

# Risk Management Tools in Beef Production

Agribenchmark Conference

June 23, 2017

Saskatoon, SK

[www.usask.ca](http://www.usask.ca)

# Roadmap

- A. What is risk?
- B. Risk follows goal formulation
- c. Link from benchmarking to profitability
- D. Simple tools to manage risk

# Risk defined

## Merriam-Webster definition of risk

- 1: possibility of loss or injury
- 4: the chance that an investment (such as a stock or commodity) will lose value



Source: CMEGroup

# Traditional sources of risk in agriculture

- Price volatility
- Weather
- Predation
- Exchange rate risk
- Policy risk
- Market risk



Source: Beth Cortez-Neavel, Flickr



Source: Mike Mozart, Flickr



Source: Dennis Matheson, Flickr

# Finding the right tool

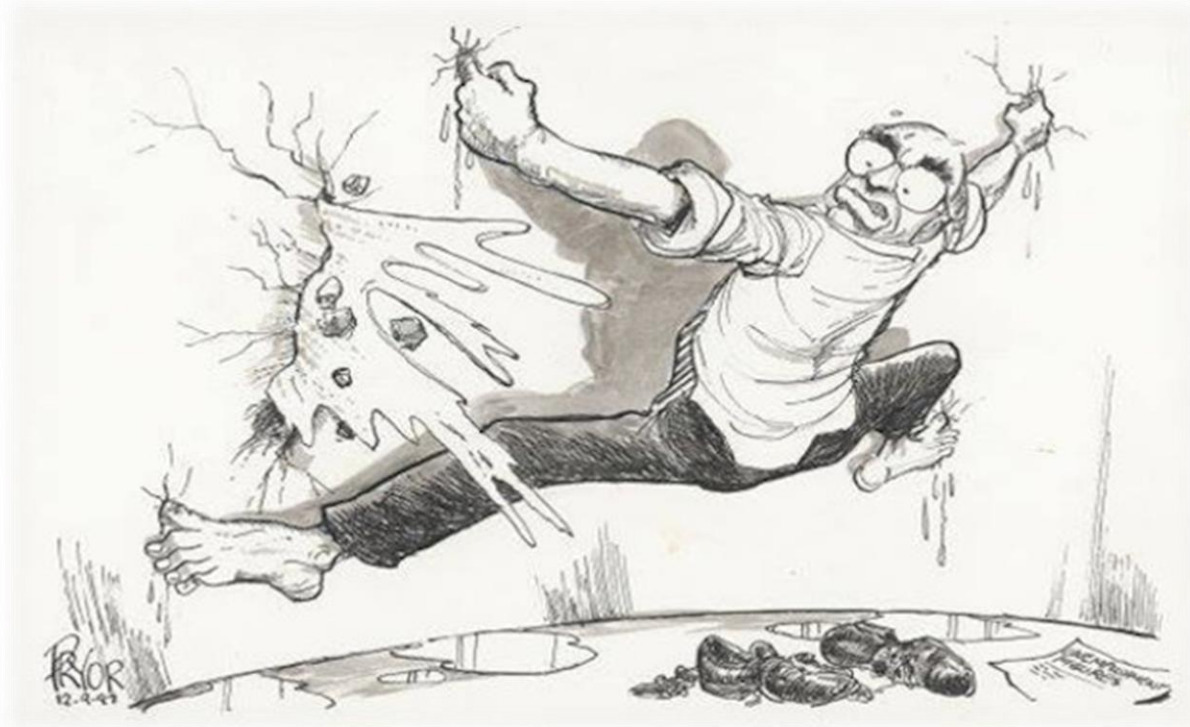
Numerous authors have found that not all firms seek to maximize profit as their primary goal

Need to match the tool to the job



# Enterprise risk management

Involves a move away from silos and toward comprehensive management of business risk



Source: <http://sarazervos.com/2016/01/19/chinas-meddling-in-markets-can-hurt-us-all/>

