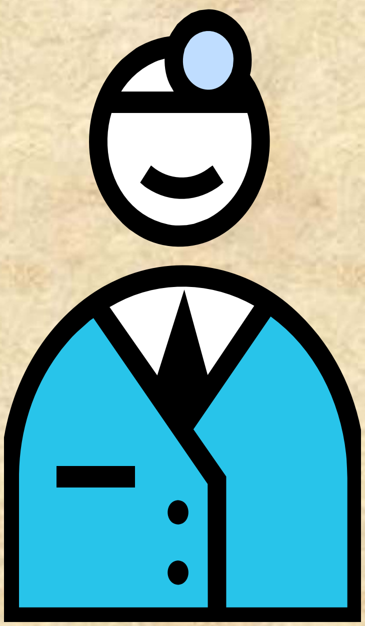
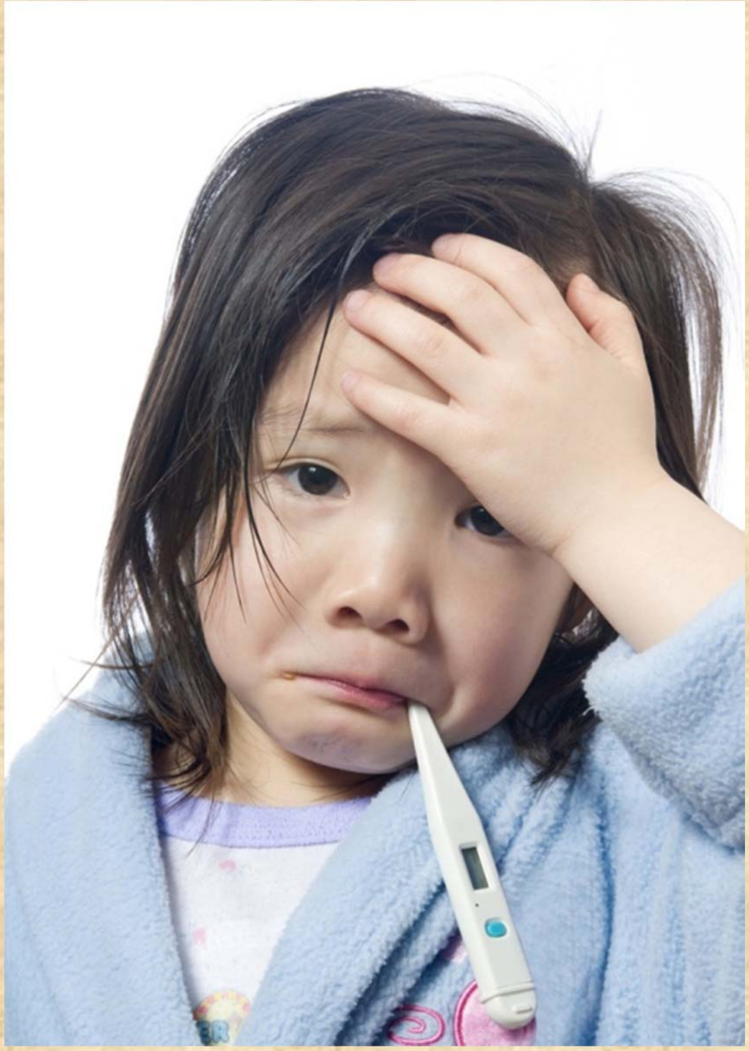
John P. Hewlett
Ranch/Farm Management Specialist
University of Wyoming
Agricultural & Applied Economics

Agricultural
Financial Management -101

EVALUATING FARM/RANCH FINANCIAL HEALTH

GOT FINANCIAL HEALTH?





SOURCES OF RISK

- Production- yield/quality variability
- Marketing- changes in price/external conditions
- Financial- variability in debt/equity capital and ability to meet cash demands
- Legal- responsibilities for contracts, statutory compliance, tort liability, and business structure
- Human- managing people and estate transfers

DETERMINING YOUR FINANCIAL HEALTH

- Historically, most producers are weak in knowledge and commitment to adequate financial analysis
- Often agricultural financial analysis is:
  - Inconsistent
  - Misguided
  - Misleading
  - Short Sighted

KEY PRODUCER ITEMS/CONCERNS

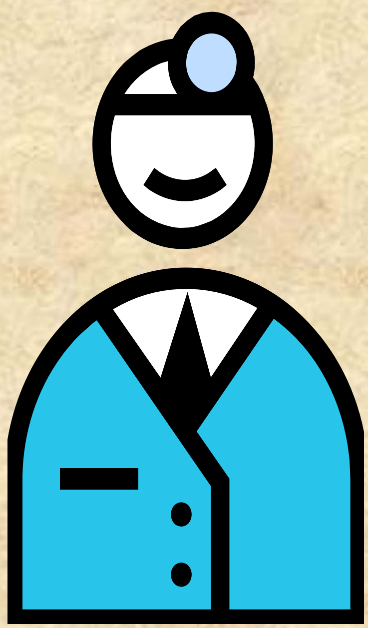
- Adequate funds for family living
  - For all families that might be involved
- Alternative enterprises, enterprise mix
- Debt Load and Structure
- Expansion plans/capabilities
- Dependence on government payments
- Managing cost of production, financial info, marketing, labor (family)
- Tight profit margins – Simply Surviving

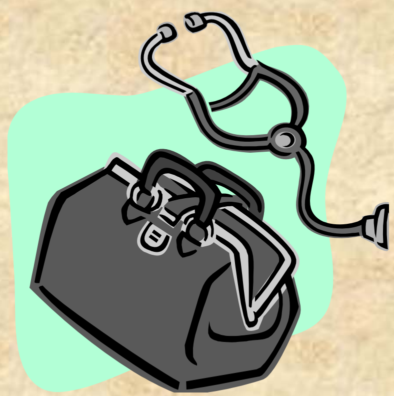
WHAT KEY FACTORS DETERMINE FINANCIAL HEALTH?

- Is it a positive Cash Flow
- A large Net Worth
- Paying no taxes to reduce cash outflows
- Lots of family labor (good hard work)
- Location
- Positive Net Income
- ?
- ?
- ?

GOT FINANCIAL HEALTH?

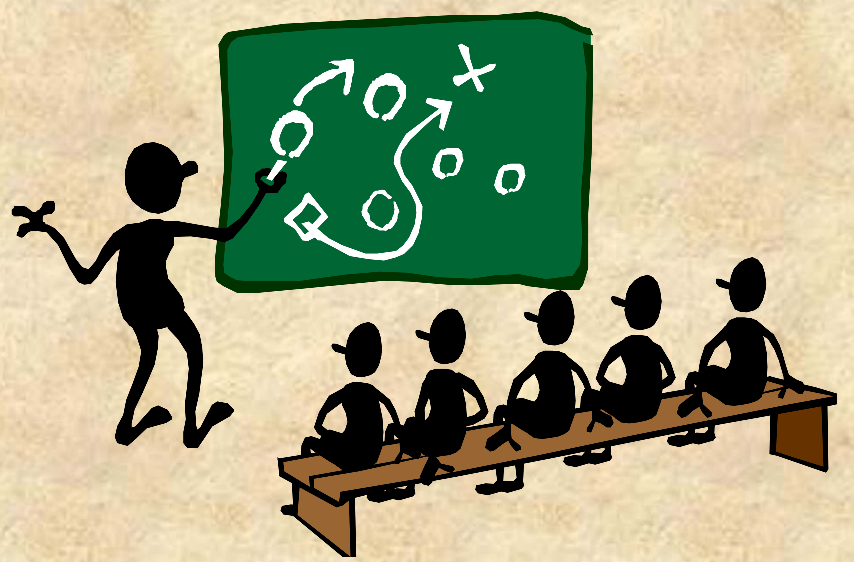
- Need to know Business Position
- Need to know Business Performance
- What Yard Stick(s) should be used





DETERMINING YOUR FINANCIAL HEALTH: WHAT?

