

2 May 2019

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Rangelands Challenges

Keywords food supply, masculinity, animal welfare

The following thoughts are from a policy outsider without on-ground experience.

Climate Change

Regardless of causation, climate change is obvious. There have been several very cold winters in the northern hemisphere. If this continues there will be food shortages and of course human migration. **Food shortages push up the prices of food-producing land.** Major northern hemisphere nations facing ongoing food shortages will look to control their supply chains by buying farm land in northern Australia.

If the current Maunder Minimum (of sunspots) is like that of the 18th century this will be a major event for some decades. <https://www.livescience.com/51597-maunder-minimum-mini-ice-age.html>

Meanwhile Queensland is likely to continue to have long droughts and short wet periods. This requires perhaps three modes for rangelands management - *dry*, *wet* and *in between*. The management modes need to be underpinned by technology, social practices and supportive banking processes.

State-owned banks may well be important for long term support of farm communities. Equally, state ownership of land can provide reduced rental in dry times.

Long droughts can ravage small towns. Should there be government policies for carrying particular towns through such times? Should there be associated obligations of local farmers and businesses e.g. in terms of land practices, purchasing, employment?

Philosophy of Land Management

For long-standing cultural reasons, European males tend to strive to overcome difficulties – in a spectrum of modes from heroes to abusive drunks. In the farm context this may appear as a drive to overpower Nature. This culture needs to be modified if farms are to be successful in preparing for and managing long droughts. There are three obvious options: teaching farmers a more broadly based philosophy, having more female farmers, and including more Indigenous practices. Women, having given birth and managed families, are more able to go with the flow and mostly do not have the urge to overpower Nature.

The corporatisation of farming is likely to be a problem where distant/overseas executives tend to manage cash flows or food supplies regardless of local social obligations and landscape sustainability.

Animal Welfare

The human race is becoming more sensitive to animal welfare in several dimensions. In some areas this is sentimentality but more broadly there is a growing sense of ethical responsibility for ecosystems and animals of all sorts, even stygofauna (subterranean animals).

<http://subterraneanecology.com.au/knowledge-publications/about-stygofauna>

To meet these expanding ethical expectations, rangelands need to be managed to standards with transparency and tracking of individual animals, from the time of birth/capture to the supermarket.



Expect to see long term changes in vegetation as the climate changes

Social institutions should be developed to provide arms-length monitoring. Egg marketing is a useful learning where customers want eggs from happy chickens, and the difference in eggs is not hard to tell.



Expect to see more pressures on graziers to ensure animal welfare during severe drought conditions..

Changing Demand

Over the next decades the amount of meat eaten per head in European culture countries will likely continue to drop for reasons of ethics, taste and health. In China too, there is a strong growth in vegan restaurants - with Shanghai going from 50 to 100 in 5 years.

<https://www.financialexpress.com/world-news/china-going-vegan-massive-decline-in-meat-consumption-vegetarian-restaurants-double-in-5-years-in-shanghai/1079511/>

So it is important to be forward looking in the uses of rangelands. Some rangelands are relatively pristine in terms of low chemical use, unmodified landscapes and unpolluted groundwater. Such lands can be used to grow produce and animals suited to highly ethical consumers that will pay a price for feeling good about the produce and its environment. “Contented cattle on traditionally managed lands” could be the marketing slogan.

What social institutions do we need to establish a pristine food industry? What lands need to be permanently protected from which industries? Can the principles of urban land use planning (control of development through regulation) be applied to rangelands?

Changing World

The world is changing rapidly. Consider the international strike by school students concerned that the older generations have not taken proper responsibility for environmental management. In the next election quite a lot of them will be voting. What do we need to do to prepare?

“Quantitative Easing” has moved the world economy into uncharted territory with no economic theory for escape. The European Central Bank and the Bank of Japan both have essentially no private sector buyers for government bonds. How will this affect industry funding from banks?

At the same time, globally, political outsiders are moving to centre stage. Comedians seem to be popular leaders. How will industries secure long term commitment from governments? Ω

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