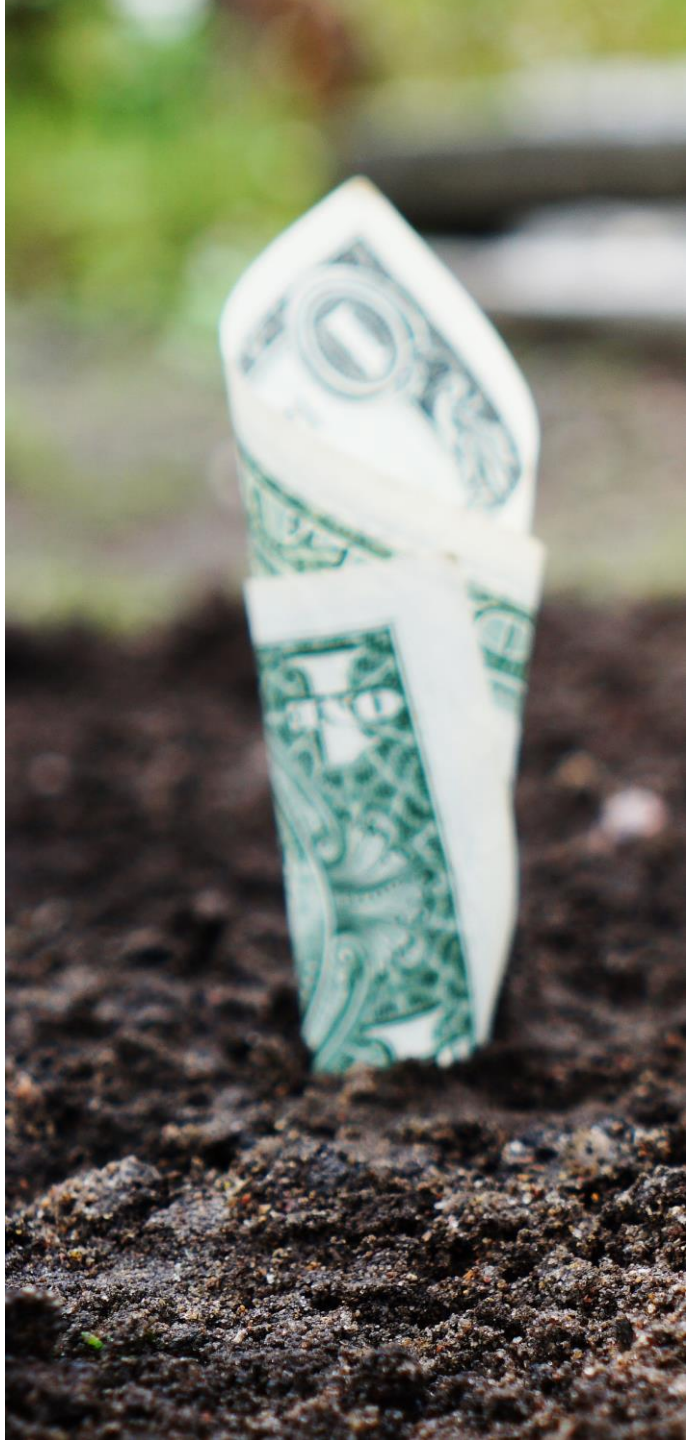
The Farmer Business Case for Sustainability

Learning Objectives

- Communicate the value of sustainability to customers
- Respond to producer questions about demand
- Highlight examples of successful farmers
- Forecast potential economic benefits

Finding Value in Sustainable Agriculture

- Reduce risk with technical support
- Increase operational efficiency
- Connect to financial assistance programs
- Engage in supply chain sustainability projects
- Protect freedom to operate



Reduce Risk with Technical Support

Chapter 1

Reduce Risk With Technical Support

Example: Grower wants to add cover crops to rotation.
Guidance needed to:

- Select appropriate seed
- Establishing healthy stands
- Terminate cover crop

Reduce Risk With Technical Support

Other examples

- Reduced tillage
- Variable rate technology
- Irrigation technology

Reduce Risk With Technical Support

You are not alone

- American Society of Agronomy
- Conservation Districts
- NRCS
- Cooperative Extension