- What is Financial Health?
  - Financial health refers to the well being of a business as measured by adequate financial analysis.
  - Financial Health can be evaluate in five areas:
    - Liquidity
    - Solvency
    - Profitability
    - Repayment Capacity
    - Financial Efficiency



If you can’t measure it, you can’t manage it!!

DETERMINING YOUR FINANCIAL HEALTH: WHY?

- Financial Business Performance Analysis is important because:
  - Our financial health determines the decisions we can make.
  - Often our personal financial well being depends on our agricultural business's financial health
  - Long run survivability depends largely on the long run profitability of our business

DETERMINING YOUR FINANCIAL HEALTH: HOW?

- PROFITABILITY
- It is critical to be or become profitable
- Positive net income is the only way to earn equity growth in a business

ACCOUNTING

Cash Inflows/Outflow

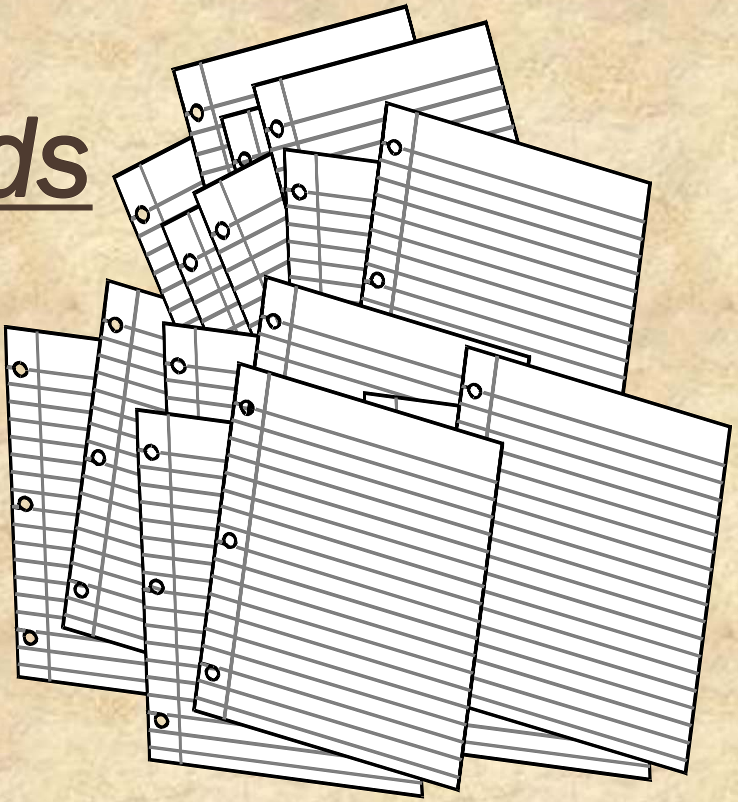
Other Resource Inflow/Outflow

- Land
- Labor
- Capital
- Time

Profit

DETERMINING YOUR FINANCIAL HEALTH: HOW?

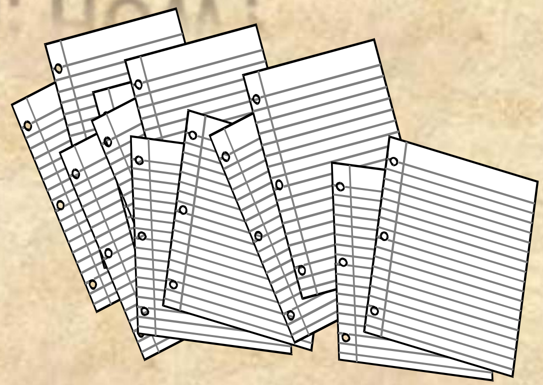
- *Financial Records*



COMPONENTS OF A COMPLETE RECORD SYSTEM

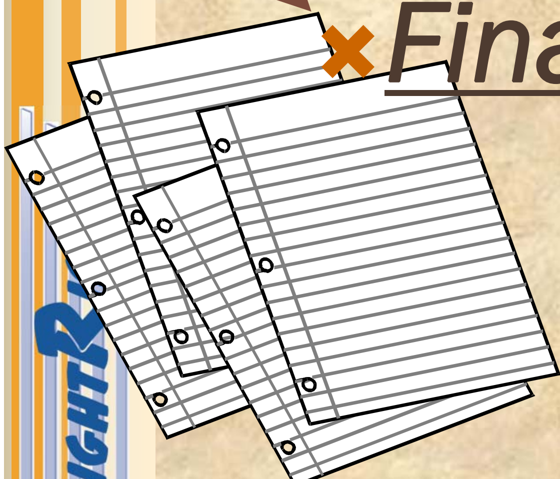
1. Cash transactions
2. Physical inventories
3. Financial inventories
4. Financial statements
5. Production records
6. Labor and machinery records
7. Family accounts and non-farm business records
8. Records summaries

DETERMINING YOUR FINANCIAL HEALTH: HOW?



- Financial Records

- *Financial Statements*

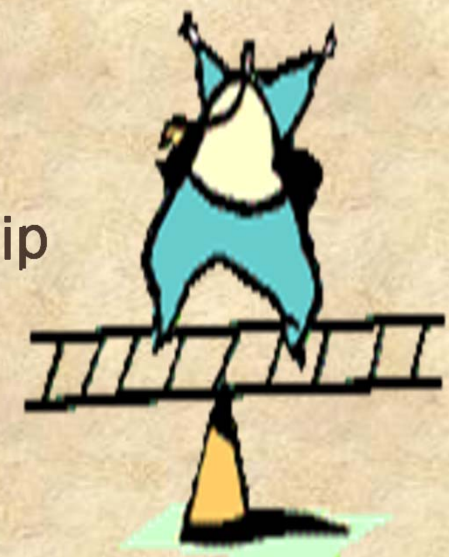


COMPLETE FINANCIALS REQUIRED

- Beginning and Ending Balance Sheets
- Cash Flow Statement
  - (Statement of Cash Flows)
- Accrual Adjusted Income Statement
- Statement of Changes in Owner Equity

FINANCIAL STATEMENTS

- Balance Sheets
  - Describe things of value and their ownership
  - Show values at a point in time (inventory), thus can be used to show changes over longer periods of time
  - Shows: Assets = Liabilities + Owner Equity



