What every Asset Management company should know…

FEEDLOTS

Photo Courtesy SA Grain

Mass Meat Production: Funding Feedlots

Cattle, as well as sheep, are fattened in feedlots.

This presentation concentrates on beef production in South Africa.

Information sources include:

- Department of Agriculture and Rural Development: Beef production
  https://www.kzndard.gov.za/images/Documents/RESOURCE_CENTRE/GUIDELINE_DOCUMENTS/PRODUCTION_GUIDELINES/Beef_Production/Feedlotting%20Cattle.pdf

- National Agricultural Marketing Council
  https://www.namc.co.za/wp-content/uploads/2017/09/NAMC-Soybean-Industry-and-Competitiveness-Study-June-2011.pdf

- South African Animal Feeds Market Analysis – https://www.nda.agric.za
- https://www.kzndard.gov.za/images/Documents/RESOURCE_CENTRE/GUIDELINE_DOCUMENTS/PRODUCTION_GUIDELINES/Beef_Production/Feedlotting%20Cattle.pdf

Age of entry into the feedlot

The majority of cattle marketed through abattoirs come from feedlots.

Most of the animals arrive at feedlots after weaning at around 7 – 9 months of age, but can be as old as two and a half years.

They gain about 150 kg in the 90 – 120 days spent in the feedlot after which they are considered 'finished' and sent for slaughter.

Slaughter rate

There are 3000 – 4000 cattle in an industrialised **feedlot** at any given time with a **slaughter** rate of **1000 cattle** per month.

Stress

Stress is a major factor in the **feedlot**

- Stress of **transport** to the feedlot
- Stress in the admission process **(dosing, dipping, weighing)**
- Stress from **bullying** at the feed troughs due to the mix of ages, weights and sexes
- Stress in the adaptation to **feed concentrates**
- Roughly 10% of animals are **unable to adapt** to feedlot conditions and are slaughtered early

Overcrowding and Disease

On arrival the animals are **vaccinated** against botulism, anthrax, quarter evil, IBR and other **diseases that rapidly spread** in the stressful, overcrowded conditions.

IBR is an acute, contagious respiratory disease of cattle caused by bovine herpesvirus type 1 (BHV-1), commonly affecting the respiratory tract.

Growth Promotors and Antibiotics

Growth promoters and anti-microbial agents are routinely administered in the feed to prevent the diseases of stress and overcrowding.

The resulting antibiotic and antimicrobial resistance in human health is a cause of major concern globally.

Rapid fattening

Cattle are herbivores, not grainivores.

Concentrated carbohydrates such as maize is fed for the purpose of rapid fattening despite the impact on the animal's digestive system.

In 2015 – 2016, roughly 450 000 tons of yellow maize was directed for human consumption and almost 100 times more (44.9 million tons) was directed to animal feed.

