# Data collection
# Good Growth Plan

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| BACKGROUND INFORMATION |
| :---: |

*Market Probe is an independent market research agency specialized in agricultural research. For "The Good Growth Plan", we are currently collecting farm data as part of a global project. This document is <u>your guide</u> for the collection of your farm data. We will already go through some topics, but we will also ask you to fill out some of the data yourself and send the information back to the market research agency.*
  - *After planting (intermediary data transfer): PART I + II*
  - *Before harvesting (intermediary data transfer): PART III*
  - *After harvesting (final data transfer): PART IV + V + VI*
*In case of questions, don't hesitate to contact the local help desk (<mark>insert helpdesk number here</mark>).*

Before we start data collection, we will guide you through the questionnaire, in order to make all questions clear to you. We will also give some more background information on the Good Growth Plan.

<mark>Include training package</mark>

| PART I: SCREENING |
|---|

**1. Please fill out the underline code, given by the interviewer:**
UNIQUE CODE: XX X XXX

Country code [        ]    **(See country codes Q2)**

Farm type [      ]    **(1=RF and 2=BF)**

Respondent number [          ]    **(Unique respondent number)**

**2. Please note down the country:**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Algeria | 01 | Egypt | 12 | Jordan | 23 | Poland | 34 |
| Argentina | 02 | France | 13 | Kenya | 24 | Russia | 35 |
| Australia | 03 | Ghana | 14 | Korea | 25 | South Africa | 36 |
| Bangladesh | 04 | Guatemala | 15 | Malaysia | 26 | Spain | 37 |
| Belgium | 05 | Honduras | 16 | Mexico | 27 | Taiwan | 38 |
| Brazil | 06 | Hungary | 17 | Morocco | 28 | Thailand | 39 |
| China | 07 | India | 18 | The Netherlands | 29 | Ukraine | 40 |
| Colombia | 08 | Indonesia | 19 | Pakistan | 30 | USA | 41 |
| Costa Rica | 09 | Italy | 20 | Paraguay | 31 | Venezuela | 42 |
| East Africa | 10 | Ivory Coast | 21 | Peru | 32 | Vietnam | 43 |
| Ecuador | 11 | Japan | 22 | Philippines | 33 | Zambia | 44 |

**3. Please indicate the location in which your farm is located.**
➔ *Please circle the location that applies.*

| | | | | |
|---|---|---|---|---|
| xxx | 1 | | xxx | 11 |
| xxx | 2 | | xxx | 12 |
| xxx | 3 | | xxx | 13 |
| xxx | 4 | | xxx | 14 |
| xxx | 5 | | xxx | 15 |
| xxx | 6 | | xxx | 16 |
| xxx | 7 | | xxx | 17 |
| xxx | 8 | | xxx | 18 |
| xxx | 9 | | xxx | 19 |
| xxx | 10 | | xxx | 20 |

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**4. Please note down the target crop:**

➔ *Please circle the crop that applies. If there is only one target crop, circle one crop. If crop rotation, please circle all crops included in the rotation.*

| | | | | |
|---|---|---|---|---|
| Apples | **1** | Pepper | **12** |
| Banana | **2** | Potato | **13** |
| Barley | **3** | Rice | **14** |
| Cauliflower for processing industry | **4** | Soybean | **15** |
| Cocoa | **5** | Stone fruit | **16** |
| Coffee | **6** | Sugarcane | **17** |
| Corn | **7** | Sunflower | **18** |
| Cotton | **8** | Tomato | **19** |
| Grape | **9** | Watermelon | **20** |
| Oilseed rape | **10** | Wheat | **21** |
| Pear | **11** | | |

**5. What is your total cultivated area of [TARGET CROP] in hectare?**

............ha

**If size < cut-off size ➔ close interview**

**6. What is the size of your cultivated area in hectare? This is the area used for growing crops (including fields that are used for pasture in a crop rotation).**

➔ *Please write down the size of your cultivated area.*

............ha

**7. What percentage of your agricultural production activities is related to crop cultivation? And what to livestock?**

➔ *Please indicate in terms of % of your time – sum should be 100%.*

| | |
|---|---|
| 1. Crop cultivation | ..............% |
| 2. Livestock | ..............% |
| | **100%** |

**8.** Xxxx
**9.** Xxxx
**10.** Xxxx
**11.** Xxxx
**12.** Xxxx
**13.** Xxxx
**14.** Xxxx
**15.** Xxxx
**16.** Xxxx
**17.** xxxx

Based on country inputs, other screening criteria will be added. Like:
- Farm size
- Crop specificity
- Crop rotation production cycle
- Production types (ways of producing crops)
- Average yield in previous years
- Level of mechanization
- Primary input channel
- Primary output channel (coop, contract, farm gate, etc.)
- Expenses for inputs
- Degree of input use
- Problems with which pests and diseases
- Grower's age
- Basic characterization
  - Demographic profile and Media habit
  - Social Activities, e.g. Farmer Group
  - Buyers channel
  - Attitudinal test on farming and pesticide usage
- Decision and criteria processes
  - Source of brand or product information
- Criteria of choosing supplier


*IF COUNTRY IS AUSTRALIA: PADDOCK INSTEAD OF FIELD OR GROWING AREA (CHECK WITH AGENCY)*
*IF COUNTRY IS THE NETHERLANDS: 1 APPLE FIELD AND 1 PEAR FIELD*
*IF CROP ROTATIONS: MULTIPLE CROPS*

| PART II : FARM CHARACTERISTICS |
|---|

| A. Contact information |
|---|

**18. Please fill out the <u>unique code</u>, given by the interviewer:**
UNIQUE CODE: XX X XXX

Country code    [   |   ]    **(See country codes Q2)**

Farm type    [   ]    **(1=RF and 2=BF)**

Respondent number    [   |   ]    **(Unique respondent number)**

**19. <u>Surname</u>**
➔ *Please write down your surname in capital letters.*

**20. <u>First name</u>**
➔ *Please write down your first name in capital letters.*

**21. <u>Phone number</u>**
➔ *Please write down your phone number, including the country and region codes.*

**22. <u>E-mail address</u>**
➔ *Please write down your e-mail address in capital letters.*

**23. Farm address - <u>street</u>**
➔ *Please write down the street name of the location of your farm in capital letters.*

**24. Farm address – <u>street number</u>**
➔ *Please write down the street number.*

**25. Farm address – <u>postal code</u>**
➔ *Please write down the postal code of the city in which your farm is located.*

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**26. Farm address – <u>city</u>**
➔ *Please write down the city in which your farm is located.*

|  |
|--|
|  |

**27. <u>Age</u>**
➔ *Please write down your age in years.*

|  |
|--|
| ...... years |

**28. <u>Gender</u>**
➔ *Please circle your gender.*

| | |
|--|--|
| Male | 1 |
| Female | 2 |

**29. We are conducting this survey on behalf of a manufacturer of crop protection products. Would it be okay for you for this company to contact you with follow-up information?**

| | |
|--|--|
| Yes | 1 |
| No | 2 |

**30. Are you a <u>full-time or part-time</u> farmer?**
➔ *Please circle your answer. Only one answer possible.*

| | |
|--|--|
| I am a full-time grower (no other activities generating income apart from farming) | 1 |
| I am a part-time grower (having other activities generating income, like teaching, …) | 2 |
| Don't know / no answer | 99 |

**31. <u>Until what age</u> did you go to school?**
➔ *Please write down the age until when you went to school.*

|  |
|--|
| Until………… year |

**32. What is your <u>highest level of education</u>?**
➔ *Please circle your answer. Only one answer possible.*

| | |
|--|--|
| No education | 1 |
| Primary/Elementary school | 2 |
| Secondary school | 3 |
| Higher education (not university) | 4 |
| University degree | 5 |
| Other. Specify: | 98 |
| Don't know / no answer | 99 |

*IF Q32 is 2 or 3 or 4 or 5*
**33. Was this an <u>agronomical/agricultural</u> education?**
➔ *Please circle your answer.*

| | |
|--|--|
| Yes | 1 |
| No | 2 |

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**34. Are you a member of a producer group, association or cooperative?**
➔ *Please circle your answer.*

| | | |
|---|---|---|
| Yes | **1** |
| No | **2** |

*IF YES (CODE 1 in Q34)*
**35. A. What is the <u>name of the producer group/association/cooperative</u> that you are a member of?**
➔ *Please note down your answer. If member of several, please note down all.*

| |
|---|
| |
| |
| |

*IF BELGIUM*
**B. Do you collaborate with a growing consultancy agency (e.g. TACO)?**
➔ *Please circle your answer.*

| | | |
|---|---|---|
| Yes | **1** |
| No | **2** |

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| B. General farm activities |
| --- |

**36. What are the <u>crops</u> you are cultivating?**

➔ *Please circle all that apply. Please write down other crop if needed. (MR)*

| | | | | |
| --- | --- | --- | --- | --- |
| Apples | 1 | | Pepper | 12 |
| Banana | 2 | | Potato | 13 |
| Barley | 3 | | Rice | 14 |
| Cauliflower for processing industry | 4 | | Soybean | 15 |
| Cocoa | 5 | | Stone fruit | 16 |
| Coffee | 6 | | Sugarcane | 17 |
| Corn | 7 | | Sunflower | 18 |
| Cotton | 8 | | Tomato | 19 |
| Grape | 9 | | Watermelon | 20 |
| Oilseed rape | 10 | | Wheat | 21 |
| Pear | 11 | | | |
| Other. Specify 1: | | | | 96 |
| Other. Specify 2: | | | | 97 |
| Other. Specify 3: | | | | 98 |
| Don't know / no answer | | | | 99 |

**C. Soil erosion measures**

41. **Which of the following <u>measures</u> are taken to manage soil erosion on your farm?**
➔ *Please tick all that apply. (MR)*

| | |
|---|---|
| Practices that reduce the effective length of the slope, such as grass strips and terraces across the slope | 1 |
| Practices that minimize the disturbance of the soil for seedbed preparation, e.g. direct drilling, chisel ploughing | 2 |
| Practices that increase the amount of soil cover and organic matter, e.g. cover crops, mulches, stubbles | 3 |
| Practices that increase the variety of crops grown on the land by improving crop rotations and including mixed cropping | 4 |
| Aligning crop management practices perpendicular to the slope, e.g. contour ploughing, planting and tramlines | 5 |
| Other crop management practices that reduce soil compaction and increase infiltration, e.g. a controlled traffic plan, sub-soiling | 6 |
| Irrigation practices that increase the effectiveness of infiltration, e.g. reduced sprinkle irrigation intensity, surge irrigation | 7 |
| Practices that allow runoff to go down slopes and paths without causing soil erosion, e.g. grassed waterways that prevent formation of rills and gullies, fascines that protect banks of water streams | 8 |
| Use a decision support system | 9 |
| Use information provided by officials about disease and pest pressure | 10 |
| None of these | 90 |
| Don't know / no answer | 99 |

42. **Please note down any <u>other measures</u> that are taken to manage soil erosion on your farm.**
➔ *Please note down other measures.*

| F. Safety measures |
|---|

**49. Do you apply <u>safety measures</u> when applying chemicals?**
➔ *Please circle your answer. (SR)*

| | | |
|---|---|---|
| Yes | **1** |
| No | **2** |

*IF YES in Q49 (safe-use behavior)*

**50.** Pesticides can be spilled or not disposed of properly at various points during their handling and use.  It is important to prevent point sources coming into contact with humans and / or  the environment, since this may cause harm and is not how they are intended to be used in crop protection.

Moreover, as pesticides are applied in a diffuse manner to pests, diseases and weeds in field and greenhouse environments,  it is important to prevent diffuse sources coming into contact with humans and / or  the environment to ensure they are used safely to protect crops, by making applications more precise and by using measures to prevent transfer from where they are applied to the rest of the environment.

