ANR Retreat 12/2/2016 Digital Measures & Impact Reporting Workshop

### OUTCOMES

#### These resources are posted on the Extension Intranet>Reporting>Metrics site:

- 1. ANR Framework structure to identify and organize ANR content
- 2. Logic Models for seven Program Area Themes
  - a. DFFS
  - b. Field Crops
  - c. Livestock
  - d. Farm & Agribusiness Management
  - e. Natural Resources
  - f. Horticulture
  - g. Food & Farm Safety/Security
- 3. Outcomes from those seven Logic Models are in Digital Measures
  - a. Short-term outcomes are with Learning Events
    - i. Count the attendees to report these in DM
  - b. Medium- and Long-Term outcomes are with Impact Statements
    - i. You need to gather input from attendees to be able to report on them in DM

#### This is where we need to move forward in reporting ANR efforts to outcomes.

- 4. Larger, longer, more frequent ANR events need to work toward implementing <u>a follow-up evaluation</u> to track one or two primary aspects of attendee behaviors in order to report impact:
  - a. Adoption of practices
  - b. Impact on revenue, savings, profit, etc.
- 5. Follow-up can occur the next time the event is held or at a certain time period after the event (in other words, when enough time has passed so that the change can have occurred).
- 6. Include question(s) on the follow-up evaluation that can give you data to report toward the outcomes. Map the evaluation question to the outcome statement.
  - a. Example: Outcome = # of participants who self-report that they adopted a recommended practice for their operation
  - b. Survey question = "Since attending \_\_\_\_\_, did you adopt a recommended practice for your operation?"
  - c. Survey responses = Yes No Not sure
- 7. When you put your impact statement into DM, report toward that outcome. For the number of participants/attendees who said "YES", put that number with the outcome.

Here are lists of outcomes by Program Area Theme. Yellow highlight shows "adoption of practice" and green highlight shows "revenue" type outcomes.

Medium and Long-Term – Through follow-up evaluation efforts, ANR outcome indicators capture the adoption of practices or changes in behaviors. Long-term outcome indicators refer to condition, social, economic, civic and environmental impacts.

#### ANR - Outcome Indicators Medium- and Long-Term Outcomes

**Diversified Food and Farming Systems** 

#### Medium-Term

# of producers (and other members of the food supply chain) that have increased revenue

# of new or improved value-added products leading to greater food system diversity that can be sold by producers (and other members of the food supply chain)

# of commodity farms that diversify into local market farming enterprises

# of acres that incorporate ecosystem services and/or biodiversity considerations

# of producers indicating adoption of recommended practices

# of producers reporting reduction in fertilizer used/acre

# of producers reporting increased dollar returns per acre or reduced costs per acre

# of acres in conservation tillage or other BMP

# of innovations adopted in food enterprises including production, allied services, processing, and distribution

# of new or improved innovations developed for food enterprises

# of new or improved value-added products that can be sold by producers (and other members of the food supply chain)

# of new or improved innovations developed for food enterprises

# of existing farmers markets that expand and/or improve their offering of healthy foods

# of existing corner stores that expand and/or improve their offering of healthy foods

# of existing school food programs and other food options (vending machines, school events, etc.) that expand and/or improve their offering of healthy foods

# of existing grocery stores that expand and/or improve their offering of healthy foods

# of other existing systems/access points, not noted, that expand and/or improve their offering of healthy foods

# of total existing systems (if not reported above), that expand and/or improve their offering of healthy foods

# of new farmers markets offering healthy foods

# of new corner stores offering healthy foods

# of new school food programs and other food options (vending machines, school events, etc.) offering healthy foods

# of new grocery stores offering healthy foods

# of other new systems/access points, not noted, offering healthy foods

# of total new systems (if not reported above), offering healthy foods

# of new or improved innovations developed for food enterprises.

# of new or improved value-added products that can be sold by producers (and other members of the food supply chain)

# of food councils and institutes created to promote practical food systems policies

# of producers who used training from Purdue, and other institutions to develop technical skills (i.e. Vermont Food Hub manager training; Farmer's Market Manager Badges)

# of research and extension advisory councils and boards

# of food policy decisions informed by university research and extension

# of constraints removed in food production, processing, and distribution by policy makers

# of incentives implemented for food production, processing, and distribution by policy makers

Long-Term

# increased successful and # diversified farm operations tracked by Ag Census, food businesses by state data, success will need to be measured by survey

# increased access of beginning farmers to more experienced farmers via participation and long-term support from Purdue for beginning farmers – initial three year program, identification of 'beginning' label, etc.