Photo courtesy USDA Natural Resource Conservation Service

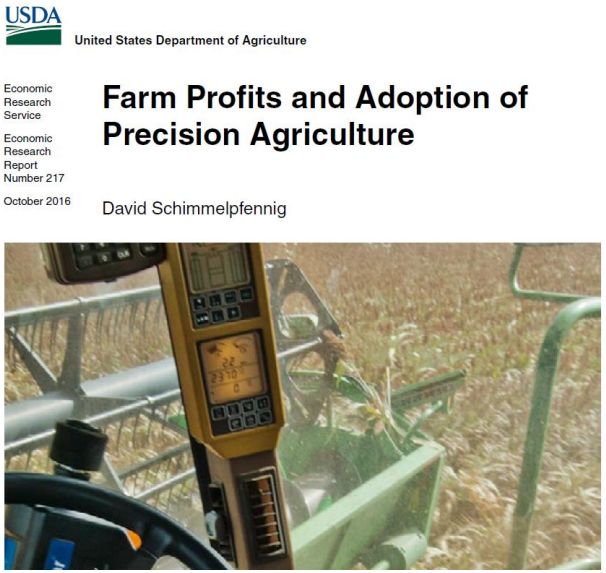
Discussion

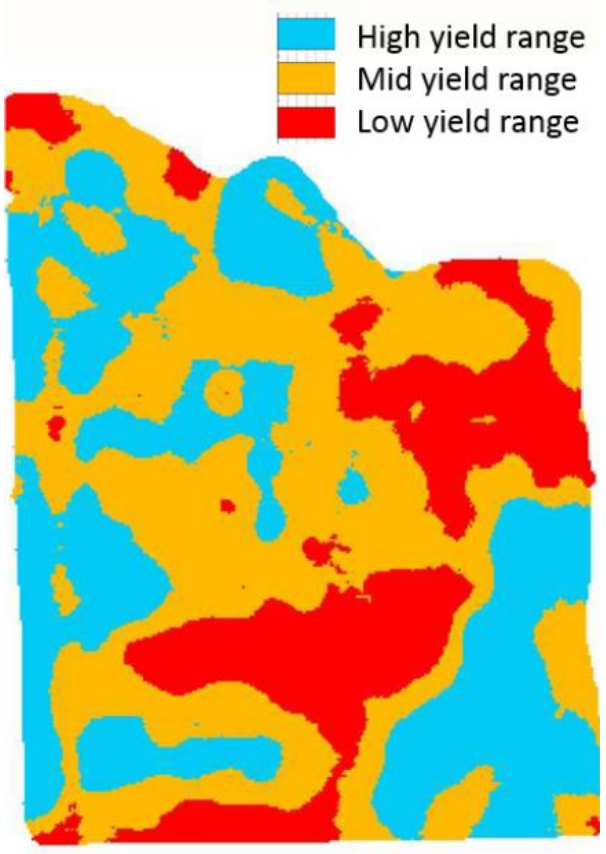
Increase Operational Efficiency: Supporting Research