**To which extent are the following <u>measures</u> for safe-use of chemicals applied on your farm?**
➔ *Please tick what applies. Only one answer possible for each measure.*

| | Always | Mostly | Some-times | Never | Don't know |
|---|---|---|---|---|---|
| a.   I always keep products under lock and out of reach of children and animals. | 4 | 3 | 2 | 1 | 99 |
| b.   I practice good personal hygiene and always wash my hands before eating and drinking | 4 | 3 | 2 | 1 | 99 |
| c.   I wash myself and my clothes after working with chemicals. | 4 | 3 | 2 | 1 | 99 |
| d.   I do not eat, smoke or drink whilst handling, working with or applying pesticides. | 4 | 3 | 2 | 1 | 99 |
| e.   I understand the product label and can follow the advice stated. If I don't understand something, I can ask someone to explain it to me. | 4 | 3 | 2 | 1 | 99 |
| f.    I routinely check and clean my spraying equipment before and after use, and repair it if needed to prevent leaking. | 4 | 3 | 2 | 1 | 99 |
| g.   I am always using Personal Protective Equipment when preparing and spraying chemicals. | 4 | 3 | 2 | 1 | 99 |
| h.   When I transport pesticides to the farm, I keep them in in separate compartments and in sealed containers away from foodstuff and other goods. | 4 | 3 | 2 | 1 | 99 |
| i.   When transporting chemicals from the farm to the field, I check that the equipment does not leak, avoiding transport on public roads if possible, and know what to do in an emergency plan in case leaks occur. | 4 | 3 | 2 | 1 | 99 |
| j.   I preferably prepare products for application in places where I am able | 4 | 3 | 2 | 1 | 99 |

| | | | | | |
|---|---|---|---|---|---|
| to contain spills, and with appropriate use of Personal Protective Equipment (PPE). | | | | | |
| k.   I triple rinse containers after use, and dispose of them in accordance with local recommendations. | 4 | 3 | 2 | 1 | 99 |
| l.   On my farm, workers are not allowed to re-enter areas treated with chemical products until permitted. | 4 | 3 | 2 | 1 | 99 |
| m.   I keep the details of chemical product applications recorded to avoid uncertainty near harvest. | 4 | 3 | 2 | 1 | 99 |
| n.   I calibrate the spraying equipment to deliver the right amount, at the right place, and at the right time, to improve efficacy, productivity, and prevent transfer. | 4 | 3 | 2 | 1 | 99 |
| o.   I try to reduce runoff and erosion from my fields if it is a problem, or try to prevent transfer to the rest of the environment, e.g. with buffers. | 4 | 3 | 2 | 1 | 99 |
| p.   I optimize the application timing to weather patterns if it is a problem, or try to prevent transfer to the rest of the environment, e.g. with ponds. | 4 | 3 | 2 | 1 | 99 |

*IF YES in Q49 (safe-use behavior)*

**51.   Which <u>other</u> measures for safe-use of chemicals do you apply on your farm to limit the risk of chemical spills, make applications more precise, and avoid transfer to humans and the rest of the environment?**
➔ *Please note down all other measures for safe-use of chemicals that you apply.*

| |
|---|
| |

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**52. In the past 12 months, did you or someone else on the farm have an <u>accident with pesticide poisoning</u>?**
➜ *Please circle your answer. (SR)*

| | |
|---|---|
| Yes | 1 |
| No | 2 |

*IF YES in Q52 (accidents with pesticide poisoning)*

**53. What were the <u>immediate actions</u> taken to treat the pesticide poisoning?**
➜ *Please note down all immediate actions to treat pesticide poisoning that you applied.*

|  |
|---|
|  |

**54. <u>Where</u> do you deposit the <u>rest water</u> after spraying?**
➜ *Spontaneous. Please circle your answer. Please note down others if not in list. Multiple answers possible. (MR)*

| | |
|---|---|
| Citerne (phytobac, heliosec, sentinel, biofilter, …) | 1 |
| In fields | 2 |
| In rivers, streams, drain or via the ditch | 3 |
| Other specify 1: | 96 |
| Other specify 2: | 97 |
| Other specify 3: | 98 |
| Don't know / no answer | 99 |

**55. A. Where do you clean your spraying equipment? Is this <u>on farm</u> or <u>on field</u>?**
➜ *Please circle your answer. Multiple answers possible. (MR)*

| | |
|---|---|
| On farm | 1 |
| On field | 2 |
| Don't know / no answer | 99 |

**B. <u>Where</u> do you dispose of the <u>cleaning water</u> used for cleaning the equipment?**
➜ *Spontaneous. Please circle your answer. Please note down others if not in list. Multiple answers possible. (MR)*

| | |
|---|---|
| On field | 1 |
| Citerne (phytobac, heliosec, sentinel, biofilter, …) | 2 |
| On an unpaved surface | 3 |
| On a paved surface (drain / dike) | 4 |
| Other specify 1: | 96 |
| Other specify 2: | 97 |
| Other specify 3: | 98 |
| Don't know / no answer | 99 |

**C. Do you <u>store</u> the sprayer protected from rain?**

➔ *Please circle your answer. (SR)*

| | |
|---|---|
| Yes | 1 |
| No | 2 |

**D. Do you use <u>drift reducing nozzles</u>?**

➔ *Please circle your answer. (SR)*

| | |
|---|---|
| Yes | 1 |
| No | 2 |

**E. Are you interested to follow <u>training</u> to keep updated with crop growing in general and environment management?**

➔ *Please circle your answer. (SR)*

| | |
|---|---|
| Yes | 1 |
| No | 2 |

*IF BELGIUM*

**F. Do you have a <u>phyto licence</u>?**

➔ *Please circle your answer. (SR)*

| | |
|---|---|
| Yes | 1 |
| No | 2 |

*IF Q55F=1 (YES)*

**G. Which <u>kind</u> of phyto licence do you have?**

➔ *Please circle your answer. (SR)*

| | |
|---|---|
| P1 | 1 |
| P2 | 2 |
| P3 | 3 |
| NP | 4 |
| P2s | 5 |
| Other. Specify: | 98 |
| Don't know / no answer | 99 |

*ALL*

**H. How would you define your <u>relationship</u> with your neighbors/direct environment, in terms of crop protection products and safety measures?**

➔ *Please circle your answer. (SR)*

| | |
|---|---|
| very good | 5 |
| good | 4 |
| average | 3 |
| bad | 2 |
| very bad | 1 |
| Don't know / no answer | 99 |

*IF Q55H=1 or 2 or 3 or 4 or 5*

**I. Can you please <u>explain</u> your answer?**
➔ *Please describe.*

| G. Description of growing area |
|---|

*We now would like to ask you to select the **2 main growing areas** for your [TARGET CROP] cultivation (in case of more than 2 main growing areas, please select the 2 largest growing areas). A growing area is defined as the area where the treatment and the conditions are unique, like one [TARGET CROP] variety, one program, one soil condition, one planting year in case of trees, ...*

**56. Please note down the <u>growing area name</u> (f.e. D-block, windmill field, ...).**
➔ *Please note down the name of each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| Field description |  |  |

**57. What is the <u>size of each growing area</u> for [TARGET CROP]?**
➔ *Please write down the size of each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| Size of growing area | ............ha | ............ha |

**58. In general, what is the <u>topography</u> of each growing area for [TARGET CROP]?**
➔ *Please note down the slope of each growing area. Please write down other if needed. (SR)*

|  | Growing area A | Growing area B |
|---|---|---|
| Hilly | 1 | 1 |
| Flat | 2 | 2 |
| Gentle slope | 3 | 3 |
| Steep slope | 4 | 4 |
| Valley | 5 | 5 |
| **98.** Other. Specify: | ... | ... |
| Don't know / no answer | 99 | 99 |

**59. A. Can you please give us the <u>GPS location</u> of each growing area for [TARGET CROP]? One point (corner or point on field) is sufficient.**
➔ *Note down the latitude and longitude of one point of each growing area and indicate whether it is North/South and West/East.*

|  | Growing area A | | Growing area B | |
|---|---|---|---|---|
| 1) Latitude | ........°........'........'' | N/S | ........°........'........'' | N/S |
| 2) Longitude | ........°........'........'' | W/E | ........°........'........'' | W/E |

**B. If you have the <u>GPS polygon</u> available for each growing area of [TARGET CROP], please write it down below.**

➔ *Note down the latitude and longitude of each point of the polygon and indicate whether it is North/South and West/East.*

| | | Growing area A | | Growing area B | |
|---|---|---|---|---|---|
| **POINT 1** | 1) Latitude | .........°.........'.........'' | N/S | .........°.........'.........'' | N/S |
| | 2) Longitude | .........°.........'.........'' | W/E | .........°.........'.........'' | W/E |
| **POINT 2** | 1) Latitude | .........°.........'.........'' | N/S | .........°.........'.........'' | N/S |
| | 2) Longitude | .........°.........'.........'' | W/E | .........°.........'.........'' | W/E |
| **POINT 3** | 1) Latitude | .........°.........'.........'' | N/S | .........°.........'.........'' | N/S |
| | 2) Longitude | .........°.........'.........'' | W/E | .........°.........'.........'' | W/E |
| **POINT 4** | 1) Latitude | .........°.........'.........'' | N/S | .........°.........'.........'' | N/S |
| | 2) Longitude | .........°.........'.........'' | W/E | .........°.........'.........'' | W/E |
| **POINT 5** | 1) Latitude | .........°.........'.........'' | N/S | .........°.........'.........'' | N/S |
| | 2) Longitude | .........°.........'.........'' | W/E | .........°.........'.........'' | W/E |
| **POINT 6** | 1) Latitude | .........°.........'.........'' | N/S | .........°.........'.........'' | N/S |
| | 2) Longitude | .........°.........'.........'' | W/E | .........°.........'.........'' | W/E |
| **POINT 7** | 1) Latitude | .........°.........'.........'' | N/S | .........°.........'.........'' | N/S |
| | 2) Longitude | .........°.........'.........'' | W/E | .........°.........'.........'' | W/E |
| **POINT 8** | 1) Latitude | .........°.........'.........'' | N/S | .........°.........'.........'' | N/S |
| | 2) Longitude | .........°.........'.........'' | W/E | .........°.........'.........'' | W/E |

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**60. Do you <u>rotate</u> crops on each growing area for [TARGET CROP]?**
➔ *Please circle your answer. (SR)*

|  | Growing area A | Growing area B |
|---|---|---|
| **Yes** | 1 | 1 |
| **No** | 2 | 2 |

*IF Q60=1 (crop rotation)*
**61. What <u>crops</u> are you cultivating in rotation on each growing area for [TARGET CROP]?**
➔ *Please circle all that apply for each growing area. Note down other crops if not in list. (MR)*

|  | Growing area A | Growing area B |
|---|---|---|
| Apples | 1 | 1 |
| Banana | 2 | 2 |
| Barley | 3 | 3 |
| Cauliflower for processing industry | 4 | 4 |
| Cocoa | 5 | 5 |
| Coffee | 6 | 6 |
| Corn | 7 | 7 |
| Cotton | 8 | 8 |
| Grape | 9 | 9 |
| Oilseed rape | 10 | 10 |
| Pear | 11 | 11 |
| Pepper | 12 | 12 |
| Potato | 13 | 13 |
| Rice | 14 | 14 |
| Soybean | 15 | 15 |
| Stone fruit | 16 | 16 |
| Sugarcane | 17 | 17 |
| Sunflower | 18 | 18 |
| Tomato | 19 | 19 |
| Watermelon | 20 | 20 |
| Wheat | 21 | 21 |
| **96.** Other. Specify 1: |  |  |
| **97.** Other. Specify 2: |  |  |
| **98.** Other. Specify 3: |  |  |
| Don't know / no answer | 99 | 99 |

*IF Q60=1 (crop rotation)*

**62. Which crop is <u>first/second/third/fourth/fifth/...</u> in the production cycle of each growing area for [TARGET CROP]?**

→ *Please circle the first/second/third/fourth/fifth/... crop. Note down other crops if not in list. (MR)*

| | Growing area A | | | | | Growing area B | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1st | 2nd | 3rd | 4th | 5th | 1st | 2nd | 3rd | 4th | 5th |
| Apples | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Banana | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Barley | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Cauliflower for processing industry | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| Cocoa | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| Coffee | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| Corn | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| Cotton | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| Grape | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
| Oilseed rape | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 |
| Pear | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 |
| Pepper | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 |
| Potato | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 |
| Rice | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 |
| Soybean | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 |
| Stone fruit | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| Sugarcane | 17 | 17 | 17 | 17 | 17 | 17 | 17 | 17 | 17 | 17 |
| Sunflower | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 |
| Tomato | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 |
| Watermelon | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| Wheat | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 |
| **96.** Other. Specify 1: | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 |
| **97.** Other. Specify 2: | 97 | 97 | 97 | 97 | 97 | 97 | 97 | 97 | 97 | 97 |
| **98.** Other. Specify 3: | 98 | 98 | 98 | 98 | 98 | 98 | 98 | 98 | 98 | 98 |
| No systematic crop rotation, depends on situation | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 |
| Don't know / no answer | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 |

**63.** **Within one season, do you cultivate <u>more than one crop</u> on each growing area for [TARGET CROP]?**
➔ *Please circle your answer. (SR)*

|  | Growing area A | Growing area B |
|---|:---:|:---:|
| **Yes** | 1 | 1 |
| **No** | 2 | 2 |

*IF Q63=1 (more than one crop in one season)*

64. **A. Which crop are you cultivating <u>before the main crop</u> (previous crop) on each growing area for [TARGET CROP]?**
**B. Which crop are you cultivating <u>as the main crop</u> on each growing area?**
**C. Which crop are you cultivating <u>after the main crop</u> (succeeding crop) on each growing area for [TARGET CROP]?**
➔ *Please circle the crop you are cultivating before the main crop, your main crop and the crop you are cultivating after the main crop. (SR per column)*

| | Growing area A | | | Growing area B | | |
|---|---|---|---|---|---|---|
| | **A.** | **B.** | **C.** | **A.** | **B.** | **C.** |
| Apples | 1 | 1 | 1 | 1 | 1 | 1 |
| Banana | 2 | 2 | 2 | 2 | 2 | 2 |
| Barley | 3 | 3 | 3 | 3 | 3 | 3 |
| Cauliflower for processing industry | 4 | 4 | 4 | 4 | 4 | 4 |
| Cocoa | 5 | 5 | 5 | 5 | 5 | 5 |
| Coffee | 6 | 6 | 6 | 6 | 6 | 6 |
| Corn | 7 | 7 | 7 | 7 | 7 | 7 |
| Cotton | 8 | 8 | 8 | 8 | 8 | 8 |
| Grape | 9 | 9 | 9 | 9 | 9 | 9 |
| Oilseed rape | 10 | 10 | 10 | 10 | 10 | 10 |
| Pear | 11 | 11 | 11 | 11 | 11 | 11 |
| Pepper | 12 | 12 | 12 | 12 | 12 | 12 |
| Potato | 13 | 13 | 13 | 13 | 13 | 13 |
| Rice | 14 | 14 | 14 | 14 | 14 | 14 |
| Soybean | 15 | 15 | 15 | 15 | 15 | 15 |
| Stone fruit | 16 | 16 | 16 | 16 | 16 | 16 |
| Sugarcane | 17 | 17 | 17 | 17 | 17 | 17 |
| Sunflower | 18 | 18 | 18 | 18 | 18 | 18 |
| Tomato | 19 | 19 | 19 | 19 | 19 | 19 |
| Watermelon | 20 | 20 | 20 | 20 | 20 | 20 |
| Wheat | 21 | 21 | 21 | 21 | 21 | 21 |
| **96.** Other. Specify 1: | | | | | | |
| **97.** Other. Specify 2: | | | | | | |
| **98.** Other. Specify 3: | | | | | | |
| Don't know / no answer | 99 | 99 | 99 | 99 | 99 | 99 |