Assets

Ownership

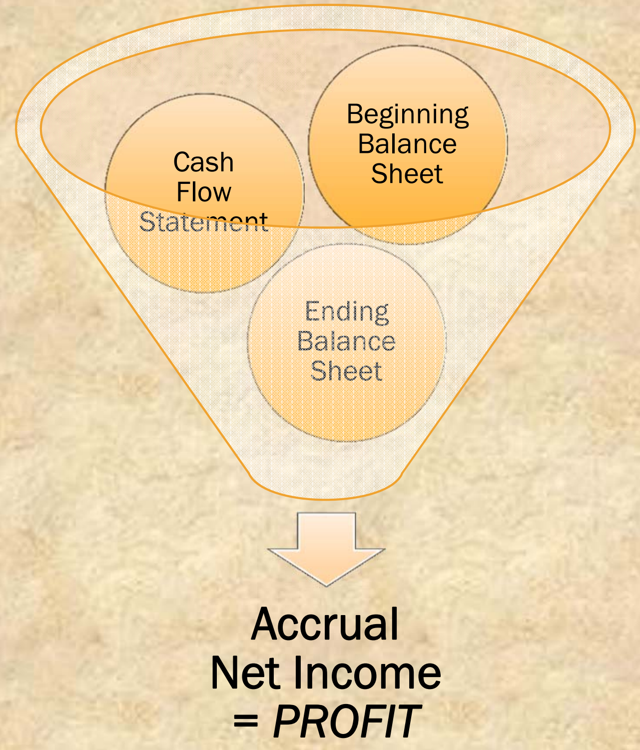
- Outside Interests
- Internal Interests

FINANCIAL STATEMENTS

- Cash Flow Statement
  - Documents changes in cash balances over the period (inflows/outflows)
  - Traditionally for agriculture this statement will show a month by month account

FINANCIAL STATEMENTS

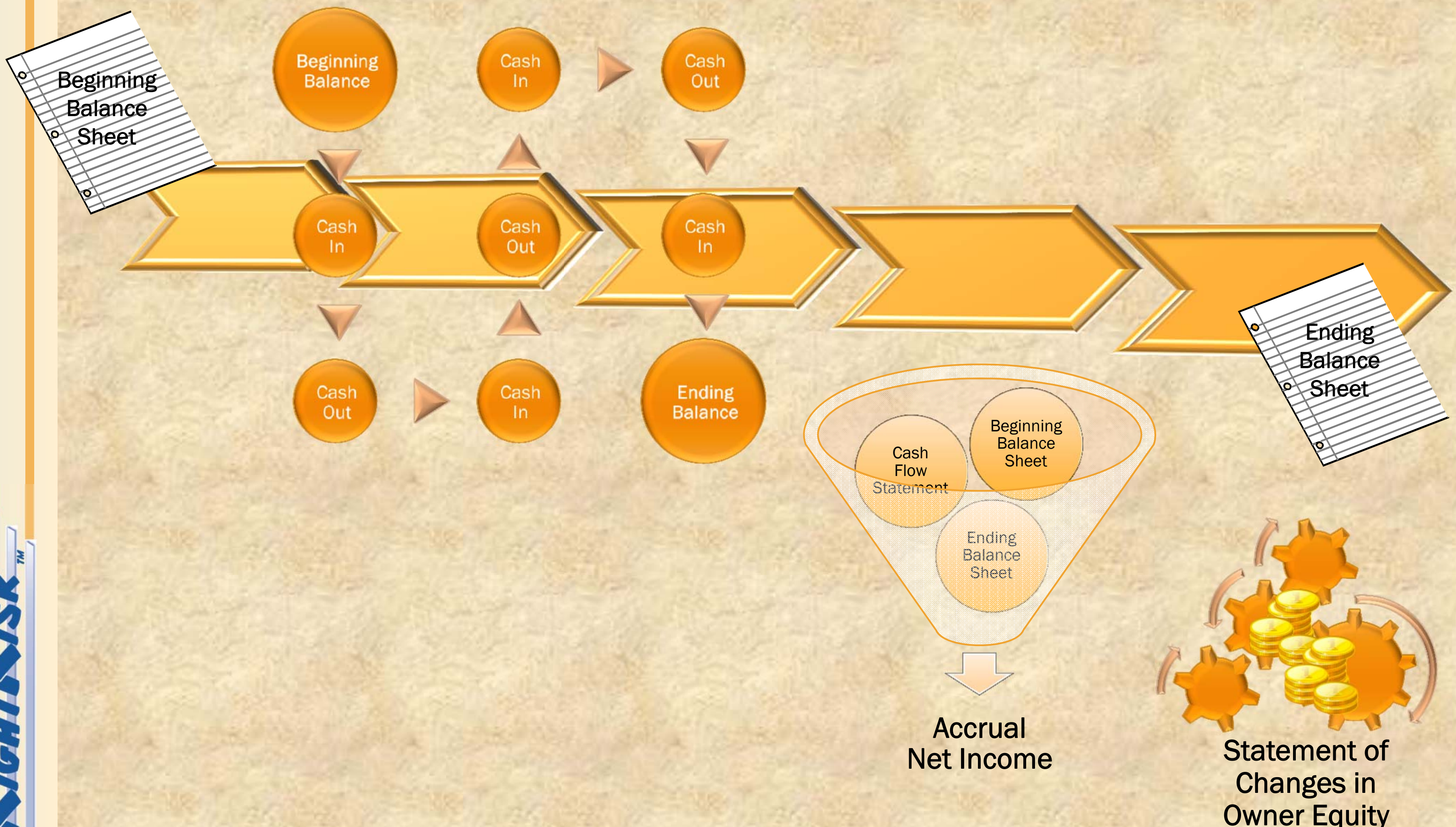
- Accrual Income Statement
  - Shows all changes in cash for the period
  - Shows all changes in non-cash accounts over the period
    - *Revenue* items like increases in inventories, etc.
    - *Expense* items like depreciation, accrued interest, accrued tax liabilities, etc.
  - Shows accrual net income or <u>*profit for period*</u>



FINANCIAL STATEMENTS

- Statement of Changes in Owner Equity
  - Shows impacts of changes described by the income statement on *equity position*
  - Also documents any withdrawals or contributions of equity over the period

FINANCIAL STATEMENTS

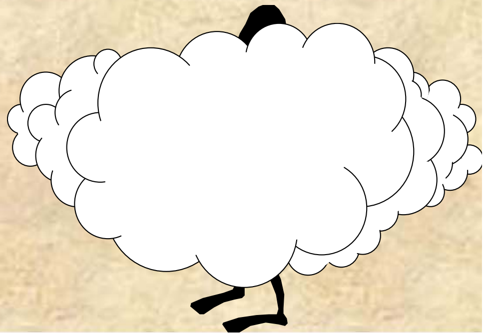


DETERMINING YOUR FINANCIAL HEALTH: HOW?