Chapter 2

Increasing Operational Efficiency: Supporting Research

USDA-ERS Study: Precision technology reduces input costs

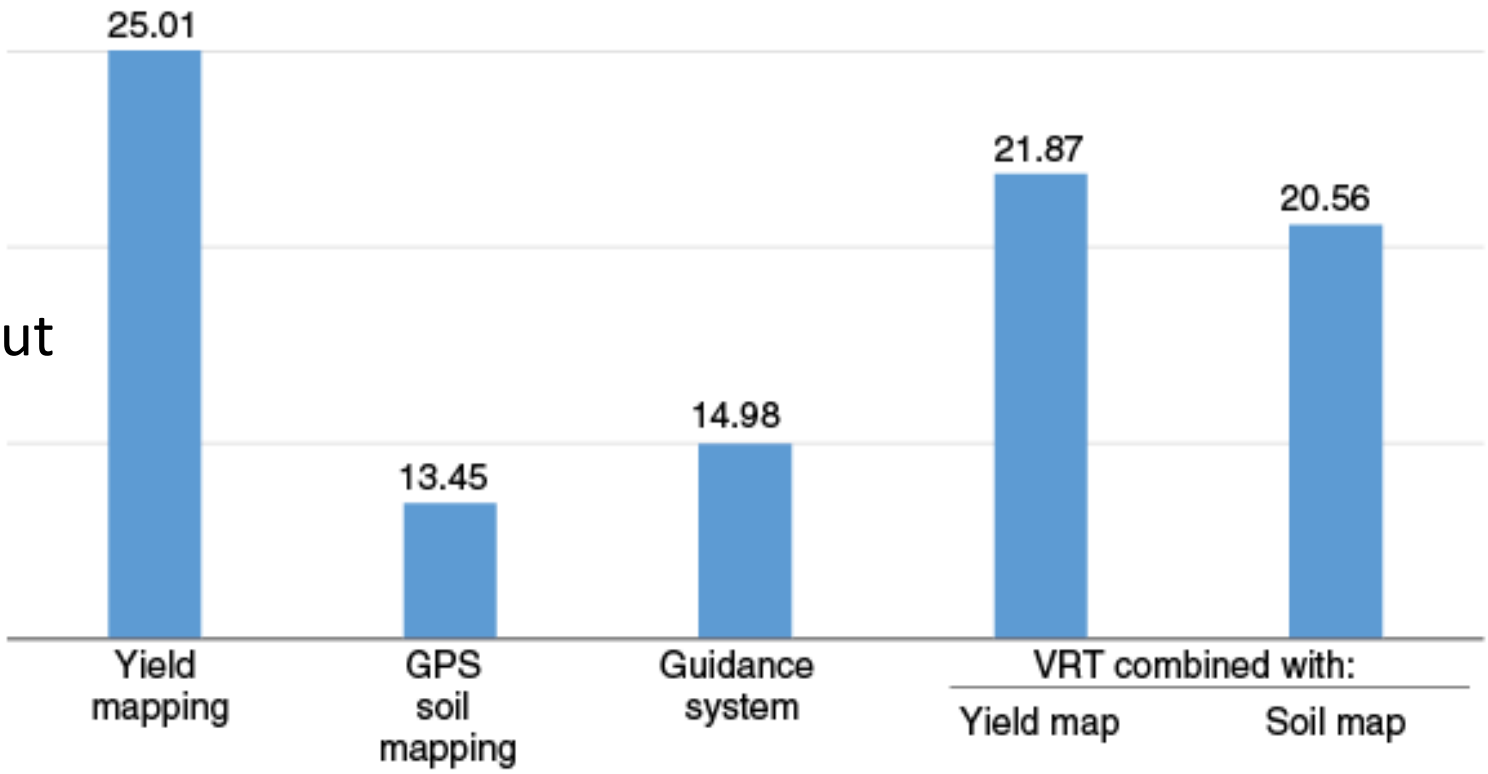




Most corn and soy growers already use yield monitors.

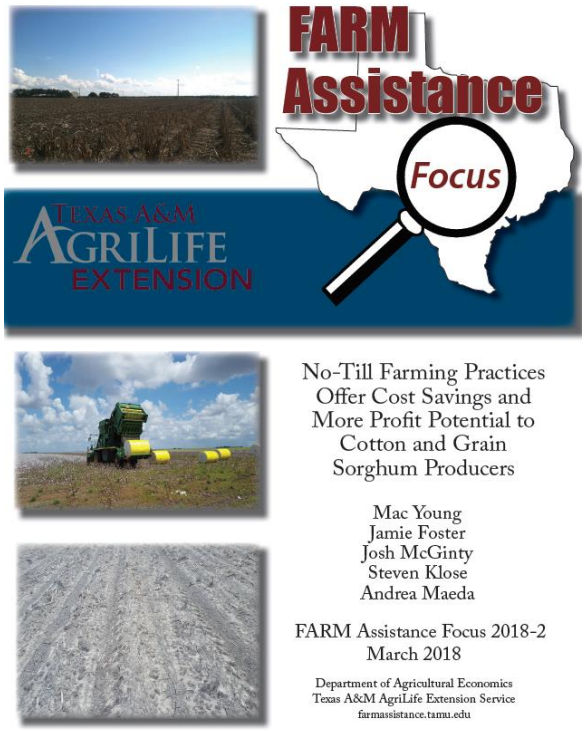
Increasing Operational Efficiency: Supporting Research