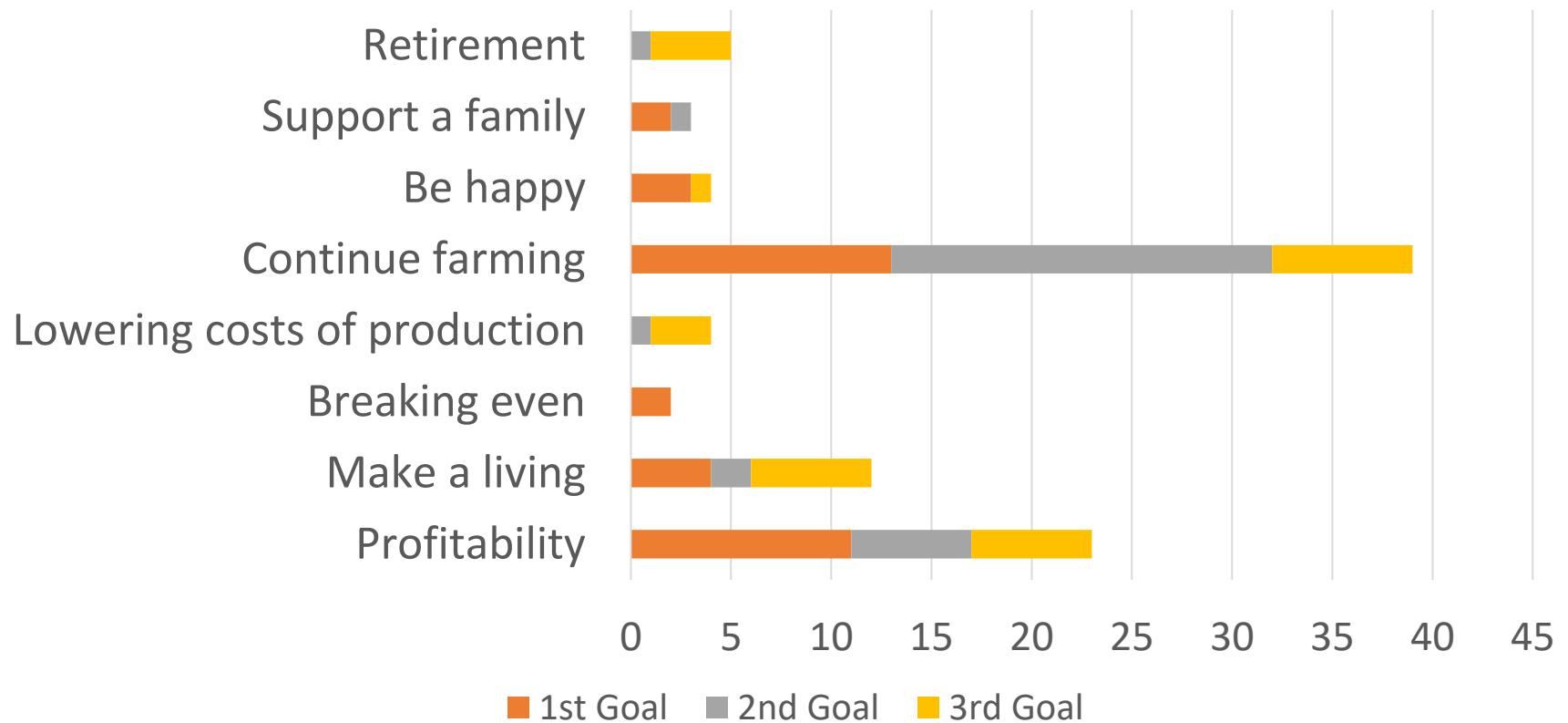
# Risk management follows strategic management