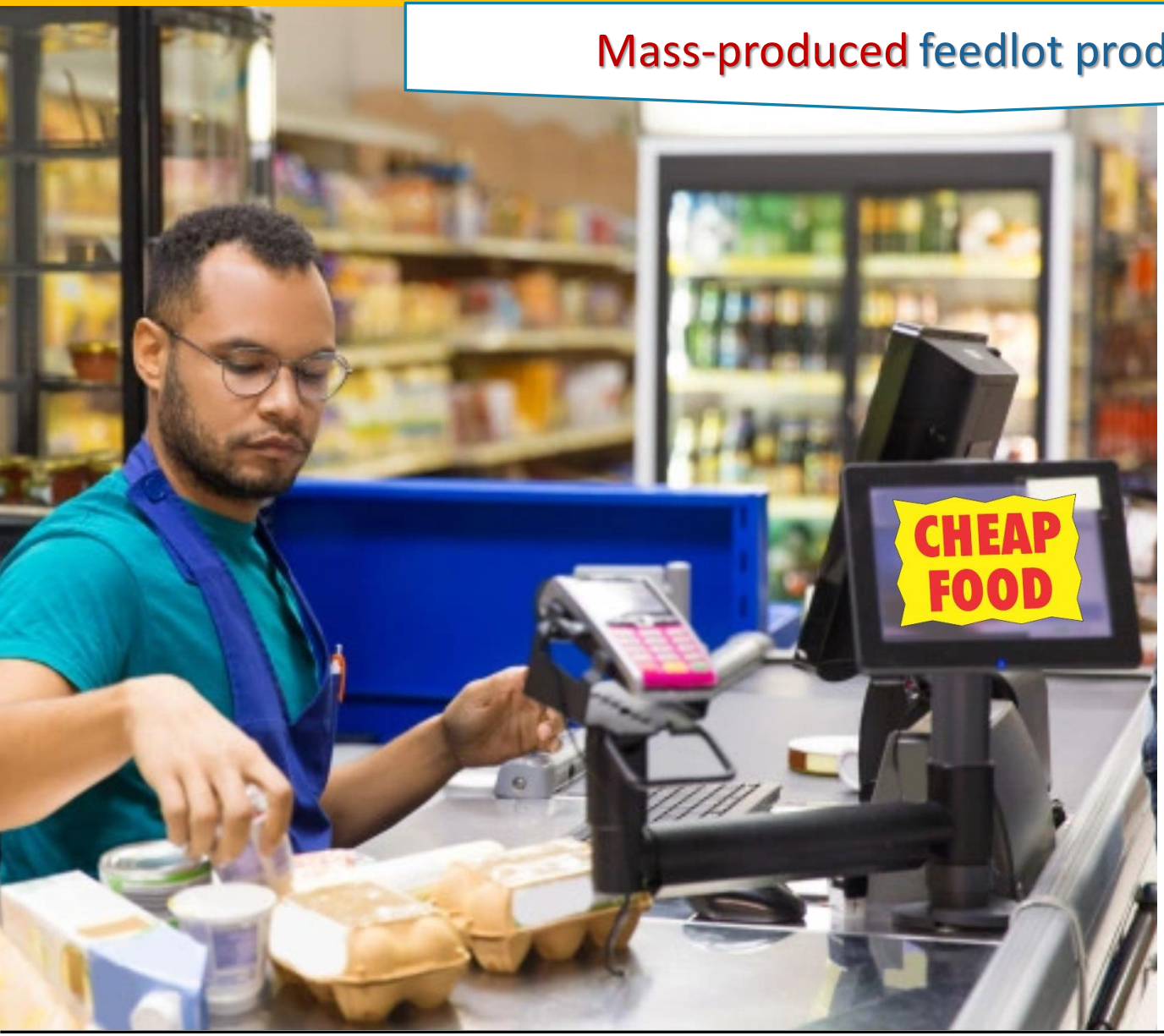
Soya beans

Soya bean oil *cake* is the most important protein component of the *South African* animal *feed* industry and is mostly used in cattle and poultry feed.

However, on average, domestic soybean meal production meets only 10 % of local demand with the remainder imported predominantly from Argentina and Brazil.

Hidden Costs: Feedlots

Mass-produced feedlot production



Inherent in mass-produced feedlot production of beef are HIDDEN COSTS not passed on directly to the shopper at the checkout counter.

True Cost Accounting

Industrialised agriculture, based on vast tracts of monocultures, is ...

- destroying the Amazon Rain Forest, a vital carbon sink
- displacing indigenous people in the rain forest
- contributing to the mass extinction of wild animals
- depleting the fertility of soil through petro-chemical fertilizers

True Cost Accounting

Industrialised agriculture, based on vast tracts of monocultures, is ...

- killing off vital pollinators such as bees, beetles, butterflies and birds through pesticide poisons known to be carcinogenic to humans
- exacerbating climate change through emissions of greenhouse gases during the export of soya over vast distances from Brazil to China and then around the world to feed animals in feedlots and factory farms
- contributing to an insecure future for today's youth

Cheap Food

According to one of the fast-growing websites on True Cost Accounting, 'cheap' food actually **costs** the world **USD 4.8 trillion** annually when social, environmental and health costs are included.

https://www.natureandmore.com/en/discover-the-true-cost-of-food

Mitigating the impact of climate change

Although Africa itself contributes less than 5% to the world's greenhouse gas emissions, scientists predict the continent will be particularly hard hit by Climate Change, with a dramatic increase in drought and flood events leading to food insecurity.

Yet it is Africa's agriculture that holds the key to mitigating the impact of all the above-mentioned external costs of 'cheap' mass-produced meat production.
We're talking here of Ecological Regenerative Agriculture
already successfully practiced by 20 000 farmers in Tanzania.

Source: Compassion in World Farming International:
https://www.ciwf.org.uk/

Ecological Regenerative Agriculture

The African Union has given the nod to Ecological Regenerative Agriculture across the continent.