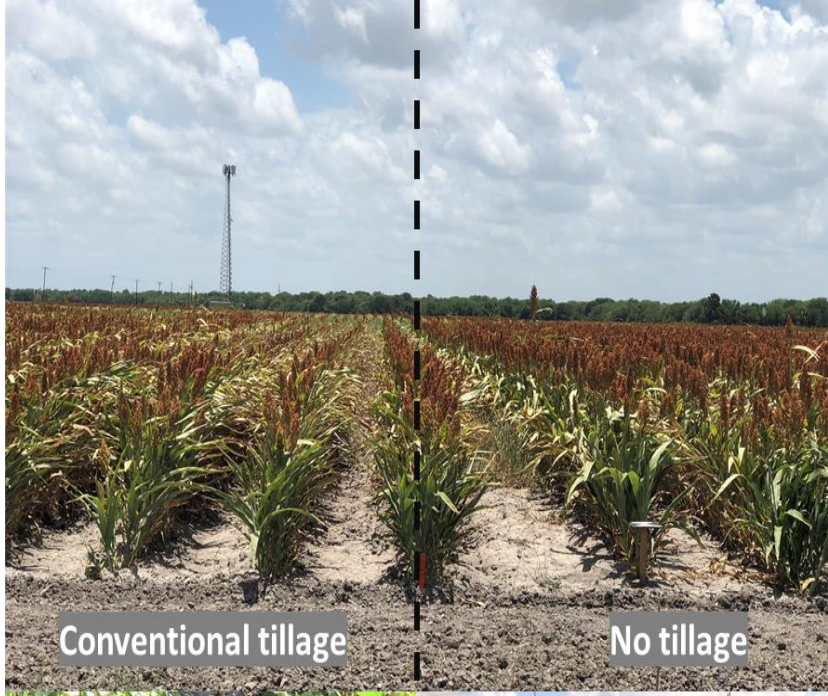
USDA-ERS Study: Precision technology reduces input costs



Increasing Operational Efficiency: Supporting Research

Texas A & M Study: Conservation Tillage Reduces Costs and Boosts Yields





Increasing Operational Efficiency: Supporting Research - Texas A & M Study

Table 2: 2018 Conventional and No-Till Cotton and Grain Sorghum Production Costs Differences Per Acre

Expenses	Cotton (lbs.)		Grain Sorghum (cwt.)	
	Conventional ($/Acre)	No-Till ($/Acre)	Conventional ($/Acre)	No-Till ($/Acre)
Herbicides (1)	41.24	51.24	35.13	38.26
Insecticides	27.33	27.35	11.15	11.54
Custom (2)	54.48	32.08	69.59	47.24
Harvest (2,3)	155.55	171.36	15.45	16.91
Boll Weevil	4.27	4.70	n/a	n/a
Labor	13.18	7.72	15.07	9.42

(1) Includes defoliants for cotton.
(2) Assumes cotton is custom harvested.
(3) Includes ginning for cotton; hauling and drying for grain sorghum.

Increasing Operational Efficiency

Table 1: Cotton and Grain Sorghum Conventional and No-Till Yields Per Acre, Corpus Christi Research and Extension Center

Year	Cotton (lbs.)		Grain Sorghum (cwt.)	
	Conventional	No-Till	Conventional	No-Till
2011	266	277	35.65	36.79
2012	428	415	26.43	39.49
2013	22	190	0.00	0.00
2014	517	565	27.74	34.41
2015	916	1,058	53.42	48.85
2016	953	910	51.29	56.48
2017	1,168	1,286	45.86	47.02
Average	610	672	34.34	37.58
Case Study Projected Average Yields				
2018	610	672	34.34	37.58
2027	640	705	34.87	38.16

