Pastures for prosperity — Seeds forum.
4. The future for the seed industry — a seed user's viewpoint

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I have had a life-time involvement in land clearing and seeding, re-seeding, breeding and marketing cattle.

Our 2 000 ha property, 'Belah Valley', at Marlborough carries adapted cattle, analysed for growth, fertility, yield and carcase traits. The herd is predominantly Brahman and is probably the most thoroughly analysed in the Brahman world in those traits that are important for "nett commercial return".

Other gene types used are African and European taurus, in the development of adapted hybrids and composites.

Our cattle and semen are sold to Australia, Africa and Asia on performance database. We take a scientific approach to innovative management and deliver positive commercial results.

We also have country in the Kynuna–Maxwelton area of north-west Queensland.

We buy quality seed to achieve several different things, all with integrity:

- profit source;
- protein source;
- nitrogen fixing;
- soil health;
- species complementarity;
- extended season;
- haystack "on the stem";
- living mulch;
- drytime insurance;
- market hedging;
- avoiding production spikes;
- improved efficiency of whole business (land, time, cattle);
- avoidance of monoculture;
- sustainable soil management; and
- sustainable profit.

We need integrity in seed supply because the impact on the property budget is enormous.

Depending on the process used, the establishment cost for adapted pastures is between $10–100/ha.

These processes cover the range of:

- simple fly-on seeding at modest rates, and waiting longer for a return;
- basic soil preparation plus full seed application rates, and quicker return; and
- soil preparation plus full seeding and fertiliser.

The more reliable the climate and cattle market, the more inclined we are to spend more cash and target a very fast return on outlays.

The beef business is the slowest production cycle in agriculture, so tends to attract more cautious expenditure to change land management systems.

The threat of poor quality seed for germination and purity is not related simply to speed of return, but even more significantly, the introduction of antagonistic, invasive, and toxic plants — known as noxious weeds. The spread of noxious weeds through official ineptitude and a careless introduction process has cost Australia dearly. Rubber vine in nurseries, parthenium in seed, harrisia cactus and lantana are some examples.

Reasonable cost seed in quantity and quality is essential. The connotations of PBR give me the horrors, and to date, the results have not endeared the folks to me, who thought PBR was good for agriculture. I don't pretend to know all the reasons, but the results are far from attractive.

We have seen some mighty efforts by DPI and CSIRO personnel to develop new strains. Introducing species from Asia, Africa and South America in significant numbers has led to identification of some outstanding solutions to land management and production obstacles. Funding from these bodies, plus MRC, has been significant, and the results very pleasing.

One odious result has been the subsequent sale of proven varieties to single propagators and licensees. To my mind, we the public, have funded the whole process and anything less than public ownership and free and open use just plain stinks. I have often pondered on the mental process that led to PBR on pasture species, the only plants with which I am familiar.

I can assure you that, in the 1950s, just the mere suggestion of not releasing surplus and proven research cattle from India led to accusations of conspiracy, hidden agendas, monopoly and corruption of process, if not people and institutions. I am of the opinion that it is a corrupt course on all accounts and needs to be corrected now, in pasture plants.

Self improvement is part of the best of human qualities, and we all aim to improve our lot, either collectively or individually. Improvement of our thinking, land, production and economics will go on regardless of who gets in our road, so we need to develop a process that is positive, not restrictive.

Some simple examples of change are well illustrated by pregnancy rates in Queensland cattle herds in my area of operation.

Heifers on low "green feed" content 39% pregnant
Heifers on high "green feed" content 91% pregnant
Cows on low "green feed" content 41% pregnant
Cows on high "green feed" content 82% pregnant (range 41–100%).

These differences can be made by good pasture improvement and management. In a dry season, one good paddock of 100 ha carrying 250 head produced:

250 head @ 500 kg LWt @ $1.10/kg (improved) = $137 500
In its unimproved state it would produce:
250 head @ 400 kg LWt @ $0.70/kg = $ 70 000
Increased return = $ 67 500

Alternatively, the cattle on the unimproved country could be carried over so income is delayed.

There was a cost, but the extra funds in the system ensured that we were in a good position to contribute to the economy next year again, as both a buyer and a seller.