Highly successful firms establish goals and objectives

Develop metrics to monitor progress

Identify pertinent sources of risk

# What are the goals of producers? (n = 38)



# What does this ranking tell us?

Respondents enjoy raising cattle and ***want to continue***

***Profitability is important, but*** not the most important

Lowering ***costs of production is an afterthought***

# Continuing farming = persistence through profits

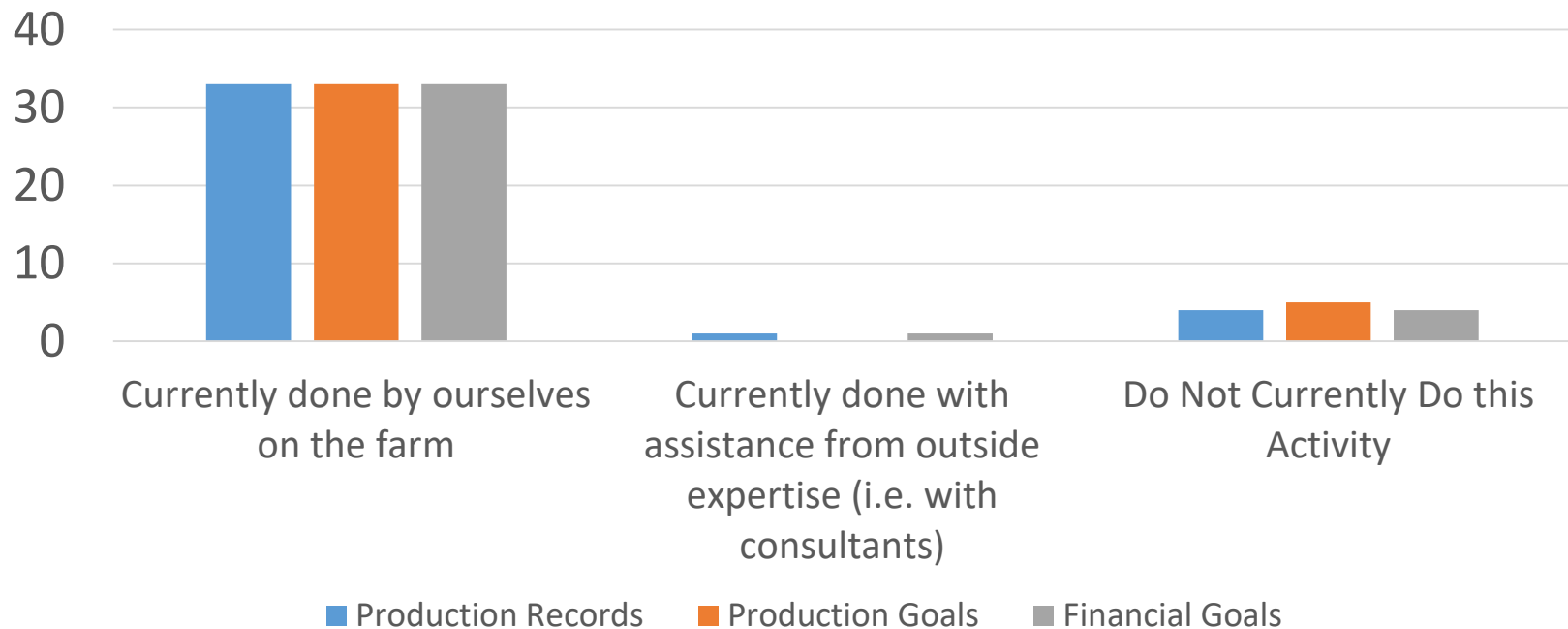
How is that achieved?

Need to find out:

- a) What do we do well?
- b) Where have we and where can we improve?
- c) How these relate to profitability?

