to significantly invest in infrastructure such as water ponding and constructing an exclusion fence. This has enabled them to turn unproductive soils into productive soils, which, in turn, has allowed for much more pasture growth and control of the grazing pressure.

“By ponding our scalded country, we have turned unproductive soils into productive soils allowing more pasture growth on country that previously yielded very little.”

“Our main priority is the health and condition of our sheep. The biggest influence of this is the condition of our country, the more productive we can get our soils the better our pastures the better the health and condition of our sheep.”

Further, by improving the land on Salisbury, the MacAlpine's have been able to keep their flock healthier for longer in dry times, providing them with a more reliable business model.



Grants and Low Interest Loan Support to Fund Infrastructure

The water infrastructure and exclusion fencing have been heavy investments. In order to purchase the required material for these projects, the MacAlpines have received grants and a low interest loan support from the Rural Assistance Authority NSW for funding.

“We have been utilising a low interest loan from the rural assistance authority (RAA) to purchase the fencing material need for our exclusion fence.”

“Our most recent project is to construct an exclusion fence around our property, by doing this we hope to better protect the benefits of water ponding by managing grazing pressure to maintain ground cover therefore soil health. This is a big project with 55km of fencing to construct at a cost of close to \$500,000.”

“The ponding has been done over many years with the help from grants, our exclusion fencing is currently underway with help from the RAA low interest loan we have been able to purchase most of the materials needed.”

The Farm Innovation Fund is available to farmers in New South Wales to meet the cost of carrying out permanent capital works that will have a significant beneficial impact on the land and long-term profitability of the business, and further helping farmers to:

- Improve farm productivity
- Manage adverse seasonal conditions
- Ensure long term sustainability.

Gross Margin

Gross Margin is a measure used to show the profitability of farming activities – such as, livestock trading. Gross Margin shows the net sales less the direct costs and is commonly referred to as 'Trading Profit'. Gross Margin is calculated as; Sales minus Cost of Goods Sold.

Gross Margin per Hectare per 100mm of Rainfall (GM(\$)/Ha/100mm) is a common measure used to show how well a farming enterprise utilizes its available land and rainfall.

Figure 2 illustrates the Sheep GM(\$)/Ha/100mm for Salisbury and the Average Farm. As can be seen, Salisbury significantly outperforms the Average Farm.