**65. Do you practice <u>intercropping</u> (growing multiple crops on the same growing area in the same season) on each growing area for [TARGET CROP]?**

➔ *Please circle your answer. (SR)*

|  | Growing area A | Growing area B |
|---|---|---|
| **Yes** | 1 | 1 |
| **No** | 2 | 2 |

*IF Q65=1 (intercropping)*

**66. <u>Which</u> crops do you intercrop on each growing area with [TARGET CROP]?**

➔ *Please circle all crops you intercrop. Note down other crops if not in list. (MR)*

|  | Growing area A | Growing area B |
|---|---|---|
| Apples | 1 | 1 |
| Banana | 2 | 2 |
| Barley | 3 | 3 |
| Cauliflower for processing industry | 4 | 4 |
| Cocoa | 5 | 5 |
| Coffee | 6 | 6 |
| Corn | 7 | 7 |
| Cotton | 8 | 8 |
| Grape | 9 | 9 |
| Oilseed rape | 10 | 10 |
| Pear | 11 | 11 |
| Pepper | 12 | 12 |
| Potato | 13 | 13 |
| Rice | 14 | 14 |
| Soybean | 15 | 15 |
| Stone fruit | 16 | 16 |
| Sugarcane | 17 | 17 |
| Sunflower | 18 | 18 |
| Tomato | 19 | 19 |
| Watermelon | 20 | 20 |
| Wheat | 21 | 21 |
| **96.** Other. Specify 1: |  |  |
| **97.** Other. Specify 2: |  |  |
| **98.** Other. Specify 3: |  |  |
| Don't know / no answer | 99 | 99 |

**67.** **What is the <u>soil type</u> of each growing area for [TARGET CROP]?**
➔ *Please circle the soil type that applies for each growing area. Note down other soil type if not in list. (SR)*

|  | Growing area A | Growing area B |
|---|---|---|
| clay soil | 1 | 1 |
| silty clay soil | 2 | 2 |
| silty clay loam soil | 3 | 3 |
| clay loam soil | 4 | 4 |
| loam soil | 5 | 5 |
| silt loam soil | 6 | 6 |
| silt soil | 7 | 7 |
| sandy clay soil | 8 | 8 |
| sandy clay loam soil | 9 | 9 |
| sandy loam soil | 10 | 10 |
| loamy sand soil | 11 | 11 |
| sand soil | 12 | 12 |
| **98.** Other. Specify: |  |  |
| Don't know / no answer | 99 | 99 |

**68.** **From your point of view, can you give your opinion of the <u>soil quality</u> of each growing area for [TARGET CROP]?**
➔ *Please circle the soil quality that applies for each growing area. (SR)*

|  | Growing area A | Growing area B |
|---|---|---|
| really good | 4 | 4 |
| good | 3 | 3 |
| bad | 2 | 2 |
| very bad | 1 | 1 |
| Don't know / no answer | 99 | 99 |

**69.** **In general, what was the condition of the soil in terms of <u>moisture level</u> for each growing area for [TARGET CROP]?**
➔ *Please circle the moisture level that applies for each growing area. (SR)*

|  | Growing area A | Growing area B |
|---|---|---|
| Very moisture | 5 | 5 |
| Rather moisture | 4 | 4 |
| Normal moisture level | 3 | 3 |
| Rather dry | 2 | 2 |
| Very dry | 1 | 1 |
| Don't know / no answer | 99 | 99 |

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| PART III: FARMING PRACTICES – BEFORE HARVEST |
|---|

**70.** **Please fill out your <u>unique code</u>, given by the interviewer (has to be the same as in Q1):**

UNIQUE CODE: XX X XXX

Country code [    ] **(See country codes Q2)**

Farm type [    ] **(1=RF and 2=BF)**

Respondent number [    ] **(Unique respondent number)**

| A. Planting and fruit development - SOYBEAN |
|---|

**71.** **Could you please note down the <u>soybean variety</u> that has been used for each growing area for soybean?**
➔ *Please note down the soybean variety that has been used for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Soybean variety** | … | … |

**72.** **When did the <u>first field preparation</u> start for each growing area for soybean?**
➔ *Please write down the date of the first field preparation for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Date first field preparation** | …/…/… (Day/Month/Year) | …/…/… (Day/Month/Year) |

**73.** **What is the <u>amount of seeds in kilogram</u> that has been sown per m² for each growing area for soybean?**
➔ *Please note down the total amount of seeds in kilogram per m² for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Seed density** | …………kg/m² | …………kg/m² |

**74.** **<u>When</u> have the seeds been sown/planted for each growing area for soybean?**
➔ *Please write down the date of sowing/planting for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Sowing/planting date** | …/…/… (Day/Month/Year) | …/…/… (Day/Month/Year) |

**75.** **What is the <u>final stand – i.e. the number of plants - per m²</u> for each growing area for soybean?**
➔ *Please note down the final stand (number of plants) per m² for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Final stand/Plant density** | …………plants/m² | …………plants/m² |

**76.** **Prior to harvest, could you please indicate the <u>percentage</u> of the plot area that is <u>lodged</u> for each growing area for soybean?**

→ *Please note down the percentage for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **% plot area lodged** | ............% | ............% |

| B. Planting and fruit development – CEREALS (WHEAT) |
| --- |

**77.** Could you please note down the <u>wheat variety</u> that has been used for each growing area for wheat?

➔ *Please note down the wheat variety that has been used for each growing area.*

| | Growing area A | Growing area B |
| --- | --- | --- |
| **Wheat variety** | … | … |

**78.** When did the <u>first field preparation</u> start for each growing area for wheat?

➔ *Please write down the date of the first field preparation for each growing area.*

| | Growing area A | Growing area B |
| --- | --- | --- |
| **Date first field preparation** | …/…/…<br>(Day/Month/Year) | …/…/…<br>(Day/Month/Year) |

**79.** What is the <u>amount of seeds in kilogram</u> that has been sown per $m^2$ for each growing area for wheat?

➔ *Please note down the total amount of seeds in kilogram per $m^2$ for each growing area.*

| | Growing area A | Growing area B |
| --- | --- | --- |
| **Seed density** | …………$kg/m^2$ | …………$kg/m^2$ |

**80.** When was the crop <u>sown/planted</u> for each growing area for wheat?

➔ *Please write down the date of sowing/planting for each growing area.*

| | Growing area A | Growing area B |
| --- | --- | --- |
| **Sowing/planting date** | …/…/…<br>(Day/Month/Year) | …/…/…<br>(Day/Month/Year) |

**81.** Could you please indicate the <u>average number of tillers per plant at growth stage 37</u> for each growing area for wheat?

➔ *Please write down the average number of tillers per plant for each growing area.*

| | Growing area A | Growing area B |
| --- | --- | --- |
| **Average number of tillers per plant at growth stage 37** | …………tillers/plant | …………tillers/plant |

**82.** Could you please indicate the <u>average number of ears per square meter</u> during flowering for each growing area for wheat?

➔ *Please write down the average number of ears per $m^2$ for each growing area.*

| | Growing area A | Growing area B |
| --- | --- | --- |
| **Average number of ears** | …………ears/$m^2$ | …………ears/$m^2$ |

83. What is the <u>final stand – i.e. the average total number of plants - per square meter</u> for each growing area for wheat?

➔ *Please note down the total number of plants per m² for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Final stand/Plant density** | …………plants/m² | …………plants/m² |

84. Prior to harvest, could you please indicate the <u>percentage</u> of the plot area that is <u>lodged</u> for each growing area for wheat?

➔ *Please note down the percentage for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **% plot area lodged** | …………% | …………% |

| C. Planting and fruit development – CEREALS (BARLEY) |
|---|

**85. Could you please note down the <u>barley variety</u> that has been used for each growing area for barley?**
➔ *Please note down the barley variety that has been used for each growing area.*

|  | **Growing area A** | **Growing area B** |
|---|---|---|
| **Barley variety** | ... | ... |

**86. When did the <u>first field preparation</u> start for each growing area for barley?**
➔ *Please write down the date of the first field preparation for each growing area.*

|  | **Growing area A** | **Growing area B** |
|---|---|---|
| **Date first field preparation** | …/…/… (Day/Month/Year) | …/…/… (Day/Month/Year) |

**87. What is the <u>amount of seeds in kilogram</u> that has been sown per $m^2$ for each growing area for barley?**
➔ *Please note down the total amount of seeds in kilogram per $m^2$ for each growing area.*

|  | **Growing area A** | **Growing area B** |
|---|---|---|
| **Seed density** | …………kg/$m^2$ | …………kg/$m^2$ |

**88. When have the seeds been <u>sown/planted</u> for each growing area for barley?**
➔ *Please write down the date of sowing/planting for each growing area.*

|  | **Growing area A** | **Growing area B** |
|---|---|---|
| **Sowing/planting date** | …/…/… (Day/Month/Year) | …/…/… (Day/Month/Year) |

**89. What is the <u>final stand – i.e. the average total number of plants per square meter</u> for each growing area for barley?**
➔ *Please note down the total number of plants per $m^2$ for each growing area.*

|  | **Growing area A** | **Growing area B** |
|---|---|---|
| **Final stand/Plant density** | …………plants/$m^2$ | …………plants/$m^2$ |

*IF WINTER BARLEY*
**90. Could you please indicate the <u>average number of tillers per plant after winter</u> for each growing area for barley?**
➔ *Please write down the average number of tillers per plant for each growing area.*

|  | **Growing area A** | **Growing area B** |
|---|---|---|
| **Average number of tillers per plant after winter** | …………tillers/plant | …………tillers/plant |

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*IF SPRING BARLEY*

**91. Could you please indicate the <u>average number of ears per <mark>square meter</mark></u> at <u>growth stage 51 to 59</u> for each growing area for barley?**

➜ *Please write down the average number of ears per m² at growth stage 51 to 59 for each growing area.*

| | Growing area A | Growing area B |
|---|---|---|
| **Average number of ears per m² at growth stages 51-59** | …………ears/m² | …………ears/m² |

**92. Could you please indicate the <u>average number of ears per <mark>square meter</mark></u> during flowering for each growing area for barley?**

➜ *Please write down the average number of ears per m² during flowering for each growing area.*

| | Growing area A | Growing area B |
|---|---|---|
| **Average number of ears** | …………ears/m² | …………ears/m² |

**93. Prior to harvest, could you please indicate the <u>percentage</u> of the plot area that is <u>lodged</u> for each growing area for barley?**

➜ *Please note down the percentage for each growing area.*

| | Growing area A | Growing area B |
|---|---|---|
| **% plot area lodged** | …………% | …………% |

| D. Planting and fruit development – GRAPE |
|---|

**94. Could you please note down the <u>grape variety</u> that has been used for each growing area for grape?**
➔ *Please note down the grape variety that has been used for each growing area.*

| | Growing area A | Growing area B |
|---|---|---|
| **Grape variety** | … | … |

**95. What is the <u>year of planting</u> of the grape vines for each growing area for grape?**
➔ *Please note down the year of planting for each growing area.*

| | Growing area A | Growing area B |
|---|---|---|
| **Year of planting** | ………… | ………… |

**96. What is the <u>total number of grape vines</u> for each growing area for grape?**
➔ *Please note down the total number of grape vines for each growing area.*

| | Growing area A | Growing area B |
|---|---|---|
| **Number of grape vines** | …………grape vines | …………grape vines |

**97. Do you <u>prune</u> each growing area for grape?**
➔ *Please circle your answer.*

| | Growing area A | Growing area B |
|---|---|---|
| **Yes** | 1 | 1 |
| **No** | 2 | 2 |

*IF Q97=1 (YES)*
**98. When did the <u>pruning of the grape vines</u> occur for each growing area for grape?**
➔ *Please write down the period of pruning for each growing area.*

| | | Growing area A | | Growing area B |
|---|---|---|---|---|
| **Pruning period** | A | From …/…/… (Day/Month/Year) | A | From …/…/… (Day/Month/Year) |
| | B | Until …/…/… (Day/Month/Year) | B | Until …/…/… (Day/Month/Year) |

**99. When did the first grape vines reach the <u>flowering stage</u> for each growing area for grape?**
➔ *Please write down the flowering date for each growing area.*

| | Growing area A | Growing area B |
|---|---|---|
| **Flowering date** | …/…/… (Day/Month/Year) | …/…/… (Day/Month/Year) |

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**100. Could you please indicate the <u>average number of grape bunches per vine</u> for each growing area for grape?**

➔ *Please write down the average number of grape bunches per vine for each growing area.*

| | Growing area A | Growing area B |
|---|---|---|
| **Average number of grape bunches per vine** | …………grape bunches/vine | ………… grape bunches/vine |

**101. Could you please indicate the <u>average number of berries per bunch</u> for each growing area for grape?**

➔ *Please write down the average number of berries per bunch for each growing area.*

| | Growing area A | Growing area B |
|---|---|---|
| **Average number of berries per bunch** | …………berries/bunch | ………… berries/bunch |

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| E. Planting and fruit development – CORN |
|---|

**102. Could you please note down the <u>corn variety</u> that has been used for each growing area for corn?**
➔ *Please note down the corn variety that has been used for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| Corn variety | … | … |

**103. When did the <u>first field preparation</u> start for each growing area for corn?**
➔ *Please write down the date of the first field preparation for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| Date first field preparation | …/…/… (Day/Month/Year) | …/…/… (Day/Month/Year) |

**104. What is the <u>amount of seeds in kilogram</u> that has been sown per $m^2$ for each growing area for corn?**
➔ *Please note down the total amount of seeds in kilogram per $m^2$ for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| Seed density | …………kg/$m^2$ | …………kg/$m^2$ |

