



The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
<http://ageconsearch.umn.edu>
aesearch@umn.edu

Papers downloaded from AgEcon Search may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.

No endorsement of AgEcon Search or its fundraising activities by the author(s) of the following work or their employer(s) is intended or implied.

**THE MAIN THING IS TO KEEP THE MAIN THING:
THE MAIN THING – OPTIMAL PRODUCTIVITY***A. d T. Pienaar¹ & W.T. Nell²*¹*Farmer and owner of Mega Merinos*²*Agricultural Economics, University of the Free State***Abstract**

Profit margins have declined substantially over the past 10 years. In order to combat the deterioration of profit margins, farmers have to adopt new technologies to improve the productivity of the direct productive assets (land & livestock) on the farm. Mega Merinos managed to double most of the more important factors contributing to increased productivity. These factors include (1) the development of the productivity of the workforce by means of delegation, (2) improved pasture management and changing to more productive grazing systems, (3) flock feed conversion – increase kilogram meat produced per kilogram fodder used, (4) increased wool production per SSU as well as the lowering of the microns of the wool, (5) change from commodities to branded wool and meat and (6) increased reproduction (lambing and weaning percentages as well as changing from a 12 month production system to an eight month production system). The successful farmer will therefore have to focus on increased productivity to obtain sustainable success.

Key words: Profit, productivity, Merinos, reproduction, branded wool, branded meat

Sub theme: Farm Management

1. Background of Mega Merinos**1.1 The Mega Merino legacy**

The Mega Merino legacy started way back in 1887, when a born stud master, Andries du Toit Pienaar, was fascinated by a sheep called the "Merino", which had the ability to produce one kilometre of fibre per hour. The breed originated in Spain, way back in 1600, belonged only to Kings and is now the largest sheep breed on earth. This exceptional stud master registered the Mega Merino stud in 1907 and started selecting genetically superior animals from thereon.

He realised it was the greatest animal God created – and man developed! He chose the world-renowned farm, Klipplaatsfontein in the Upper Karoo area of South Africa in the Colesberg district, to breed the animals. This is one of the healthiest climates on earth, hot summers and cold winters, with an average rainfall of 350 mm per year; ideal for sheep, organic free-range country, no toxic substances, all natural. Through the selection criteria applied, these sheep are widely adapted, which is available in many countries. Their productivity on all feed levels is amazing, having the ability to convert natural pasture into protein and nitrogen with the highest efficiency, giving the optimum net income.

The farm is managed by Andries Pienaar and his son, Jacques Pienaar. There are 7 000 ewes on the farm. They are on an eight month production system, which means that they have three breeding seasons in two years.

1.2 Reason for the Mega Merino's Success

Stud master realised that change is a process – not a destination. We believe success is not only to win, but what you plough back into the industry.

The management team believe that the partnership with Modern Fibre Technology expertise can change the "Wool-Fibre scene" internationally – from Conception to Consumption – from our farm to our friends throughout the world. We must pass the Mega Merino 4×4 test, namely: Reproduction, Hardiness, Adaptability and Feed Conversion.

The management team are result driven and committed to excellence!

1.3 Mission of Mega Merinos

"We breed sheep that generate the highest net income per hectare without damaging the natural veldt."

This mission lead to the saying: "Change is a process, not a destination!"

2. Introduction

The main thing in all businesses is optimal productivity. What is productivity? Productivity is output divided by input. It is also determined by the output per unit of direct productive assets (land and livestock).

A picture of a shearer illustration, and the progression of combs and cutters technology, will be shown during the presentation of the paper.

A very important law is Kuyiski's law of 72, which means that you divide country's inflation rate by 72. At the moment South Africa is 10% effectively, so in 7,2 years you have to earn double the money to have the same living standards. It is a bigger fear in America than the September 11 bombing, because you get too old for your money. That is why the essence is the constant improvement of productivity to obtain sustainability.