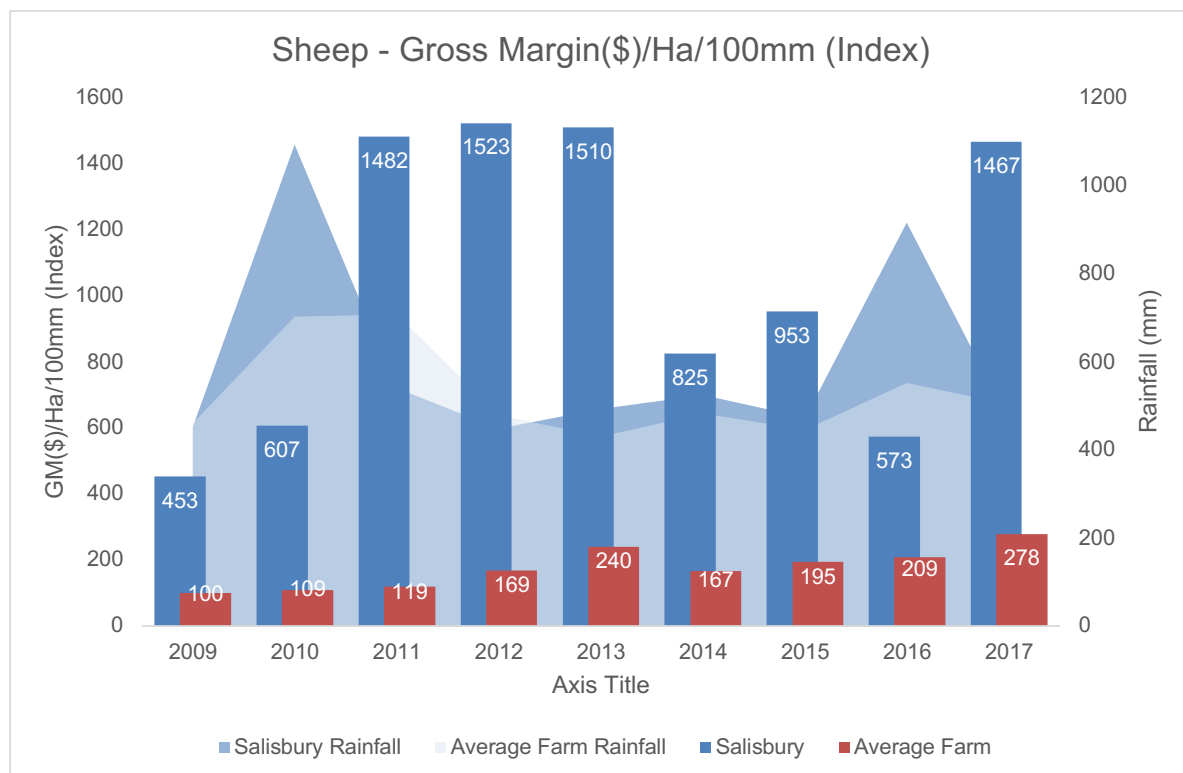


Figure 2: Sheep – Gross Margin Per Hectare Per 100mm of Rainfall

Data insights:

- Salisbury's GM(\$)/Ha/100mm is generally higher than the benchmark due to little (or no) livestock purchases made each year. The sheep flock is predominately self-replacing.

Sheep Sales

Sheep Sales are the primary source of income on Salisbury. For the MacAlpines, they have initiated selling off stock accordingly in dry periods. In doing so, the MacAlpines have consistently run stock below capacity and have been able to improve the management of their stock numbers in order to limit grazing pressure. This shows that the Salisbury enterprise is in a flexible position to adjust to adverse climatic circumstances.

“The current dry time we are experiencing has taught us a few lessons in managing our stock numbers, we try to implement a destocking strategy as early as possible to conserve our country the best we can.”

“In early years when we first came here, we probably ran too many stock as we hadn’t got a feel for the landscape. Over time we have learnt how important it is to properly manage ground cover and protect our pastures, resulting in us now running fewer stock but being able to run them better.”

“By improving our country and not increasing our stocking rates it has helped us to keep our flock healthier for longer in dry times, proving us with a more reliable business.”

Figure 3 compares Salisbury’s number of sheep sales per Ha to that of the Average Farm. It is clear that Salisbury sells a significantly higher number of sheep per year.