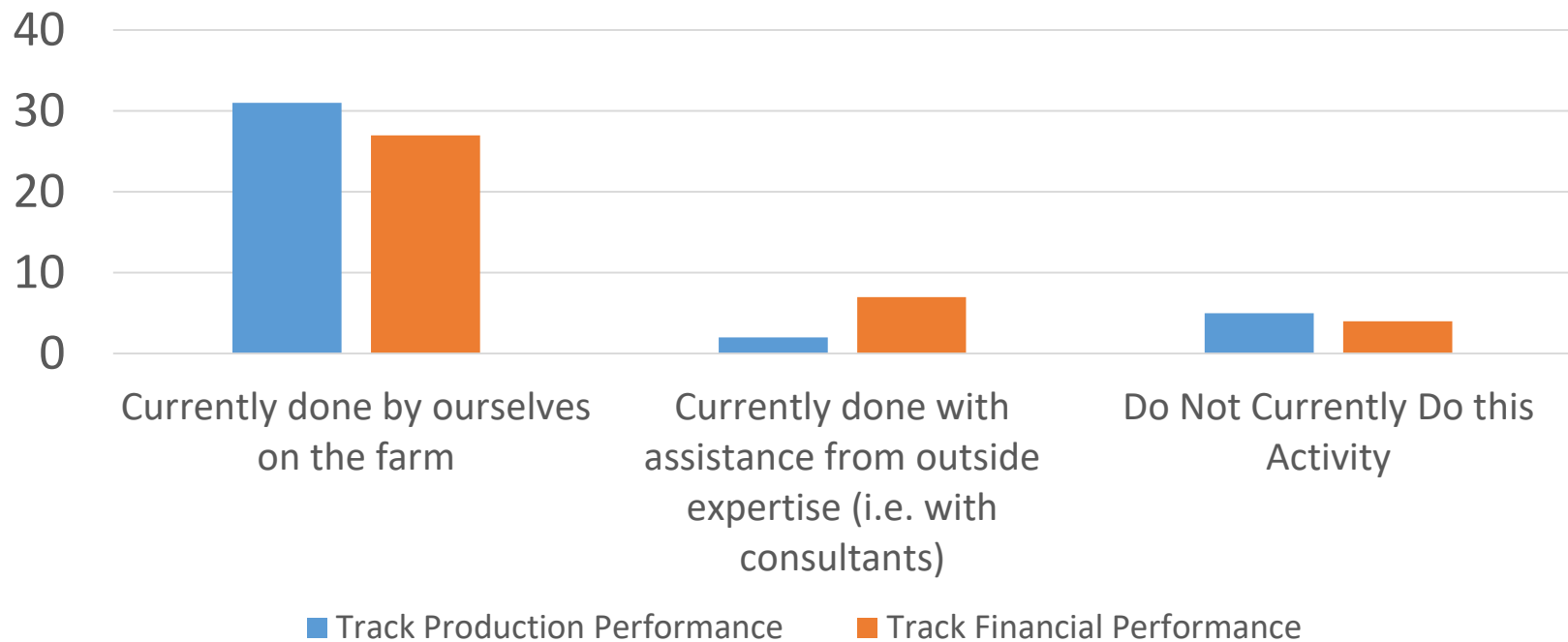
# Is there a disconnect?