Here we can use the illustration of the bottle and marble story, namely how to fill a bottle that illustrates productivity. A bottle is given to John; they ask him: How can you fill this bottle? He took marbles, filled it to the top. They asked him if the bottle is full; he said yes. Then they gave the same bottle to Peter and asked if the bottle was full. He said it is not full, so he took sand and filled it with sand. Then they gave it to Joseph and asked if the bottle was full. He said no and filled it with oil. That is how productivity works, the fact that you always have to look at the different angles of your business to see if you are efficient in what you are doing and there is always place for improvement due to technological development, you never get to the end of it.

It must be realised that we are in an information economy. In the industrial economy in the 1900s it took 30 years for knowledge to double; now it takes 14 days for knowledge to double. The earth is flat, so trade in the new world is like this: one phone call and you speak to China and within five minutes you speak to America and you use the internet. We must remember: **change is a process, not a destiny** and that we are not farmers anymore, but agribusiness men and women. An agribusiness man is a focused business and a farm is an outdoor fuel factory.

Another very important factor is that poverty is a state of mind, not a state of money; it is the way you think that makes you poor. There are presently 6,5 billion people on earth to do business with. So it is the farm manager's responsibility to create and sustain a market. Move away from commodities to differentiated products (Nell & Napier, 2009).

The essence is diagnosis, the format for diagnosis, not hormones, but everything must be based on economic facts. In sheep farming we have proved that we speed up the velocity of your money by going from a 12-month shearing to an 8-month shearing. We have gone from marketing sheep at 15 months to marketing sheep at three to five months. That is just in animal breeding. We have been in the animal breeding for a hundred and twenty three years, breeding merino sheep, and producing wool and meat.

Each generation has passed on what it has learned. Another important thing is that experience is wonderful, but experience without a vision is detrimental. You can have forty years of experience, but just the same experience over and over, forty times. What is also important is optimal not maximum; maximum is not sustainable, optimal is sustainable.

The format for diagnosis is to ask the right question if you want the right answer. To ask the right question, you must know the business, otherwise you do not know what questions to ask. Never be too proud to get help. The more you know, the more you see how little you know.

There is a motorcar illustrating a business model. I will show you the meat chain and the wool chain and show, for interest sake, what share the producer is getting in the chain. The five key performance indicators in an agribusiness are: marketing, finance, product, the factory (farm) and the people. Marketing is the force that propels the business in the future relevance. All marketing is based on perception. Marketing is modern-day warfare. Marketing is based on brand sense; it is based on the five senses of a human being, namely sight, smell, hearing, tasting and feeling. The boss of the business is the customers; they have your money in their pockets.

3. Performance areas where Mega Merinos improved productivity

Mega Merinos was over the past number of years constantly on the lookout for ways to improve the productivity of their direct productive assets to obtain and sustain their competitive advantage. The following areas contributed the most to these improvements:

3.1 Development of human capital capacity

People management and the development of human capital capacity of the workforce of Klipplaatsfontein contributed to improved profitability of the direct productive assets. They used the technique of delegation to increase the responsibility of the workforce, whereby increasing their productivity, so that management of the farm could increase their management capacity. The following are examples of how it was obtained:

- The current administrative officer, 12 responsible for total office management, came on the farm 20 years ago with a grade 12 certificate. He is today the backbone of the administrative office.
- Ram manager, Jack Ramaysa, has now been on the farm for 38 years. When he came on the farm he was illiterate and we taught him to read and write. He won the best sheep handler award in South Africa a record number of times. Jack was the first Lesotho citizen that was invited to be a sheep judge at the show of Condoblin in 2007 in Australia.
- Ewe manager, Speelman Ramaysa, Jack's brother, is now 36 years on the farm and was also illiterate and we taught him also to read and write. He won the Northern Cape foreman of the year award. He also won the Karoo champion sheep counter award.