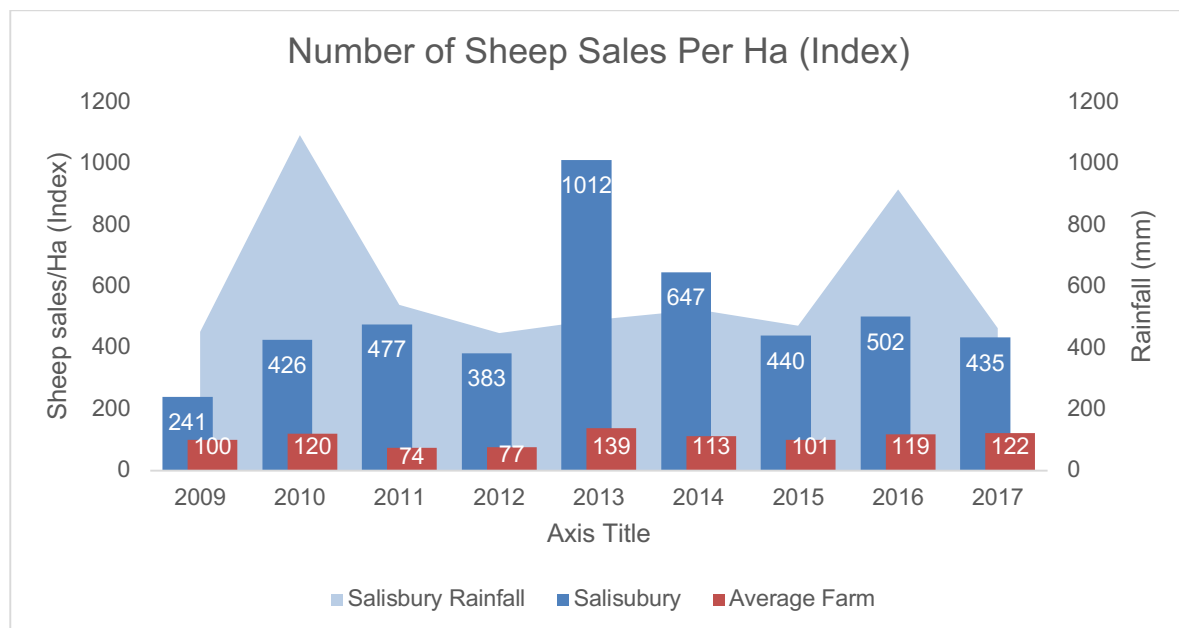


Figure 3: Number of Sheep Sales Per Ha (Index)

Data insights:

- In the years 2011 to 2015, Salisbury experienced low rainfall, therefore the MacAlpines sold more sheep in order to adjust to the dry times.
- In years of above average rainfall, such as 2010 and 2016, the MacAlpines have sold less sheep.