# of producers (and other members of the food supply chain) that have increased revenue

Increased # of Indiana products in supermarkets, number of vendors at farmers' markets, CSA's, food hubs, greater purchasing by institutions, restaurants, grocers and consumers

Increase in direct sales \$ value in Ag census and subsequent local food surveys by USDA

Increased # jobs in distribution, storage, marketing, sales and production of local food

# of food councils and institutes created to promote practical food systems policies

# of research and extension advisory councils and boards

# of food policy decisions informed by university research and extension

# of constraints removed in food production, processing, and distribution by policy makers

# of incentives implemented for food production, processing, and distribution by policy makers

Increased # coordination of education and technical support from campus to county, county to client and campus to client, unified online presence for assistance, research being performed in local food systems, interdisciplinary work for local food research and teaching on campus

Field Crops			
Medium-Term			
# of participants who self-report that they adopted a recommended practice for their operation			
# of participants who self-report that they adopted fertilizer and pesticide recommendations for field crops			
# of participants that adopted changes to their farm to make them more resilient to climate change			
# of producers indicating adoption of recommended technologies for agronomic crops			
# of producers indicating adoption of recommended management practices for agronomic crops			
Long-Term			
# of reduction in pesticide spills or drift complaints			
# of producers indicating increased dollar returns per acre and/or reduced costs per acre due to adopted agronomic practices			
# of producers indicating increased dollar returns per acre due to overall crop quality improvement			
# of routine water quality tests of major water bodies and tributaries showing a decrease in soil particles and agriculturally-related chemicals of concern			
Livestock			
Medium-Term			
# of participants who self-report that they adopted a recommended technology for their farm/business			
# of participants who self-report that they adopted a recommended management practice for their farm/business			
# of youth seeking careers in livestock industry			
# of improved prevention, detection, control and intervention technologies adopted			
# of participants who self- report an expanded network of contacts/resources			
Long-Term			
# of producers reporting decreased production cost per unit of output, increase value per unit of output, and increase profitability			
# of participants reporting improved livestock and poultry wellbeing			
# of producers reporting they have started a new operation or have expanded their operation			
# of producers reporting adopted technologies and practices assisted them in remaining/becoming compliant			
Farm & agribusiness management			
Medium-Term			
# of participants reporting they adopted a practice to monitor financial ratios			
# of participants conducting risk assessments			
# of participants reporting a new or revised commodity marketing strategy			
# of participants reporting the adoption of written land leases			
# of participants evaluating new business ventures			
# of producers reporting improved financial position			
# of contingency plans written			
# of participants reporting better tenant/landlord relationships # of successful new ventures formed			
# of farms successfully passed to next generation			
Natural resources			
Medium-Term			
# of ecosystem service valuation plans created or revised			
# of participants adopt use of decision-support tool for ecosystem service valuation			
# of management plans created for financial and ecological value of "free" services provided by ecosystems			
# of participants / stakeholders adopted best management practices for biofuels production / harvesting / storage systems			
# of acres incorporate ecosystem services and/or biodiversity considerations			
# of participants employ climate adaptation strategies in natural ecosystems, including strategies for biodiversity			
# of acres under recommended adaptation strategies for natural resources management			
# of landowners / agencies adopt best management practices for maintenance of locally-valued ecosystem services			
# of participants adopt recommended adaptation strategies for natural resources management			
# of agencies / organizations / communities incorporate climate-based management practices in community development			

#### Long-term

# of participants adopted recommended climate mitigation practices (e.g., water use efficiency, carbon sequestration, reducing carbon and energy footprint)

# of acres under recommended climate mitigation practices (e.g., water use efficiency, carbon sequestration)

# of acres employing best management practices for ecosystem conservation

% of privately owned agricultural acreage retained during landowner succession due to educational interventions. Refers to working lands, nonworking lands, and other landscape components, like rangeland, forestland, cropland, conversation lands, wetlands, water bodies, riparian areas, etc.

# of graduate students working in biofuels labs

# of biofuels workers trained

# of visitors to local open spaces, parks, etc.

 $\$  of property values increase adjacent to parks / open spaces

\$ of local/county investment in management and conservation of natural resources

# of businesses (eco-tourism/recreation/forestry)

# of policies and guidelines that reflect the conservation and management of ecological resources for future generations

# of agencies / organizations / communities that adopted recommended climate mitigation practices and policies (e.g., applied water conservation policies)

#### Horticulture

#### Medium-Term

# of participants adopt recommended practices for horticulture and the environment

# of participants who volunteer

# of participants who grow leadership ability

% increase in number of and membership in associations

% increase in number of volunteers

# of viable technologies developed or modified for the detection and characterization of food supply contamination from foodborne threats.

