

Insights into Integrated Programs



Grantsmanship
Workshop



Integrated Research, Education, and Extension

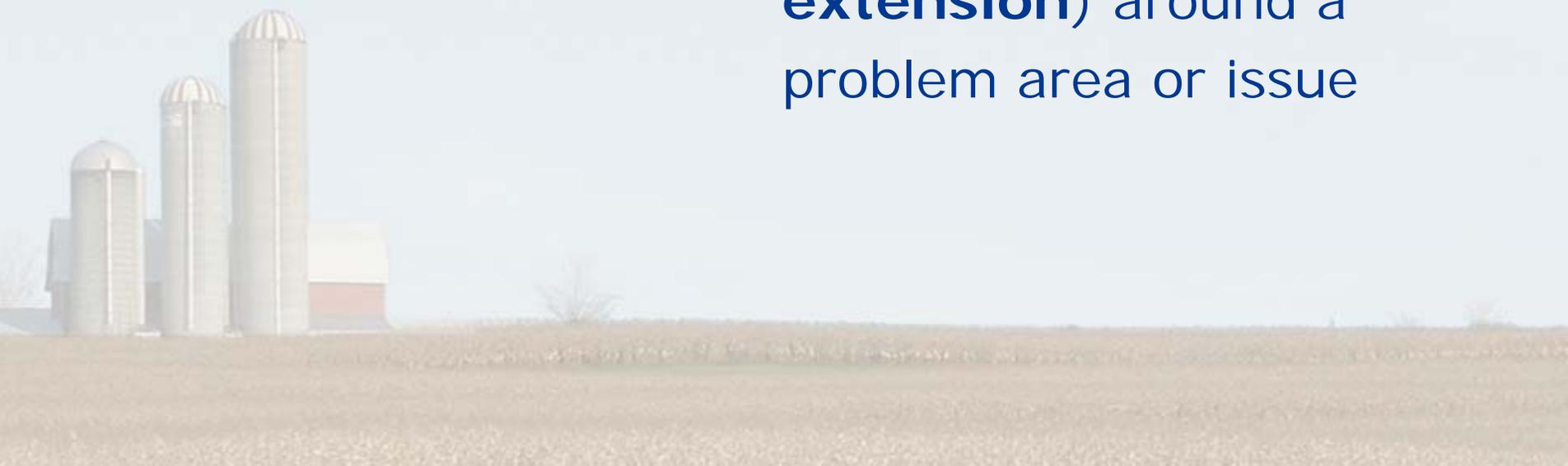
I n t e g r a t e d

Research

Education

Extension

To bring the three components of the agricultural knowledge system (**research, education, and extension**) around a problem area or issue



CSREES Integrated Programs

Section 406 Integrated, Research, Education, and Extension Program

- National Integrated Food Safety Initiative
- National Integrated Water Quality Program
- Integrated Pest Management Programs

CAR, RAMP, IPM Centers

- Methyl Bromide Transitions
- Integrated Organic Program



CSREES Integrated Programs

Pest Management Alternatives Program

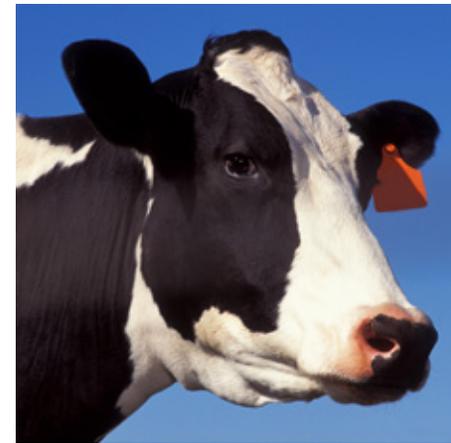
National Research Initiative Integrated Programs

– 17 program areas will support integrated projects in FY 2007

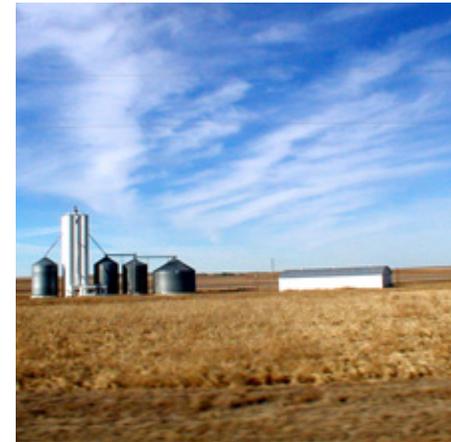




Integrated Research Education, and Extension Program (Section 406)