Wool Production

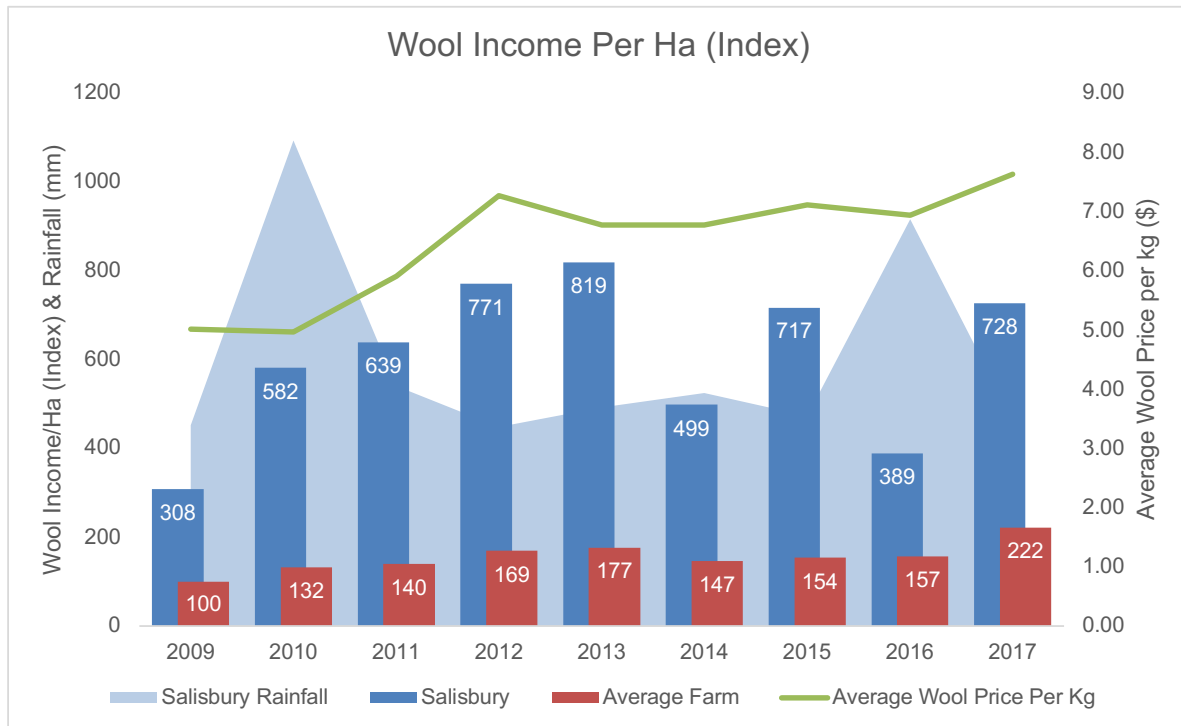


Figure 4: Wool Income Per Ha (Index)

Data insights:

- For Salisbury, the increase/decrease in wool income correlates to the rise/fall in the price of wool for that year. For example, in 2017 there was an increase in the average wool price and an increase in Salisbury's wool income.

Total Income

Figure 5 compares the total farm income per hectare of Salisbury to that of the Average Farm. Again, it is clear that Salisbury performs well above the Average Farm on income.

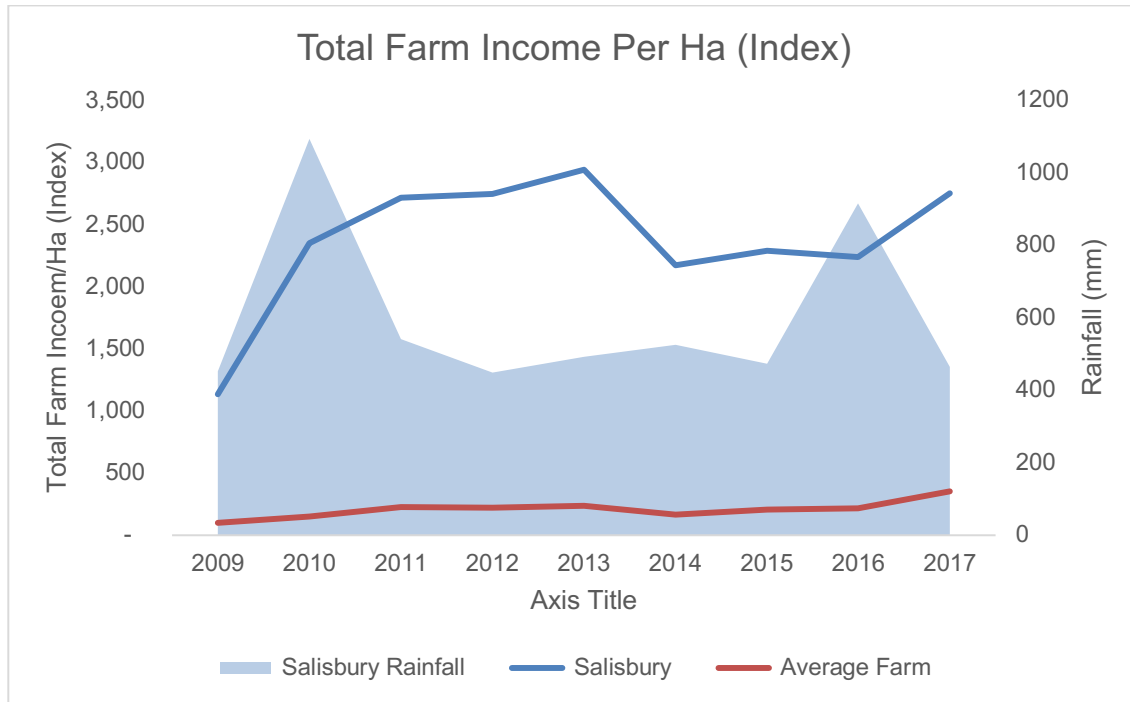


Figure 5: Total Farm Income Per Ha (Index)

Business Profit

Figure 6 compares Salisbury's farm business profit to that of the Average Farm. Salisbury usually performs significantly better than that of the Average Farm.