## Goals and Recordkeeping on Sample Farms

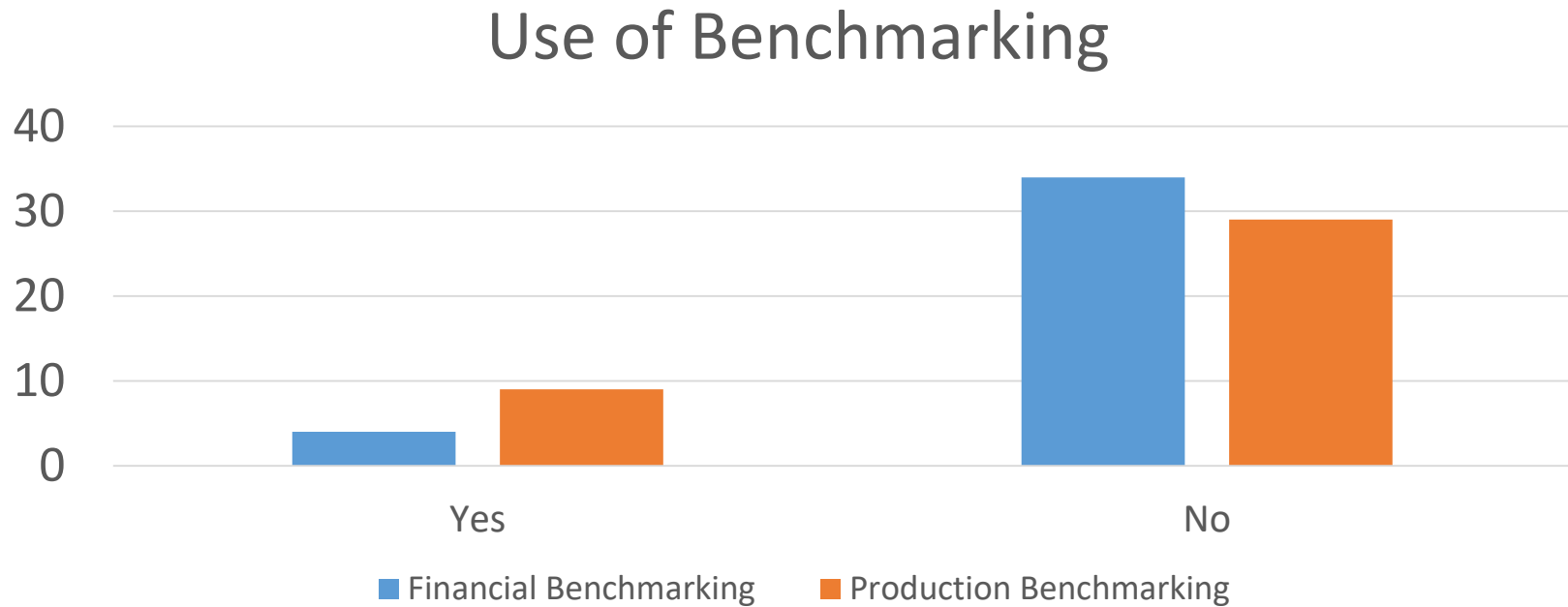


# Is there a disconnect?

## Production and Performance Tracking



# Is there a disconnect?



# How can farmers manage risk of leaving the industry?

Need to understand profitability drivers on farm

- a) What are on-farm trends?
- b) How does my farm compare to the industry?

# What drives profitability?

Table 3 AgriProfits Indicators By Degree of Relationship to Profitability

High relationship	Moderate relationship	Low relationship
Return to Equity per Cow Wintered	Females Exposed	Open Cow Percent (%)
Gross Margin per Pound Weaned	Feed Bedding Pasture per Cow Wintered	Length of Calving (days)
Return to Investment	Pounds Weaned per Total Investment	Length of Calving (days)
Operating Expense F	Days on Feed	Wean Weight as Percent of Mature Cow Weight (%)
Total Production Pound Weaned	Animal Unit Months per Cow Wintered	Conception Rate (%)
Value of F per Cow Wintered	Pounds Weaned per Cow Exposed	% Calved in First 2 Cycles
L per Cow	Days on Pasture	Breeding Season (d
Door Cost per Cow Wintered	Calf Crop (%)	Interest per Total ent
ixed Cost per Cow	Pasture cost per Cow Wintered	Days on Grazing
Winter Feed Cost per Cow Wintered	Pounds Weaned per Cow Wintered	Mature Weight
Total Investment per Cow Wintered	Calving Rate (%)	Wean Rate (%)
Cows Wintered	Growth (wean weight)	Calf Weight Per Day of Age
		Death Loss of Calves (%)

Mostly Financial Factors

Mostly Production Factors

Source: Millang

# What tools should producers be using?

## **A computer**

- a) Know costs of production and how your farm compares to others in industry
- b) In what areas is your business improving?
- c) What is the relationship between the things you do well and profitability?
  - High/Medium/Low
  - Want to avoid spending more time on things we do well that do not contribute to profitability
- d) Scenario testing using farm financial statements

# What tools should producers be using?

## **A network**

- a) Beef profit partnerships model out of Australia/NZ
- b) TEPAP program from Dr. Danny Klinefelter
  - Measuring cost of production has led to opportunities for improvement within their farm business.
- c) Allows to see the business through other's eyes
- d) Focus on a particular issue group wants (and is incentivized) to solve

# What tools should producers be using?

## **A marketing plan**

- a) Profitability makes longevity possible
- b) A marketing plan forces you to think about:
  - What you are selling
  - Where you are selling it
  - How and when will you price it
  - How does your marketing tactics fit with your goals?
- c) Gets around issue of own overconfidence

# What tools should producers be using?

## **A board**

- a) External body of advisors who can challenge manager
  - Forces manager to critically evaluate all decisions
  - Not doing something is a decision
  
- b) Are management decisions aligned with long-term goals of the farm?

# What tools should producers be using?

## **A protocol**

- a) Farming how our grandparents farmed may not cut it
- b) Value chains that pay premiums require documentation
  - Days of “trust me” are over
- c) Enable producers to ‘bolt on’ verification to other marketing programs
  - McDonald’s sustainability initiatives

# Take Home Message

1. Risk identification follows goal formulation
2. What metrics matter?
3. Who is challenging our assumptions?

# Thank You!

## **Contact:**

Eric Micheels

Department of Agricultural and Resource Economics

University of Saskatchewan

306.966.8411

@ericmicheels

eric.micheels@usask.ca

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