Grantsmanship
Workshop



National Integrated Food Safety Initiative

SECTION 406

Supports projects on priority issues in food safety that are best solved using an integrated approach

Priorities address a broad spectrum of concerns ranging from on-farm production, post-harvest processing and distribution, to food selection, preparation and consumption

\$12.9 M for FY 2007

Contact: Dr. Jan Singleton
jsingleton@csrees.usda.gov

National Integrated Water Quality Program

SECTION 406

Support research, extension and education activities that address U.S. water quality priorities

Targeted to the identification and resolution of agriculturally-related degradation of water quality

\$11.3 M for FY 2007

Contact: Dr. Mike O'Neill
moneill@csrees.usda.gov

Integrated Pest Management: Crops at Risk

SECTION 406

Enhance the development and implementation of innovative, ecologically-based IPM systems focused on a specific food or fiber commodity in commercial production

\$1.3 M for FY 2007

Contact: Dr. H.J. (Rick) Meyer
hmeyer@csrees.usda.gov

Integrated Pest Management: Risk Avoidance & Mitigation

SECTION 406

Enhance the development and implementation of innovative IPM strategies for multi-crop food and fiber production systems, or for production systems on an area-wide or landscape scale

\$4.2 M for FY 2007

Contact: Dr. Robert Nowierski
rnowierski@csrees.usda.gov

Integrated Pest Management: Regional Pest Management Centers

SECTION 406

To bring together expertise, identify needs and priorities and address a broad range of IPM issues focused at the regional level

\$3.9 M in FY 2007

Contact: Dr. Mike Fitzner
mfitzner@csrees.usda.gov

Methyl Bromide Transitions

METH-O-GAS®

FUMIGANT

RESTRICTED RESTRIENT

SECTION 406

Support the discovery and implementation of practical IPM alternatives for managing soil borne pathogens and weeds, post-harvest pests, or storage and packing material sanitation

\$3.0 M for FY 2007

Contact: Dr. Bill Hoffman
whoffman@csrees.usda.gov

Integrated Organic Program

SECTION 406

Addresses critical organic agriculture issues through the integration of research, education, and extension activities in support of organic producers and those adopting organic practices

\$4.7 M for FY 2007

Contact: Dr. Tom Bewick
tbewick@csrees.usda.gov

Pest Management Alternatives Program



Develop and implement IPM practices, tactics and systems for specific pest problems while reducing human and environmental risks

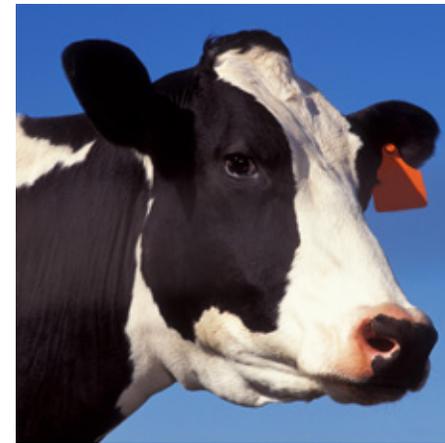
\$1.4 M for FY 2007

Contact: Dr. Monte Johnson
mpjohnson@csrees.usda.gov

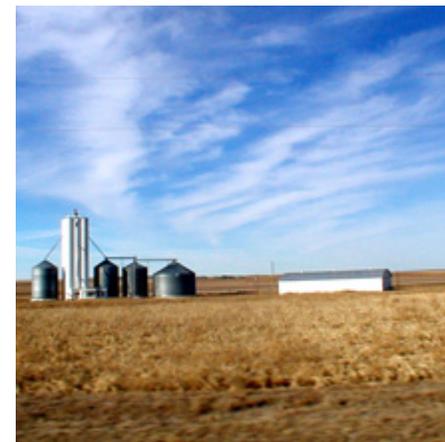




NATIONAL RESEARCH INITIATIVE



Grantsmanship
Workshop



National Research Initiative

NRI Program Clusters

- Agricultural Genomics and Biosecurity
- Agricultural Production and Value-Added Processing
- Nutrition, Food Safety and Quality
- Agroecosystems and Rural Prosperity