**105. When have the seeds been <u>sown/planted</u> for each growing area for corn?**
➔ *Please write down the date of sowing/planting for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| Sowing/planting date | …/…/… (Day/Month/Year) | …/…/… (Day/Month/Year) |

**106. What is the <u>final stand</u> – i.e. the average total number of plants per square meter for each growing area for corn?**
➔ *Please note down the total number of plants per $m^2$ for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| Final stand/Plant density | …………plants/$m^2$ | …………plants/$m^2$ |

**107. Could you please indicate the <u>average number of cobs per square meter</u> during flowering for each growing area for corn?**
➔ *Please write down the average number of cobs per $m^2$ for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| Average number of cobs per $m^2$ | …………cobs/$m^2$ | …………cobs/$m^2$ |

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**108.** **Prior to harvest, could you please indicate the <u>percentage</u> of the plot area that is <u>lodged</u> for each growing area for corn?**

➔ *Please note down the percentage.*

|  | Growing area A | Growing area B |
|---|---|---|
| **% plot area lodged** | ............% | ............% |

| F. Planting and fruit development – COTTON |
|---|

**109. Could you please note down the <u>cotton variety</u> that has been used for each growing area for cotton?**
➔ *Please note down the cotton variety that has been used for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| Cotton variety | ... | ... |

**110. When did the <u>first field preparation</u> start for each growing area for cotton?**
➔ *Please write down the date of the first field preparation for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| Date first field preparation | …/…/… (Day/Month/Year) | …/…/… (Day/Month/Year) |

**111. What is the <u>amount of seeds in kilogram</u> that has been sown per m² for each growing area for cotton?**
➔ *Please note down the total amount of seeds in kilogram per m² for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| Seed density | …………kg/m² | …………kg/m² |

**112. When have the seeds been <u>sown/planted</u> for each growing area for cotton?**
➔ *Please write down the date of sowing/planting for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| Sowing/planting date | …/…/… (Day/Month/Year) | …/…/… (Day/Month/Year) |

**113. What is the <u>final stand – i.e. the average total number of plants per square meter</u> for each growing area for cotton?**
➔ *Please note down the total number of plants per m² for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| Final stand/Plant density | …………plants/m² | …………plants/m² |

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| G. Planting and fruit development – RICE |
|---|

**114. Could you please note down the <u>rice variety</u> that has been used for each growing area for rice?**
➔ *Please note down the rice variety that has been used for each growing area.*

|  | **Growing area A** | **Growing area B** |
|---|---|---|
| **Rice variety** | … | … |

**115. When did the <u>first field preparation</u> start for each growing area for rice?**
➔ *Please write down the date of the first field preparation for each growing area.*

|  | **Growing area A** | **Growing area B** |
|---|---|---|
| **Date first field preparation** | …/…/…<br>(Day/Month/Year) | …/…/…<br>(Day/Month/Year) |

**116. What <u>production system</u> (ways of planting rice) is used on each growing area for rice? Was it….?**
➔ *Please tick what applies for each growing area. Only one answer possible per growing area. Note down other if not in list.*

|  | **Growing area A** | **Growing area B** |
|---|---|---|
| **Transplanted (TR)** | 1 | 1 |
| **Direct-seeded (DS)** | 2 | 2 |
| **Direct-seeded, wet-sown (DSWS)** | 3 | 3 |
| **Direct-seeded, dry-sown (DSDS)** | 4 | 4 |
| **System of Rice Intensification (SRI)** | 5 | 5 |
| **98.** Other. Specify |  |  |
| Don't know / no answer | 99 | 99 |

**117. What is the <u>amount of seeds</u> in kilogram that has been sown per m² for each growing area for rice?**
➔ *Please note down the total amount of seeds in kilogram per m² for each growing area.*

|  | **Growing area A** | **Growing area B** |
|---|---|---|
| **Seed density** | …………kg/m² | …………kg/m² |

**118. When have the seeds or seedlings been <u>planted</u> for each growing area for rice?**
➔ *Please write down the date of planting for each growing area.*

|  | **Growing area A** | **Growing area B** |
|---|---|---|
| **Planting date** | …/…/…<br>(Day/Month/Year) | …/…/…<br>(Day/Month/Year) |

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**119. Please indicate the <u>inter-row space</u> that is applied on each growing area for rice?**

➔ *Please note down the inter-row space in* ==centimeter== *for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Inter-row space** | …………==cm== | …………==cm== |

**120. Could you please indicate the <u>average number of tillers per hill at the panicle initiation</u> for each growing area for rice?**

➔ *Please note down the average number of tillers per hill at the panicle initiation.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Average number of tillers per hill at the panicle initiation** | …………tillers/hill | ………… tillers/hill |

**121. Could you please indicate the <u>average number of tillers per hill at heading/flowering</u> for each growing area for rice?**

➔ *Please note down the average number of tillers per hill at heading/flowering.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Average number of tillers per hill at heading/flowering** | …………tillers/hill | ………… tillers/hill |

**122. Could you please indicate the <u>average number of tillers per hill at active ripening</u> for each growing area for rice?**

➔ *Please note down the average number of tillers per hill at active ripening.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Average number of tillers per hill at active ripening** | …………tillers/hill | ………… tillers/hill |

| H. Planting and fruit development – POTATO |
| --- |

**123. Could you please note down the <u>potato variety</u> that has been used for each growing area for potato?**
➜ *Please note down the potato variety that has been used for each growing area.*

|  | Growing area A | Growing area B |
| --- | --- | --- |
| **Potato variety** | … | … |

**124. When did the <u>first field preparation</u> start for each growing area for potato?**
➜ *Please write down the date of the first field preparation for each growing area.*

|  | Growing area A | Growing area B |
| --- | --- | --- |
| **Date first field preparation** | …/…/… (Day/Month/Year) | …/…/… (Day/Month/Year) |

**125. What is the <u>amount of seeds in kilogram</u> that has been sown per m² for each growing area for potato?**
➜ *Please note down the total amount of seeds in kilogram per m² for each growing area.*

|  | Growing area A | Growing area B |
| --- | --- | --- |
| **Seed density** | …………kg/m² | …………kg/m² |

**126. When have the seeds been <u>sown</u> for each growing area for potato?**
➜ *Please write down the date of sowing for each growing area.*

|  | Growing area A | Growing area B |
| --- | --- | --- |
| **Sowing date** | …/…/… (Day/Month/Year) | …/…/… (Day/Month/Year) |

**127. What is the <u>final stand – i.e. the average total number of plants per square meter</u> for each growing area for potato?**
➜ *Please note down the total number of plants per m² for each growing area.*

|  | Growing area A | Growing area B |
| --- | --- | --- |
| **Final stand/Plant density** | …………plants/m² | …………plants/m² |

| I. Planting and fruit development – OILSEED RAPE |
|---|

**128.** Could you please note down the oilseed rape variety that has been used for each growing area for oilseed rape?
➔ *Please note down the oilseed rape variety that has been used for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| Oilseed rape variety | … | … |

**129.** When did the first field preparation start for each growing area for oilseed rape?
➔ *Please write down the date of the first field preparation for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| Date first field preparation | …/…/…<br>(Day/Month/Year) | …/…/…<br>(Day/Month/Year) |

**130.** What is the amount of seeds in kilogram that has been sown per $m^2$ for each growing area for oilseed rape?
➔ *Please note down the total amount of seeds in kilogram per $m^2$ for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| Seed density | …………kg/m² | …………kg/m² |

**131.** When have the seeds been sown for each growing area for oilseed rape?
➔ *Please write down the date of sowing for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| Sowing date | …/…/…<br>(Day/Month/Year) | …/…/…<br>(Day/Month/Year) |

**132.** What is the final stand – i.e. the average total number of plants per square meter for each growing area for oilseed rape?
➔ *Please note down the total number of plants per $m^2$ for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| Final stand/Plant density | …………plants/m² | …………plants/m² |

**133.** Prior to harvest, could you please indicate the percentage of the plot area that is lodged for each growing area for oilseed rape?
➔ *Please note down the percentage per growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| % plot area lodged | …………% | …………% |

| J. Planting and fruit development – SUNFLOWER |
|---|

**134. Could you please note down the <u>sunflower variety</u> that has been used for each growing area for sunflower?**

➜ *Please note down the sunflower variety that has been used for each growing area.*

| | Growing area A | Growing area B |
|---|---|---|
| **Sunflower variety** | … | … |

**135. When did the <u>first field preparation</u> start for each growing area for sunflower?**

➜ *Please write down the date of the first field preparation for each growing area.*

| | Growing area A | Growing area B |
|---|---|---|
| **Date first field preparation** | …/…/… (Day/Month/Year) | …/…/… (Day/Month/Year) |

**136. What is the <u>amount of seeds in kilogram</u> that has been sown per $m^2$ for each growing area for sunflower?**

➜ *Please note down the total amount of seeds in kilogram per $m^2$ for each growing area.*

| | Growing area A | Growing area B |
|---|---|---|
| **Seed density** | …………kg/$m^2$ | …………kg/$m^2$ |

**137. When have the seeds been <u>sown/planted</u> for each growing area for sunflower?**

➜ *Please write down the date of sowing/planting for each growing area.*

| | Growing area A | Growing area B |
|---|---|---|
| **Sowing/planting date** | …/…/… (Day/Month/Year) | …/…/… (Day/Month/Year) |

**138. What is the <u>inter-row space</u> that is used when planting sunflower on each of the growing areas?**

➜ *Please note down the inter-row space in cm for each growing area.*

| | Growing area A | Growing area B |
|---|---|---|
| **Inter-row space** | …………cm | …………cm |

**139. What is the <u>final stand – i.e. the average total number of plants per square meter</u> for each growing area for sunflower?**

➜ *Please note down the total number of plants per $m^2$ for each growing area.*

| | Growing area A | Growing area B |
|---|---|---|
| **Final stand/Plant density** | …………plants/$m^2$ | …………plants/$m^2$ |

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**140. Prior to harvest, could you please indicate the <u>percentage</u> of the plot area that is <u>lodged</u> for each growing area for sunflower?**

➔ *Please note down the percentage.*

| | Growing area A | Growing area B |
|---|---|---|
| **% plot area lodged** | ............% | ............% |

| K. Planting and fruit development – SUGARCANE |
|---|

**141. Could you please note down the <u>sugarcane variety</u> that has been used for each growing area for sugarcane?**
➜ *Please note down the sugarcane variety that has been used for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Sugarcane variety** | … | … |

**142. What is the <u>year of planting</u> for each growing area for sugarcane?**
➜ *Please note down the year of planting for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Year of planting** | ………… (Year) | …………(Year) |

**143. What is the <u>average age</u> of the plants in each growing area for sugarcane?**
➜ *Please note down the average age of the plants for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Age of plants** | …………years | …………years |

**144. What is the <u>final stand – i.e. the average total number of plants per square meter</u> for each growing area for sugarcane?**
➜ *Please note down the total number of plants per $m^2$ for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Final stand/Plant density** | …………plants/$m^2$ | …………plants/$m^2$ |

**145. Which of the following <u>planting types</u> have been used for each growing area for sugarcane?**
➜ *Please tick what applies. Please write down other if needed. (SR)*

|  | Growing area A | Growing area B |
|---|---|---|
| **Mechanical planting** | 1 | 1 |
| **Manual planting** | 2 | 2 |
| **98. Other. Specify** |  |  |
| Don't know / no answer | 99 | 99 |

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**146. What is the <u>replanting cycle (generation)</u> for each growing area for sugarcane?**
➔ *Please circle the replanting cycle that applies. Please write down other if needed. (SR)*

|  | Growing area A | Growing area B |
|---|---|---|
| First cycle: plant cane | 1 | 1 |
| Second cycle/ratoon | 2 | 2 |
| Third cycle/ratoon | 3 | 3 |
| Fourth cycle/ratoon | 4 | 4 |
| Fifth cycle/ratoon | 5 | 5 |
| Sixth cycle/ratoon | 6 | 6 |
| Seventh cycle/ratoon | 7 | 7 |
| Eight cycle/ratoon | 8 | 8 |
| Ninth cycle/ratoon | 9 | 9 |
| Tenth cycle/ratoon | 10 | 10 |
| Other specify: …. | 98 | 98 |
| Don't know / no answer | 99 | 99 |

*IF Q146=1 (first cycle)*
**147. When have the young plants been <u>planted</u> for each growing area for sugarcane?**
➔ *Please write down the date of planting for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| Planting date | …/…/… (Day/Month/Year) | …/…/… (Day/Month/Year) |

**148. A. Could you please indicate the <u>number of tillers per meter at 60 days after planting</u> for each growing area for sugarcane?**
➔ *Please note down the number of tillers per meter.*

|  | Growing area A | Growing area B |
|---|---|---|
| Number of tillers per meter at 60 days after planting | …………tillers/m | …………tillers/m |

**B. Could you please indicate the <u>number of tillers per meter at 200 days after planting</u> for each growing area for sugarcane?**
➔ *Please note down the number of tillers per meter.*

|  | Growing area A | Growing area B |
|---|---|---|
| Number of tillers per meter at 200 days after planting | …………tillers/m | …………tillers/m |

**C. Could you please indicate the <u>number of sugarcane failures in %-age at 60 days after planting</u> for each growing area for sugarcane?**
➔ *Please note down the percentage.*

|  | Growing area A | Growing area B |
|---|---|---|
| Number of sugarcane failures at 60 days after planting | …………% | …………% |

**D. Could you please indicate the <u>number of sugarcane failures in %-age at 200 days after planting</u> for each growing area for sugarcane?**

➔ *Please note down the percentage.*

| | Growing area A | Growing area B |
|---|---|---|
| **Number of sugarcane failures at 200 days after planting** | ............% | ............% |

**E. Prior to harvest, could you please indicate the <u>percentage</u> of the plot area that is <u>lodged</u> for each growing area for sugarcane?**