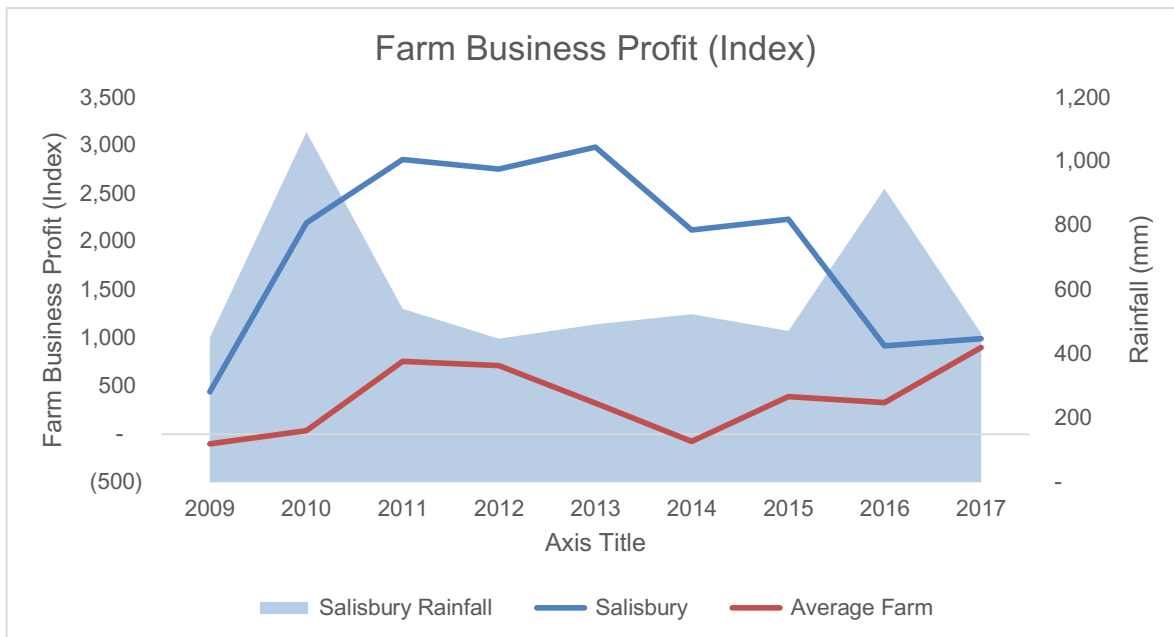


Figure 6: Farm Business Profit (Index)

Data insights:

- From 2011 to 2015, Salisbury experienced low rainfall. Despite this, the farm was able to maintain a well above average business profit.
- Profitability fell in 2016 due to a significant decrease in wool sales.
- In 2017, there was a significant increase in depreciation expenses. This is due to increased property improvements (predominately fencing) in 2017.

Expenses

For some expenses, we have observed that the MacAlpines invest significantly more than that of the Average Farm. However, by focussing their expenditure on specific projects such as water infrastructure and fencing, the MacAlpines have been able to lower their other expenses, whilst still maintaining higher productivity and profitability.

While the MacAlpines invest more in expenses such as water infrastructure and fencing, this is offset by lower expenses in other areas such as chemicals and fertilizers. Overall, production rates are significantly higher, and despite the higher expense, the profitability of the farming operation has been positive.

Repairs and Maintenance Expenses

Figure 7 below compares Salisbury's Repairs and Maintenance per hectare expenditure to that of the Average Farm. This is the total expenditure on repairs such as motor vehicles, plant and equipment and other structures.

For Salisbury, the MacAlpines have heavily invested in water infrastructure such as water ponding and taking artesian water out of open drains and into tanks and troughs. Hence, Salisbury has a higher average expenditure for Repairs and Maintenance compared to the Average Farm.

"We have heavily invested in water infrastructure this includes water ponding and taking our artesian water out of open drains and into tanks and troughs."

