Pinpointing the changes

P M. Falconer
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Seeding . . . an area of big technological change in the last 10 years.

Only ten years ago, Western Australian wool sold for as little as 15 cents a pound and many sheep were unsaleable; feed barley sold at 35 cents a bushel; "super" cost only 15 cents a ton and bank interest was 6½ per cent.

Those examples were taken from a "low spot" in our agricultural history which followed the boom development era of the 1960s.

It has all changed radically in the 1970s . . . a dynamic decade of agricultural "ups and downs".

One of Western Australia's first farm management consultants, P.M. Falconer of Planfarm, has helped his clients through this period of transition. Here he assesses the extent of the changes:

Crop area:
In the last 20 years, the area of wheat, barley and total crop has more than doubled, the area of oats has remained fairly stable; and lupins have entered the field as a new crop.

The development of lupins as a crop has been restricted by the tendency of farmers and others to see them as an alternative to cereal crop, whereas in Western Australia they are really an alternative to livestock. I believe a much bigger area of lupins can be justified.

Fifty-seven per cent of wheat farms grow less than 400 ha each, but their total crop comprises only 21 per cent of the State's sown area. Ten years ago there were 73 per cent growing less than 400 ha, totalling 31 per cent of the crop.

Sheep:
Sheep numbers rose dramatically during the development era of the "sixties" but from 1970 they have fluctuated on a falling trend. Neither the percentage of breeding ewes nor the percentage of ewes mated to British Breed rams has altered significantly over the last twenty years, but in the last few years there has been a slightly increasing trend.

Some 51 per cent of our sheep flocks have less than 2,000 sheep each and these comprise only 18 per cent of the Western Australian sheep flock.

Cattle:
Cattle numbers rose steadily during the early 1970s but have fallen steadily since 1975. Sixty-one per cent of cattle herds now have less than 100 head but their total represents only 10 per cent of our cattle. Ten years ago, 15 per cent of our cattle were contained in 76 per cent of the herds.

Pigs:
Pig numbers have increased slowly over the last 20 years with a sharp increase at the time of wheat quotas. Unfortunately for some, another one is occurring right now. Fifty per cent of our pig herds have less than 50 pigs, and these comprise 11 per cent of total numbers.

Production:
In Western Australia, production is very much a function of season. However, there is no clear indication of major changes in wheat yield per hectare, wool clip per sheep or lambing percentage over the last decade on a State basis.

In that same 10 years, 5,000 farms have disappeared from the State total, but others have prospered remarkably well.

Some other major changes in the State's agriculture are:
• Size of holding:
  Particularly in the cropping areas there is a clear and continuing trend to fewer and larger farms.
• Persons involved:
  The numbers of farmers and farm workers have fallen severely in the pastoral areas but have changed little in the agricultural areas in the last ten years.
• Fertiliser:
  The total used for all purposes and the quantity used on crops, has fallen. The percentage of the State total used on crops has risen.

One needs to examine sheep and crop production changes on a regional basis, to get a clearer picture.

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Regional Changes:

Changes in the grouping of statistical areas make it rather difficult to compare data from ten years ago, with today’s. To indicate the trend in the regions, here are some percentage changes from four areas:

- The Kimberleys, representing the North West Pastoral Zone;
- The Shire of Kojonup representing the Great Southern;
- The Shire of Wongan/Ballidu representing the Central Wheatbelt, and
- The Shire of Merredin representing the Eastern Wheatbelt

The example areas represent some 70 per cent of the State’s cattle and 85-90 per cent of its sheep and crop areas.

Kimberleys:
Kimberley holdings are now 13 per cent larger but 33 per cent fewer people are involved. There are 32 per cent more cattle than 10 years ago but now virtually no sheep.

Shire of Kojonup:
The statistics show that over the ten years 1968/9 to 1978/9, the major changes have been—

11% less farms, but the average size has increased 12%;
20% more barley (5% more total crop);
8% more sheep, (13% more ewes);
46% increase in use of British Breed rams;
86% more beef cattle;
156% more pigs;
18% less fertiliser.

Shire of Wongan/Ballidu:
27% less holdings but they are 24% bigger;
30% more wheat, 400% more barley, 33% more total crop;
19% less sheep even though 7.5% more ewes;
39% less sheep per hectare of crop;
180% more cattle, 71% more pigs;
25% less total fertiliser but 16% more on crops.

Shire of Merredin:
28% less farms which are now 32% bigger;
13% more wheat, 230% more barley, 12% more crop;
7.5% less sheep, 17% lower sheep/crop ratio;
36% more pigs;
43% less fertiliser and even 27% less fertiliser on crop;

There has been clear trend in these regions for—

- Fewer and larger farms
- More crop—particularly barley
- Stable or reducing sheep flocks with the effect of more stubble per sheep available
- More pigs
- Less total fertiliser

I believe that bigger farms are inevitable if we seek economic viability and for that reason also, I believe we will see further increasing areas of crop. That obviously affects the balance of stubble feed available and is one factor encouraging more pigs.

The extent of reduced fertiliser usage is alarming. In many cases it is the result of false and short-term economies which could have significant effect on long-term production.

Regional statistics do not tell the full story. In any region there is a big range of performance. The leading farmers will show a different picture to the average. Furthermore, in later years the statistics do not tell us the cleared or effective area so it is not possible to work out stocking rates etc. on a regional basis.

We know that many farmers in the Eastern Wheatbelt now crop 65 per cent of their farms, and I believe that will continue. We know many farmers in the Central Wheatbelt are sowing 50 per cent of the farm to crop and I believe that will increase. This compares with a norm of 42 per cent and 35 per cent respectively 10 years ago.

The combined effect of more crop and lower winter stocking rate is to:

- increase the area of stubble available for each stock unit,
- increase the flexibility of livestock enterprises by giving a better balance of summer feed,
- reduce the effectiveness of the sheep flock in weed control.

The effect of the change on a typical Eastern Wheatbelt farm between 1969/70 and 1979/80 has been to:

- increase the percentage of the farm in crop from 42 to 65%;
- increase the winter stocking rate from 2.5 to 3.0 dry sheep equivalents per hectare;
- reduce the number of DSEs per ha of crop from 3.75 to 3.0;
- reduce the number of sheep per ha of stubble from 3.0 to 1.29, and
- increase the quantity of stubble feed from 10 to 23 weeks, (at an estimated 30 sheep-weeks per ha).

The flow-on trend is to more fat stock rather than store stock production, and greater reliance on nitrogen fertiliser and chemicals for weed control.

The effectiveness of chemicals in controlling grass weeds may well create major new changes such as stocking rate reduction, unless there is dramatic improvement in pasture species.

Conclusion:
I consider that the lessons of the last 10 years show that production was one of the least of our problems.

After all, don’t we have quotas to control the production of whole milk?

Were we not told in 1969 that we produced too much wheat?

Were we not told in 1971 that we had too many sheep?

Were we not told in 1974 that we had too many cattle?

Were we not told in 1980 that we are shaping to have too many pigs?

All this when we have millions of underfed people just to the north of us who should have an insatiable appetite for our produce.

I believe our real problems are not related to crop and sheep production but to politics, to trade and tariff policies, to exchange rates, to cost of energy, to industrial problems, to capital organisation, to environmentalism and to personnel management.

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