Program Areas:

- Animal Genome (A): Applied Animal Genomics (Peter Burfening)
- Animal Protection and Biosecurity (B): Animal Well-Being (Peter Brayton)
- Animal Protection and Biosecurity (C): Animal Biosecurity Coordinated Agricultural Projects (Peter Johnson)

Agricultural Genomics and Biosecurity Cluster (\$9.8M)

NRI Integrated
FY 2007

Program Areas:

- Plant Biosecurity (Liang-Shiou Lin and John Sherwood)
- Plant Genome (D): Applied Plant Genomics Coordinated Agricultural Project (Ed Kaleikau)



Agricultural Production and Value-Added Processing Cluster (\$5.5 M)

NRI Integrated
FY 2007

Program Areas:

- Animal Reproduction (Mark Miranda)
- Animal Growth and Nutrient Utilization (Mark Miranda)
- Plant Biology (A): Gene Expression and Genetic Diversity (Liang-Shiou Lin)
- Plant Biology (B): Environmental Stress (Gail McLean)

Program Areas:

- Bioactive Food Components for Optimal Health (Etta Saltos)
- Human Nutrition and Obesity (Etta Saltos and Susan Welsh)
- Improving Food Quality and Value (Ram Rao and Hongda Chen)
- Epidemiological Approaches for Food Safety (Mary Torrance)

Agroecosystems and Rural Prosperity (10.6 M)

NRI Integrated
FY 2007

Program Areas:

- Air Quality (Ray Knighton)
- Managed Ecosystems (Diana Jerkins)
- Biology of Weedy and Invasive Species in Agroecosystems (Michael Bowers)
- Agricultural Prosperity for Small and Medium-Sized Farms (S. Sureshwaran and Diana Jerkins)

Knowledge Continuum for Research, Education, and Extension

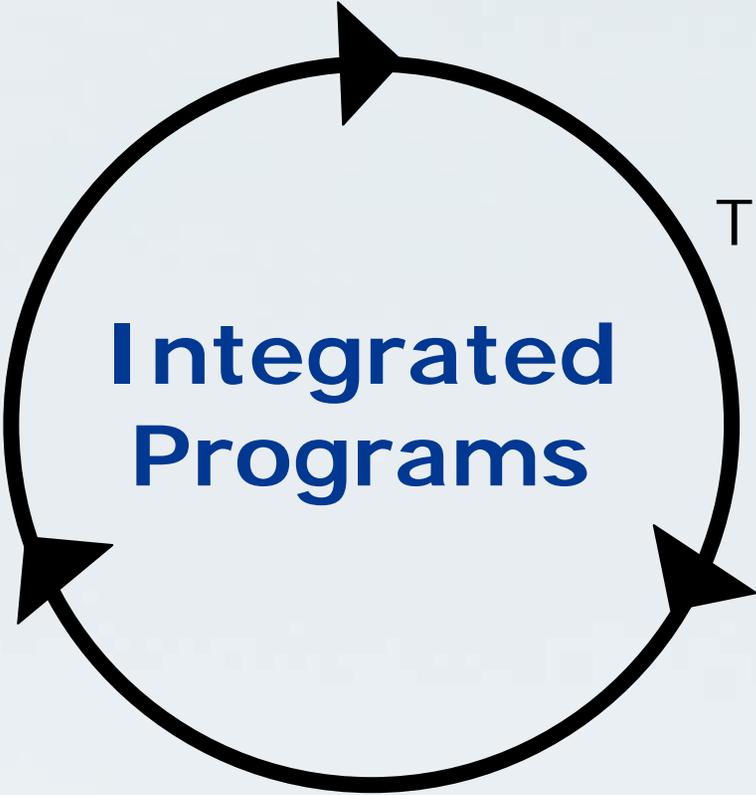
Research

Creation of knowledge

Education

Training the next generation

Integrated Programs



Extension

Dissemination of knowledge for decision-making



Integrated Research, Education, and Extension

What does optimal integration look like?

Research, education, and extension components complement one another and are truly necessary for the ultimate success of the project.



What Does Optimal Integration Look Like?

Proposed research:

should be applied research to address knowledge gaps that are critical to the development of practices and programs to address the problem.



