



NISA SUSTAINABILITY ASSESSMENT WHOLE FARM BASE TIER SURVEY

PARTICIPANT INFO

State: _____ Respondent age: _____

Total acres farmed: _____

Total acres owned: _____ Total acres rented: _____

Number of years farming for owner: _____

Family generations currently involved in this operation: _____

Is your farm family owned? _____

NOTE: Only complete sections and/or questions that pertain to your production system. Survey should be answered based on practices which describe what you commonly do across ALL crops, not just a single field or crop.



Farm Production Management Decisions

1A The farm's average rotation is:
(Check only one)

- In a perennial crop rotational system
- On a three year or more rotation (one year of current crop and two or more years of other crops)
- On a two year rotation (an alternate planting of current harvested crop and another harvestable crop)
- This field had same annual crop last year (no rotation)
- Not applicable

1B Which of the following practices are used to limit compaction on your farm?

(Check all that apply)

- Correct tire inflation and/or tracks (reduce psi as much as is practical)
- Control traffic patterns
- Add a deep tap rooted crop to your rotation (e.g., alfalfa)
- Avoid equipment traffic on wet soils
- Not applicable

1C Is all planting equipment calibrated to ensure accurate planting rates?

(Check only one)

- Yes
- No
- Not applicable

1D Is all planting, harvest, tillage, and field equipment cleaned and sanitized at least twice per year?

(Check only one)

- Yes
- No
- Not applicable

1E Is auto steer technology used, if appropriate to the scale of production?

(Check only one)

- Yes
 - No
 - Not applicable
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Soil and Water Quality Section

SOIL

2A Which of the following practices are implemented to prevent wind erosion?
(Check all that apply)

- Use conservation tillage practices that maintain 30% plant residue on soil surface at planting
- Plant winter covers
- Use filter strips and/or biofilters for environmental benefits and/or to prevent soil movement near sensitive areas
- Use existing windbreaks
- Plant a new windbreaks
- Other
- Not applicable

FERTILITY

2B Are soil samples for nutrients taken in accordance with research-based guidelines regarding frequency and number of samples?
(Check only one)

- Yes
- No
- Not applicable

2C Is an annually updated nutrient management plan that follows science-based application guidelines on file?
(Check only one)

- Yes
- No
- Not applicable

2D Are nutrient and lime application guidelines followed for crop type to ensure optimal productivity?

(Check only one)

- Yes
- No
- Not applicable

WATER

2E Is a soil and water conservation plan for your farm available?

(Check only one)

- Yes
- No
- Not applicable

IRRIGATION:

**If you do not irrigate, skip to next section*

2F Is an irrigation scheduling program used (either computerized or by checkbook method)?

(Check only one)

- Yes
- No
- Not applicable

2G Are irrigation and water use records maintained?

(Check only one)

- Yes
 - No
 - Not applicable
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Scouting and Record Keeping Section

3A Which of the following describe why you scout?

(Check as many that apply)

- To determine when levels of a pest in a field reach or exceed treatment thresholds
- To reduce the amount of pesticides you use in order to minimize environmental impact
- To check on the effectiveness of a pest control measure already implemented
- In response to a local or recent pest report you heard or read about
- Not applicable

3B How long are field scouting and or farm production records kept on file to use for future decision-making?

(Check only one)

- Records are kept for longer than 5 years
- Records are kept between 2 and 4 years
- Records are kept for 1 year
- Not applicable

3C Are remote sensing or other advanced technologies used, if appropriate to production scale, to aid in scouting and diagnosis of pest problems?

(Check only one)

- Yes
 - No
 - Not applicable
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Information and Production Section

4A Have you or your farm manager(s) attended science-based field days or educational meetings to learn about farm, crop, and ecosystem management?

(Check only one)

- Yes
- No
- Not applicable

4B Is on-farm research conducted on your farm in collaboration with science-based partners?

(Check all that apply)

- Yes
- No
- Not applicable

4C Are crop updates or internet newsletters used on your farm?

(Check all that apply)

- Yes
- No
- Not applicable

4D Are GIS/GPS technologies used in your production, if appropriate to crop scale?

(Check only one)

- Yes
 - No
 - Not applicable
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Pesticide and Fertilizer Handling and Worker Safety Section

5A Is the person who makes pesticide applications on your farm a certified applicator (can be private or commercial)?