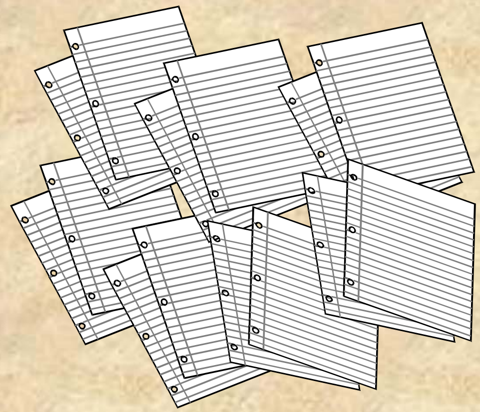
- Financial statements allow financial performance to be adequately evaluated if they are:
  - Reconciled
  - Complete
  - Shared

TERMINOLOGY CAUSES US PROBLEMS

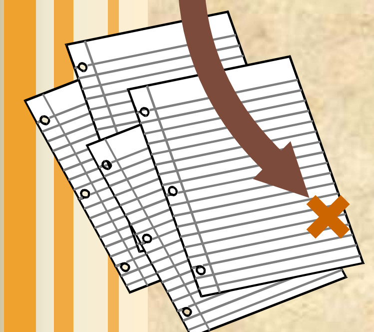
- Expense versus Expenditure
- All cash inflows are not income
  - Loan proceeds from lenders
- All cash outflows are not expenses
  - Principal payments to lenders
- Non-cash expenses
  - Depreciation, accrual adjustments
- Non-cash income
  - Accrual adjustments



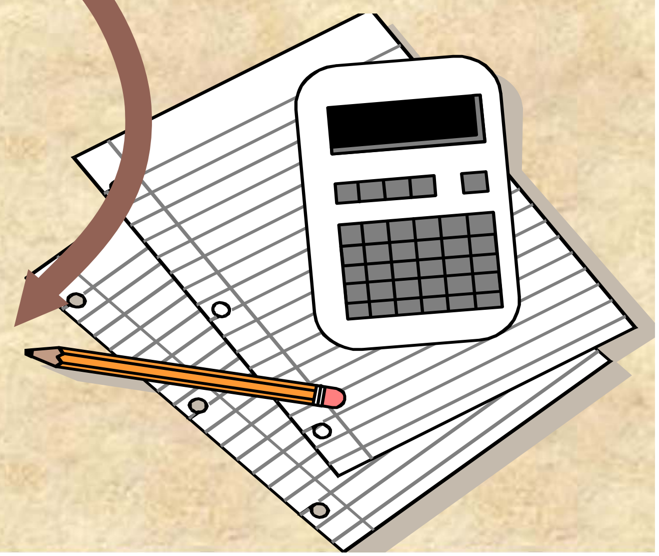
DETERMINING YOUR FINANCIAL HEALTH: HOW?



- Financial Records



- Financial Statements



- *Financial Analysis*

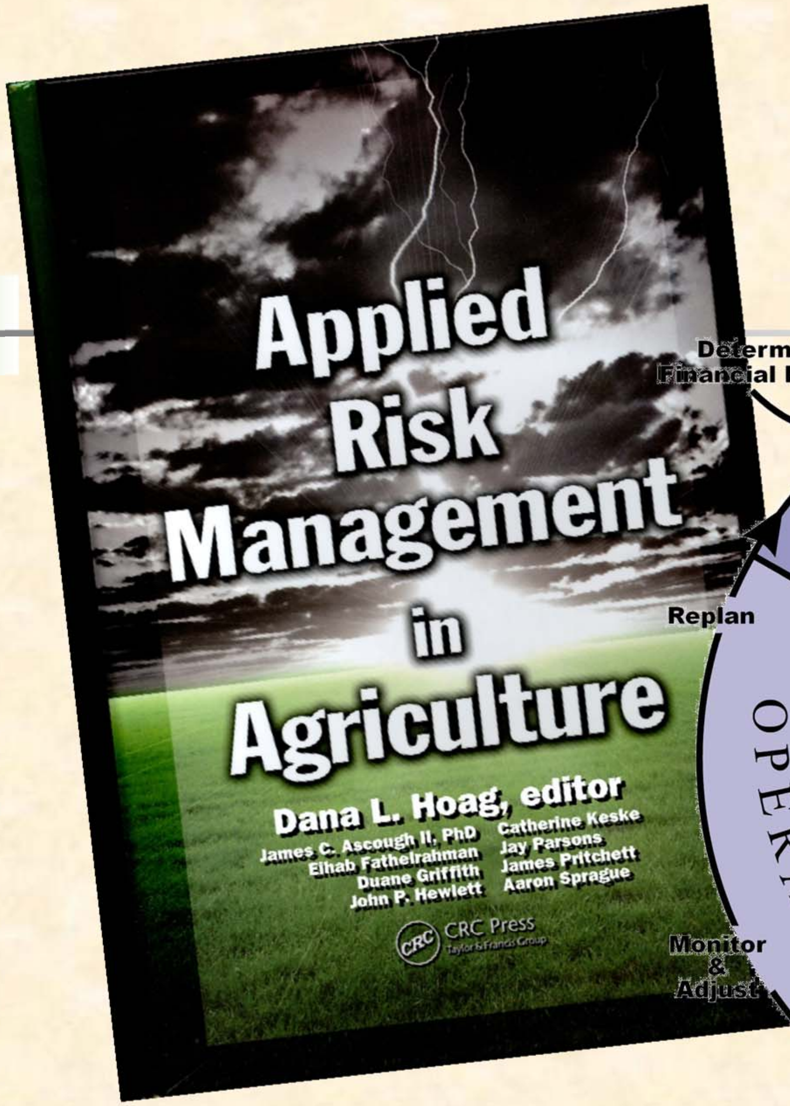
FINANCIAL ANALYSIS

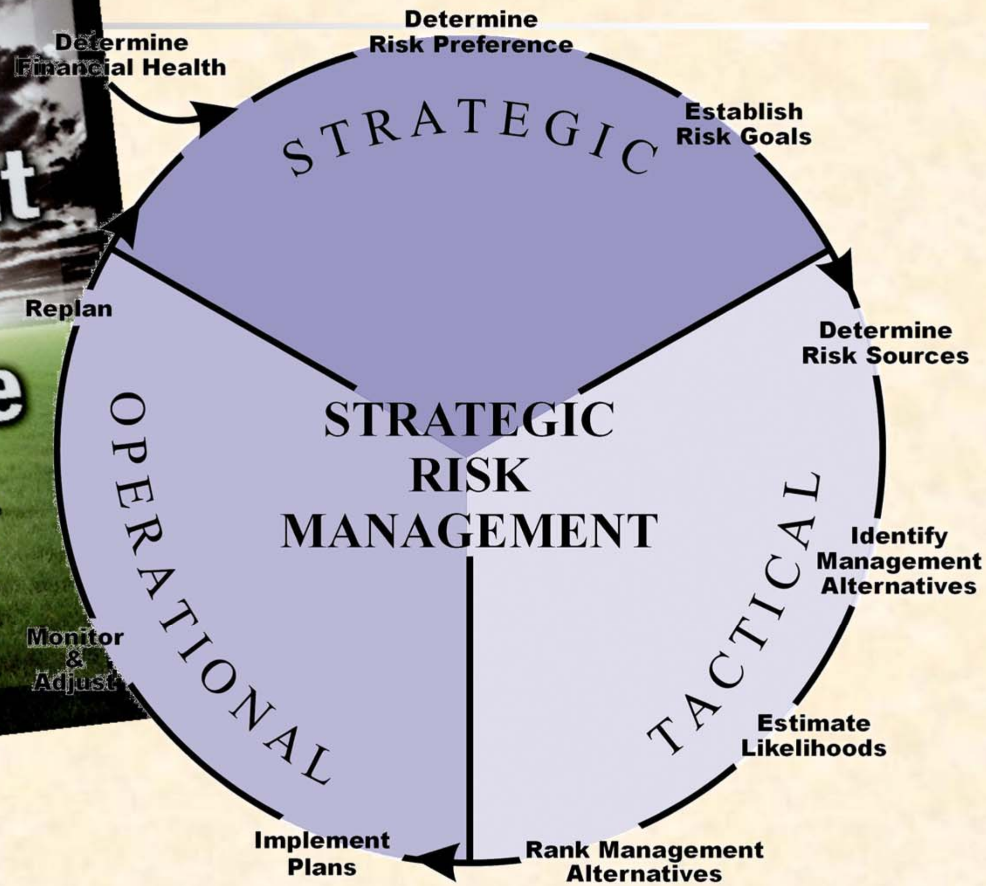
- Liquidity
  - Measures the ability of the operation to meet its short-term debt obligations
  - Looking at 12 months or less
- Solvency
  - Measures the ability of the operation to meet its long-term debt obligations
  - Looking at over one year