What Does Optimal Integration Look Like?

Proposed education (teaching and teaching-related):
should strengthen institutional capacities and result in curricula and related products that will be sustained beyond the life of the project.



What Does Optimal Integration Look Like?

Proposed extension:

should lead to measurable, documented changes in learning, actions, or conditions in an identified audience or stakeholder group.



Integrated Research, Education, and Extension

Integrated Project Characteristics

Stakeholder Driven

Problem Focused

Outcome Oriented



Integrated Project Characteristics

- Aim to resolve today's problems
- Address needs identified by stakeholders in the community
- Clearly identify anticipated outcomes and have a plan for evaluating success of the project
- Contain objectives for each component of the project (research, education, and/or extension)

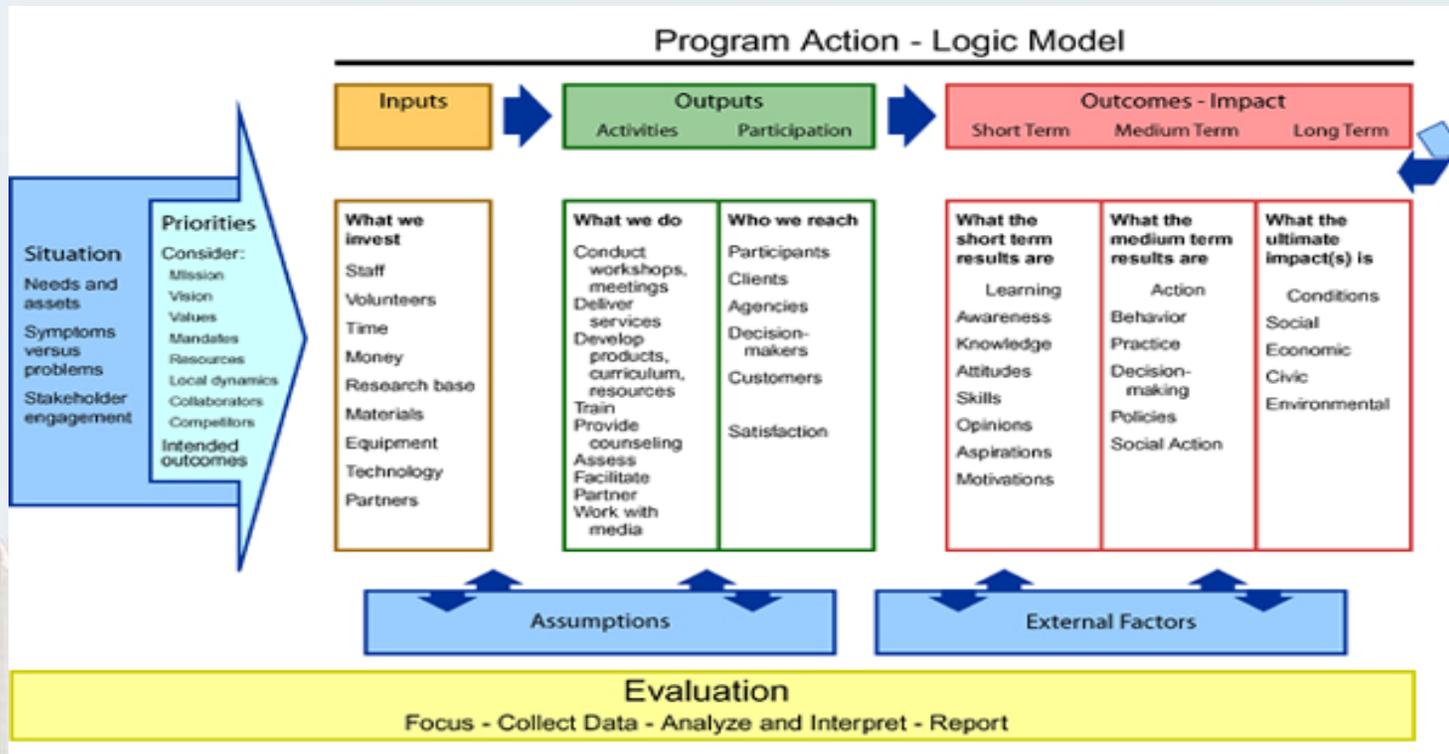
Integrated Project Characteristics

- Budget sufficient resources to carry out the set of extension, research, and/or education activities that will lead to the desired outcomes
- Include individuals on the project team with significant expertise in each project component (research, education, and/or extension)