(Check only one)

- Yes
- No
- Not applicable

5B How often is your spray equipment (or the custom applicator's equipment) calibrated each cropping season (e.g., each nozzle with same flow and coverage rate)?

(Check only one)

- 4 times per year
- 3 times per year
- 2 times per year
- 1 time per year
- Not at all
- Not applicable

5C Is there a written drift management plan for pesticide applications available?

(Check only one)

- Yes
- No
- Not applicable

5D Are pesticide applications timed to limit volatilization (e.g., temperature, wind, and humidity monitored)?

(Check only one)

- Yes
- No
- Not applicable

Pest Management Section

WEEDS

6A Which practices do you use on the farm to manage weeds?

(Check all that apply)

- Scout fields for weeds shortly after emergence in a systematic pattern and continued each week until control options are no longer available
- Spot spray or cultivate (if appropriate) for perennial weeds, or patches of annual weed escapes, based on scouting reports
- Use diverse herbicide chemical groups with different mode-of-actions (identified on label) in rotational crops to avoid potential herbicide resistance
- Control a known problem weed in previous years' crops
- Use mechanical methods for weed control (e.g., preplant tillage, row cultivation, rotary hoeing) for weed management
- Use mowing or tillage equipment to control weeds on the field edges and adjacent areas to reduce the chance of weeds migrating into fields
- Keep field records for long-term weed species and density comparisons
- Use recommended agronomic practices (planting date, row spacing, seeding rates, fertility) to maximize early season crop growth, thus minimizing weed competition to crops
- Control noxious weeds on farm
- Clean machinery when moving from field to field to lessen the chance of spreading weeds
- Use a sterile seed bed with burn down treatments to eliminate weeds prior to planting
- Not applicable

INSECTS

6B Which practices do you use on your farm to manage insects?

(Check all that apply)

- Rotate insecticides chemical groups with different mode-of-actions (identified on label) specifically to avoid the emergence of insect resistance
- Select an insecticide based on preserving or enhancing natural enemies
- Scout for insect pests at critical periods throughout the growing season in a systematic pattern
- Keep field records on the density of each insect pest for long-term comparisons
- Manage cropping system locations to avoid pest concerns from previous to current year's crop
- Use augmentative biological control with beneficial insects released in the area either prior to or during the growing season
- Manage or enhance the habitat in or around the field to encourage or conserve beneficial insect populations (e.g. multi-species windbreaks)
- Manage the health of the crop to enhance its ability to withstand increased degrees of pest pressure
- Select resistant or tolerant varieties
- Not applicable

DISEASES

6C Which practices do you use on your farm to manage diseases?

(Check all that apply)

- Rotate fungicides chemical groups with different mode-of-actions (identified on label) specifically to avoid the emergence of resistance
 - Apply an effective biocontrol agent to reduce the chance of disease
 - Change the crop rotation to lower the probability of certain soil-borne diseases occurring (e.g., planted a crop that decreases nematode populations)
 - Monitor plant health and disease spread with aerial monitoring or aerial photography
 - Monitor disease using crop management websites
 - Select resistant or tolerant varieties for the suppression of plant disease
 - Scout crops for disease weekly in a systematic pattern throughout the growing season
 - Keep field records of disease frequency and severity for long-term comparisons
 - Manage fertility for healthy plants in order to resist disease
 - Not applicable
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Ecosystem Management and Restoration

7A Have you worked with an ecologist and/or qualified individual (conservation, restoration, NRCS employee, biologist or ecology specialists) to discuss the natural areas (privately owned, non-farmed lands such as prairie, savannahs, wetlands, forest, etc.) on your farm and to develop a plan for proper maintenance and/or restoration?

(Check only one)

- Yes
- No
- Not applicable

7B Are natural plant and ecosystem community types and biodiversity that you have on your land known by farmer?

(Check only one)

- Yes
- No
- Not applicable

7C Are restoration and/or conservation activities on your lands documented?

(Check only one)

- Yes
- No
- Not applicable

7D Are practices to enhance conservation of native wildlife or general biodiversity in and/or around your farm and/or privately owned lands implemented?