Additionally, the MacAlpines recently began a new project to construct an exclusion fence around the property. This project is aimed to improve the management and control of the grazing pressure, which will help maintain ground cover and therefore the soil health. The exclusion fence will also improve the management of pests on the property.

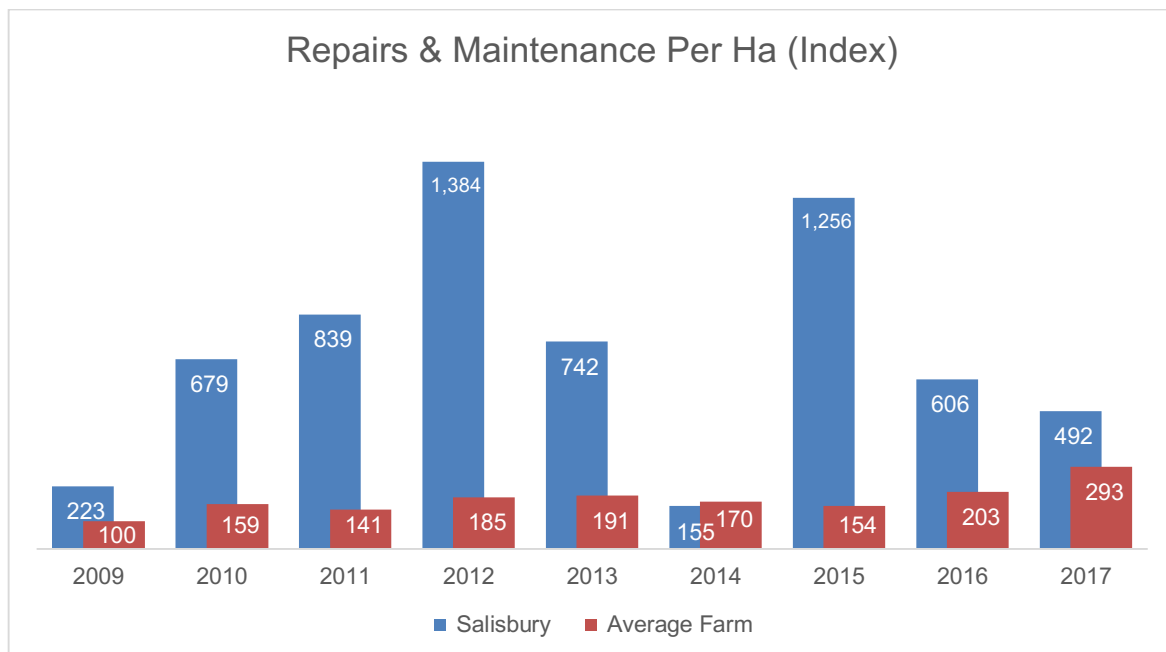


Figure 7: Repairs and Maintenance Expenses Per Ha (Index)

Despite having a higher expenditure to that of the Average Farm, the MacAlpines regenerative innovations have been successful and as a result there have been a number of improvements to the property:

- By water ponding, the MacAlpines have turned unproductive soils into productive soils. This has allowed more pasture growth on land that has previously yielded very little.
- Additionally, water ponding has allowed water to better penetrate the soil, resulting in a rise in vegetable matter and the amount of stored carbon levels.
- Again, the benefits and outcomes of the exclusion fence will allow for better control of the grazing pressure and the health of the soil, which is important for the overall health of the sheep.

Pasture Expenses

Pasture expenses are those that are necessary to maintain the soil and pasture health in a farming enterprise. In this analysis, we have considered the following expenses as Pasture expenditure and compared them to that of the Average Farm:

- Fertilisers
- Seed
- Fodder

As can be seen in Figure 8, 9, 10 and 11 the MacAlpines spend significantly less and often do not invest in Fertilizers, Seeds, Crop and Pasture Chemicals and Fodder. The MacAlpines heavy investment in water ponding has resulted in the improvement of the soil health and function and the overall pasture status. Hence, they have been able to reduce their expenditure on pasture maintaining expenses.

