

**LOGIC MODEL**

**Name of Program:** Field Crops

**Situation:** To support decision-making by farmers in the production, harvest, and storage of agronomic crops, including corn, soybeans, wheat, hay/forage, and other field crops.

**Goal:** To enhance Indiana Stakeholders' understanding of crop production issues; and to support decision-making by farmers in the production, harvest, and storage of agronomic crops, including corn, soybeans, wheat, hay/forage, and other field crops.

<b>INPUTS</b> <b>What we invest</b>	<b>OUTPUTS</b> <b>Activities</b> <b>What we do</b>	<b>OUTPUTS</b> <b>Participation</b> <b>Who is reached</b>	<b>Short: What do we think participants will know, feel, or be able to do after participating in the program?</b>	<b>Medium: How do we think the participants will behave or act differently after participating in the program?</b>	<b>Long: What kind of impact can result if the participants behave or act differently after participating in the program?</b>
<ul style="list-style-type: none"> <li>• Field staff</li> <li>• Campus staff</li> <li>• Purdue Agricultural Centers (PACs)</li> <li>• Sustainable Agriculture Research and Education (SARE) Program</li> <li>• Partnerships:               <ul style="list-style-type: none"> <li>○ ISDA</li> <li>○ Indiana Corn and Soybean Association</li> <li>○ NRCS</li> <li>○ IN Farm Bureau</li> <li>○ Soil &amp; Water Conservation Districts</li> <li>○ USDA</li> <li>○ OISC</li> <li>○ Purdue ACRE Research Farm</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Purdue Ag Center Field Days</li> <li>• Educational Workshops &amp; Conferences</li> <li>• On-farm research</li> <li>• Programs in Pesticides –PARP, CCH</li> <li>• Information/ resources on plant diseases – Plant Disease &amp; Diagnostic Lab</li> <li>• Climate change</li> <li>• Forages</li> <li>• Soil Health –Cover Crops, Residue Management and Manure usage</li> <li>• Water Mgmt. - Irrigation and Field Drainage</li> <li>• Grain Storage and Management</li> <li>• Precision Agriculture</li> <li>• Nutrient Mgmt.</li> <li>• Alternative Crops</li> <li>• Education Materials</li> <li>• Media Releases and social media</li> <li>• Training for CCA's providing Continuing Education hours to meet requirements</li> <li>• One source among many of information for clients</li> </ul>	<ul style="list-style-type: none"> <li>• Agricultural producers/ farmers</li> <li>• Commercial Agrichemical (Fertilizer and Pesticide) Applicators</li> <li>• Allied Industry (Implement Dealers, Seed Sales, Banking)</li> <li>• Commodity groups</li> <li>• Governmental Agencies (USDA, ISDA, IDNR, OISC)</li> <li>• Consultants</li> <li>• Certified Crop Advisors (CCA)</li> <li>• Youth</li> <li>• General public</li> <li>• Underserved / Underrepresented clients</li> </ul>	<ul style="list-style-type: none"> <li>• FIELD 1.1 # of participants informed about field crops</li> <li>• FIELD 1.2 # of youth informed about field crops</li> <li>• FIELD 1.3 # of participants informed about crop production issues</li> <li>• FIELD 1.4 # of participants informed about agronomic issues</li> <li>• FIELD 1.5 # of participants informed about agronomic technologies</li> <li>• FIELD 1.6 # of participants informed about agronomic management practices</li> </ul>	<ul style="list-style-type: none"> <li>• FIELD 2.1 # of participants who self-report that they adopted a recommended practice for their operation</li> <li>• FIELD 2.2 # of participants who self-report that they adopted fertilizer and pesticide recommendations for field crops - NIFA GF 1.4.a</li> <li>• FIELD 2.3 # of participants that adopted changes to their farm to make them more resilient to climate change - NIFA CC 2.3</li> <li>• FIELD 2.4 # of producers indicating adoption of recommended technologies for agronomic crops - NIFA GF 2.3</li> <li>• FIELD 2.5 # of producers indicating adoption of recommended management practices for agronomic crops - NIFA GF 2.3</li> </ul>	<ul style="list-style-type: none"> <li>• FIELD 3.1 # of reduction in pesticide spills or drift complaints</li> <li>• FIELD 3.2 # of producers indicating increased dollar returns per acre and/or reduced costs per acre due to adopted agronomic practices - NIFA GF 1.3</li> <li>• FIELD 3.3 # of producers indicating increased dollar returns per acre due to overall crop quality improvement - NIFA GF 2.4</li> <li>• FIELD 3.4 # of routine water quality tests of major water bodies and tributaries showing a decrease in soil particles and agriculturally-related chemicals of concern</li> </ul>

**ASSUMPTIONS**

- 1) Continued demand for agronomic crops for food, livestock, fuel, and fiber.
- 2) Field crop sector remains strong.
- 3) Overall soil productivity remains constant or improves.
- 4) Continued demand for field crops

**EXTERNAL FACTORS**

- 1) Impacts from weather variability/climate change
- 2) Funding and resource acquisition
- 3) Public sector/retailer/governmental concerns over production parameters such as GMOs, pesticide usage, soil and nutrient loss, and hypoxia/water quality
- 4) Variable weather (climate change)
- 5) Regulation changes