Using Key Production & Financial Measures to Manage Farm Activities

Operations Managers Conference

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1. Tools to Organize Work
2. Goals vs. Standards
3. KPI’s to Monitor Results and Focus Workers

Management principles from some of the BEST dairies in the world!

Profitability

1. Improve Work Efficiency
2. Influence Workers to do What YOU Want

$ DAIRY WORKS

MANAGEMENT:

SYSTEMS ... Work that is in control
PEOPLE ...... that implement work systems correctly
MONITOR .... assure results
Work can be defined as a **system** that has structure:

- a series of related **tasks** is a process
- a group of related **processes** is a system

"The more we understand about work the more we can shape it and control it."

### Peanut butter and jelly sandwich

1. Get loaf of bread, peanut butter, strawberry jelly, a plate & knife:
   - bread, peanut butter from cabinet; jelly from refrig
   - Knife from drawer; plate from shelf
2. Put 1 slice of bread on plate
3. Spread peanut butter on bread with knife:
   - Use knife to scoop and spread peanut butter
   - Cover slice of bread @ ¼ inch thick
4. After cleaning knife, spread jelly on top of peanut butter and put second piece of bread on top of jelly
5. Clean up:
   - Return loaf of bread, peanut butter and jelly to cabinet or refrigerator
   - Wash knife, clean counter
6. Serve sandwich

### Organizing Work

**S standard**

**O operating**

**P procedures**

### Protocols

**Flow Charts**

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### Collected and Processed Colostrum

- Milk and co-mingle 1st milk from fresh cows 2X/day in 2 qt bottles
- Measure Aby’s with colostrometer
- Put bottles in refrigerator
- Put freshest on lower shelf

### Prepare Colostrum to Feed

- Warm freshest Colostrum when calf is born
- Bring calf to barn and dip navel
- Feed by suckling for 15 minutes
- Force feed by replegated tube after 15 minutes

### Feeding Colostrum

- Record date & time
- Record cows, calf ID
- Record my P/S issues
- Wash equipment
3. Define the tasks

**Collect and Process Colostrum**
1. Milk and co-mingle colostrum from fresh cows in hospital parlor
2. Head either nipple on colostrum into 4 qt. bottles
3. Attach nipples, spray bottles, put into crate
4. Calf Mgr. transports colostrum immediately to maternity area refrigerator
5. Store freshest colostrum in front, lower shelf

**Prepare Colostrum to Feed**
1. Warm 1 bottle of freshest colostrum immediately when calf is born
2. Transport calf to maternity hutch area and dip navel
3. Warm to 101 degrees

**Feed Colostrum**
1. Attach esophageal tube to bottle of colostrum
2. Force feed by esophageal feeder

**Clean Equipment and Record Information**
1. Fill out preprinted form completely
2. Wash equipment
Organizing Work ....

**3. Defina las tareas**

1.1 Mezcla de leche y calostro de vacas frescas en AM & P.M.
1.2 El ordeñador encargado de colocar calostro en botellas de un 4 qt. de galón.
1.3 Poner el chupón, rociar las botellas, poner en la caja.
1.4 El becerro encargado de transportar el calostro inmediatamente al refrigerador.
1.5 Almacenar calostro más fresco en enfrente, de la parte de abajo.

2.1 Calentar una botella de calostro fresco al nacer el becerro.
2.2 Transportar el becerro a maternidad y poner en la jaula, cortar ombligo y poner yodo.

3.1 Alimentar amamantando por 10 minutos, después de que el calostro esté tibio.
3.2 Alimentar calostro por medio de tubo a través del esófago, después de 10 minutos.

4.1 Llenar forma completamente.
4.2 Lavar el equipo.

**Development charts:**

- combine 2 ideas...
  - e.g. What and who is to do something with when it should be done
- used to develop schedules
Tips for Protocols; SOP’s

1. “Chunk out” parts of work:
   • By worker
   • By activity
   • By location
   • By common sense

2. WRITE BIGGER POINTS IN BOLD HEADINGS:

   2.1 Smaller, sub-points
   2.2 Smaller, sub-points

3. Use short, concise bullet points:
   3.1 NOT: put one piece of bread from the loaf on the plate,
   3.2 BUT: put 1 slice on plate
   3.3 Scoop & spread jelly
       (strawberry if needed)

4. Add amount of detail necessary:
   • Depends on your philosophy
   • Depends on your worker’s needs
   • Depends on options available to workers

5. Write out to either:
   • “This is how we do it here all the time”……robot, no decision, no exceptions!!!!!!!!!
   • Teach workers to make decisions by accumulating facts and coming to a logical decision.
Using Key Production & Financial Measures to Manage Farm Activities