➔ *Please note down the percentage.*

| | Growing area A | Growing area B |
|---|---|---|
| **% plot area lodged** | ............% | ............% |

*IF Q146≠1 (first cycle)*

**149. For the plant cane in the first cycle, what was the <u>total ton of cane per hectare</u> that has been achieved for each growing area?**

➔ *Please write down the total tons of cane per hectare for each growing area.*

| | Growing area A | Growing area B |
|---|---|---|
| **Total tons of canes per hectare plant cane** | ............ton/ha | ............ton/ha |

| L. Planting and fruit development – TOMATO |
|---|

**150. Could you please note down the <u>tomato variety</u> that has been used for each growing area for tomato?**
➔ *Please note down the tomato variety that has been used for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Tomato variety** | … | … |

**151. Are tomatoes grown on <u>open field or in greenhouse</u> for each growing area?**
➔ *Please indicate what applies. Please write down other if needed. (SR)*

|  | Growing area A | Growing area B |
|---|---|---|
| **Open field** | 1 | 1 |
| **Greenhouse** | 2 | 2 |
| **98.** Other. Specify 1: | … | … |
| Don't know / no answer | 99 | 99 |

*IF Q151=2 (greenhouse)*
**152. Are tomatoes grown in an <u>active greenhouse</u> or a <u>passive greenhouse</u> for each growing area?**
➔ *Please indicate what applies. Please write down other if needed. (SR)*

|  | Growing area A | Growing area B |
|---|---|---|
| **Active greenhouse** | 1 | 1 |
| **Passive greenhouse** | 2 | 2 |
| **98.** Other. Specify 1: | … | … |
| Don't know / no answer | 99 | 99 |

**153. When did the <u>first field preparation</u> start for each growing area for tomato?**
➔ *Please write down the date of the first field preparation for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Date first field preparation** | …/…/…<br>(Day/Month/Year) | …/…/…<br>(Day/Month/Year) |

**154. What is the <u>amount of seeds in kilogram</u> that has been sown per m² for each growing area for tomato?**
➔ *Please note down the total amount of seeds in kilogram per m² for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Seed density** | …………kg/m² | …………kg/m² |

**155. When have the seeds/young plants been <u>sown/planted</u> for each growing area for tomato?**
➔ *Please write down the date of sowing/planting for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Sowing/planting date** | …/…/…<br>(Day/Month/Year) | …/…/…<br>(Day/Month/Year) |

**156. What is the <u>final stand – i.e. the average total number of plants per square meter</u> for each growing area for tomato?**

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➔ *Please note down the total number of plants per m² for each growing area.*

| | Growing area A | Growing area B |
|---|---|---|
| **Final stand/plant density** | …………plants/m² | …………plants/m² |

➔ *Please note down the total number of plants per m² for each growing area.*

| | Growing area A | Growing area B |
|---|---|---|

| M. Planting and fruit development – PEPPER |
|---|

**157. Could you please note down the <u>pepper variety</u> that has been used for each growing area for pepper?**
➔ *Please note down the pepper variety that has been used for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Pepper variety** | … | … |

**158. Are peppers grown on <u>open field or in greenhouse</u> for each growing area?**
➔ *Please indicate what applies. Please write down other if needed. (SR)*

|  | Growing area A | Growing area B |
|---|---|---|
| **Open field** | 1 | 1 |
| **Greenhouse** | 2 | 2 |
| **98.** Other. Specify 1: | … | … |
| Don't know / no answer | 99 | 99 |

*IF Q158=2 (greenhouse)*
**159. Are peppers grown in an <u>active greenhouse</u> or a <u>passive greenhouse</u> for each growing area?**
➔ *Please indicate what applies. Please write down other if needed. (SR)*

|  | Growing area A | Growing area B |
|---|---|---|
| **Active greenhouse** | 1 | 1 |
| **Passive greenhouse** | 2 | 2 |
| **98.** Other. Specify 1: | … | … |
| Don't know / no answer | 99 | 99 |

**160. When did the <u>first field preparation</u> start for each growing area for pepper?**
➔ *Please write down the date of the first field preparation for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Date first field preparation** | …/…/… (Day/Month/Year) | …/…/… (Day/Month/Year) |

**161. What is the <u>amount of seeds in kilogram</u> that has been sown per m² for each growing area for pepper?**
➔ *Please note down the total amount of seeds in kilogram per m² for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Seed density** | …………kg/m² | …………kg/m² |

**162. When have the seeds/young plants been <u>sown/planted</u> for each growing area for pepper?**
➔ *Please write down the date of sowing/planting for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Sowing/planting date** | …/…/… (Day/Month/Year) | …/…/… (Day/Month/Year) |

**163. What is the <u>final stand – i.e. the average total number of plants per square meter</u> for each growing area for pepper?**

➔ *Please note down the total number of plants per m² for each growing area.*

| | Growing area A | Growing area B |
|---|---|---|
| **Final stand/plant density** | …………plants/m² | …………plants/m² |

➔ *Please note down the total number of plants per m² for each growing area.*

| | Growing area A | Growing area B |
|---|---|---|

| N. Planting and fruit development – WATERMELON |
|---|

**164. Could you please note down the <u>watermelon variety</u> that has been used for each growing area for watermelon?**
➔ *Please note down the watermelon variety that has been used for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Watermelon variety** | ... | ... |

**165. Are watermelons grown on <u>open field or in greenhouse</u> for each growing area?**
➔ *Please indicate what applies. Please write down other if needed. (SR)*

|  | Growing area A | Growing area B |
|---|---|---|
| **Open field** | 1 | 1 |
| **Greenhouse** | 2 | 2 |
| **98.** Other. Specify 1: | ... | ... |
| Don't know / no answer | 99 | 99 |

*IF Q165=2 (greenhouse)*
**166. Are watermelons grown in an <u>active greenhouse</u> or a <u>passive greenhouse</u> for each growing area?**
➔ *Please indicate what applies. Please write down other if needed. (SR)*

|  | Growing area A | Growing area B |
|---|---|---|
| **Active greenhouse** | 1 | 1 |
| **Passive greenhouse** | 2 | 2 |
| **98.** Other. Specify 1: | ... | ... |
| Don't know / no answer | 99 | 99 |

**167. When did the <u>first field preparation</u> start for each growing area for watermelon?**
➔ *Please write down the date of the first field preparation for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Date first field preparation** | .../.../... (Day/Month/Year) | .../.../... (Day/Month/Year) |

**168. What is the <u>amount of seeds in kilogram</u> that has been sown per m² for each growing area for watermelon?**
➔ *Please note down the total amount of seeds in kilogram per m² for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Seed density** | ............kg/m² | ............kg/m² |

**169. When have the seeds/young plants been <u>sown/planted</u> for each growing area for watermelon?**
➔ *Please write down the date of sowing/planting for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Sowing/planting date** | .../.../... (Day/Month/Year) | .../.../... (Day/Month/Year) |

**170. What is the <u>final stand – i.e. the average total number of plants per square meter</u> for each growing area for watermelon?**

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➔ *Please note down the total number of plants per* m² *for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Final stand/plant density** | …………plants/m² | …………plants/m² |

➔ *Please note down the total number of plants per* m² *for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|

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| O. Planting and fruit development – BANANA |
| --- |

**171. Could you please note down the <u>banana variety</u> that has been used for each growing area for banana?**
➔ *Please note down the banana variety that has been used for each growing area.*

| | Growing area A | Growing area B |
| --- | --- | --- |
| **Banana variety** | … | … |

**172. What is the <u>year of planting</u> for each growing area for banana?**
➔ *Please note down the year of planting for each growing area.*

| | Growing area A | Growing area B |
| --- | --- | --- |
| **Year of planting** | ………… | ………… |

**173. What is the <u>average age</u> of the trees in each growing area for banana?**
➔ *Please note down the average age of trees for each growing area.*

| | Growing area A | Growing area B |
| --- | --- | --- |
| **Age of trees** | …………years | …………years |

**174. What is the <u>total number of trees</u> for each growing area for banana?**
➔ *Please note down the total number of trees for each growing area.*

| | Growing area A | Growing area B |
| --- | --- | --- |
| **Tree density** | …………trees | …………trees |

**175. Do you <u>prune</u> each growing area for banana?**
➔ *Please circle your answer.*

| | Growing area A | Growing area B |
| --- | --- | --- |
| **Yes** | 1 | 1 |
| **No** | 2 | 2 |

*IF Q175=1 (YES)*
**176. When did the <u>pruning of the trees</u> start for each growing area for banana?**
➔ *Please write down the period of pruning for each growing area.*

| | | Growing area A | | Growing area B |
| --- | --- | --- | --- | --- |
| **Pruning period** | A | From …/…/… (Day/Month/Year) | A | From …/…/… (Day/Month/Year) |
| | B | Until …/…/… (Day/Month/Year) | B | Until …/…/… (Day/Month/Year) |

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**177.** When was the <u>last replanting</u> of the trees – i.e. date when the last trees were replanted - for each growing area for banana?
➔ *Please indicate the last replanting of the trees for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Last replanting** | ....(Year) | ....(Year) |

**178.** Please indicate the <u>percentage of trees</u> that has been <u>replanted</u> during the last replanting phase for each growing area for banana?
➔ *Please indicate the percentage of trees that has been replanted for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Percentage of trees replanted** | ....% | ....% |

**179. Did you leave the field <u>fallow</u> in the past <u>before re-planting</u> for each growing area for banana?**
➔ *Please tick what applies. (SR)*

|  | Growing area A | Growing area B |
|---|---|---|
| **Yes** | 1 | 1 |
| **No** | 2 | 2 |

| P. Planting and fruit development – APPLE |
|---|

**180. Could you please note down the <u>apple variety</u> that has been used for each growing area for apple?**
➔ *Please note down the apple variety that has been used for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Apple variety** | … | … |

**181. What is the <u>year of planting</u> for each growing area for apple?**
➔ *Please note down the year of planting for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Year of planting** | ………… | ………… |

**182. What is the <u>total number of trees</u> for each growing area for apple?**
➔ *Please note down the total number of trees for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Tree density** | …………trees | …………trees |

**183. Do you <u>prune</u> each growing area for apple?**
➔ *Please circle your answer. (SR)*

|  | Growing area A | Growing area B |
|---|---|---|
| **Yes** | 1 | 1 |
| **No** | 2 | 2 |

*IF Q183=1 (YES)*
**184. When did the <u>winter pruning of the trees</u> start for each growing area for apple?**
➔ *Please write down the period of pruning for each growing area.*

|  |  | Growing area A |  | Growing area B |
|---|---|---|---|---|
| **Pruning period** | A | From …/…/… (Day/Month/Year) | A | From …/…/… (Day/Month/Year) |
|  | B | Until …/…/… (Day/Month/Year) | B | Until …/…/… (Day/Month/Year) |

**185. When did the first trees reach the <u>flowering stage</u> for each growing area for apple?**
➔ *Please write down the flowering date for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Flowering date** | …/…/… (Day/Month/Year) | …/…/… (Day/Month/Year) |

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**186. What is the <u>average number of flowers per tree</u> at the flowering stage for each growing area for apple?**

➔ *Please tick what applies for each growing area. Single response.*

|  | Growing area A | Growing area B |
|---|---|---|
| No flowers | 1 | 1 |
| Few flowers | 2 | 2 |
| Normal amount of flowers | 3 | 3 |
| A lot of flowers | 4 | 4 |
| Don't know / no answer | 99 | 99 |

**187. Could you please indicate the <u>average number of apples per tree</u> for each growing area for apple?**

➔ *Please write down the average number of apples per tree for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| Average number of apples per tree | …………apples/tree | …………apples/tree |

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| Q. Planting and fruit development – STONE FRUIT |
|---|

**188. Could you please note down the <u>stone fruit variety</u> that has been used for each growing area for stone fruit?**
➔ *Please note down the stone fruit variety that has been used for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| Stone fruit variety | … | … |

**189. What is the <u>year of planting</u> for each growing area for stone fruit?**
➔ *Please note down the year of planting for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| Year of planting | ………… | ………… |

**190. What is the <u>total number of trees</u> for each growing area for stone fruit?**
➔ *Please note down the total number of trees for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| Tree density | …………trees | …………trees |

**191. Do you <u>prune</u> each growing area for stone fruit?**
➔ *Please circle your answer. (SR)*

|  | Growing area A | Growing area B |
|---|---|---|
| Yes | 1 | 1 |
| No | 2 | 2 |

*IF Q191=1 (YES)*
**192. When did the <u>pruning of the trees</u> start for each growing area for stone fruit?**
➔ *Please write down the period of pruning for each growing area.*

|  |  | Growing area A |  | Growing area B |
|---|---|---|---|---|
| Pruning period | A | From …/…/… (Day/Month/Year) | A | From …/…/… (Day/Month/Year) |
|  | B | Until …/…/… (Day/Month/Year) | B | Until …/…/… (Day/Month/Year) |

**193. When did the first trees reach the <u>flowering stage</u> for each growing area for stone fruit?**
➔ *Please write down the flowering date for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| Flowering date | …/…/… (Day/Month/Year) | …/…/… (Day/Month/Year) |

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**194.** What is the <u>average number of flowers per tree</u> at the flowering stage for each growing area for stone fruit?