3.2 Natural pasture management

The grazing system was improved with holistic management that upgraded the biodiversity of high nutritional grass and shrub species, as well as the improvement of bird species. There are 430 different plant species on the farm. They have all been evaluated in quality norms from 1 to 10 to see how good they are. Our farm also has a cell grazing system; the results have been that we've doubled our fuel production in the area. We keep doubling the sheep that we use to keep and also what the district is keeping per hectare.

3.3 Flock feed conversion

The improvement of the natural veldt and strict flock selection for growth performance caused that the marketing age came down significantly. The farm used to wean lambs at 5 months at 28kg and market them at an age of 15 months, which was improved with flock management, breeding, selection and grazing technologies to 3 months weaning at a weight of 30kg and market at 5 months. The flock are very strictly selected on the ability to convert plant protein to animal protein. This also speeds up the velocity of your money.

3.4 Wool production

Flock selection and breeding technology improvement lead to substantial productivity improvement of wool production. The wool micron decreased by 6 micron, now carrying 10% ewe's body weight over the past 10 years and the shearing intervals improved from 12 to 8 months, which speed up the velocity of your money. Genetic selection focussed on productivity, lead to this improvement.

3.5 Branding versus commodity

Branding versus commodity marketing is also important. They say if you still think of commodity marketing, you deserve what commodity marketing gives you. You have to go bigger and bigger. Modern-day marketing is all about branding. When a person is born on earth, he is given a name. Pesto is an individual brand, he is not nobody or nothing. The MD of Coke spoke to the Mega Merino Stud Centenary and somebody asked him if it was still necessary to market Coke. His reply was that

they need to market twenty four out of twenty four hours, the target is one billion cokes a day, worldwide.

How do you test if your product is being marketed properly? If you get variation in your price, 50 dollars, then 80 dollars, then 30 dollars, then you know you are making an extreme mess with those jumps in the prizes. A Toyota, for example, will cost R180 000, then it will cost R200 000, then R220 000 and then R250 000.

The essence in my opinion is a strategic marketing manager. It is a specialised job, one of the most, if not the most important job in a company. Without getting a product to the customer, there will be no business.

An example of the power of systems is Eskom in South Africa, which has a system problem. It is very important to introduce the right systems in your business model. The problem with Eskom is that they have no competition, you have to have competition. Competition creates greatness. There are 360 Merino breeders in South Africa, which are my competition, and if I do not see that I am at the cutting edge, I will lose out, because the customers have so many choices.

3.6 Reproduction of the ewes

Fertility is non-negotiable!!! The mating age decreased from 18 months in 1970 to 10 months on veldt and 8 months on irrigation in 2010. The flock strike rate (culling) declined from 45% in 1970 to 6% in 2010. The ewes are very strictly selected to improve productivity. The weaning percentage increased from 65% to 132% over the past 15 years. This means that the management team managed to increase the meat and wool income more than double over this period. One of the aspects that helped them a lot with increased reproduction was that they changed the production system from a 12 month cycle to an eight month production cycle.

The above-mentioned areas of improved productivity contributed to the competitive advantage of Mega Merinos, which is illustrated by means of the example in Table 1.

Table 1: Financial differences between two sheep farmers

Financial difference between the average farmer in the district and Mega Merinos		
	Farmer A	Farmer B
Number of ewes	1 000	1 000
Production cycle (months)	12	8
Weaning percentage per production season	70%	132%
Weaning percentage per year	70%	198%
Number of lambs weaned	700	1980
Weaning weight (cutting weight)	16	25
Grade	A0	A2/A3
R/kg	30,00	39,00
Gross Production Value (R)	336 000	1 930 500
Less: Variable costs (55% & 45%) (R)	184 800	868 725
Gross margins (R)	151 200	1 061 775
Difference between farmer A and B per year	R910 575	
Difference after 10 years @ 10% compounded interest	R14 512 221	

This is the difference between success and failure in agriculture. The difference was caused by improved productivity of direct productive assets.