1. Tools to Organize Work
2. Goals vs. Standards

Leadership & Management

Manager
- Organizes Work
- Relies on the Supervisor to train workers
- Monitors results by comparing these to goals; communicates results to supervisor

Supervisor
- Learns the work system from the Manager
- Trains workers
- Monitors workers and work; focuses his workers on standards of performance

Supervisors must learn that goals are achieved by the standards they set:

**GOALS**
- SCC < 200,000
- Heat Detection > 75%
- Pg rate > 22%
- D&C < 60 DIM < 7%
- DOA | < 6%
- Death loss < 8%
- Calf death loss < 2%

**STANDARDS**
- Clean teats on cows on opposite side of parlor
- Crayon placement
- ALL ovsynch injections
- Appetite, attitude, eyes
- Learn stages of labor
- Feed & water for downers: concern
- Milk mixing spotless

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Managing with KPI’s

1. Use numbers to manage people & cows; simplifies records
2. Keep workers focused on results

“To MANAGE, not to Troubleshoot”
What are the “key performance indicators” on a dairy?

A small number of strategic measurements ……..
collected from each area of the dairy……………..
that are representative of general performance…. and can be measured and monitored daily.

A “report card” for each group of workers on your dairy!

Information management on a dairy:

- collect
- analyze
- interpret
- take action
Maternity & Fresh Cow Herdsman
Job Description
(Tony)
Responsible to the Dairy Manager to manage all cows & heifers from when they enter close up pen until they leave the fresh pen. Specific duties include:

1. Observe closeups, assist at calvings as necessary
2. Process fresh animals according to “Fresh Cow Processing” protocol
3. Feed the first gallon of colostrum according to the “Colostrum Delivery” protocol
4. Move animals to fresh pen
5. Lock up, evaluate and treat fresh cows according to the “Fresh Cow Management” protocol
6. Complete all “Calving and Fresh Cow Forms” daily
7. Manage assistants and associate workers in his/her department

Management Strategy
Using KPI Principles to improve Calving and Fresh Cow Management

Case Study: An Arizona Dairy Herd
- 3200 cows milked 3X/day
- Highest producing herd in the state
- Uses DairyWorks KPI Information Management Software
- Identified high cull rate within 60 DIM
- Utilized DairyWorks training seminars and consulting personnel along with KPI information to resolve problem

Herdsman Training
- Focus key employees on “RESULTS”
Maternity & Fresh Cow Herdsman
Job Description
(Tony)
Responsible to the Dairy Manager to manage all cows & heifers from when they enter close up pen until they leave the fresh pen.

**KPI’s:**
1. DOA (Dead On Arrival) Rate
   - Goal: < 7%
   - # calves born dead / # births
2. Total Protein Levels in Newborns
   - Goal: > 95%
   - 24 hour blood samples measured with refractometer
   - # samples > 5.0 / total # samples evaluated
3. % culls < 60 DIM
   - Goal: < 7%
   - # cull & dead < 60 DIM / total # fresh animals
4. % incidence of DA’s
   - Goal: < 1%
   - # DA’s / # fresh animals

**SUMMARY**
May 1 to Sept. 30:

**Summer, 2002**
- 4.8% Culled by 60 DIM
- Percent of total culls 24.8%

**Summer, 2003**
- 2.2% Culled by 60 DIM
- Percent of total culls 13.2%

152 – 69 = 83 additional survivals
83 cows @ $1,500/cow = $124,500

**Using Key Production & Financial Measures to Manage Farm Activities**

1. Tools to Organize Work
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**TAKE HOME MESSAGES:**
- Take control of ORGANIZING work
- “Profit” hangs in the balance
- Efficiency is doing it fast and right
- “Systems” = processes & tasks
- SOP’s = protocols
- “robot” work vs. “decision making work”
Profitability

1. Improve Work Efficiency
2. Influence Workers to do What YOU Want

$ LEADERSHIP / MANAGEMENT MATRIX

LEADERSHIP
- A relationship between people
- Influence others
- Based on Trust
- Skills (buckets)
- Others choose to follow

MANAGEMENT
- Organizing work and workers
- Training and Monitoring
- Feedback for results

Leadership and Management

MANAGEMENT SYSTEMS ……that are in control (Work)
PEOPLE ……..that implement systems correctly (Workers)
MONITORING to assure that both people and systems are in control (Results)
The 6 LEADERSHIP STYLES: Perceived Patterns of Behavior

