

*indicates mandatory questions

1. *Name of person/farmer filling out the survey: _____
2. *Are you a: *(select all that apply)*
 - Farm Owner
 - Farm Renter
 - Farm Manager for an individual land owner
 - Corporate Farming Company Employee
3. *How many farmers are you answering on behalf of? _____
4. *Gender of farmer(s):
 - Male
 - Female
5. *Do you use any of the following farmer assessment tools? *(Select all that apply)*
 - Cool Farm Tool
 - Field to Market Fieldprint Calculator or Platform
 - Global G.A.P.
 - Potato Sustainability Initiative
 - Sustainable Agriculture Initiative (SAI) Farmer Self-Assessment
 - Sustainable Rice Platform
 - Company (Brand) Specific Assessment/Survey other than Kellogg
 - None of the above
6. *Location
 - *Region (Select from list)
 - Asia
 - Africa
 - Australia
 - Central America
 - Eastern Europe/Russia
 - North America
 - South America
 - Western Europe
 - *Country _____
 - State/Province _____
 - Zip code to nearest major town _____
 - GPS coordinates (if available) _____

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English

7. *For which crop were you requested to complete this survey (this will be the reporting crop for the rest of the survey)? *(Select only one)*
- Corn/Maize
 - Barley
 - Oats
 - Potato
 - Rice
 - Raisins/Sultanas
 - Strawberries
 - Sugar Beet
 - Wheat
8. *Total farmable land for current year of production: _____ hectares/acres *(Select unit of measure)*
9. *How many hectares/acres did you grow of the reporting crop for this production season?
_____ hectares/acres *(Select unit of measure)*
10. What seed varieties did you use for the reporting crop?
- a. Enter Seed Brand: _____
 - b. Enter Seed Product Name: _____
11. What is the agricultural performance of the seed variety(s) you produced for the reporting crop?
(Select all that apply)
- Good performance across all metrics
 - Could be better - Low yield
 - Could be better -Water intense
 - Could be better - Pest/Insect vulnerable
 - Could be better - Disease vulnerable
 - Could be better – Cost of seed
12. For the reporting crop, please provide the planting density per unit of land measure. _____
(Select the correct unit of measure: kg/ha, lbs/acre, bags/acre, bags/ha)
13. *What is the previous crop planted on field before the reporting crop? (Select all that apply)
- Barley
 - Corn / Maize
 - Oats
 - Potato
 - Rice
 - Soybean
 - Strawberries
 - Sugar Beet
 - Wheat
 - Other

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English

14. *Do you regularly rotate your crops, that is, grow a series of different types of crops in the same area in subsequent seasons?

Yes

No

15. *Which planting and harvest method do you practice? (Select all that apply)

Hand planting and/or harvesting

Mechanized planting and/or harvesting

16. Please specify the month when planting started for the reporting crop this year: (Select from the list of months)

• January

• February

• March

• April

• May

• June

• July

• August

• September

• October

• November

• December

17. Please specify the month harvesting started for the reporting crop this year: (Select from the list of months)

• January

• February

• March

• April

• May

• June

• July

• August

• September

• October

• November

• December

18. Which of the following farming systems do you use on your farm? (Select all that apply)

Organic

Certified Organic

Conventional

Certified Transitional

Environmental:

19. *How much energy do you use to produce one season of the reporting crop? (Enter all that apply)

- Electricity: _____ kWh
- Diesel: _____ liters
- Propane: _____ liters
- Natural Gas: _____ liters
- Oil: _____ liters
- Gasoline: _____ liters
- Biofuels (biodiesel/biogas/bioethanol): _____ liters, kg, or kWh
(Select correct unit of measure)

20. If you used renewable energy for heat and transportation, what energy sources did you use (Select all that apply)

- Biodiesel
- Biogas
- Biomass
- Solar Thermal
- I did not use renewable energy

21. If you used renewable energy for electricity, what energy sources did you use (Select all that apply)

- Solar
- Hydroelectric
- Wind
- Geothermal
- I did not use renewable energy

22. How do you track your energy usage?

- I keep notes either digitally (e.g., a farm management system) or on paper about my energy usage
- I can estimate my energy usage from experience
- I want to learn more about how to better track my energy usage