# of children and youth who reported eating more of healthy foods

Long-Term

# of participants adopting best practices and technologies resulting in increased yield, reduced inputs, increased efficiency, increased economic return, and/or conservation of resources

Reduced negative environmental impact due to horticultural operations

Increased quality and supply of Indiana-produced horticultural products

#### Food & Farm Safety/Security

#### Medium-Term

# of participants who self-report that they adopted a recommended safety practice

# of food producers, processors, and handlers self-report they assess their farms or respective areas of activity for risks of microbial contamination

# of food producers, processors, and handlers who self-report they assess their farms or respective areas of activity for critical control points (this includes chemical, physical, and biological contamination) contamination

# of participants self-report they develop Farm Emergency Plans

# of communities that develop/enhance their ESF-11, Agriculture and Natural resources component of their Comprehensive Emergency Management Plan

#### Long-Term

# food producers, processors, and handlers implement interventions and processes that reduce risk of microbial contamination

# of communities participating in ag-related emergency exercises

## **ADOPTION OF PRACTICE**

ALL – Here is a general question to get a number of those who adopt practice:

Since attending the	(title of A	ANR workshop/event), did you adopt a new, recommended practice?	
Yes if yes, indicate what ne	ew practice you	ou have adopted:	
No			
Not sure			
SPECIFIC PROGRAM (unique to	ANR theme – s	– specific to program – provide more details about actions)	
Ask them an open-ended ques	tion AND/OR pr	provide a list for them to choose from, to identify what has changed.	
OPEN-ENDED As a result of a	ttending	(title of ANR workshop/event) last year, what ACTIONS have you take	n?

LIST -- Choose all that apply.

□ \_\_\_\_\_

Examples of ACTIONS by Topic Area (Logic Model). Statements in quotes are from outcome indicators.

## DFFS

"Adoption of recommended practices"

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FIELD CROPS

"Field crop recommended practice"

· \_\_\_\_\_

"Fertilizer and pesticide recommendations for field crops"

□ \_\_\_\_\_

"Recommended technologies for agronomic crops"

□ \_\_\_\_\_

"Recommended management practices for agronomic crops"

\_\_\_\_\_

## LIVESTOCK

"Recommended technology for their livestock farm/business"

- Precision technology
- □ **Production & housing systems**
- Ventilation
- □ Feed delivery systems
- Milking systems
- Other:\_\_\_\_\_

"Recommended management practice for their livestock farm/business"

- Grazing management
- Feeding management
- Animal health

- Animal well-being
- □ Breeding & genetics
- Food safety
- □ Manure/nutrient management
- Other:

"Adopted technologies and practices assisted them in remaining/becoming compliant"

- Nutrient management
- Product quality
- **Odors**
- Animal welfare
- Other:\_\_\_\_\_

## FARM & AGRIBUSINESS MANAGEMENT

"Practic	es to monitor financial ratios"

"Adoption of written land leases"

□ \_\_\_\_\_

### NATURAL RESOURCES

"Adopt use of decision-support tool for ecosystem service valuation"

- Adopt use of best management practices for biofuels production / harvesting / storage systems"
  Adopt use of best management practice for maintenance of locally-valued ecosystem services"
  Adopt use of best management practice for maintenance of locally-valued ecosystem services"
  Adopt use of recommended climate mitigation practices"
  HORTICULTURE
  "Recommended practices for horticulture and the environment"
  - · \_\_\_\_\_

## FOOD & FARM SAFETY/SECURITY

"Adopted a recommended safety practice"

# **ECONOMIC IMPACT**

<u>ALL</u> - Here is a general question for all to determine the number who had improvement in financial position: Since attending the \_\_\_\_\_\_ (title of ANR workshop/event) last year, have you experienced an improvement in your operation's financial position?

\_\_\_\_Yes if yes, indicate what financial improvement you have experienced: \_\_\_\_\_\_

\_\_ No

\_\_\_ Not sure

<u>SPECIFIC PROGRAM (unique to ANR theme – specific to program – to get at more detail related to finances)</u> Ask them an open-ended question AND/OR provide a list for them to choose from, to identify what has changed.

OPEN-ENDED -- As a result of attending \_\_\_\_\_\_ (title of ANR workshop/event) last year, what financial improvements have you had in your operation?

LIST -- Choose all that apply.

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Examples of FINANCIAL IMPROVEMENTS by Topic Area (Logic Model):

## DFFS

- □ Increased revenue
- □ Increased dollar returns per acre or reduced costs per acre
- · \_\_\_\_\_

#### FIELD CROPS

- □ Increased dollar return per acre
- Reduced costs per acre due to adopted agronomic practices\increased dollar returns per acre due to overall crop quality improvement
- U \_\_\_\_\_

#### LIVESTOCK

- Decreased production cost per unit of output pound of beef
- □ Increased value per unit of output **100 weight of milk**
- □ Increased profitability

## FARM & AGRIBUSINESS MANAGEMENT

- □ Improved financial position

## NATURAL RESOURCES

- What is dollar amount increase of property values adjacent to parks / open spaces?
- · \_\_\_\_\_

- Increased yield
- □ Reduced inputs
- □ Increased efficiency
- □ Increased economic return
- □ Conservation of resources
- · \_\_\_\_\_

 FOOD & FARM SAFETY/SECURITY

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