➔ *Please tick what applies for each growing area. Single response.*

|  | Growing area A | Growing area B |
|---|---|---|
| No flowers | 1 | 1 |
| Few flowers | 2 | 2 |
| Normal amount of flowers | 3 | 3 |
| A lot of flowers | 4 | 4 |
| Don't know / no answer | 99 | 99 |

**195.** Could you please indicate the <u>average number of fruits per tree</u> for each growing area for stone fruit?

➔ *Please write down the average number of fruits per tree for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Average number of fruits per tree** | ………… fruits/tree | ………… fruits/tree |

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| R. Planting and fruit development – COFFEE |
|---|

**196. Could you please note down the <u>coffee variety</u> that has been used for each growing area for coffee?**
➔ *Please note down the coffee variety that has been used for each growing area.*

| | Growing area A | Growing area B |
|---|---|---|
| **Coffee variety** | … | … |

**197. What is the <u>year of planting</u> for each growing area for coffee?**
➔ *Please note down the year of planting for each growing area.*

| | Growing area A | Growing area B |
|---|---|---|
| **Year of planting** | ………… | ………… |

**198. What is the <u>total number of trees</u> for each growing area for coffee?**
➔ *Please note down the total number of trees for each growing area.*

| | Growing area A | Growing area B |
|---|---|---|
| **Tree density** | …………trees | …………trees |

**199. Do you <u>prune</u> each growing area for coffee?**
➔ *Please circle your answer. (SR)*

| | Growing area A | Growing area B |
|---|---|---|
| **Yes** | 1 | 1 |
| **No** | 2 | 2 |

*IF Q199=1 (YES)*
**200. When did the <u>pruning of the trees</u> start for each growing area for coffee?**
➔ *Please write down the period of pruning for each growing area.*

| | | Growing area A | | Growing area B |
|---|---|---|---|---|
| **Pruning period** | A | From …/…/… (Day/Month/Year) | A | From …/…/… (Day/Month/Year) |
| | B | Until …/…/… (Day/Month/Year) | B | Until …/…/… (Day/Month/Year) |

**201. When did the first trees reach the <u>flowering stage</u> for each growing area for coffee?**
➔ *Please write down the flowering date for each growing area.*

| | Growing area A | Growing area B |
|---|---|---|
| **Flowering date** | …/…/… (Day/Month/Year) | …/…/… (Day/Month/Year) |

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**202. What is the <u>average number of flowers per tree</u> at the flowering stage for each growing area for coffee?**
➔ *Please tick what applies for each growing area. Single response.*

|  | Growing area A | Growing area B |
|---|---|---|
| No flowers | 1 | 1 |
| Few flowers | 2 | 2 |
| Normal amount of flowers | 3 | 3 |
| A lot of flowers | 4 | 4 |
| Don't know / no answer | 99 | 99 |

**203. When did the <u>fruit development</u> start for each growing area for coffee?**
➔ *Please write down the fruit development date for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| Fruit development date | …/…/… (Day/Month/Year) | …/…/… (Day/Month/Year) |

**204. Could you please indicate the <u>average number of coffee fruits per tree</u> for each growing area for coffee?**
➔ *Please write down the average number of coffee fruits per tree for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| Average number of coffee fruits per tree | …………coffee fruits/tree | …………coffee fruits/tree |

| S. Planting and fruit development – COCOA |
|---|

**205. Could you please note down the <u>cocoa variety</u> that has been used for each growing area for cocoa?**
➔ *Please note down the cocoa variety that has been used for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Cocoa variety** | … | … |

**206. What is the <u>year of planting</u> for each growing area for cocoa?**
➔ *Please note down the year of planting for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Year of planting** | ………… | ………… |

**207. What is the <u>total number of trees</u> for each growing area for cocoa?**
➔ *Please note down the total number of trees for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Tree density** | …………trees | …………trees |

**208. Do you <u>prune</u> each growing area for cocoa?**
➔ *Please circle your answer. (SR)*

|  | Growing area A | Growing area B |
|---|---|---|
| **Yes** | 1 | 1 |
| **No** | 2 | 2 |

*IF Q208=1 (YES)*
**209. When did the <u>pruning of the first trees</u> occur for each growing area for cocoa?**
➔ *Please write down the period of pruning of the first trees for each growing area.*

|  |  | Growing area A |  | Growing area B |
|---|---|---|---|---|
| **Pruning period** | A | From …/…/… (Day/Month/Year) | A | From …/…/… (Day/Month/Year) |
|  | B | Until …/…/… (Day/Month/Year) | B | Until …/…/… (Day/Month/Year) |

**210. When did the first trees reach <u>the flowering stage</u> for each growing area for cocoa?**
➔ *Please write down the date that the first trees reached the flowering stage for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Date flowering stage of first trees** | …/…/… (Day/Month/Year) | …/…/… (Day/Month/Year) |

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**211. What is the <u>average number of flowers per tree</u> at the flowering stage for each growing area for cocoa?**
➔ *Please tick what applies for each growing area. Single response.*

|  | Growing area A | Growing area B |
|---|---|---|
| No flowers | 1 | 1 |
| Few flowers | 2 | 2 |
| Normal amount of flowers | 3 | 3 |
| A lot of flowers | 4 | 4 |
| Don't know / no answer | 99 | 99 |

**212. Rain during flowering damages the flowers. What <u>percentage of the trees were damaged</u> for each growing area for cocoa?**
➔ *Please note down the percentage of trees damaged for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| Percentage of trees damaged | …………% | ………… % |

**213. What is the <u>average number of green pods</u> per 25 trees (randomly selected) before the green pods become orange for each growing area for cocoa?**
➔ *Please randomly select 25 trees that have pods per growing area. Please note down the average number of green pods of these 25 trees for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| Average number of green pods per 25 trees | …………green pods/25 trees | ………… green pods/25 trees |

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| T. Planting and fruit development – CAULIFLOWER FOR PROCESSING INDUSTRY |
|---|

**214. Could you please note down the <u>cauliflower varieties</u> that have been used for each growing area for cauliflower for the processing industry?**
➔ *Please note down the cauliflower varieties that have been used for each growing area.*

| | Growing area A | Growing area B |
|---|---|---|
| **Cauliflower varieties** | …<br>…<br>…<br>…<br>… | …<br>…<br>…<br>…<br>… |

**215. When did the <u>first field preparation</u> start for each growing area for cauliflower?**
➔ *Please write down the date of the first field preparation for each growing area.*

| | Growing area A | Growing area B |
|---|---|---|
| **Date first field preparation** | …/…/…<br>(Day/Month/Year) | …/…/…<br>(Day/Month/Year) |

**216. When have the young plants been <u>delivered</u> to the farm for each growing area for cauliflower?**
➔ *Please write down the date of delivery for each growing area.*

| | Growing area A | Growing area B |
|---|---|---|
| **Delivery date** | …/…/…<br>(Day/Month/Year) | …/…/…<br>(Day/Month/Year) |

**217. Which <u>type of plant</u> is planted on each growing area for cauliflower?**
➔ *Please tick what applies for each growing area. Multiple response.*

| | Growing area A | Growing area B |
|---|---|---|
| Peat pot | 1 | 1 |
| Tray | 2 | 2 |
| **96.** Other. Specify 1: | | |
| **97.** Other. Specify 2: | | |
| **98.** Other. Specify 3: | | |
| Don't know / no answer | 99 | 99 |

**218. When have the young plants been <u>planted</u> for each growing area for cauliflower?**
➔ *Please write down the date of planting for each growing area.*

| | Growing area A | Growing area B |
|---|---|---|
| **Planting date** | …/…/…<br>(Day/Month/Year) | …/…/…<br>(Day/Month/Year) |

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**219. What is the <u>final stand – i.e. the average total number of plants per hectare</u> for each growing area for cauliflower?**

➔ *Please note down the total number of plants per ha for each growing area.*

| | Growing area A | Growing area B |
|---|---|---|
| **Final stand/plant density** | …………plants/ha | …………plants/ha |

**220. What is <u>plant distance</u> between the rows and within the row for each growing area for cauliflower?**

➔ *Please note down the plant distance within the row and between rows for each growing area.*

| | Growing area A | | Growing area B | |
|---|---|---|---|---|
| **Plant distance** | …………cm | x …………cm | …………cm | x …………cm |

| V. Fertilizer usage |
|---|

**224. Do you apply <u>organic fertilizers</u> on each of the growing areas for [TARGET CROP]?**
➔ *Please tick what applies. (SR)*

| | Growing area A | Growing area B |
|---|---|---|
| Yes | 1 | 1 |
| No | 2 | 2 |

*IF Q224=1*
**225. What was the <u>quantity</u> used in ton per hectare on each of the growing areas for [TARGET CROP]?**
➔ *Please note down the quantity in ton per hectare.*

| | Growing area A | Growing area B |
|---|---|---|
| Organic fertilizer quantity | …………ton/ha | ………… ton/ha |

**226. Do you apply <u>chemical fertilizers</u> on each of the growing areas for [TARGET CROP]?**
➔ *Please tick what applies. (SR)*

| | Growing area A | Growing area B |
|---|---|---|
| Yes | 1 | 1 |
| No | 2 | 2 |

*ONLY FOR BELGIUM: IF Q226=1*
**227. Do you carry out <u>row-by-row</u> and/or <u>broadcast</u> (entire field) <u>fertilizer spreading</u> on your cauliflower plots?**
➔ *Please tick what applies. (SR)*

| | Growing area A | Growing area B |
|---|---|---|
| Only row by row fertilizer | 1 | 1 |
| Only broadcast fertilizer | 2 | 2 |
| A combination of row by row and broadcast fertilizer | 3 | 3 |
| Don't know / no answer | 99 | 99 |

*IF Q226=1*
**228. What was the <u>quantity</u> used in kilograms per hectare on each of the growing areas for [TARGET CROP]?**
➔ *Please note down the quantity in kilograms per hectare.*

| | Growing area A | Growing area B |
|---|---|---|
| Chemical fertilizer quantity | …………kg/ha | ………… kg/ha |

*IF Q226=1*

**229. For the chemical fertilizers used, what is the <u>distribution</u> of N, P and K that has been used for each growing area for [TARGET CROP] in percentages?**

➔ *Please note down the amount of N, P, K equivalent that applies for each growing area.*

| | Growing area A | Growing area B |
|---|---|---|
| 1. **Fertilizer quantity – as N equivalent** | …………% | ………… % |
| 2. **Fertilizer quantity – as P $(P_2O_5)$ equivalent** | ………… % | ………… % |
| 3. **Fertilizer quantity – as K $(K_2O)$ equivalent** | ………… % | ………… % |

| W. Seed treatment |
|---|

*ALL COUNTRIES, EXCEPT BELGIUM + IF HYBRID = BOUGHT SEEDS (in programming automatically)*

**230.** Do you <u>buy</u> <mark>young trees/seeds</mark> or do you use <u>saved</u> <mark>young trees/seeds</mark> for each growing area for [TARGET CROP]?

➔ *Please tick what applies for each growing area. (MR)*

| | Growing area A | Growing area B |
|---|---|---|
| **Bought <mark>young trees/seeds</mark>** | 1 | 1 |
| **Saved <mark>young trees/seeds</mark>** | 2 | 2 |
| **96.** Other. Specify 1: | | |
| **97.** Other. Specify 2: | | |
| **98.** Other. Specify 3: | | |
| Don't know / no answer | 99 | 99 |

*IF Q230=1 (bought <mark>young trees/seeds</mark>) + ALWAYS FOR BELGIUM*

**231.** Can you please indicate <u>where</u> you <u>buy your</u> <mark>young trees/seeds</mark> for each growing area for [TARGET CROP]?

➔ *Please circle your answer. Multiple answers possible. Please write down other if needed.*

| | Growing area A | Growing area B |
|---|---|---|
| **Cooperative** | 1 | 1 |
| **Other farmers** | 2 | 2 |
| **Retailer or manufacturer** | 3 | 3 |
| **Own nursery** | 4 | 4 |
| **Other nursery** | 5 | 5 |
| **96.** Other. Specify 1: | | |
| **97.** Other. Specify 2: | | |
| **98.** Other. Specify 3: | | |
| Don't know / no answer | 99 | 99 |

*IF BELGIUM*

**232. From which supplier do you buy your young plants for each growing area for cauliflower?**

➔ *Please circle your answer. Multiple answers possible. Please write down other if needed.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Vermeulen** | 1 | 1 |
| **Blomme** | 2 | 2 |
| **D'Hondt** | 3 | 3 |
| **WPG** | 4 | 4 |
| **Denolf** | 5 | 5 |
| **Nollet** | 6 | 6 |
| **96.** Other. Specify 1: |  |  |
| **97.** Other. Specify 2: |  |  |
| **98.** Other. Specify 3: |  |  |
| Don't know / no answer | 99 | 99 |

*IF SEEDS*
*IF HYBRID SEEDS = In programming = EMPTY*

**233. Do you use on-farm or pre-treated seed treatment to treat the seeds for each growing area for [TARGET CROP]?**

➔ *Please circle your answer. (SR)*

|  | Growing area A | Growing area B |
|---|---|---|
| **On-farm seed treatment** | 1 | 1 |
| **Pre-treated seed treatment** | 2 | 2 |
| None | 90 | 90 |
| Not applicable | 91 | 91 |
| Don't know / no answer | 99 | 99 |

*IF Q233=1 or 2 (seed treatment applied)*

**234. What is the quantity that has been used for 100 kilograms of seeds for each growing area for [TARGET CROP] (concentrate used – without solution in water)?**

➔ *Please note down the amount in grams (for solid products) or millilitres (for liquid products) for 100 kilograms of seeds for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| 1. Seed treatment for solid products (in g/100kg seeds) | …………g/100 kg seeds | ………… g/100 kg seeds |
| 2. Seed treatment for liquid products (in ml/100kg seeds) | …………ml/100 kg seeds | ………… ml/100 kg seeds |

*IF BELGIUM*

**235. Have the seeds of the young plants been <u>coated</u> for each of the growing areas for cauliflower?**
➔ *Please tick what applies. (SR)*

|  | Growing area A | Growing area B |
|---|---|---|
| **Yes** | 1 | 1 |
| **No** | 2 | 2 |