23. *What measures have you taken to maximize energy use efficiency? (Select all that apply)

- I have changed to higher efficiency tractors and/or trucks for hauling
- I use biotech seeds to decrease tillage and cultivation
- I am using biofuels to meet some of my energy needs
- I am using wind or solar energy to meet my energy needs
- I use precision agriculture tools to improve efficiency and to reduce fuel and fertilizer inputs
- I have implemented operating strategies to improve energy efficiency such as building full modules and operating tractors and other equipment at reduced RPM
- I use seed treatments to reduce the need for post emergent applications of insecticides and fungicides
- I have conducted an energy audit on my farm
- I have not conducted an energy audit on my farm but will conduct one in the future
- I did not take any measures to maximize energy use efficiency

24. *Do you have adequate resources to maximize your energy use efficiency?

- Yes, I am maximizing my energy use efficiency with the resources I have
- No, I lack the financial resources to implement energy efficient practices
- No, I could use more education on how to maximize my energy use efficiency

25. *Do you irrigate the reporting crop? (If the answer is "yes," please answer questions 25a-c. If the answer is "no," please proceed to question 26.)

- Yes
- No

a. What is your irrigation method for the reporting crop and what % of crop is irrigated utilizing that method?

- Center Pivot _____% of crop
- Lateral _____% of crop
- Sprinkler _____% of crop
- Drip _____% of crop
- Flood _____% of crop
- Channel irrigation _____% of crop

b. What is your total irrigation water use? _____liters/ha or _____liters/acre or _____acre-feet (Select correct units of measure)

c. Did you use flow meters to track your irrigation water applied?

- I used flow meters on my entire farm
- I used flow meters on some of fields
- I did not use flow meters

26. *How much fertilizer do you apply per hectare or acre for one rotation of the reporting crop? (Select correct units of measure for amount (kg or lbs) and area (ha or acre))

- N (Urea): _____kg/lbs per _____ha/acres
- N (Ammonium): _____kg/lbs per _____ha/acres
- N (Nitrate): _____kg/lbs per _____ha/acres
- P or P₂O₅: _____kg/lbs per _____ha/acres
- K: _____kg/lbs per _____ha/acres
- Organic fertilizer: _____kg/lbs per _____ha/acres

27. How often did you apply fertilizer for the reporting crop in this production season?

_____ (Please enter 1, 2, 3, 4, or 5 applications)

28. *What type of pesticides do you use ("Pesticides" include insecticides, herbicides, fungicides, fumigants, etc.)?

- I apply organic pesticides
- I apply synthetic pesticides
- I apply organic and synthetic pesticides
- I do not apply pesticides

(Please answer questions 29-30 only for wheat and oat production. If you are reporting on a different crop, please proceed to question 31.)