FINANCIAL ANALYSIS

- Profitability
  - Measures the ability of the operation to generate returns over its expenses
- Efficiency
  - Measures how efficiently the operation has used its resource base to generate revenue
- Repayment Capacity
  - Measures the capacity of the operation to repay debt obligations


Introduction
Strategic
Tactical
Operational
Ag Risks
Do It Yourself
RiskNavigator SRM

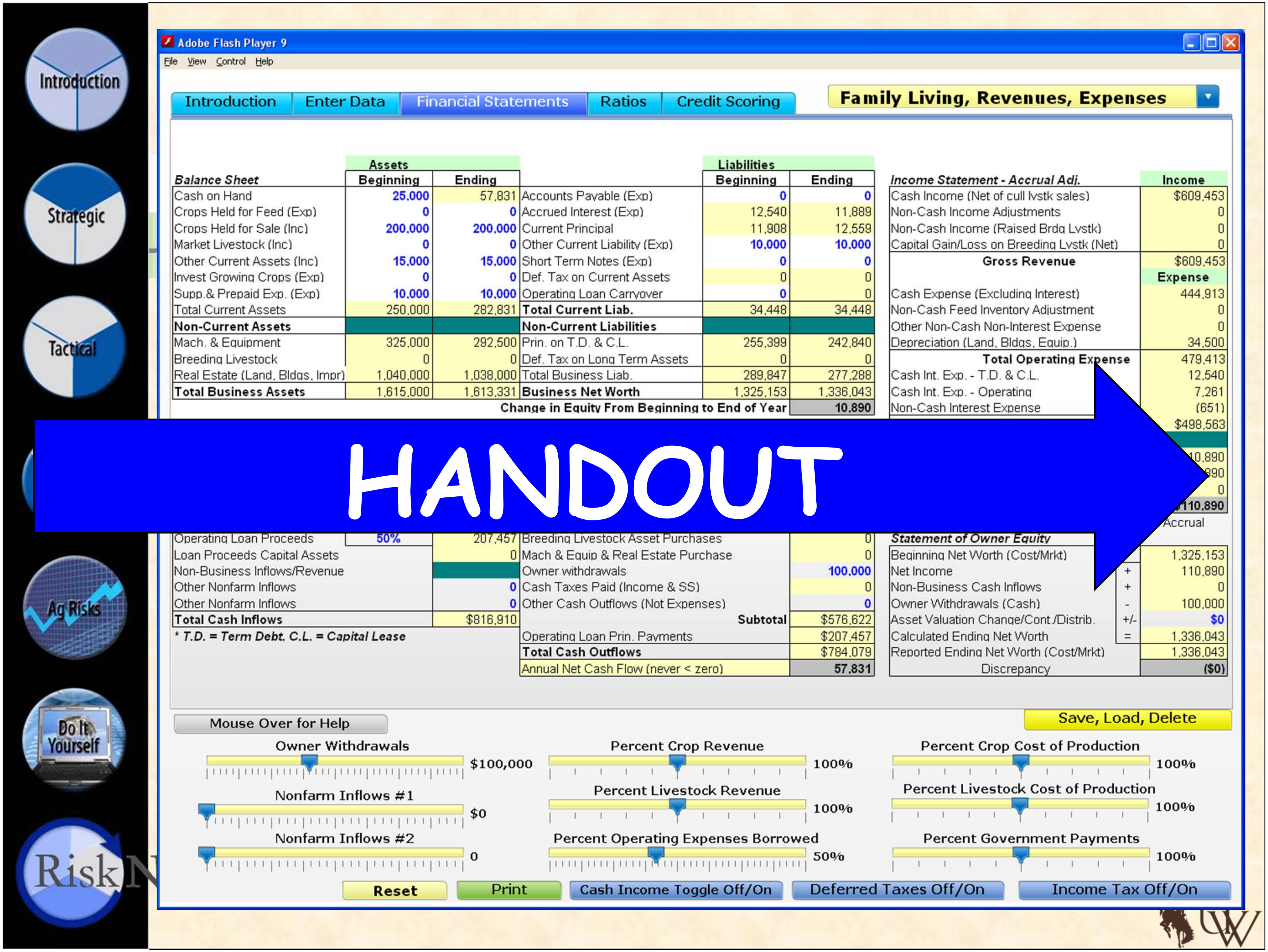

Applied Risk Management in Agriculture
Dana L. Hoag, editor
James C. Ascough II, PhD
Elhab Fathelrahman
Duane Griffith
John P. Hewlett
Catherine Keske
Jay Parsons
James Pritchett
Aaron Sprague
CRC Press


Determine Financial Health
Determine Risk Preference
Establish Risk Goals
STRATEGIC
Determine Risk Sources
Identify Management Alternatives
TACTICAL
Estimate Likelihoods
Rank Management Alternatives
Implement Plans
OPERATIONAL
Monitor & Adjust
Replan
STRATEGIC RISK MANAGEMENT

