

# Case Study 5

## John and Helen Pastega



Helen and John Pastega, Project Catalyst growers.

John and Helen Pastega were determined to reduce the quantity of chemical applied to their cane, to improve the water quality outcomes and to improve their own sustainability.

Having purchased an air assist sprayer the Pastega's were keen to understand the required time frame for the reduced chemical costs to cover the capital outlay of the sprayer, and what was the benefit over time relative to initial cost of the sprayer?

The Pastega's had previously purchased and installed GPS units into their tractors, and recorded tractor operation and

application data using AgDat. So economic analysis of the new air assist sprayer was required to assist them quantify the benefits of their investment. The benefits included both a reduction in chemical costs and also the time required for application reduced due to the increased speed at which John could travel. The new sprayer improved chemical strike rate and reduced the quantity of sprays required.

This investment resulted in 5% increase in the gross margin at the time of analysis with a five year pay back period. The improved spray efficiency also reduced their exposure to price and yield risk.

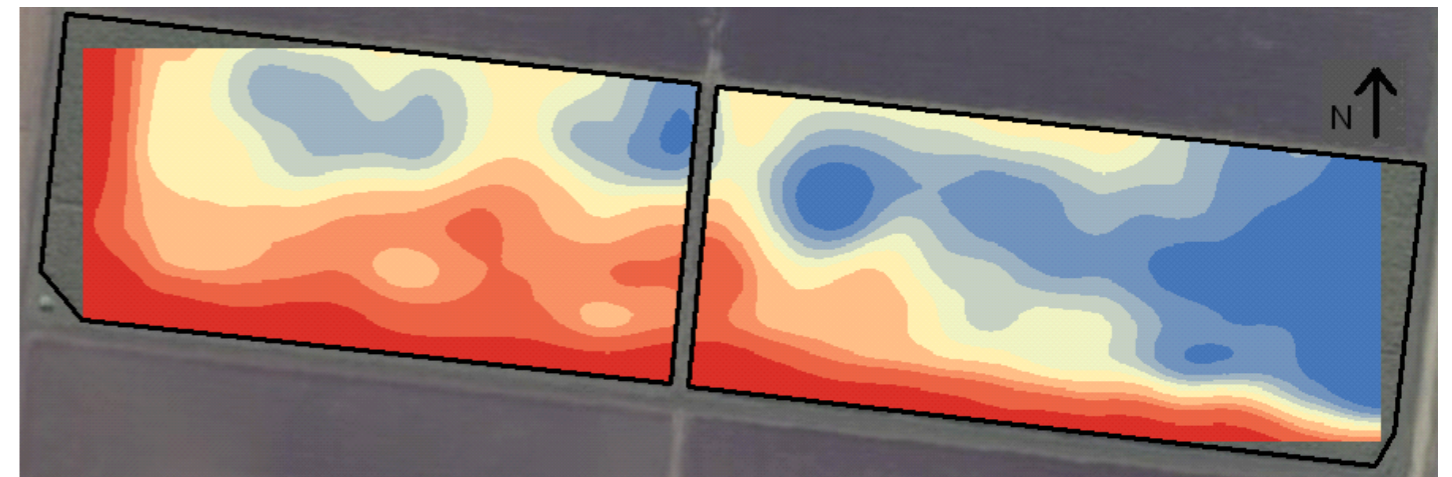
The Pastega's saw the opportunity to better understand their whole of business economic situation



Pastega's current economic analysis exploring variation within farm blocks.

and completed Profit Probe analyses over several years. Although Helen and John have always kept excellent financial records it was a different way of using their data to view the business. This identified that although they had purchased a new overhead irrigator, their return on assets were low due to inability to use it effectively as a result of mechanical issues. It also provided some strategic insights for improving their gross margin ratio to improve overall business viability.

These insights created an interest in John to better understand the differences in gross margin at a block level rather than at the typical property level. John's most recent economic analysis has looked at the available data for calculation of block level gross margins. This has highlighted the blocks with the highest gross margins, and provides additional information to decide where management could be modified to improve the long term viability of the business.



Blue	\$4,972.19 - \$5,524.95
Yellow	\$4,403.17 - \$4,647.03
Red	\$1,379.23 - \$3,590.28

Aspired understanding of total gross margin (over crop cycle) variation within block.

"The Pastega's were keen to understand the required time frame for the reduced chemical costs to cover the capital outlay of the sprayer."



Air assist sprayer.