*IF Q235=1 (coated seeds)*

**236. <u>Which</u> coating has been used for each of the growing areas for cauliflower?**
➔ *Please write down the different coatings that have been used for each growing area.*

| Growing area A | Growing area B |
|---|---|
|  |  |

*IF BELGIUM*

**237. A. Which of the following <u>seedbed treatments</u> has been performed by the nursery for each of the growing areas for cauliflower?**
➔ *Please tick what applies. (MR)*

|  | Growing area A | Growing area B |
|---|---|---|
| **Phyto-drip** | 1 | 1 |
| **Dummy pil** | 2 | 2 |
| Don't know / no answer | 99 | 99 |

*IF Q237A=1 (Phyto-drip)*

**B. Which <u>compound</u> has been used by the nursery for each of the growing areas for cauliflower?**
➔ *Please fill in the compound.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Compound** |  |  |

*IF Q237A=2 (Dummy pil)*

**C. Which <u>compound</u> has been used by the nursery for each of the growing areas for cauliflower?**
➔ *Please fill in the compound.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Compound** |  |  |

*IF BELGIUM*

**238. Do you use on-farm <u>tray treatment</u> for each of the growing areas for cauliflower?**

➔ *Please tick what applies. (SR)*

|  | Growing area A | Growing area B |
|---|---|---|
| Yes | 1 | 1 |
| No | 2 | 2 |

*IF Q238=1 (on-farm tray treatment)*

**239. Could you please note down, for each growing area of cauliflower, <u>when</u> the tray treatment took place, <u>which products</u> (growth regulators, fertilizers or crop protection) have been used and the <u>dose rate</u>?**

➔ *Please note down the following details. Please look in your storage room in you don't know all details by heart.*
   *A. Date on which the product has been applied*
   *B. Brand product name*
   *C. Dosage and measurement unit*

*GROWING AREA A*

| Product number | a. Timing of product application | b. Brand product name | c. Dosage | |
|---|---|---|---|---|
| | | | Dose per 1000 plants | Measurement unit |
| 1 | …/…/… (Day/Month/Year) | | | |
| 2 | …/…/… (Day/Month/Year) | | | |
| 3 | …/…/… (Day/Month/Year) | | | |
| 4 | …/…/… (Day/Month/Year) | | | |
| 5 | …/…/… (Day/Month/Year) | | | |
| 6 | …/…/… (Day/Month/Year) | | | |
| 7 | …/…/… (Day/Month/Year) | | | |
| 8 | …/…/… (Day/Month/Year) | | | |
| 9 | …/…/… (Day/Month/Year) | | | |
| 10 | …/…/… (Day/Month/Year) | | | |

*GROWING AREA B*

| Product number | a. Timing of product application | b. Brand product name | c. Dosage | |
|---|---|---|---|---|
| | | | Dose per 1000 plants | Measurement unit |
| 1 | …/…/… (Day/Month/Year) | | | |
| 2 | …/…/… (Day/Month/Year) | | | |
| 3 | …/…/… (Day/Month/Year) | | | |
| 4 | …/…/… (Day/Month/Year) | | | |
| 5 | …/…/… (Day/Month/Year) | | | |
| 6 | …/…/… (Day/Month/Year) | | | |
| 7 | …/…/… (Day/Month/Year) | | | |
| 8 | …/…/… (Day/Month/Year) | | | |
| 9 | …/…/… (Day/Month/Year) | | | |
| 10 | …/…/… (Day/Month/Year) | | | |

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| X. Crop protection products |
|---|

**240. Do you apply <u>integrated pest and weed management practices</u> on each growing area for [TARGET CROP]?**
➔ *Please circle your answer. (SR)*

|  | Growing area A | Growing area B |
|---|---|---|
| **Yes** | 1 | 1 |
| **No** | 2 | 2 |

**241. Could you please note down, on the next page, <u>all products</u> that have been used for <u>growing area A and growing area B</u>?**
➔ *Please note down the following details per product. Please look in your crop protection products storage room if you don't know all details by heart.*
    *A. Date on which the product has been applied*
    *B. Type of product (Fungicide, insecticide, fertilizer, herbicide, miticides/acaricides, rodenticides, nematicides/molluscicides, plant growth regulator/harvest aids/adjuvants)*
    *C. Brand product name (e.g. Engeo 247 SC)*
    *D. Dosage in kg/ha for solid products. Dosage in l/ha for liquid products. Always refer to the concentrate of a product (not the solution in water)*
    *E. Indicate the unit of quantity: kilogram or liter per hectare*
    *F. Amount of water that the product is solved in per hectare*
    *G. Pest/disease/weed that is targeted*
    *H. Level of pest/disease/weed pressure (low, medium, high)*
    *I. Percentage of area treated against pests/diseases/weeds*
    *J. Percentage of crop free of pests/diseases/weeds at harvest*
    *K. Type of application equipment used (hand operated sprayers (e.g. knapsack), motorized boom sprayer, airblast sprayer, granular applicator, Aerial applicator, other) If other, please specify.*
    *L. Price of product per kilogram or liter*

*GROWING AREA A*

| Product number | a. Timing of product application | b.Type of product 1=Fungicide 2=Insecticide 3=Fertilizer 4=Herbicide 5=Miticides/ acaricides 6=Rodenticides 7=Nematicides/ molluscicides 8=Plant growth regulator/harvest aids/adjuvants | c. Brand product name | d. Dosage | e. Unit of quantity 1=Kilogram/ hectare 2=Liter/ hectare | f. Amount of H$_2$O solved in liters per hectare | g. Pest/disease/ weed targeted | h. Level of pest/ disease/ weed pressure 1=Low pressure 2=Medium pressure 3=High pressure | i. Percentage of the area treated against pests/ diseases/ weeds (in %) | j. Percentage of crop free of pests/ diseases/ weeds at harvest (in %) | k. Equipment type 1=Hand operated sprayers (e.g. knapsack), 2=Motorized boom sprayer 3=Airblast sprayer 4=Granular applicator 5=Aerial applicator 6=Other,specify | l. Price of product per kilogram or liter (in USD) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | …/…/… (Day/Month/Year) | | | | | | | | | | | |
| 2 | …/…/… (Day/Month/Year) | | | | | | | | | | | |
| 3 | …/…/… (Day/Month/Year) | | | | | | | | | | | |
| 4 | …/…/… (Day/Month/Year) | | | | | | | | | | | |
| 5 | …/…/… (Day/Month/Year) | | | | | | | | | | | |
| 6 | …/…/… (Day/Month/Year) | | | | | | | | | | | |
| 7 | …/…/… (Day/Month/Year) | | | | | | | | | | | |
| 8 | …/…/… (Day/Month/Year) | | | | | | | | | | | |
| 9 | …/…/… (Day/Month/Year) | | | | | | | | | | | |
| 10 | …/…/… (Day/Month/Year) | | | | | | | | | | | |

*GROWING AREA A (continued)*

| Product number | a. Timing of product application | b.Type of product 1=Fungicide 2=Insecticide 3=Fertilizer 4=Herbicide 5=Miticides/ acaricides 6=Rodenticides 7=Nematicides/ molluscicides 8=Plant growth regulator/harvest aids/adjuvants | c. Brand product name | d. Dosage | e. Unit of quantity 1=Kilogram/ hectare 2=Liter/ hectare | f. Amount of H$_2$O solved in liters per hectare | g. Pest/disease/ weed targeted | h. Level of pest/ disease/ weed pressure 1=Low pressure 2=Medium pressure 3=High pressure | i. Percentage of the area treated against pests/ diseases/ weeds (in %) | j. Percentage of crop free of pests/ diseases/ weeds at harvest (in %) | k. Equipment type 1=Hand operated sprayers (e.g. knapsack), 2=Motorized boom sprayer 3=Airblast sprayer 4=Granular applicator 5=Aerial applicator 6=Other,specify | l. Price of product per kilogram or liter (in USD) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | …/…/… (Day/Month/Year) | | | | | | | | | | | |
| 12 | …/…/… (Day/Month/Year) | | | | | | | | | | | |
| 13 | …/…/… (Day/Month/Year) | | | | | | | | | | | |
| 14 | …/…/… (Day/Month/Year) | | | | | | | | | | | |
| 15 | …/…/… (Day/Month/Year) | | | | | | | | | | | |
| 16 | …/…/… (Day/Month/Year) | | | | | | | | | | | |
| 17 | …/…/… (Day/Month/Year) | | | | | | | | | | | |
| 18 | …/…/… (Day/Month/Year) | | | | | | | | | | | |
| 19 | …/…/… (Day/Month/Year) | | | | | | | | | | | |
| 20 | …/…/… (Day/Month/Year) | | | | | | | | | | | |

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*GROWING AREA A (continued)*

| Product number | a. Timing of product application | b.Type of product 1=Fungicide 2=Insecticide 3=Fertilizer 4=Herbicide 5=Miticides/ acaricides 6=Rodenticides 7=Nematicides/ molluscicides 8=Plant growth regulator/harvest aids/adjuvants | c. Brand product name | d. Dosage | e. Unit of quantity 1=Kilogram/ hectare 2=Liter/ hectare | f. Amount of $H_2O$ solved in liters per hectare | g. Pest/disease/ weed targeted | h. Level of pest/ disease/ weed pressure 1=Low pressure 2=Medium pressure 3=High pressure | i. Percentage of the area treated against pests/ diseases/ weeds (in %) | j. Percentage of crop free of pests/ diseases/ weeds at harvest (in %) | k. Equipment type 1=Hand operated sprayers (e.g. knapsack), 2=Motorized boom sprayer 3=Airblast sprayer 4=Granular applicator 5=Aerial applicator 6=Other,specify | l. Price of product per kilogram or liter (in USD) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 21 | …/…/… (Day/Month/Year) | | | | | | | | | | | |
| 22 | …/…/… (Day/Month/Year) | | | | | | | | | | | |
| 23 | …/…/… (Day/Month/Year) | | | | | | | | | | | |
| 24 | …/…/… (Day/Month/Year) | | | | | | | | | | | |
| 25 | …/…/… (Day/Month/Year) | | | | | | | | | | | |
| 26 | …/…/… (Day/Month/Year) | | | | | | | | | | | |
| 27 | …/…/… (Day/Month/Year) | | | | | | | | | | | |
| 28 | …/…/… (Day/Month/Year) | | | | | | | | | | | |
| 29 | …/…/… (Day/Month/Year) | | | | | | | | | | | |
| 30 | …/…/… (Day/Month/Year) | | | | | | | | | | | |

*GROWING AREA B*

| Product number | a. Timing of product application | b.Type of product 1=Fungicide 2=Insecticide 3=Fertilizer 4=Herbicide 5=Miticides/ acaricides 6=Rodenticides 7=Nematicides/ molluscicides 8=Plant growth regulator/harvest aids/adjuvants | c. Brand product name | d. Dosage | e. Unit of quantity 1=Kilogram/ hectare 2=Liter/ hectare | f. Amount of $H_2O$ solved in liters per hectare | g. Pest/disease/ weed targeted | h. Level of pest/ disease/ weed pressure 1=Low pressure 2=Medium pressure 3=High pressure | i. Percentage of the area treated against pests/ diseases/ weeds (in %) | j. Percentage of crop free of pests/ diseases/ weeds at harvest (in %) | k. Equipment type 1=Hand operated sprayers (e.g. knapsack), 2=Motorized boom sprayer 3=Airblast sprayer 4=Granular applicator 5=Aerial applicator 6=Other,specify | l. Price of product per kilogram or liter (in USD) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | …/…/… (Day/Month/Year) | | | | | | | | | | | |
| 2 | …/…/… (Day/Month/Year) | | | | | | | | | | | |
| 3 | …/…/… (Day/Month/Year) | | | | | | | | | | | |
| 4 | …/…/… (Day/Month/Year) | | | | | | | | | | | |
| 5 | …/…/… (Day/Month/Year) | | | | | | | | | | | |
| 6 | …/…/… (Day/Month/Year) | | | | | | | | | | | |
| 7 | …/…/… (Day/Month/Year) | | | | | | | | | | | |
| 8 | …/…/… (Day/Month/Year) | | | | | | | | | | | |
| 9 | …/…/… (Day/Month/Year) | | | | | | | | | | | |
| 10 | …/…/… (Day/Month/Year) | | | | | | | | | | | |

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*GROWING AREA B (continued)*

| Product number | a. Timing of product application | b.Type of product 1=Fungicide 2=Insecticide 3=Fertilizer 4=Herbicide 5=Miticides/ acaricides 6=Rodenticides 7=Nematicides/ molluscicides 8=Plant growth regulator/harvest aids/adjuvants | c. Brand product name | d. Dosage | e. Unit of quantity 1=Kilogram/ hectare 2=Liter/ hectare | f. Amount of $H_2O$ solved in liters per hectare | g. Pest/disease/ weed targeted | h. Level of pest/ disease/ weed pressure 1=Low pressure 2=Medium pressure 3=High pressure | i. Percentage of the area treated against pests/ diseases/ weeds (in %) | j. Percentage of crop free of pests/ diseases/ weeds at harvest (in %) | k. Equipment type 1=Hand operated sprayers (e.g. knapsack), 2=Motorized boom sprayer 3=Airblast sprayer 4=Granular applicator 5=Aerial applicator 6=Other,specify | l. Price of product per kilogram or liter (in USD) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | …/…/… (Day/Month/Year) | | | | | | | | | | | |
| 12 | …/…/… (Day/Month/Year) | | | | | | | | | | | |
| 13 | …/…/… (Day/Month/Year) | | | | | | | | | | | |
| 14 | …/…/… (Day/Month/Year) | | | | | | | | | | | |
| 15 | …/…/… (Day/Month/Year) | | | | | | | | | | | |
| 16 | …/…/… (Day/Month/Year) | | | | | | | | | | | |
| 17 | …/…/… (Day/Month/Year) | | | | | | | | | | | |
| 18 | …/…/… (Day/Month/Year) | | | | | | | | | | | |
| 19 | …/…/… (Day/Month/Year) | | | | | | | | | | | |
| 20 | …/…/… (Day/Month/Year) | | | | | | | | | | | |

