



Stipa Native Grasses Association
 Inc.
 ABN 42 300 161 459
 150 Caroon Lane
 Branxholme Vic 3302
 Mobile 0418 532 130
 Email: graemehand9@gmail.com

Where is the money going?

Graeme Hand

Readers of Stipa newsletters will know that I keep pushing the line that grazing management, based on native perennial grasslands, is lower risk and more profitable, over time, than contemporary management based on inputs.

Key Points:

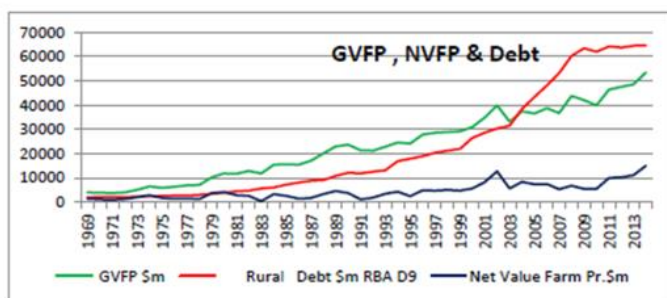
- Contemporary agriculture, based on inputs, results in low net farm income
- Many farms, in the high rainfall zone, may need to be de-intensified
- New practices need to be selected based on lowering costs and risk
- Current farm economics results in farm designs that do not work in practice
- Financial planning to make sure that profit is planned before expenses is required to overcome the tendency to allow expenses to rise to anticipated income

Low net farm income

Contemporary, 'industrial' agriculture based on inputs and focused on increasing production has had some unintended consequences. These unintended consequences are reducing biodiversity, soil health and water quality while emitting large amounts of soil organic carbon and producing a lot of low quality food⁵. Apart from these unintended consequences production driven agriculture has done a fantastic job of increasing production and gross farm income. The only problem is that farmers continue to receive an ever-declining fraction of this increasing gross income while debt is high and putting farms at risk. See Graph Australian Net Farm Income.

Australian Net Farm Income

Chart 1



Compiled from: ABARES commodity statistics Table 13, 2014

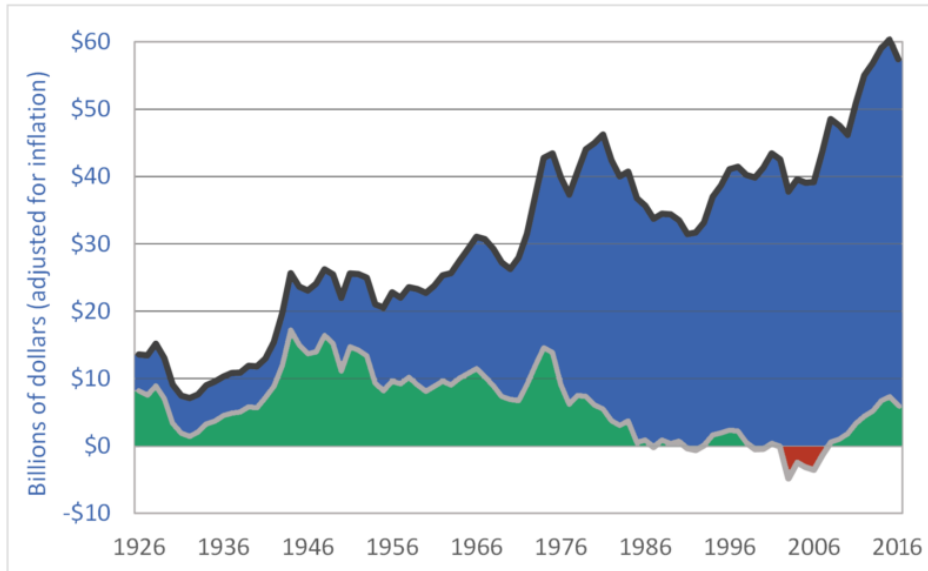
RBA online; Table D9, Rural Debt

GVFP – gross value farm production
 NVFP – net value farm production

Source: Ben Rees, Australian Agriculture: the real story, 2015

A recent graph of Canadian net farm income (see below) highlights that many countries are doing worse than Australia. The startling information, from this graph, is that in the “32-year period from 1985 to 2016, inclusive, agribusiness corporations captured 98% of farmer’s revenues – \$C1.3 trillion out of \$C1.35 trillion in revenues”.

Canadian Net Farm Income



Canadian net farm income and gross revenue, inflation adjusted, net of government payments, 1926–2016. (Blue area – gross revenue Green area - net farm income)

<http://www.darrinqualman.com/canadian-net-farm-income/>

The really clever bit that agribusiness has pulled off is “they have left Canadian taxpayers to backfill farm incomes (approximately \$100 billion have been transferred to farmers since 1985). And they have left farmers to borrow the rest (farm debt is at a record high – just under \$100 billion)”.

By any measure, the ability to convince governments and farmers to borrow to fund agribusiness profits is excellent business management. The following is an attempt to work out how this can be happening.

I have looked at three different areas to explain the drivers of this illogical behaviour.

The areas are:

- Economics - Barrie Ridler, Tim Hutchings
- Marketing - Doug McKenzie-Mohr
- Holistic Management - Allan Savory

Economics - Barrie Ridler

Barrie Ridler is one of the economists that I have studied. His expertise is the NZ dairy industry but applies equally to grazing and cropping.

Barrie explains in several papers and conference presentations that dairy is in a permanent state of disequilibrium. This disequilibrium is evident in systemic overstocking¹.

Research at the Lincoln University dairy farm confirmed that most dairy farms are overstocked. Even though this farm was in the top 5% of NZ dairy farms for profit lowering the stocking rate by 5.2% increased production by 12.5% and profit by 15%¹.