1. Coercive: Leader demands immediate compliance
2. Authoritative: Leader mobilizes followers toward a vision
3. Affiliative: Leader values individuals and creates harmony
4. Democratic: Leader builds consensus through participation
5. Pacesetting: Leader expects to excel and directs others this way
6. Coaching: Leader develops followers to higher roles, expectations

A dairyman leads with his/her dominant leadership style: followers recognize and respond positively or negatively

1. Coercive style: (intense drive to achieve through control)

"I'm going to deduct $25.00 every time I see another RP. And we are not going to use Excelen in fresh cows anymore because it is too expensive. You can only use penicillin to treat sick cows with metritis."
Coercive style: (intense drive to achieve thru control)

- **Works:**
  - get attention
  - set standards
- **Doesn’t work:**
  - workers reluctant to talk
  - workers stray when leader is absent

Authoritative style: (firm but fair)

- **Works:**
  - need for clear direction
  - commit to goals
- **Doesn’t work:**
  - can be overbearing
  - when leader isn’t as experienced as workers

Affiliative style: (wants to be liked)

- **Works:**
  - to build positive attitude
  - to reinforce success
- **Doesn’t work:**
  - mediocrity tolerated
  - praise allows poor performance to go uncorrected

Democratic style: (wants worker participation)

- **Works:**
  - what do you guys think we should use on metritis cows.....Excenel or penicillin? Which do you think works better?
Democratic style: (wants worker participation)

- Works:
  - when leader is uncertain
  - to get fresh ideas
- Doesn’t work:
  - time consuming
  - resistor can sabotage
  - making decisions that are not best for profit

Pacesetter style: (role model; lead by example)

- Works:
  - with skilled, motivated workers
  - for technical aspects of work
- Doesn’t work:
  - when leader is absent
  - when workers are not committed

Coaching style: (teacher; develop others over time)

- Works:
  - to grow middle managers
  - to teach how and why for protocols
- Doesn’t work:
  - time consuming when need to get things done now
  - costs more when there is high turnover

The 6 LEADERSHIP STYLES:
Perceived Patterns of Behavior

1. Coercive: Intense drive to succeed though control
2. Authoritative: Leader is firm but fair
3. Affiliative: Leader creates harmony and wants to be liked
4. Democratic: Leader builds consensus through participation
5. Pacesetting: Role model; leads by example
6. Coaching: Teacher; develops followers
DAIRY WORKS
PRINCIPLE: ORGANIZE DAIRY (OWNER)

Accountability

Manager

- Organizes Work

Supervisor

- Learns the work system from the Manager

- Relies on the Supervisor to train workers

- Monitors results by comparing these to goals; communicates results to supervisor

- Monitors workers and work; focuses his workers on standards of performance

Teamwork

- DELEGATE:
  - “giving SOMETHING to SOMEBODY”
  - 1. protocols
  - 2. monitor

Personal Growth

Leadership & Management
Supervisor Development

Supervisors must learn that **goals** are achieved by the **standards** they set:

**GOALS**
- SCC < 200,000
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Working Supervisor

- **Worker:** using your experience and getting the work done
- **Supervisor:** Your skills provide the help and direction the rest of your workers need

DAIRY WORKS

You CAN change the attitude of an individual worker:

“Motivate” .......

DAIRY WORKS

Managing the Individual Worker ...

“Motive”: Some inner drive, impulse, intention, etc. that causes a person to do something or get a certain way

“Motivate”: Creating an environment where people work toward a pre-determined outcome

DAIRY WORKS

Managing the Individual Worker ...

Extrinsic motivation:
- Based on rewards or punishment
- “outside influence”
- Controllable

Intrinsic Motivation:
- Based on pride, in work and accomplishment; inner drive
- “fire in belly”
- Uncontrollable
Motivating Workers

Manager:
- Establish Goals
- Devise systems
- Train Workers
- Compare results with goals and Feedback

Worker:
- Learn work systems
- Bring the right "attitude"
- Work correctly
- Improve with feedback

Motivate! Motivated!

DAIRY WORKS
Managing the Individual Worker
Extrinsic Motivation: "Incentives"

PLUSES:
1. Forces managers to set goals
2. Managers measure performance
3. Sets clear standards for workers
4. Rewards extra work and interest

NEGATIVES:
1. Destroys "teamwork" / workers blame other workers
2. Workers try to "beat the system"
3. Workers can't control circumstances that affect their bonus
4. Send signal: pay more just to do it right
5. Good effort but no bonus: de-motivate workers unexpectedly
6. Get bonus once, expect it all the time
7. "Sales personnel" vs "Service providers"
8. Workers required to solve problems... appropriate?

Profitability

1. Improve Work Efficiency
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DAIRY WORKS MANAGEMENT SYSTEM