29. Do you use glyphosate to improve crop harvest?

- Yes
- No

30. Do you use glyphosate to: (Select all that apply)
- Assist in managing weather impacts
 - Improve crop quality
 - Help dry grain
 - Late season weed control
 - Pre-emergent weed control in conjunction with minimal tillage/conservation agriculture practices
31. *Do you take measures to preserve biodiversity on the farm? (Select all that apply)
- We have a biodiversity plan in place
 - We have practices that support biodiversity
 - I'd like to learn more about how to support biodiversity
32. What biodiversity measures have you taken? (Select all that apply)
- I plant crop mixtures and multiple crop varieties
 - I include beneficial flowers, perennials, hedgerows or areas of uncultivated land on the land that I manage
 - I provide nesting areas for pollinators and other wildlife
 - I work with local conservation organizations to assist in improving or increasing biodiversity
 - I do not practice any of these measures
 - Other: _____
33. * Do you use Integrated Pest Management (IPM) principles? (If the answer is "yes," please answer question 33a.)
- Yes, and I've received formal training
 - Yes, I've educated myself using books or the internet
 - No, I could use more education or resources on Integrated Pest Management
 - No, Integrated Pest Management does not apply to my operation
- a. *What integrated pest management practices do you use? (Select all that apply)
- I rotate Modes of Action (MOA) for resistance management
 - I have a scouting program to identify pests and diseases in my crop
 - I consider the potential environmental impacts when selecting my pest control products
 - I use a consultant to help me plan my pest management strategies
 - I consider timing, pesticide application equipment, neighbors and weather when planning my applications
 - I use a crop rotation, cover crop, trap crop, or other controls to reduce pest populations over time
 - I keep detailed pest management records through a Farm Management System
34. *Does everyone on your farm use Personal Protective Equipment (PPE) when handling or applying chemicals?
- Yes, and everyone involved in chemical applications has been trained according to legal requirements
 - Yes, but there is no formal training
 - No, PPE is not used for chemical applications
 - No, we do not use chemicals that require PPE

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English

35. Based on a visual assessment, is the soil texture for the crop you are reporting on:
- Coarse (sandy)
 - Medium (silt)
 - Fine (clay)
36. Is the drainage in your field poor? For example, does the water pool in your field?
- Yes
 - No
37. Is the soil in your field: (Select all that apply)
- Dry: 'Dry' if, for any part of the growing season, soil is dry, cracked or crop may be stressed in drought conditions
 - Moist: 'Moist' soils are those (including irrigated soils) without any water constraint during the growing season
38. *Do you conduct soil tests? (If the answer is "yes," please answer questions 38a-c.)
- Yes I do them and they inform my decisions
 - Yes I do them, but I don't use them
 - I have the resources to conduct soil tests, but I don't conduct soil tests
 - I don't have the resources to conduct soil tests
- b. Which of the following do you soil test for?
- Macronutrients (N, P, K)
 - Micronutrients (Ca, Mg, Zn, Cu, Bo, Mn, Fe, S)
 - pH
 - Electrical Conductivity (EC)
 - Cation exchange capacity (CEC)
 - Soil Organic Matter (SOM)
 - None of the above
- c. What is the average % of soil organic matter (SOM) across your farm?
- $SOM \leq 1.72$
 - $1.72 < SOM \leq 5.16$
 - $5.16 < SOM \leq 10.32$
 - $SOM > 10.32$
 - I don't know my average SOM
- d. What is the average pH of your soil across your farm?
- $pH \leq 5.5$
 - $5.5 < pH \leq 7.3$
 - $7.3 < pH \leq 8.5$
 - $pH > 8.5$
 - I don't know my average pH
39. *Do you practice any of the following methods on the field(s) where you produced the reporting crop this year? (Select all that apply and indicate the number of years each practice has been implemented.)
- No till: _____ years
 - Minimum till: _____ years
 - Stubble retention: _____ years
 - Permanent soil cover: _____ years
 - Cover crops: _____ years
 - Buffer or filter strips: _____ years

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English

40. Would you like to learn more about soil health management practices that are appropriate for your area?
- Yes
 - No, I already have adequate information about to how to manage soil health
41. Do you participate in a certified nutrient optimization program? (Please answer this question only if the crop was produced in the United States or Canada.)
- 4R nutrient stewardship
 - S.T.A.R. Program
 - None of the above
42. What nutrient management practices do you use? (Select all that apply)
- Nutrient management plan
 - Rate recommendation based on model optimizing fertilizer cost and crop yield
 - Rate recommendation from an agriculture research or university extension program
 - Reduced tillage including conservation tillage and no-till
 - Crop rotation or cover crop with nitrogen fixing crops such as soy, alfalfa, legumes, etc.
 - Non-nitrogen fixing cover crops
 - Nutrient/Soil management based on soil mapping
 - High efficiency/sub-surface drip fertigation (injection of fertilizers, soil amendments, water amendments and other water-soluble productions into an irrigation system)
 - Working with an agronomist to evaluate and improve nutrient use efficiency
 - Overall rate recommendations optimized using weather data
 - Use of a nitrification inhibitor
 - I do not use any of the nutrient management practices above
43. Do you laser level your field or level using local techniques?
- Yes
 - No
44. *From whom do you seek agronomic advice? (Select all that apply)
- Certified crop advisor or agronomist
 - Chemical distributor or input provider
 - Seed distributor
 - Private technician consultant
 - Government extension officer
 - Influential village leader
 - Co-operatives
 - Family or Friends
 - No one
45. Do you practice precision agriculture calibrated to optimize yield? (If the answer is "yes," please answer question 45a.)
- Yes
 - No