HANDOUT

http://RightRisk.org
Risk Navigator SRM

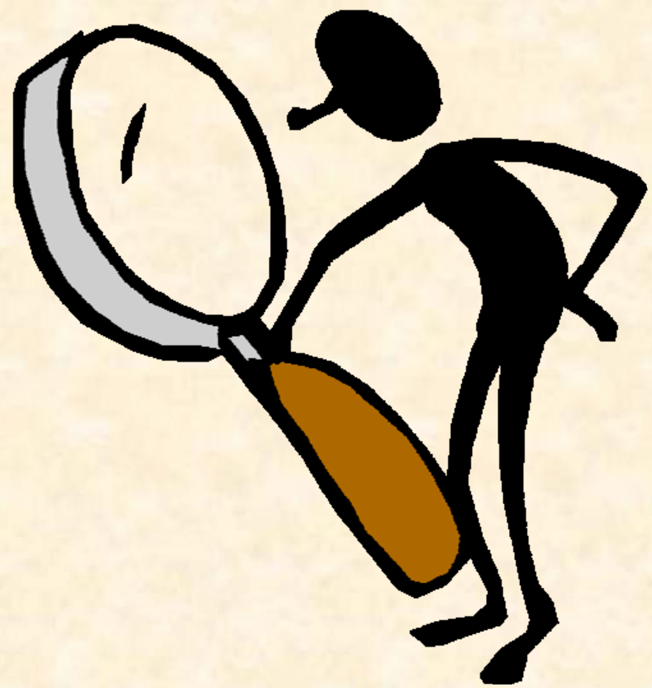
RightRisk™


Introduction
Strategic
Tactical
Ag Risks
Do It Yourself
Adobe Flash Player 9
File View Control Help
Introduction | Enter Data | Financial Statements | Ratios | Credit Scoring
Family Living, Revenues, Expenses
Balance Sheet | Assets Beginning | Ending | Liabilities Beginning | Ending
Cash on Hand 25,000 57,831 Accounts Payable (Exp) 0 0
Crops Held for Feed (Exp) 0 0 Accrued Interest (Exp) 12,540 11,889
Crops Held for Sale (Inc) 200,000 200,000 Current Principal 11,908 12,559
Market Livestock (Inc) 0 0 Other Current Liability (Exp) 10,000 10,000
Other Current Assets (Inc) 15,000 15,000 Short Term Notes (Exp) 0 0
Invest Growing Crops (Exp) 0 0 Def. Tax on Current Assets 0 0
Supp.& Prepaid Exp. (Exp) 10,000 10,000 Operating Loan Carryover 0 0
Total Current Assets 250,000 282,831 Total Current Liab. 34,448 34,448
Non-Current Assets Non-Current Liabilities
Mach. & Equipment 325,000 292,500 Prin. on T.D. & C.L. 255,399 242,840
Breeding Livestock 0 0 Def. Tax on Long Term Assets 0 0
Real Estate (Land, Bldgs, Impr) 1,040,000 1,038,000 Total Business Liab. 289,847 277,288
Total Business Assets 1,615,000 1,613,331 Business Net Worth 1,325,153 1,336,043
Change in Equity From Beginning to End of Year 10,890
Income Statement - Accrual Adj. Income
Cash Income (Net of cull lvstk sales) $609,453
Non-Cash Income Adjustments 0
Non-Cash Income (Raised Brdg Lvstk) 0
Capital Gain/Loss on Breeding Lvstk (Net) 0
Gross Revenue $609,453
Expense
Cash Expense (Excluding Interest) 444,913
Non-Cash Feed Inventory Adjustment 0
Other Non-Cash Non-Interest Expense 0
Depreciation (Land, Bldgs, Equip.) 34,500
Total Operating Expense 479,413
Cash Int. Exp. - T.D. & C.L. 12,540
Cash Int. Exp. - Operating 7,261
Non-Cash Interest Expense (651)
$498,563
HANDOUT
Accrual
Operating Loan Proceeds 50% 207,457 Breeding Livestock Asset Purchases 0
Loan Proceeds Capital Assets 0 Mach & Equip & Real Estate Purchase 0
Non-Business Inflows/Revenue Owner withdrawals 100,000
Other Nonfarm Inflows 0 Cash Taxes Paid (Income & SS) 0
Other Nonfarm Inflows 0 Other Cash Outflows (Not Expenses) 0
Total Cash Inflows $816,910 Subtotal $576,622
* T.D. = Term Debt, C.L. = Capital Lease
Operating Loan Prin. Payments $207,457
Total Cash Outflows $784,079
Annual Net Cash Flow (never < zero) 57,831
Statement of Owner Equity
Beginning Net Worth (Cost/Mrkt) 1,325,153
Net Income + 110,890
Non-Business Cash Inflows + 0
Owner Withdrawals (Cash) - 100,000
Asset Valuation Change/Cont./Distrib. +/- $0
Calculated Ending Net Worth = 1,336,043
Reported Ending Net Worth (Cost/Mrkt) 1,336,043
Discrepancy ($0)
Mouse Over for Help
Save, Load, Delete
Owner Withdrawals $100,000
Percent Crop Revenue 100%
Percent Crop Cost of Production 100%
Nonfarm Inflows #1 $0
Percent Livestock Revenue 100%
Percent Livestock Cost of Production 100%
Nonfarm Inflows #2 0
Percent Operating Expenses Borrowed 50%
Percent Government Payments 100%
Reset
Print
Cash Income Toggle Off/On
Deferred Taxes Off/On
Income Tax Off/On

Topics Examined With RDFinancial

- Owner Withdrawals
- Non-business income
- Government Payments
- Capital asset purchase
- Cost of Production
- Asset revaluation
- Debt Load (asset and liability structure)
- Risk Protection Tools (Insurance)
- Non-cash expense (not depreciation)

