

# Introduction and Purpose



**Amber Elliott-Whisnant**

Eastern Mountain Regional Field Office



**United States Department of Agriculture**  
National Agricultural Statistics Service



# Introduction and Purpose

- Production Practices Report
  - Potatoes
- Production Practices and Costs Report
  - Wheat



# Introduction and Purpose

- Basic guidance on ARMS II
- Will not cover all scenarios
- Study manual
- Work with supervisors
- Participate in schools
- Practice exercises



# What is ARMS?

- Agricultural Resource Management Survey is a project conducted in cooperation with USDA's Economic Research Service (ERS)
- Primary source of information for agricultural resource use, costs, and farm finance
- Supports key uses of enterprise, farm, and household data that correspond with mandated activities required by the U.S. Congress.



# Motivation for Collecting these Data

---

## Agricultural and Consumer Protection Act of 1973

“The Secretary of Agriculture...shall conduct a cost of production study of the wheat, feed grain, cotton, and dairy commodities under the various production practices and **establish a current national weighted average cost of production**. This study shall be updated annually and shall include all typical variable costs, including interest costs, a return on fixed costs, and a return for management.”

Mandated reporting of these data is part of permanent Farm Bill legislation



# ARMS: Data Collection Phases

- Phase I (May – July): Screens list frame operations for in-business status, operating arrangement, and presence of targeted commodities.
- Phase II: (Oct – Dec): Collects data on chemical use, production practices, and variable input costs for targeted commodities.
- Phase III: (January – April): Focuses on farm economics and risk management practices; typically includes the entire ARMS II sample and a general sample.



# What is special about ARMS II?

- Two Main Versions
  - Production Practices Report (PPR – Short)
  - Production Practices and Cost Report (PPCR – Long)
- Provides Reported Data on Actual Pesticide Use
  - Crop Treated
  - Acreage Treated
  - Rates and Number of Treatments
  - Identify Alternatives Used



# What is special about ARMS II?

- Provides ability to conduct economic and environmental analyses relating to:
  - Field crop chemical use,
  - Crop Production practices, and
  - Integrated Pest Management (IPM) practices and adoption levels.
- The need by data users for farm financial data corresponding with field crop chemical use, production practices, and IPM information has been increasing for a number of years.





# What is special about ARMS II?

- Detailed field-level information...
- Tied to production outcomes, to commodity costs and returns, and to whole-farm finances and farm operator and household attributes
- Tied to program participation, and policies...
- With a large and nationally-representative sample of farms



# EPA is the Primary User of ARMS Data

- The Water Quality Initiative
  - Data needed for assessing issue
  - Mandated development of database
- USDA Pesticide Data Program (PDP)
  - NASS & ERS responsibility
  - NASS begins chemical surveys
- Food Quality Protection Act
  - EPA mandated to review tolerance levels
  - NASS provides actual usage data



# What is special about ARMS II?

- Without ARMS II Data:
  - Loss of minor uses of chemicals
- With ARMS II Data:
  - Changes in labeling and usage
    - Increased re-entry or pre-harvest intervals
    - Change protective equipment requirements
    - Reduce the use rate or number of sprays



# Who Else Uses This Information?

- National and agricultural media
- Input providers
- Farmers and their advisors
- Policy stakeholders
  - Farm organizations and commodity groups



# Who Else Uses This Information?

- **Policymakers**

- Policy Decisions Will be Made with or Without ARMS
- Some Policymakers have farm backgrounds, most don't
- Those that do can't - just rely on background, experience
- They're all busy, so they rely on others for information
- ARMS provides accurate data on U.S. agriculture
- Better information makes for better decisions



# Benefits to Farms

- Farmers benefit indirectly
  - Extension advisors, magazines, newspaper, radio
  - Farm org., commodity groups, agribusiness
  - Congress, USDA
- Growers chance to tell their story
- Establish facts about chemical use
- Decision-making for Product re-registration
- Impact/Consequences of cancellation



# How ARMS Phase II Data are Disseminated

- ERS reports on policy-relevant topics
  - And related Amber Waves magazine articles
  - And related daily ERS Charts of Note
- Data releases on our website
  - ARMS crop production practices
  - Commodity costs and returns
  - NASS Quick Stats (chemical use)
- Staff analyses for policymakers (not public)



# ARMS II/Chemical Use Background

- Target commodities rotated:
  - 2015 – Cotton, Oats, Soybeans, Wheat, Fruit
  - 2016 – Corn, Potatoes, Vegetables
  - 2017 – Cotton, Soybeans, Wheat, Fruit
  - 2018 – Soybeans, Corn, Peanuts, Vegetables
  - 2019 – Wheat, Barley, Cotton, Sorghum, Fruit
  - 2020 – Soybeans, ~~Corn~~, ~~Rice~~, Vegetables
  - 2021 – Corn, Rice, Cotton, Fruit
  - 2022 – Wheat, Potatoes, Vegetables
  - 2023 – Soybeans, Peanuts, Oats, Barley
  - 2024 – Wheat and Sorghum
- Wheat – PPR (Short Form)





# Additional Information

- The Phase II Interviewers Manual
- ERS website: [www.ers.usda.gov](http://www.ers.usda.gov)
- Charts of Note: read and sign up for free distribution at
  - <http://www.ers.usda.gov/data-products/charts-of-note.aspx>
- ARMS Cropping Practices Data Summary
  - <http://www.ers.usda.gov/data-products/arms-farm-financial-and-crop-production-practices/tailored-reports-crop-production-practices.aspx>
- ERS Commodity Costs and Returns Estimates
  - <http://www.ers.usda.gov/data-products/commodity-costs-and-returns.aspx>



# Thanks for Watching!



**United States Department of Agriculture**  
National Agricultural Statistics Service