Barrie argues that this illogical position can be partly explained by the following:

1. Systemic misinformation because dairy uses non-economic farming models and performance measures
2. Dairy farmers are more interested in building long-term assets rather than profit.

Economics – Tim Hutchings

Tim Hutchings who has written his PhD on risk in agriculture has shown that underestimating risk and adopting practices that increased costs and intensify the farm business results in farm businesses losing money over time frames such as 10 years². In a paper that he co-authored the abstract states – *“This analysis shows that innovations need to be assessed more on their ability to reduce costs rather than to increase income”*. The paper goes on to state – *“Further analysis shows that the current static measures of financial performance (Gross margins, profit and cash margins) do not characterise the risk-adjusted performance of the various farming systems and almost certainly result in a flawed specification of best practice farm management in south-eastern Australia”*.

Doug McKenzie-Mohr³ - Marketing

The behavioural change expert, Doug McKenzie Mohr provides an insight into the marketing ability of agribusiness. Agribusiness has developed a complete marketing package that has governments, researchers, farmers and the community believing that their products are necessary to produce food.

The table below is an attempt to show the barriers that agribusiness has overcome not only convincing farmers that they need these products but that it is socially unacceptable not to use them. This is no mean feat when you realise that many of these products are poisonous to people and the environment while at the same time reducing biodiversity and depleting soil health.

BARRIERS	TOOLS
Lack of Motivation	Commitment Norms Incentives
Forget to Act	Prompts
Lack of Social Pressure	Norms
Lack of Knowledge	Communication Social Diffusion
Structural Barriers	Convenience

Source: McKenzie-Mohr, Doug. *Fostering Sustainable Behavior: An Introduction to Community-Based Social Marketing* (Kindle Locations 2095-2103). New Society Publishers. Kindle Edition.

This table shows some of the barriers people face when adopting new behaviours. When you analyse agribusiness through the lens of making sure people adopt and maintain new behaviours, then it is clear to me, that agribusiness has spent large amounts of time and effort addressing each of these barriers.

If I use this table to think of just one practice - spreading fertiliser:

- **Motivation** – agribusiness provides incentives, contacts people to obtain commitment and has made it a social norm to spread fertiliser.

- **Forget to act** – agribusiness provides reminders through advertising in rural papers, television etc. as well as direct contact to individuals to “plan your upcoming needs for the season to make sure that you don’t miss out”.
- **Lack of social pressure** – agribusiness has convinced many farmers that if you are not putting on fertiliser then you are mining the soil and you are a bad farmer even though there is a great deal of research showing that most cropping and grazing soils are being over fertilised.
- **Lack of knowledge** - agribusiness provides experts to read soil tests as well as using departments of agriculture and NRM organisations to provide the same service and training.
- **Structural barriers** - agribusiness provides services to the level of spreading fertiliser on your farm. This service is incredibly convenient when compared to the work and skills required to increase perennial grass density and diversity with decomposing litter in the inter tussock space to increase nutrient cycling through grazing management.

Allan Savory – managing holistically

These paragraphs from Allan Savory’s textbook⁴ have always made sense to me

“After years of consulting in many countries for clients of great variety in sophistication, enterprises, and economic circumstances, I was struck by what they all shared in common. Each of them finished the year in the same nail-biting suspense over their bottom line. No matter what state, country, or currency, no matter what size of business, what product, market, or price conditions, the same picture emerged consistently. Planned income: \$ 200,000; expenses \$ 195,000. Planned income: \$ 10,350,000; expenses, \$ 10,340,000. Like the unanimous elections in totalitarian countries, this defied logic. Profit margins simply could not be so uniform and proportionately small across so many widely differing situations.

Eventually it dawned on me that the problem must lie in the only common factor: human nature. Like most people, my clients were allowing their expenses to rise to meet the income they anticipated receiving. I suffered from the same weakness.”

What can we do to keep money?

To summarise, agribusiness and banks capture most farm income due to:

- Poor economic information, research and advice
- Excellent marketing
- Tapping into human nature that allows expenses to rise to meet income

If these are the causes, then the following should allow farmers to keep more money in their bank.

1. Do not use gross margins, research and advice but confirm which enterprises are profitable under your management on your land. If you have a rainfall risk only trial new enterprises or practice changes that lower costs and reduce risk.
2. Ignore salesman/ agronomists, that have the answer to your problem, and do your own research that addresses the cause.
3. Only adopt practices that lower costs and risk. See article on three ways to improve profit in this newsletter.
4. Use Allan Savory’s financial planning process that makes sure that profit is planned before expenses

References:

1. The intensification of the NZ dairy industry – Ferrari cows being run on two stroke fuel on a road to nowhere. Fraser P.J., Ridler B.J. and Anderson W.J. New Zealand Agricultural and Resource Economics Society (Inc.), 2014. Source: http://ageconsearch.umn.edu/bitstream/187491/2/Fraser_etal_2014.pdf
2. Financial analysis of the effect of the mix of crop and sheep enterprises on the risk profile of dryland farms in south-eastern Australia, Hutchings and Nordblom, 2011. AFBM Journal volume 8 number 1.
3. McKenzie-Mohr, Doug. Fostering Sustainable Behavior: An Introduction to Community-Based Social Marketing (Kindle Locations 2113-2114). New Society Publishers. Kindle Edition.
4. Savory, Allan. Holistic Management, Third Edition: A Commonsense Revolution to Restore Our Environment (Kindle Locations 6190-6197). Island Press. Kindle Edition.
5. Hidden Costs of Industrial Agriculture, Union of Concerned Scientists, http://www.ucsusa.org/food_and_agriculture/our-failing-food-system/industrial-agriculture/hidden-costs-of-industrial.html#.WSNtPWh97IU