- Non-cash income
- Contributed capital
- Distributed capital

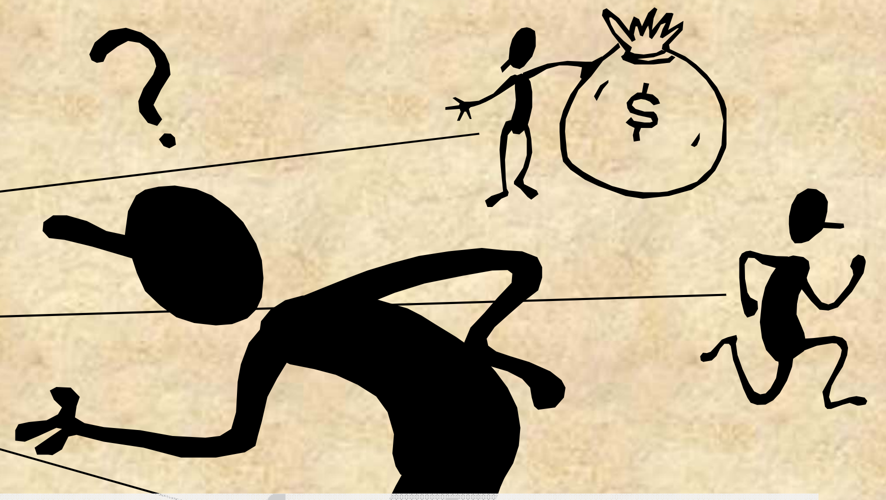


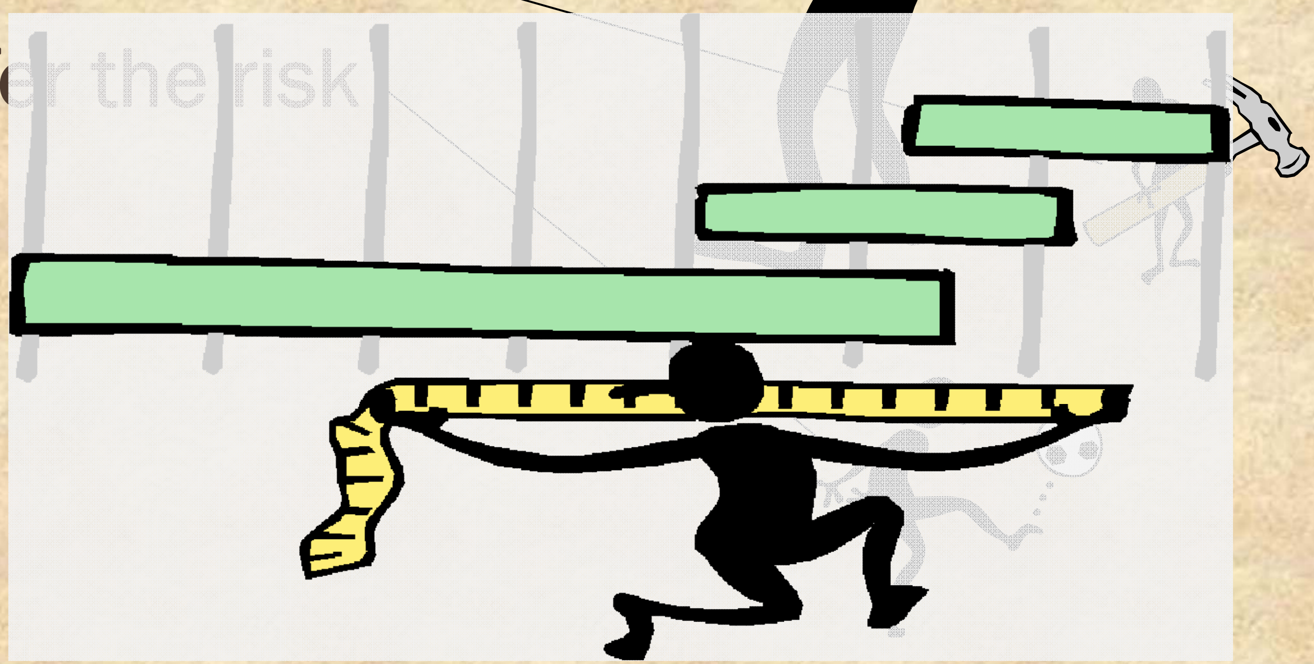
SOURCES OF RISK

- Production- yield/quality variability
- Marketing- changes in price/external conditions
- Financial- variability in debt/equity capital and ability to meet cash demands
- Legal- responsibilities for contracts, statutory compliance, tort liability, and business structure
- Human- managing people and estate transfers

IDENTIFY MANAGEMENT ALTERNATIVES

- Assume the risk
- Avoid the risk
- Reduce the risk
- Transfer the risk





CURRENT FEDERAL INSURANCE OPTIONS

Insu

County	Who Far AGR-L	LRP Fed Cattle	LRP Swine	LRP Lamb	Vegetation Index - Apiculture
Albany	R	D	D	D	P,D
Big Horn	R	D	D	D	P,D
Campbell	R	D	D	D	P,D
Carbon	R	D	D	D	P,D
Converse	R	D	D	D	P,D
Crook	R	D	D	D	P,D
Fremont	R	D	D		P,D
Niobrara	R	D	D		P,D
Park	R	D	D	D	P,D
Platte	R	D	D	D	P,D
Sheridan	R	D	D	D	P,D
Sublette	R	D	D	D	P,D
Sweetwater	R	D	D	D	P,D
Teton	R	D	D	D	P,D
Uinta	R	D	D	D	P,D
Washakie	R	D	D	D	P,D
Weston	R	D	D	D	P,D

Type o
M = M
APH=
YP=Y
RP=
RPE=
R= R
P= P
D=D

2009 Wyoming Crop Insurance

Insurance Plans Available in Wyoming

Insurable Crops	Insured Acres	Total Acres	Percent Insured
Alfalfa Seed (APH)	7,844	10,500	75%
Barley (APH)	40,964	80,000	51%
Corn (APH, CRC, GRIP, GRP)	55,436	90,000	62%
Dry Beans (APH)	31,429	37,500	84%
Forage Production (APH)	150,558	690,000	22%
Forage Seeding (Dollar)	4,576	35,000	13%
Millet (APH)	4,538	12,400	37%
Oats (APH)	6,601	40,000	17%
Potatoes (APH)	547	558	98%
Sugar Beets (APH)	24,584	31,000	79%
Sunflowers (APH, RA)	6,505	7,720	84%
Wheat (APH, CRC, GRIP, GRP)	131,159	155,000	85%
Sub -Totals:	464,741	1,189,678	39%
Prevented Planting	2229		
Grand -Total:	466,970		

HANDOUT

Lamb (LRP)	1,478,293
Swine (LRP, LGM)	0
Adjusted Gross Revenue – LITE (AGR-LITE)	466,539
Apiculture (Vegetation Index)	0
Nursery (Dollar)	254,541
Pasture, Rangeland, Forage (Vegetation Index)	30,264,639
Total	33,373,834

Crop Pilot Programs

Program	County Availability
Alfalfa Seed (APH)	Big Horn, Park Counties
Apiculture (Vegetation Index)	All Counties
Pasture, Rangeland & Forage (Vegetation Index)	All Counties

Billings Regional Office
Contact: Doug Hagel, Director
Address: 3490 Gabel Road
Suite 100
Billings, MT 59102
Phone: (406) 657-6447
Fax: (406) 657-6573
E-Mail: rsomt@rma.usda.gov

Northern Regional Compliance Office
Contact: Mark Huber, Director
Address: Suite 200
3400 Federal Drive
Egan, MN 55122
Phone: (612) 725-3730
Fax: (612) 725-3735
E-Mail: cfomn@rma.usda.gov