South African global expert on soil science and sustainability, Professor Raymond Auerbach, is playing a pivotal role.

humane education

COMPASSION in world farming SOUTH AFRICA

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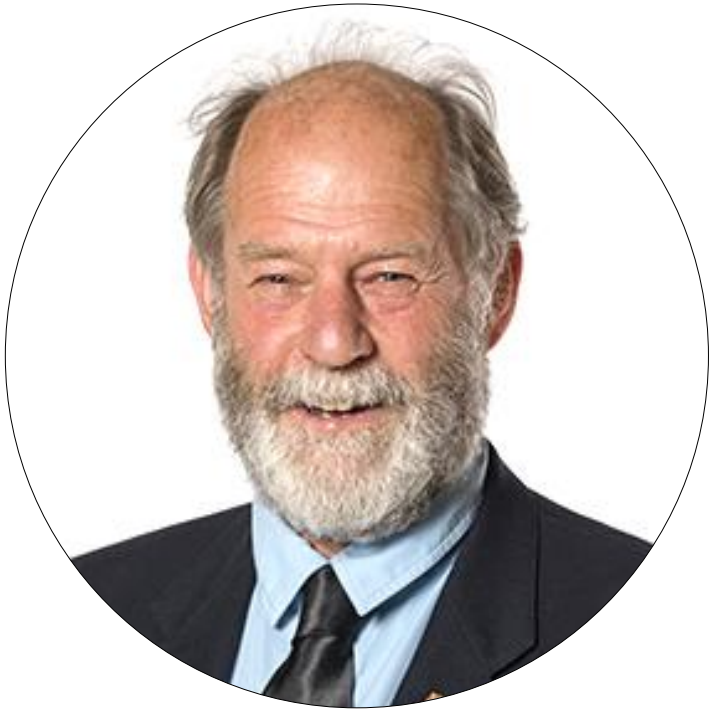

Download the open access e-book now, free of charge, at: http://www.cabi.org/bookshop/book/9781786399601

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Source: Animal Voice, November 2020, Issue 85 www.animalvoice.org – online magazines.

Cheap food is a misnomer

With technology, consumers are becoming ever-more vigilant in regard to the social and environmental impacts of the products they buy.

It is a matter of concern to many consumers nowadays …

- Whether farm workers are paid properly
- Whether the animals are treated well
- Whether toxic and/or carcinogenic chemicals are used as pesticides
- Whether antibiotics and/or antimicrobials are routinely included in animal feed
- How the environment is impacted

True Cost Accounting

True Cost Accounting is becoming the next buzz word and an App is in the pipeline that will give consumers an understanding of the **true costs** involved in the production of a product.

Below is an example of how an App might start with the health of the soil on which the animal feed is grown.

Natural capital: Soil

State of soil fertility: Organic matter mg/m2 : xxxx

Soil's sequestration of carbon: xxxx

Value of soil in Euros/kg: xxxx

https://www.natureandmore.com/en/discover-the-true-cost-of-food

Smallholder Farmers

In South Africa there are some 2 million smallholder farmers who cannot compete with supermarket prices.

Their livelihoods are jeopardised and constitute yet another hidden cost of industrialised agriculture.

As in Tanzania, small-holders stand to benefit by Asset Management and other financial companies directing their investments into support for ecological regenerative agriculture.

Reforming Feedlots…

…to ameliorate some of the negative impacts inherent in the feedlot system

- Provision of shade and shelter
- Provision of silage as part of the feed
- There is no known optimal stocking density since the feedlot method of keeping cattle is inherently contrary to their nature
- Dehorning should be banned unless carried out as disbudding on a very young animal
- According to the website https://foodfacts.org.za/hormones-in-meat/ hormone implants are administered to animals in the feedlot. The most common ear implant contains zeranol or a mixture of trenbolone and estradiol. Both types of implant promote improve conversion of feed into muscle by up to 20%. According to https://foodfacts.org.za/ scientific evidence does not indicate that the use of hormones in farming presents a risk to public health. However, the use of hormone implants are banned in the EU.

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SEE: https://tedxcapetown.org/posts/climatechange-champion-meet-andrew-ardington-regenag-sa

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New book "Organic Food Systems: Meeting the Needs of Southern Africa"
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http://www.cabi.org/bookshop/book/9781786399601

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https://www.caringclassrooms.co.za

https://www.animalvoice.org/animal-voice-online-magazine

https://www.animalvoice.org