Discussion

Increase Operational Efficiency: Grower Testimonials

Chapter 3


Profiles In Soil Health
Jared Questad,
Baltic, SD

Soil Health Partnership: Farmer Dave Moss

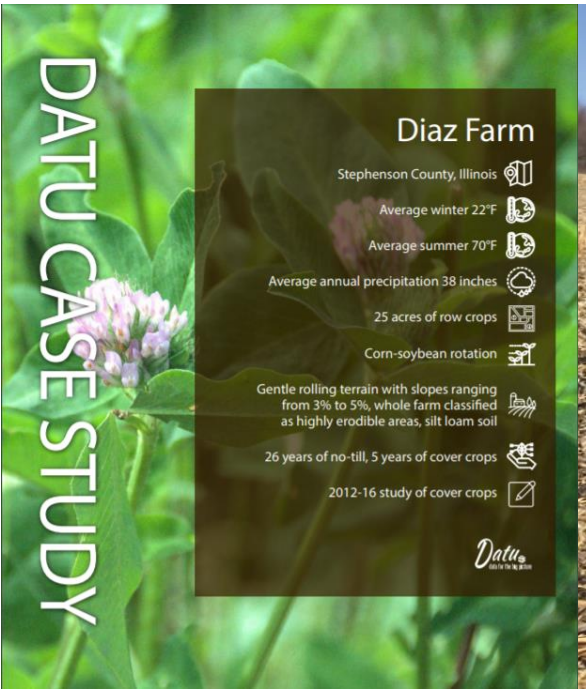
Discussion

Increase Operational Efficiency: Case Studies

Chapter 4

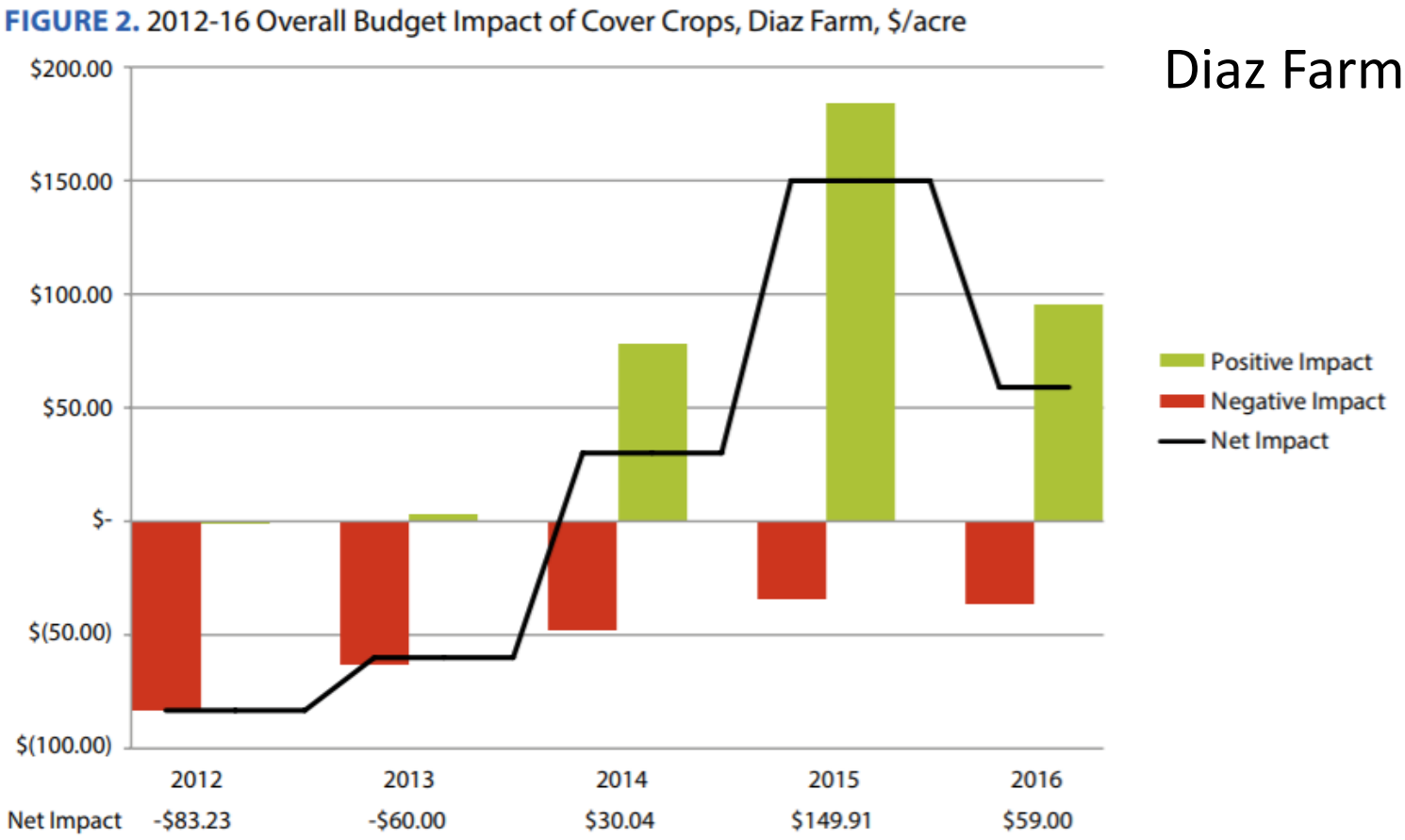
Increase Operational Efficiency: Case Studies