- a. What precision agriculture technologies do you use? (Select all that apply.)
- I use a yield monitor to identify field variability
 - I use an auto steer guidance system on farm implements
 - I use a GPS unit to pinpoint field areas requiring special attention
 - I make use of aerial or satellite images to identify areas needing treatment
 - I use a soil map for management decisions
 - I use variable rate planting
 - I use variable rate fertilizer applications
46. Do you use a farm management software to manage your farm?
- Yes
 - No
47. Where is your storage for harvested crops? (If the answer is "I immediately sell my harvested crops without storing," please proceed to question 48.)
- Harvested crops are stored on my farm
 - Harvested crops are stored with processor or co-op
 - Harvested crops are stored with government supported crop storage
 - I immediately sell my harvested crops without storing
- a. At the location where you store your crops, what storage type is used?
- Concrete/Steel Silos
 - Open Bulkheads
 - Warehouse/Cold Storage (Cooler)
 - Portable Storage
 - Aerated Storage

Social:

48. *Have you ever been required to sign a Code of Conduct or guideline on ethical business practices?
- Yes, a [Kellogg Supplier Code of Conduct](#) has been shared with me.
 - Yes, my customer (e.g. miller) has a code of conduct that I signed.
 - No
49. * How many workers were employed by your operation during your last harvest? (Please do not include unpaid family members who work on the farm.) (If the answer is "I do not employ workers," please proceed to question 50. If not, please answer questions 49a-e.)
- I do not employ workers
 - 1-10
 - 11-25
 - 26-50
 - 51-100
 - over 100
- a. What percent of your workers on farm are: (These numbers should sum to 100%)
- Men _____ %
 - Women _____ %
- b. What percent of your workers on farm are: (These numbers should sum to 100%)
- Local Permanent Residents _____ %
 - Not local, but permanent residents of the same country _____ %
 - Not local permanent residents – from out of country _____ %

- c. What percent of your workers on farm are: (should add up to 100%)
- Direct hire _____ %
 - Contracted hire _____ %
- d. How do you pay your workers?
- Pay workers directly
 - Pay workers indirectly, through a worker representative
 - Pay workers indirectly, through a labor broker or employment agency
- e. Do you and workers on your farm have regular access to health and safety training?
- Yes, through my processor or trader
 - Yes, through government entities
 - Yes, through opportunities with non-governmental organizations (NGOs)
 - No

Economic:

50. *What is your average yield in metric tons per hectare or acre for the last growing cycle of the reporting crop? _____ MT/ha or MT/acre (Select correct units of measure.)
51. *What was the difference between your actual harvest compared to your expected yield? _____ % (Please calculate by dividing actual yield by expected yield)
52. Are you satisfied with your yield returns on the reporting crop?
- Yes, every year
 - Yes, depends on the year
 - No
53. What level of disease pressure did you experience with the reporting crop in this production season?
- High
 - Medium
 - Low
54. What level of weed pressure did you experience with the reporting crop in this production season?
- High
 - Medium
 - Low
55. What level of insect pressure did you experience with the reporting crop in this production season?
- High
 - Medium
 - Low
56. If you experienced crop loss, which of the following were the cause? (Select all that apply)
- Pre-harvest crop rot
 - Disease pressure
 - Weed pressure
 - Insect pressure
 - Lack of post-harvest storage
 - Extreme weather (for example, drought, heat/cold, hail, wind damage, flooding)
 - Market problems (for example, unable to sell, contract cancellation, lack of demand)