(Check all that apply)

- Plant diverse native vegetation for pollinators (e.g., prairie plantings in landscapes and/or mixed species windbreaks)
- Plant native vegetation in buffer zones
- Protect endangered species
- Enroll in conservation incentive programs
- Plant and/or protect native ecosystems such as wetlands, prairie, or woodlands

- Attend a training session related to conservation of native ecosystems
 - Have pollinator protection plan (e.g., limited spraying during peak flights, maintain water supply, have adequate diversity of species, etc.)
 - Other locally appropriate conservation practices
 - Not applicable
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Farm Operations and Sustainability Section:

GENERAL SUSTAINABILITY

8A Have you worked on a sustainability metric assessment (outcome based metric, life cycle analysis, buyer requirement, etc.) for your farm and/or crops (e.g., some type of evaluation of environmental impact of system such as for greenhouse gas emission)?

(Check only one)

- Yes (1-2 assessments per year)
- Yes (2 or more assessments per year)
- No
- Not applicable

8B Is the ability to trace product from field to distribution chain available?

(Check only one)

- Yes
- No
- Not applicable

8C Has a GAP and/or other food safety audit been completed?

(Check only one)

- Yes
- No
- Not applicable

ECONOMICS

8D Is a cost of production analysis for major crops completed?

(Check only one)

- Yes, by field and crop
- Yes, by crop
- No
- Not applicable

8E Is a marketing plan for your farm available?

(Check only one)

- Yes
- No
- Not applicable

8F How do you maintain economic diversity?

(Check all that apply)

- Grow multiple agriculture crops
- Have livestock species
- Maintain forestry lands
- Maintain hunting or tourist lands
- Work off the farm
- Sell byproducts of crop production
- Create and sell value-added products (e.g. jam, syrups, pickles, etc.)
- Not applicable to my farming operation

8G Is there a risk management plan (e.g. purchasing federal disaster programs, buying crop insurance, etc.) for responding to major natural and family disasters available?

(Check only one)

- Yes
- No
- Not applicable

8H Is there a plan for succession of your farming operation?

(Check only one)

- Yes
- No
- Not applicable

ENERGY/ RECYCLING

8I Are practices applied to limit energy use?

(Check all that apply)

- Use biofuels
- Use energy efficient lighting
- Encourage practices to limit idling of vehicles and equipment
- Adjust energy use based on peak demand (e.g. timing of drying, irrigation, etc.)
- Improve fuel efficiency over time by changing vehicle size, limiting field passes, vehicle fuel efficiency, load, scale or using other efficient methods
- Use upgraded tools to reduce energy use (e.g. efficient pumps, variable frequency drive fans, new mechanisms, etc.)
- Not applicable

8J Is there a recycling program on your operation?

(Check only one)

- Yes
- No
- Not applicable

HUMAN RESOURCES

**if no employees outside of family skip to community outreach section*

8K Is there a written human resources plan for your farm that contains any of the following: a company mission, company values, strategy for staffing and recruiting, discrimination policy, training and employee development, performance measures, compensation and benefits, and record keeping?

(Check only one)

- Yes
- No
- Not applicable

8L Is there an employee handbook for your operation, which each employee receives at hiring, that explains policies and procedures for your farm (may include dress code, attendance, health and safety training, grievance policy, etc.)? *(Check only one)*

- Yes
- No
- Not applicable

8M Are full time employees provided benefits such as health, retirement, and/or paid holidays?

(Check only one)

- Yes
- No
- Not applicable

8N Are educational opportunities for employees (schooling reimbursements, ESL classes, etc) provided by your company/farming operation?

(Check only one)

- Yes
- No
- Not applicable

COMMUNITY OUTREACH

80 How are you involved in the community (e.g., political involvement, service in informing neighbors of changing production practices, gathering input from local stakeholders)?

(Check all that apply)

- I serve on local governmental, civic and/or cultural boards to aid the local community
 - I inform neighbors of changing production practices
 - I am involved in a local service organization (e.g., faith-based, civic group)
 - I participate in functions that promote the benefits of agriculture in my community
 - I work on local land issues (conservation easements, farmland preservation, etc.)
 - I buy my production inputs from a local (e.g. state) source when possible
 - I invite community members and schools to visit my farm to learn about agriculture
 - I host hours/visits from state and federal agencies
 - Not applicable
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