National Association of Conservation Districts and Datu Research Case Study: Diaz Farm Benefits from No-Till and Cover Crops



Dan Diaz and son, Zack

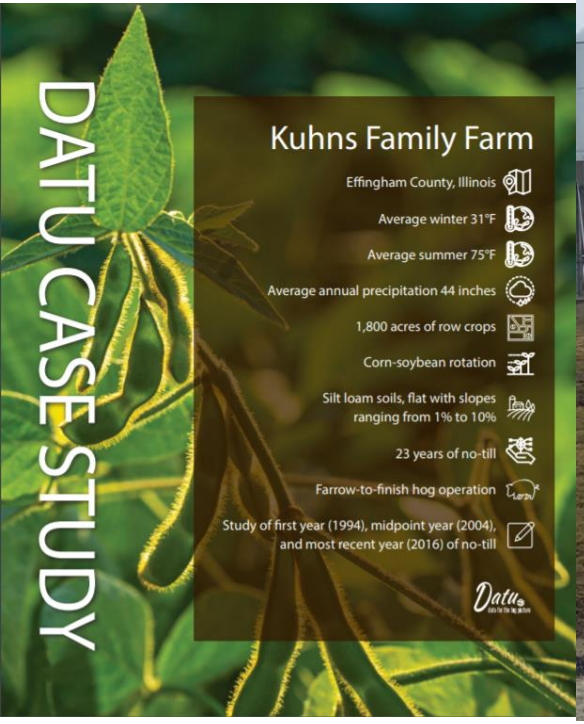
Increase Operational Efficiency: Case Studies