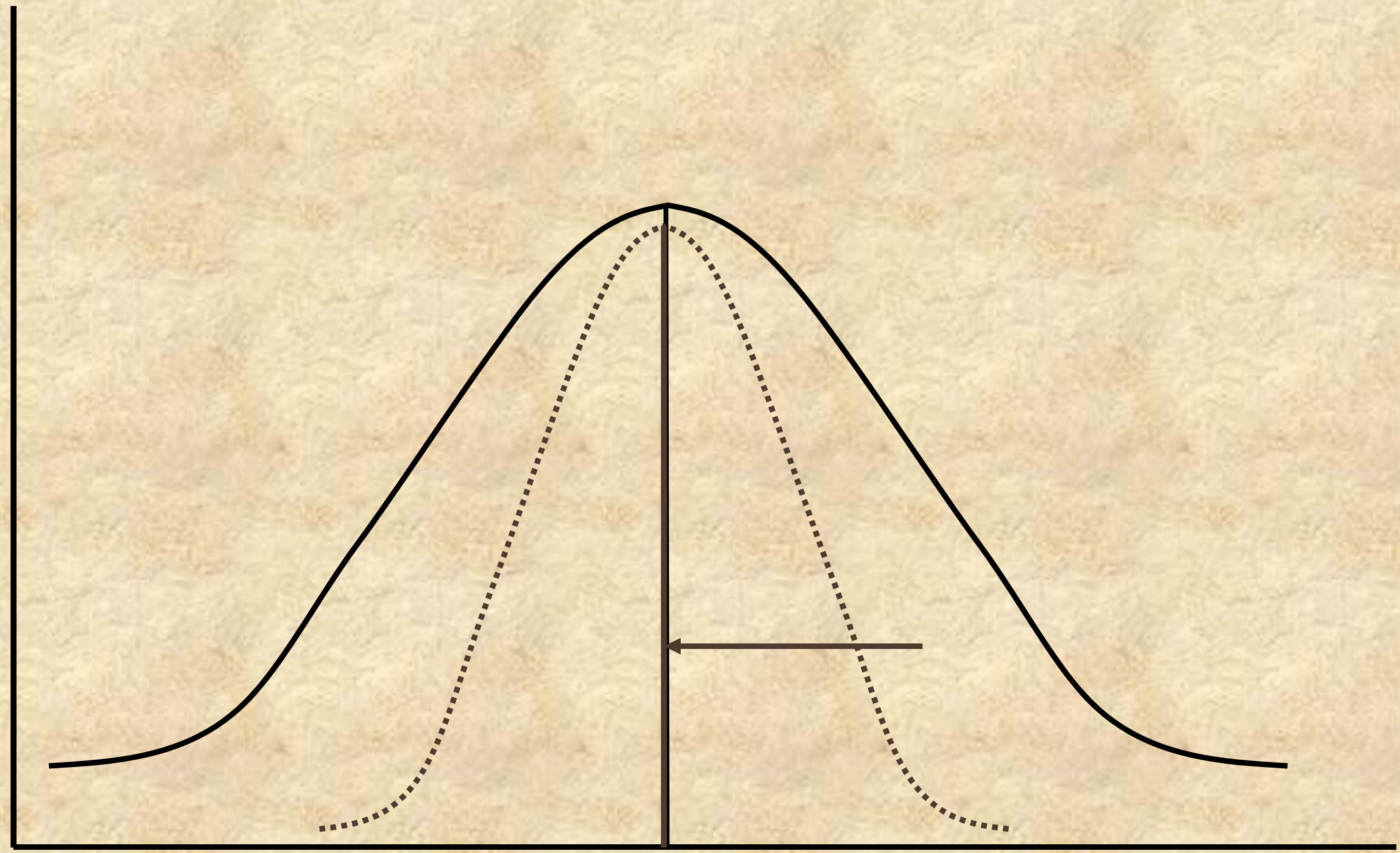
APH – Actual Production History
CRC – Crop Revenue Coverage
GRP – Group Risk Plan
GRIP – Group Risk Income Plan
IP – Income Protection
LGM – Livestock Gross Margin
LRP – Livestock Risk Protection
RA – Revenue Assurance

Data as of January 11th, 2010

CROP INSURANCE

- Kinds of risk addressed by crop insurance:
  - Yield risk
  - Price risk
  - Revenue risk (yield and price)
- Benefit of crop insurance in the management of risk;

TRANSFER



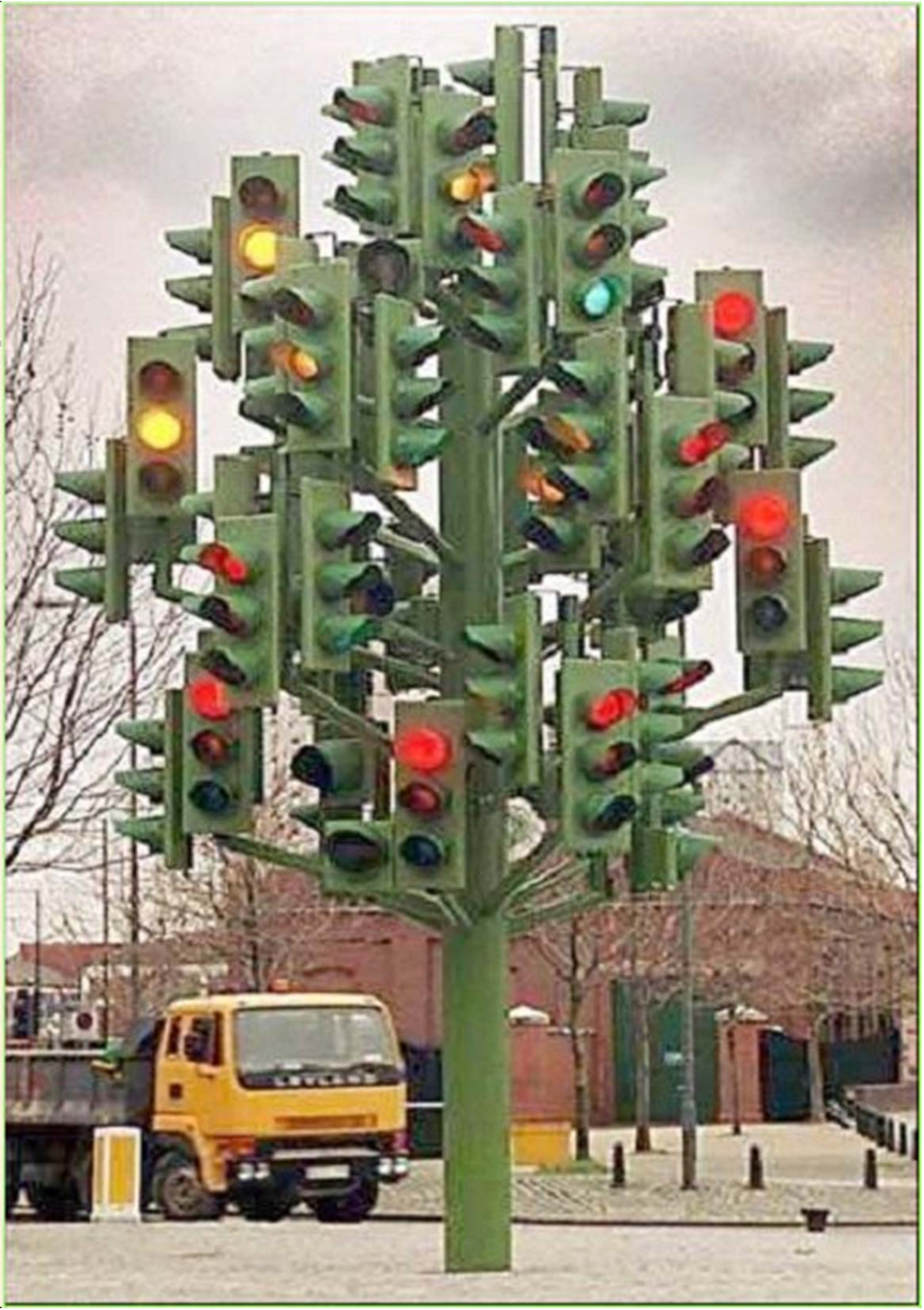
CROP INSURANCE

- Use of crop insurance can affect other risk management decisions, such as the use of marketing and financial tools;
- Must make informed decisions on crop insurance prior to the sales closing date deadline
- Recordkeeping requirements for crop insurance.

Parting Comment

Do <u>not</u> risk the future of your operation (family and business) with frustration over preparing detailed financial statements.

Just do it!




QUESTIONS?
RIGHTRISK
RMA