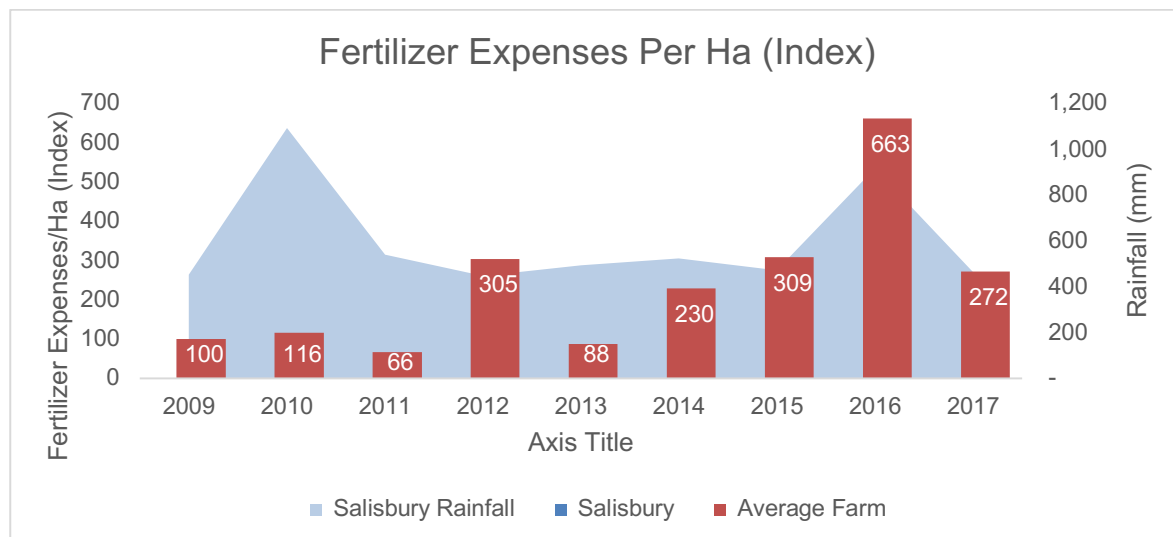


Figure 8: Fertilizer Expenses Per Ha (Index)

Data insights:

- For all years analysed in this report, Salisbury have made no expenditure on fertilizer as a result of the regenerative improvements the MacAlpines have made. The fertilizer expenditure for the Average Farm has still been included for comparison purposes.