Logic Model Planning Process

From University of Wisconsin Cooperative Extension



Logic Model Planning Process



Inputs: What we invest

Outputs:

Activities: What we do

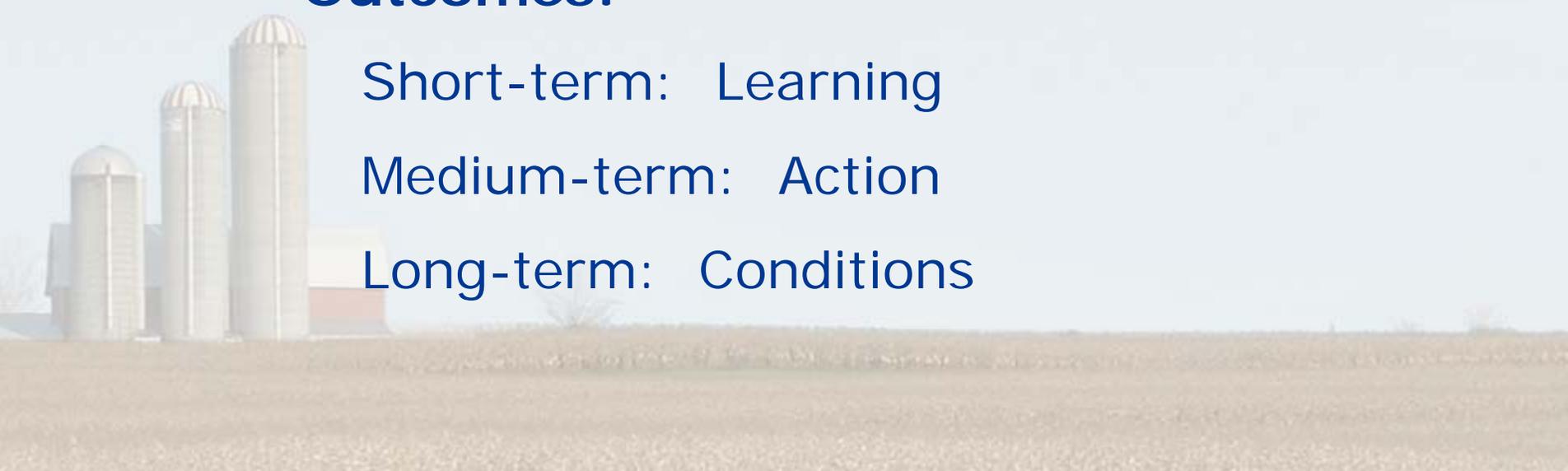
Participation: Who we reach

Outcomes:

Short-term: Learning

Medium-term: Action

Long-term: Conditions



Potential Outcomes/Impact

Short-Term

Learning

Awareness

Knowledge

Skills

Opinions

Aspirations

Medium

Action

Behavior

Practices

Decisions

Policies

Social Action

Long-Term

Conditions

Social

Economic

Civic

Environmental

Evaluation

Focus – Collect Data – Analyze and Interpret - Report

Outputs (Project Activities)

What are the project activities that will lead to the desired outcomes?

- Do they include research?
- Do they include extension?
- Do they include education?

For extension and education, the focus should be on learner centered objectives

Collaborative Team Approach



Build a team that represents the integrated approach

Build on existing partnerships while allowing new alliances to be formed



Collaborative Team Approach



Include collaborators that are trusted by and representative of the stakeholder community

Build an interdisciplinary team and clearly identify the roles and responsibilities of each team member



Collaborative Team Approach



Essential Elements of Successful Teams

- Mutual Respect
 - Trust
 - Follow through on Actions
 - Effective Communication
 - Flexibility
 - Shared Values
 - Allocation of Resources among Functions and Participating Institutions
- 

Stakeholder Driven



Substantial involvement by stakeholders will help to ensure true integration

Include stakeholders in identifying the issue, developing the project, and evaluating progress



Stakeholder Driven



Maintain regular and effective communication with stakeholders

Consider creating a stakeholder advisory committee



Problem Focused

A photograph showing a long, straight row of trees in a green field, receding into the distance under a clear sky.