Diaz Farm

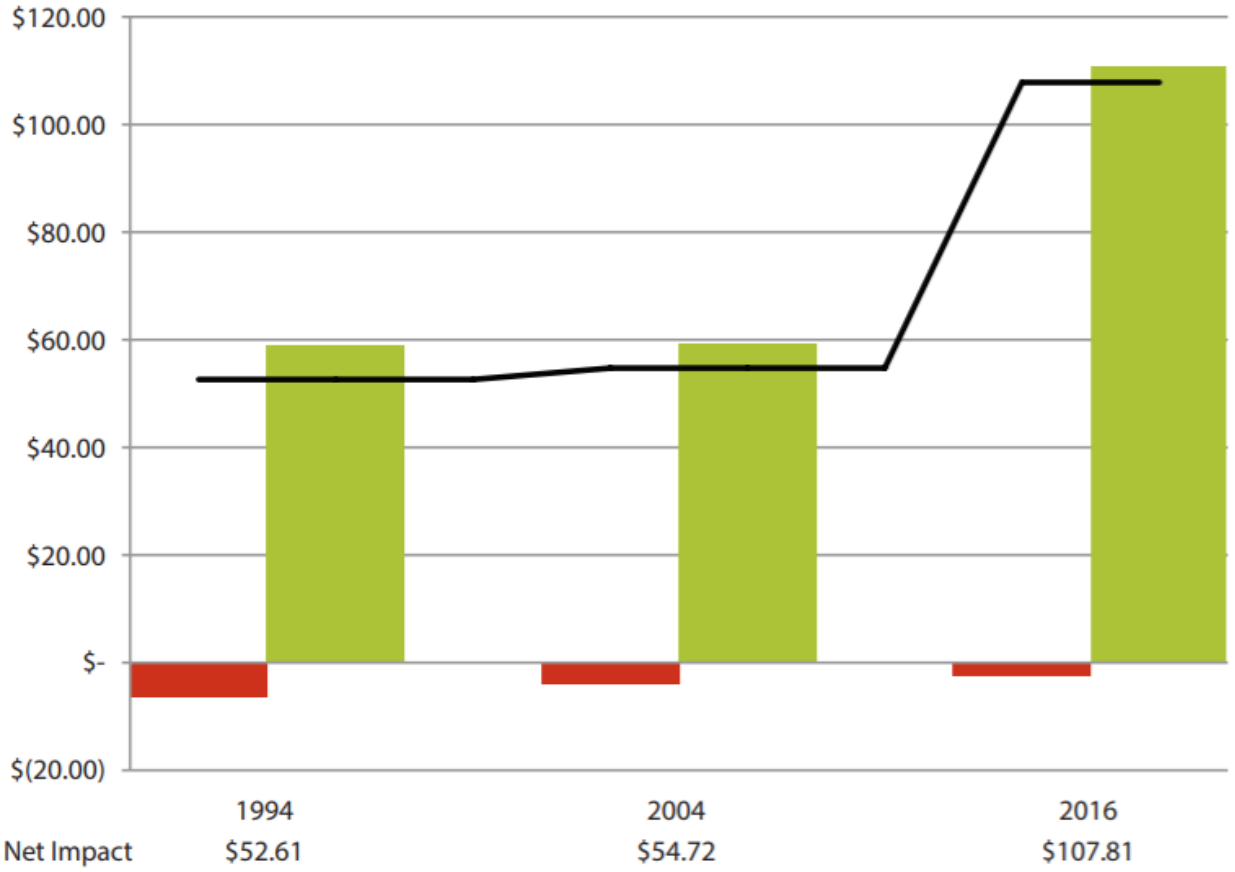
Increase Operational Efficiency: Case Studies

National Association of Conservation Districts and Datu Research Case Study: No-Till Makes a Positive Impact on Kuhn's Family Farm



Increase Operational Efficiency: Case Studies

FIGURE 1. Overall Budget Impact of No-till in 1994, 2004, and 2016, K.F. Farm, $/acre



Kuhn Family Farm

Discussion

Other Opportunities

Chapter 5

Other Opportunities: Financial Assistance and Incentives

USDA-NRCS

- Ag Management Assistance Program (AMA)
- Conservation Stewardship Program (CSP)
- Environmental Quality Incentives Program (EQIP)

Photo by Jeff Vanuga, USDA Natural Resource Conservation Service

Other Opportunities: Expanding Market Access

Unilever Sustainable Soy Project

- Iowa farmers eligible for $10/A, up to 10% total farmed acres
- Remaining 90% eligible for $5/ cover cropped acre

Unilever

ADM

WWF

PRACTICAL farmers of Iowa
working together, always learning

IOWA SOYBEAN Association

USB
UNITED SOYBEAN BOARD

Other Opportunities: Protect Freedom to Operate

- Protect legacy farms
- Keep growers on the land
- Proactively reduce likelihood of new regulations

Discussion

Review

- Communicate the value of sustainability.
- Respond to grower questions about the demand for sustainably sourced products.
- Point to farmers that have successfully implemented practices that improve sustainability outcomes on their farm.
- Forecast the potential economic benefits to growers of adjusting the farm management system.

Discussion

Thank you!

Sustainability Programming for Ag Retailers and CCAs (SPARC)

A COLLABORATIVE INITIATIVE BROUGHT TO YOU BY

Agricultural Retailers Association

American Society of Agronomy

Certified Crop Adviser

EDF Environmental Defense Fund — Finding the ways that work

Field to Market