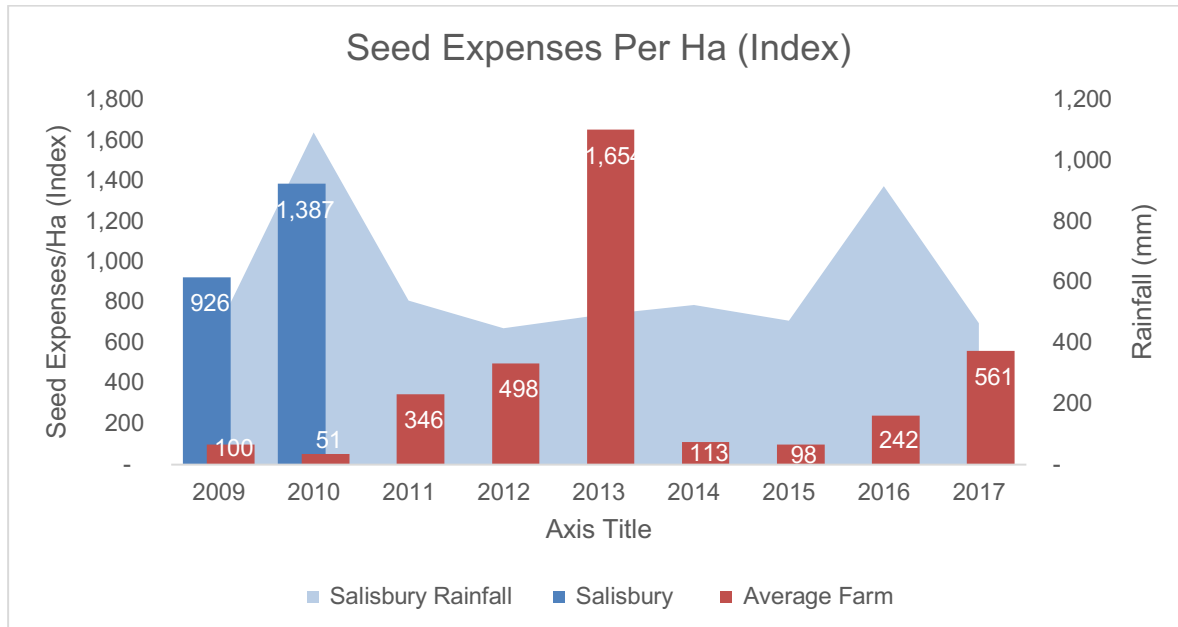


Figure 9: Seed Expenses Per Ha (Index)

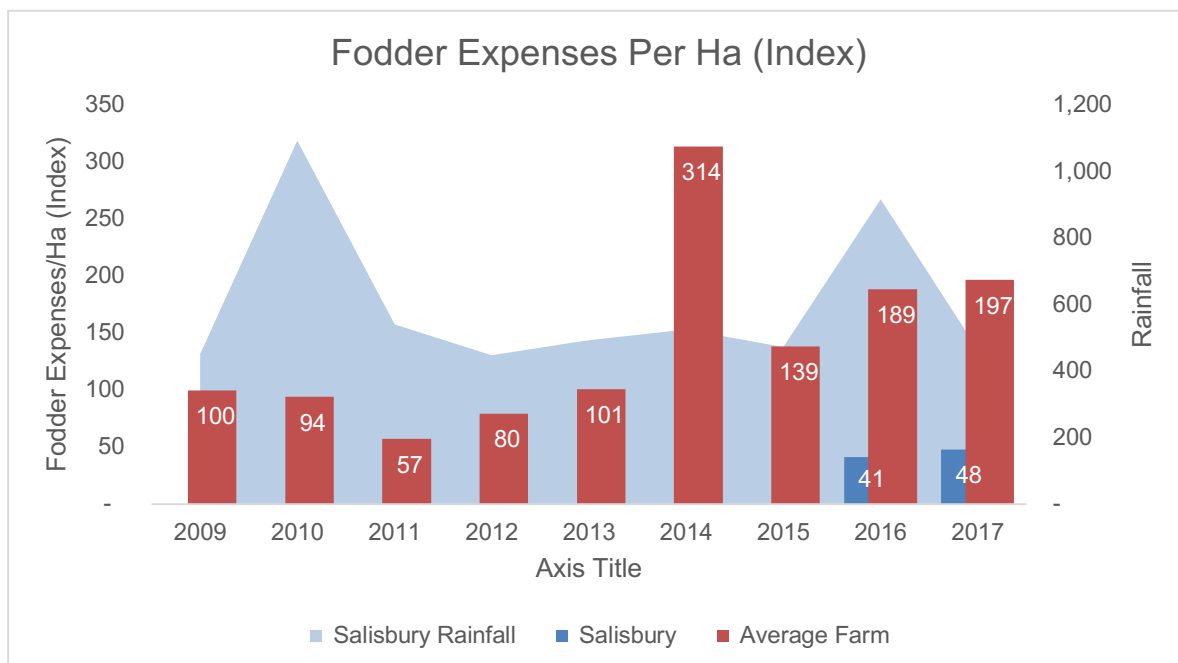


Figure 11: Fodder Expenses Per Ha (Index)