4. Five key performance indicators for success in agribusiness

Any farming business striving toward success must be able to develop successful cells that can be duplicated on the farm. When you develop a management style to improve productivity within a cell, it can be duplicated to expand success throughout the whole farming business. The following five key performance indicators support the creation and sustaining of competitive advantages (table 1) that is essential for success:

4.1 Marketing

Marketing is the driving force that powers the farming business into the future. A farmer can produce the best quality and quantity of products, but if it is unknown where the consumers are and what they want, the products will not be sold. The marketing strategy followed by Mega Merinos is discussed in detail in section 5.3.

4.2 Finance

Finance (cash) is the substance generated by a successful business model. The main objective is ROI (return on investment); money is just a piece of paper stamped by the Reserve Bank. An example of this principle is that a 50 billion Zimbabwean dollar can buy only half a loaf of bread. This shows that if the productivity of a country is not right, its whole economy, and by implication cash shortages on farm level, may be a problem. If the business model is not right, you have a mirror in your motorcar,

which you need to look in and ask the person in the mirror what he is doing wrong. You do not need to blame your grandfather, the government or anybody else. Cash flow is crucial. It is also called catch flow. If your cash-flow planning is not right it will cause tremendous business difficulties. You need to have a sound business model that generates cash productively.

4.3 Product

Next is the product quality and continuity (availability). In our case the product is the animal (meat and wool). You must plan your production system in such a way that you have the correct products, at the correct place where the clients are, at the right price and your promotion must be in place so that your clients know your product and have the urge to buy your product, which is also part of our marketing tactics. You've got to have breeding objectives for optimum productivity. The most important breeding objectives are, firstly, fertility, for example super fertility, and secondly, a ewe must wean 50% of her body weight to natural grazing. The following is what we call Sheppard's selection, our carcass brand for meat. That means 70% of the income is generated from meat and 30% is generated from wool. The key is diagnosis, not hormones. You can pick a lady friend or a dog for hormone use.

4.4 Factory

The farm is an open air factory, which produces protein and energy. Your pasture management skills are going to determine your carrying capacity and also the quality of the pastures. This is directly linked to the productivity of your direct productive assets (land and livestock).

4.5 People

Surround yourself with competent people. The workforce, management team and consultants used in the management of the farm are crucial for sustainable success.

It is therefore important that the power of a functional farming system is under control to generate optimal productivity and each system has the virus of its own distinction.

5. Conclusion

That is in short how it works in sheep breeding, and that is the same in any business, you got to have the objectives based on optimum productivity with everything, even your cost side in place. You got to make your cost productive. A farm is just a fuel (protein and energy) factory; we are actually in the fuel marketing business. Even if you are in an agribusiness, it does not matter you either market your products through machines called sheep or you can market it directly into a wine bottle, etc.

We have five merino businesses:

1. We have a flock farm that is empowered 50% with new farmers.
2. We have a stud farm that is a value-adding business with genetics.
3. We have an irrigation farm under centre pivots and pastures, which has a 200% lambing percentage, where the average for South Africa is about 70%.
4. We have Mega Merino farm in Australia.
5. We started a Mega Merino farm in New Zealand. We are selling semen and embryos all over the world. America has also ordered semen from us.

They say farmers have wonderful observation ability, but their conclusion is not always right. Discipline creates freedom; that is our motto. The five key performance indicators must be met with a score of 8 out of 10 to be a success: marketing, finance, factory, people and product. I drew a money dam with each of the five indicators as plugs. If marketing is not good the money runs out of that plug, and that is how it works for each of them. The farming business must therefore be constant on the lookout for ways to increase productivity of direct productive assets and as a result speed up the velocity of cash.

The golden rule in the formation economy is that change is a process not a destination, so you create your own future. That is passion, vision, persistence, culture, the essence for success, **focused** on optimum productivity.

Reference

Nell, W. T. & Napier, R. J. 2009. *Strategic approach to farming success*. (2nd revised edition). Bloemfontein, South Africa: Wim Nell Agricultural Management Consultant.