



# MPO NATIONAL Congress

**SURVIVING AND PERSEVERING DURING DROUGHT**

# Living in the Garden of Eden



- Rain-like Irrigation
- Pastures
- Fertile soil
- Intermediate temperatures
- Market accessibility
- Sosio-Economic Climate
  
- BEAUTIFUL SURROUNDINGS

















# Living in the Garden Of Eden



- **THE SNAKE**
- Drought
- Fire
- Weeds
- Insects
- Market accessibility
- Sosio-Economic Climate

# Counter Measures (Nutrition)



- Plan
- Risk analysis
- Hedging
- Feed storage



# Counter Measures (Nutrition)



- Hedging
  - Energy - Maize / Wheat / By-products
  - Protein – Soya / Cotton
  - Roughage – Hay
- Advantages
  - Eliminate uncertainty
  - Fix the price
  - Nutritional effects
  - Simplify Nutritionists job
  - Market / Economic climate

# Counter Measures - Nutrition



- Pitfalls
  - Stability of currency
  - Movement of price
  - Ethical Behaviour / Stability of Company
  - On-farm situation
  - Market / Economic climate

# Counter Measures - Nutrition



- Roughage
- Pasture
  - Grass / Legume
  - Quality / fertiliser
  - Digestion
  - Fiber effectivity / matt

# Counter Measures - Nutrition



- Roughage
- Silage
  - Fermentation
  - Moisture
- Hay
  - Quality / Cut / Baling Process
- Lucerne
  - Quality / Cut / Baling process
  - Where produced







# Quality



# Counter Measures - Nutrition



- **Roughage - Comparison**

- **Silage**

- Preserve Quality
- Intermediate price
- Milking potential good

- **Hay**

- Quality loss / nutritional value
- What do you procure
- Costs
- Milking Potential - depends on hay

- **Lucerne**

- Nutritional analysis / value – equal to Pasture?
- Storage
- Expensive
- Milking Potential - Excellent

# Average and variation of different nutritional elements in lucerne hay in South Africa

Chemical Analysis	Minimum	Average	Maximum
Dry matter %	90.7	93.6	96.4
Crude Protein %	12.3	18.8	25.4
Ash %	3.6	10.5	17.5
Organic matter %	82.5	89.5	96.5
Acid Detergent Fibre %	21.9	39.9	58.1
Neutral Detergent Fibre %	26.7	48.3	69.8
Non structural carbohydrates %	4.2	19.1	37.1
Fat %	0.1	1.7	3.3
Metabolisable Protein g/kg	96.8	137.8	178.7
In vitro Organic Matter %	56.7	67.6	78.5
Metabolisable Energy MJ/kg/DM	7.8	10.7	13.5

## **Please consult with your:**

Nutritionist

Feed mill Representative

Procurement Specialist

Co-operative

The team that is responsible for nutritional welfare of the dairy and your financial sustainability!