Aim for high potential impact and significant public benefit

Address stakeholder needs

Match the issue to an appropriate funding opportunity within CSREES

A photograph of a farm with several tall, cylindrical silos and a barn in the background, with a large field of golden-brown crops in the foreground.

Develop a Strategic Response



Research: What are the knowledge gaps?

Extension: How will you reach those who need the information?

Education: How will you train the next generation?



Project Management Plan

A photograph showing three people in a field. On the left, a man in a dark jacket is looking towards the center. In the middle, a man wearing a red baseball cap and a light blue shirt is looking towards the right. On the right, a young man in a grey and blue baseball jersey is looking towards the center. They appear to be in a rural setting with tall grass in the background.

Roles of team members are clearly stipulated: lead institution, etc.

Administrative and management strategies clearly articulated



Project Management Plan

A photograph showing three people in a field. On the left, a man in a dark jacket is looking towards the center. In the middle, a man wearing a red baseball cap and a light blue shirt is looking towards the right. On the right, a young man in a grey and blue baseball jersey is looking towards the center. They appear to be in a rural setting with tall grass in the background.

Transparency in budget issues

Realistic agenda and timeframe for delivery of products

Effective coordination and communication



Project Evaluation Plan

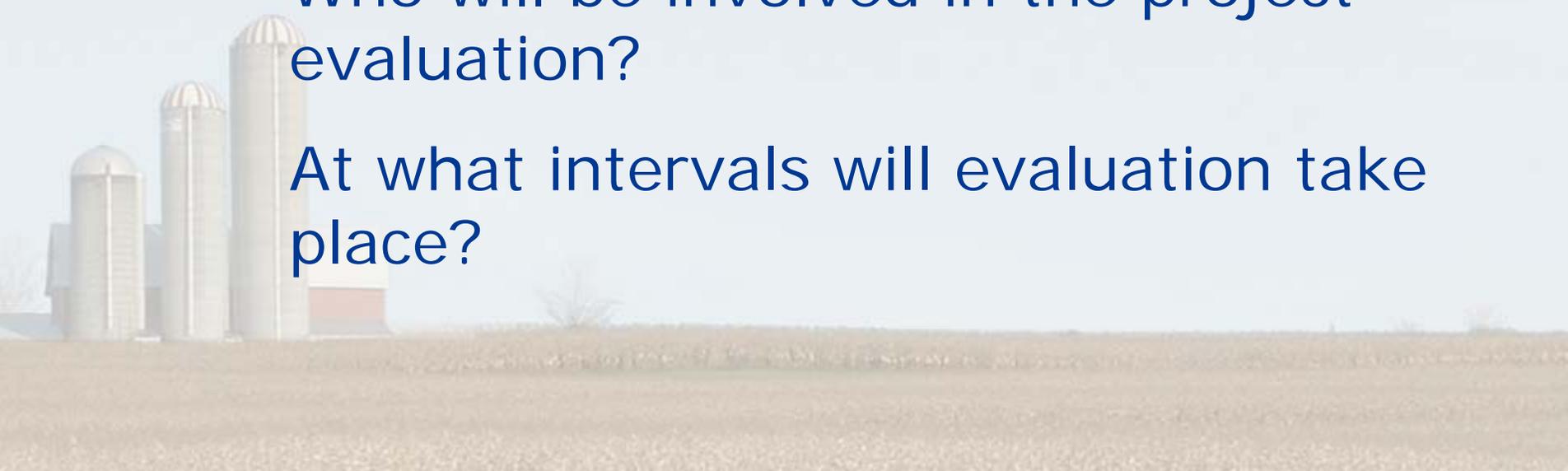
A photograph of three young men standing in a field of tall grass. The man on the left is partially visible, wearing a dark jacket. The man in the middle is wearing a red baseball cap and a light blue shirt. The man on the right is wearing a grey and blue baseball jersey. They appear to be engaged in a conversation.

Suitable and feasible methods for evaluating success of the project

How will you determine whether this project is effective?

Who will be involved in the project evaluation?

At what intervals will evaluation take place?

A photograph of a farm with three large, cylindrical metal silos in the background. The silos are arranged in a row, with the tallest one in the center. The foreground is a field of golden-brown crops, likely corn, under a clear sky.

*Integrated Programs
Solve Today's
Problems*

