

## LOGIC MODEL

Name of Program: Farm & Food Safety/Security

Situation: Agriculture remains one of the high risk occupations so efforts needed to reduce risk of injury or mortality in farming and with food production. Additionally, efforts to reduce the risk of microbial contamination of the food supply by a foodborne pathogen necessitate education and intervention at all levels of the food production chain. Note: Agricultural Safety and Health is reported in a separate logic model. EDEN including CERT is recognized as a collaborative effort with ANR, CD, and HHS and reported in the “collaborative/multiple program area” category.

Goal: To enhance the adoption of farm and food safety practices and emergency preparedness to reduce risk and mitigate impact of foodborne illness, farm accidents, and farm and community emergencies.

INPUTS What we invest	OUTPUTS Activities What we do	OUTPUTS Participation Who is reached	Short: What do we think participants will know, feel, or be able to do after participating in the program?	Medium: How do we think the participants will behave or act differently after participating in the program?	Long: What kind of impact can result if the participants behave or act differently after participating in the program?
<ul style="list-style-type: none"> <li>• Field staff</li> <li>• Campus staff</li> <li>• Purdue Ag Centers</li> <li>• Partnerships:               <ul style="list-style-type: none"> <li>○ State &amp; Federal agencies</li> <li>○ IN State Department of Health</li> <li>○ Indiana State Dept. of Ag</li> <li>○ Indiana Vegetable Growers Association</li> <li>○ Illiana Watermelon Association</li> <li>○ Eastern Cantaloupe Growers Association</li> <li>○ BOAH</li> <li>○ IDHS</li> <li>○ PEAT/EDEN</li> <li>○ Farmers Market Associations</li> <li>○ Indiana Grown</li> <li>○ IBCA</li> <li>○ Locally raised food marketing venues</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Education workshops</li> <li>• Agribility</li> <li>• Farming with arthritis</li> <li>• Farm safety</li> <li>• Grain bin rescue</li> <li>• Food safety               <ul style="list-style-type: none"> <li>○ Produce</li> <li>○ GAPs</li> <li>○ Preventive Controls</li> <li>○ Other food products (meat, processed, etc.)</li> <li>○ Home based vendor trainings</li> </ul> </li> <li>• ServSafe</li> <li>• Aseptic food preparation</li> <li>• Applied Research</li> <li>• S-CAP Community Emergency Plan Development</li> <li>• Comprehensive Emergency Management Plan (CEMP)</li> <li>• Direct marketing aspects of processed foods, poultry and eggs</li> <li>• Nims and ice trainings</li> <li>• Provide educational resources – public spokesperson</li> </ul>	<ul style="list-style-type: none"> <li>• Farmers &amp; ranchers</li> <li>• Farm employees</li> <li>• Agricultural producers</li> <li>• Food processors and handlers</li> <li>• Governmental agencies</li> <li>• Allied industries</li> <li>• Youth</li> <li>• Emergency Responders</li> <li>• Food business owners – small</li> <li>• Extension Educators – trainees</li> <li>• Vets</li> </ul>	<p><b>Short:</b> What do we think participants will know, feel, or be able to do after participating in the program?</p> <ul style="list-style-type: none"> <li>• Participants/Youth will learn about farm safety. (INDICATOR = # of participants/youth informed about farm safety)</li> <li>• Participants/Youth will learn about safe food handling and processing. (INDICATORS = NIFA FS3.2 # of participants/youth informed about safe food handling &amp; processing; and NIFA FS3.1 Number of growers, producers, and food workers completing GAPs, GMPs, HACCP, food safety certification (like ServSafe), and on farm BMP programs to increase food safety.</li> <li>• Participants/Youth will learn about farming opportunities or resources for individuals with special requirements. (INDICATOR = # of participants/youth informed about farming opportunities or resources for individuals with special requirements)</li> <li>• Food producers, processors, and handlers will gain an enhanced understanding of food safety issues (INDICATOR = NIFA FS3.2 # of food producers, processors, and handlers informed about food safety issues)</li> <li>• Participants/Youth will learn about Agricultural Emergency Plan Development (INDICATOR = # of participants/communities informed about Agricultural Emergency Plan Development)</li> <li>• Participants/Youth will learn who to contact if a food safety issue arises at their farm/facility (INDICATOR = # of participants/youth informed about who to contact if a food safety issue arises at their farm/facility)</li> <li>• Participants will gain understanding into emergency response and their possible roles (INDICATOR = # of participants informed about emergency response and their possible roles)</li> </ul>	<p><b>Medium:</b> How do we think the participants will behave or act differently after participating in the program?</p> <ul style="list-style-type: none"> <li>• Participants will adopt recommended practices for farm safety. (MEASURE = # of participants who self-report that they adopted a recommended farm safety practice)</li> <li>• Food producers, processors, and handlers will assess their farms or respective areas of activity for risks of microbial contamination (MEASURE = # of food producers, processors, and handlers who self-report_)</li> <li>• Food producers, processors, and handlers will assess their farms or respective areas of activity for critical control points (this includes chemical, physical, and biological contamination) contamination (MEASURE = # of food producers, processors, and handlers who self-report_)</li> <li>• Participants will develop Farm Emergency Plans (MEASURE: # of farm emergency plans developed)</li> <li>• Communities will develop/enhance their ESF-11, Agriculture and Natural resources component of their Comprehensive Emergency Management Plan (MEASURE: NIFA GF2.9 # of ESF-11/CEMP developed or enhanced)</li> </ul>	<p><b>Long:</b> What kind of impact can result if the participants behave or act differently after participating in the program?</p> <ul style="list-style-type: none"> <li>• Food producers, processors, and handlers will implement interventions and processes in their respective areas of activity that reduce the risk of microbial contamination (ex. Sanitizer use, third party GAPs certification) (MEASURE = _TBD)</li> <li>• Communities will be better prepared to respond to agricultural and agriculturally-related disasters (MEASURE = NIFA GF2.9 # of communities participating in ag-related emergency exercises)</li> </ul>

## **ASSUMPTIONS**

- 1) Production and marketing of food products into the public food supply necessitates an awareness of food safety issues.
- 2) Interventions and processes that reduce the risk of contamination by a foodborne pathogen are required at each step of food production and delivery.
- 3) Agriculture remains vital in Indiana
- 4) Agriculture remains a high-risk occupation
- 5) Food Safety will continue to be a high priority
- 6) Continued prevalence of small farm and food service start-up businesses

## **EXTERNAL FACTORS**

- 1) Government regulatory activity (FDA through Food Safety and Modernization Act)
- 2) Requirements of food buyers (those moving product from grower to consumer)
- 3) Environment (many foodborne pathogens are found naturally in the environment)
- 4) Changing consumer expectations
- 5) Funding
- 6) Legal and regulatory climate
- 7) Frequency of natural and other disasters

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