57. Do you have a documented training system for ensuring food safety and quality of your products?
- Yes, we are trained in food safety by government agencies or processors to Hazard Analysis And Critical Control Point (HACCP) management system requirements
 - Yes, we have had some training in food safety and quality
 - No, we haven't had training but this has not impacted our access to sell our food
 - No, we haven't had training and it limits the places we can sell
58. Do you have a documented training system for you and your employees on agricultural practices?
- Yes, we receive Global G.A.P. Training
 - Yes, we receive training through a third party like government extension
 - Yes, we receive training through a processor
 - No, we haven't had training
59. Do you have enough access to agronomic resources to operate your business and make improvements over time?
- Yes
 - No
60. What are the top three things that would help you improve your business? (Select three options.)
- Access to agronomic education
 - Access to new seed technologies
 - Access to crop protection products
 - Access to markets and market pricing
 - Access to digital agriculture tools (e.g., farm management system, scouting)
 - Access to precision agriculture tools (e.g. variable rate planters)
 - Access to information or investment for conservation practices
 - Access to financing

Climate Risk and Adaptation:

61. *Do you feel your farming operation is at risk for extreme weather events (for example, drought, heat/cold, hail, wind damage, flooding) (If the answer is "no" or "I don't know," please proceed to question 62.)
- Yes
 - No
 - I don't know
- a. *Do you take actions to lessen your risk from extreme weather events?
- Yes
 - No
- b. Which methods are you using to address extreme weather events? (Select all that apply)
- Drought prevention (Ex. rainwater harvesting)
 - Soil Protection (Ex. wind break rows, erosion barriers)
 - Freeze / Frost Protection (Ex. wind machines, sprinkling)
 - Crop Insurance
 - Soil enhancement (Ex. drainage, soil structure, organic matter)
 - Alternate wet dry
 - None

The remaining questions apply only to crops produced in the following countries: Bangladesh, Brazil, Chile, China, Colombia, Egypt, India, Mexico, Morocco, South Africa, Thailand, Tunisia, and Turkey.

62. Are you and your family able to meet all of your basic needs (food, housing, clothes, education, and savings) from your income only from farming?
- Yes, all the time
 - Yes, depending on the season
 - No
63. Do you have access to financing options to purchase inputs such as seeds and fertilizer?
- Yes
 - No
64. Do you have access to regular market pricing information for the crops you produce?
- Yes, through supplier-supported resources
 - Yes, through Non-Governmental Organization (NGO)-supported resources
 - Yes, I research on my own
 - No, I don't

(If the answer to question 49 was "I do not employ workers," please skip questions 65-69.)

65. Do you keep any of your employees' identification or travel documents? (e.g. passports, visas, identification)
- Yes, we keep these documents in a central location at all times
 - Yes, but employees can access them upon request within 24 hours
 - Yes, but employees can access them anytime without needing permission
 - No, we do not keep any documents for employees
66. Do your employees pay for any of the following expenses, either directly or through paycheck deductions?
- Medical screening as a condition of employment
 - Job training
 - Worker levy fees
 - Personal protective equipment or other safety items
 - No
67. Do you have a system for your employees to file complaints about issues?
- Yes, we have a formal system and keep records of complaints and resolutions
 - Yes, we have an informal system and employees can come to a manager if they have a complaint
 - No, we do not have a system for employees to make complaints
68. Do you provide your employees housing during their time of employment?
- Yes, I provide employees with housing, with no restrictions on leaving the housing at any time
 - Yes, I provide employees with housing, with some restrictions on leaving the housing (night curfew, approval needed, only weekends, etc.)
 - No

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English

69. Do you and your employees have regular access to: *(Select all that apply)*

- Drinking water
- Bathroom facilities
- Health and medical services
- Safety training and equipment
- Formal education for school age children
- None of the above