Market Probe
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*GROWING AREA B (continued)*

| Product number | a. Timing of product application | b.Type of product 1=Fungicide 2=Insecticide 3=Fertilizer 4=Herbicide 5=Miticides/ acaricides 6=Rodenticides 7=Nematicides/ molluscicides 8=Plant growth regulator/harvest aids/adjuvants | c. Brand product name | d. Dosage | e. Unit of quantity 1=Kilogram/ hectare 2=Liter/ hectare | f. Amount of $H_2O$ solved in liters per hectare | g. Pest/disease/ weed targeted | h. Level of pest/ disease/ weed pressure 1=Low pressure 2=Medium pressure 3=High pressure | i. Percentage of the area treated against pests/ diseases/ weeds (in %) | j. Percentage of crop free of pests/ diseases/ weeds at harvest (in %) | k. Equipment type 1=Hand operated sprayers (e.g. knapsack), 2=Motorized boom sprayer 3=Airblast sprayer 4=Granular applicator 5=Aerial applicator 6=Other,specify | l. Price of product per kilogram or liter (in USD) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 21 | …/…/… (Day/Month/Year) | | | | | | | | | | | |
| 22 | …/…/… (Day/Month/Year) | | | | | | | | | | | |
| 23 | …/…/… (Day/Month/Year) | | | | | | | | | | | |
| 24 | …/…/… (Day/Month/Year) | | | | | | | | | | | |
| 25 | …/…/… (Day/Month/Year) | | | | | | | | | | | |
| 26 | …/…/… (Day/Month/Year) | | | | | | | | | | | |
| 27 | …/…/… (Day/Month/Year) | | | | | | | | | | | |
| 28 | …/…/… (Day/Month/Year) | | | | | | | | | | | |
| 29 | …/…/… (Day/Month/Year) | | | | | | | | | | | |
| 30 | …/…/… (Day/Month/Year) | | | | | | | | | | | |

## PART IV: FARMING PRACTICES – AFTER HARVEST

**242. Please fill out the <u>unique code</u>, given by the interviewer (has to be the same as in Q1):**

UNIQUE CODE: XX X XXX

| | | |
|---|---|---|
| Country code | | **(See country codes Q2)** |
| Farm type | | **(1=RF and 2=BF)** |
| Respondent number | | **(Unique respondent number)** |

### A. Harvest timing & quality per crop - SOYBEAN

**243. When was the <u>harvest period</u> for each growing area for soybean?**
➔ *Please write down the harvest period for each growing area.*

| | | Growing area A | | Growing area B |
|---|---|---|---|---|
| **Harvest period** | A | From …/…/… (Day/Month/Year) | A | From …/…/… (Day/Month/Year) |
| | B | Until …/…/… (Day/Month/Year) | B | Until …/…/… (Day/Month/Year) |

**244. What is the <u>shelled yield</u> (marketable yield) that has been achieved for each growing area for soybean?**
➔ *Please write down the shelled yield for each growing area.*

| | Growing area A | Growing area B |
|---|---|---|
| **Shelled yield** | …………ton/ha | …………ton/ha |

**245. Please indicate the <u>moisture content in percentage of the grain at harvest</u> for each growing area of soybean?**
➔ *Please indicate the moisture content in percentage of the grain at harvest for each growing area.*

| | Growing area A | Growing area B |
|---|---|---|
| **Moisture content in percentage of the grain at harvest** | …………% | …………% |

**246. What <u>percentage</u> of the harvest of soybean of each growing area is used for each purpose?**
➔ *Please note down what applies for each growing area. The sum of the percentages should add up to 100%.*

| | Growing area A | Growing area B |
|---|---|---|
| 1. Feeding livestock | ………… % | ………… % |
| 2. Harvest sold | ………… % | ………… % |
| | 100% | 100% |

*IF Q246 2.HARVEST SOLD > 0% (entirely or partly)*

**247. What is the price per ton per buyer that has been obtained for each growing area for soybean?**

➔ *Please write down the percentage of the yield that each buyer bought and the price they have paid. The sum of the percentages cannot exceed 100%.*

| | Growing area A | | | Growing area B | | |
|---|---|---|---|---|---|---|
| **Buyer 1:** | a. ...% | b. ............$/ton | | a. ...% | b. ............$/ton | |
| **Buyer 2:** | a. ...% | b. ............$/ton | | a. ...% | b. ............$/ton | |
| **Buyer 3:** | a. ...% | b. ............$/ton | | a. ...% | b. ............$/ton | |
| **Buyer 4:** | a. ...% | b. ............$/ton | | a. ...% | b. ............$/ton | |
| **Buyer 5:** | a. ...% | b. ............$/ton | | a. ...% | b. ............$/ton | |

**248. What is the protein content of this yield for each growing area for soybean?**

➔ *Please write down the protein content for each growing area.*

| | Growing area A | Growing area B |
|---|---|---|
| **Protein content** | ............% | ............% |

**249. What is the oil content of this yield for each growing area for soybean?**

➔ *Please write down the oil content for each growing area.*

| | Growing area A | Growing area B |
|---|---|---|
| **Oil content** | ............% | ............% |

**250. What is the weight of 1000 harvested soybean seeds for each growing area for soybean?**

➔ *Please write down the weight of 1000 harvested soybean seeds for each growing area.*

| | Growing area A | Growing area B |
|---|---|---|
| **Weight of 1000 harvested soybean seeds** | ............kg | ............kg |

**251. What is the percentage of grains damaged at harvest (total lost – not marketable) for each growing area for soybean?**

➔ *Please write down the percentage of grains damaged at harvest for each growing area.*

| | Growing area A | Growing area B |
|---|---|---|
| **Percentage of grains damaged at harvest** | ............% | ............% |

| B. Harvest timing & quality per crop – CEREALS (WHEAT) |
|---|

**252. When was the harvest period for each growing area for wheat?**
➔ *Please write down the harvest period for each growing area.*

|  | Growing area A | | Growing area B | |
|---|---|---|---|---|
| **Harvest period** | A | From …/…/… (Day/Month/Year) | A | From …/…/… (Day/Month/Year) |
|  | B | Until …/…/… (Day/Month/Year) | B | Until …/…/… (Day/Month/Year) |

**253. What is the grain yield (marketable yield) that has been achieved for each growing area for wheat?**
➔ *Please write down the yield for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Yield** | …………ton/ha | …………ton/ha |

**254. Please indicate the moisture content in percentage of the grain at harvest for each growing area of wheat?**
➔ *Please indicate the moisture content in percentage of the grain at harvest for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Moisture content in percentage of the grain at harvest** | …………% | …………% |

**255. What percentage of the harvest of wheat of each growing area is used for each purpose?**
➔ *Please note down what applies for each growing area. The sum of the percentages should add up to 100%.*

|  | Growing area A | Growing area B |
|---|---|---|
| 1. Home consumption | …………% | ………… % |
| 2. Feeding own livestock | ………… % | ………… % |
| 3. Harvest sold | ………… % | ………… % |
|  | 100% | 100% |

*IF Q255 3.HARVEST SOLD > 0% (entirely or partly)*

**256. What is the <u>price per ton per buyer</u> that has been obtained for each growing area for wheat?**

➔ *Please write down the percentage of the yield that each buyer bought and the price they have paid. The sum of the percentages cannot exceed 100%.*

|  | Growing area A | | Growing area B | |
|---|---|---|---|---|
| **Buyer 1:** | a. …% | b. …………$/ton | a. …% | b. …………$/ton |
| **Buyer 2:** | a. …% | b. …………$/ton | a. …% | b. …………$/ton |
| **Buyer 3:** | a. …% | b. …………$/ton | a. …% | b. …………$/ton |
| **Buyer 4:** | a. …% | b. …………$/ton | a. …% | b. …………$/ton |
| **Buyer 5:** | a. …% | b. …………$/ton | a. …% | b. …………$/ton |

**257. What is the <u>weight of 1000 harvested grains</u> for each growing area for wheat?**

➔ *Please write down the grain weight for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Weight of 1000 harvested grains** | …………kg | …………kg |

**258. What is the <u>protein percentage</u> of this yield for each growing area for wheat?**

➔ *Please write down the protein content for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Protein content** | …………% | …………% |

**259. What is the <u>percentage of grains damaged at harvest</u> (total lost – not marketable) for each growing area for wheat?**

➔ *Please write down the percentage of grains damaged at harvest for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Percentage of grains damaged at harvest** | …………% | …………% |

| C. Harvest timing & quality per crop – CEREALS (BARLEY) |
|---|

**260. When was the <u>harvest period</u> for each growing area for barley?**
➔ *Please write down the harvest period for each growing area.*

| | | Growing area A | | Growing area B |
|---|---|---|---|---|
| **Harvest period** | A | From …/…/… (Day/Month/Year) | A | From …/…/… (Day/Month/Year) |
| | B | Until …/…/… (Day/Month/Year) | B | Until …/…/… (Day/Month/Year) |

**261. What is the <u>grain yield</u> (marketable yield) that has been achieved for each growing area for barley?**
➔ *Please write down the yield for each growing area.*

| | Growing area A | Growing area B |
|---|---|---|
| **Yield** | …………ton/ha | …………ton/ha |

**262. Please indicate the <u>moisture content in percentage of the grain at harvest</u> for each growing area of barley?**
➔ *Please indicate the moisture content in percentage of the grain at harvest for each growing area.*

| | Growing area A | Growing area B |
|---|---|---|
| **Moisture content in percentage of the grain at harvest** | …………% | …………% |

**263. What <u>percentage</u> of the harvest of barley of each growing area is used for each purpose?**
➔ *Please note down what applies for each growing area. The sum of the percentages should add up to 100%.*

| | Growing area A | Growing area B |
|---|---|---|
| 1.  Feeding livestock | ………… % | ………… % |
| 2.  Harvest sold | ………… % | ………… % |
| | 100% | 100% |

*IF Q263 2.HARVEST SOLD > 0% (entirely or partly)*

**264. What is the price per ton per buyer that has been obtained for each growing area for barley?**
➔ *Please write down the percentage of the yield that each buyer bought and the price they have paid. The sum of the percentages cannot exceed 100%.*

|  | Growing area A | | Growing area B | |
|---|---|---|---|---|
| **Buyer 1:** | a. …% | b. …………$/ton | a. …% | b. …………$/ton |
| **Buyer 2:** | a. …% | b. …………$/ton | a. …% | b. …………$/ton |
| **Buyer 3:** | a. …% | b. …………$/ton | a. …% | b. …………$/ton |
| **Buyer 4:** | a. …% | b. …………$/ton | a. …% | b. …………$/ton |
| **Buyer 5:** | a. …% | b. …………$/ton | a. …% | b. …………$/ton |

**265. What is the weight of 1000 harvested grains for each growing area for barley?**
➔ *Please write down the grain weight for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Weight of 1000 harvested grains** | …………kg | …………kg |

**266. What is the protein content of this yield for each growing area for barley?**
➔ *Please write down the protein content for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Protein content** | …………% | …………% |

**267. What is the percentage of grains damaged at harvest (total lost – not marketable) for each growing area for barley?**
➔ *Please write down the percentage of grains damaged at harvest for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Percentage of grains damaged at harvest** | …………% | …………% |

| D. Harvest timing & quality per crop - GRAPE |
|---|

**268. When was the harvest period for each growing area for grape?**
➜ *Please write down the harvest period for each growing area.*

| | | Growing area A | | Growing area B |
|---|---|---|---|---|
| **Harvest period** | A | From …/…/…(Day/Month/Year) | A | From …/…/…(Day/Month/Year) |
| | B | Until …/…/…(Day/Month/Year) | B | Until …/…/…(Day/Month/Year) |

**269. What is the grape yield (marketable yield) that has been achieved for each growing area?**
➜ *Please write down the yield for each growing area.*

| | Growing area A | Growing area B |
|---|---|---|
| **Yield** | …………ton/ha | …………ton/ha |

**270. What is the price per ton per buyer that has been obtained for each growing area for grape?**
➜ *Please write down the percentage of the yield that each buyer bought and the price they have paid. The sum of the percentages cannot exceed 100%.*

| | Growing area A | | Growing area B | |
|---|---|---|---|---|
| **Buyer 1:** | a.    …% | b. …………$/ton | a.    …% | b. …………$/ton |
| **Buyer 2:** | a.    …% | b. …………$/ton | a.    …% | b. …………$/ton |
| **Buyer 3:** | a.    …% | b. …………$/ton | a.    …% | b. …………$/ton |
| **Buyer 4:** | a.    …% | b. …………$/ton | a.    …% | b. …………$/ton |
| **Buyer 5:** | a.    …% | b. …………$/ton | a.    …% | b. …………$/ton |

**271. What is the sugar content for each growing area for grape?**
➜ *Please write down the sugar content for each growing area.*

| | Growing area A | Growing area B |
|---|---|---|
| **Sugar content** | …………% | …………% |

**272. What is the percentage of fruits damaged at harvest (total lost – not marketable) for each growing area for grape?**
➜ *Please write down the percentage of fruits damaged at harvest for each growing area.*

| | Growing area A | Growing area B |
|---|---|---|
| **Percentage of fruits damaged at harvest** | …………% | …………% |

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| E. Harvest timing & quality per crop - CORN |
| --- |

**273. When was the harvest period for each growing area for corn?**

➔ *Please write down the harvest period for each growing area.*

| | | Growing area A | | Growing area B |
| --- | --- | --- | --- | --- |
| **Harvest period** | A | From …/…/… (Day/Month/Year) | A | From …/…/… (Day/Month/Year) |
| | B | Until …/…/… (Day/Month/Year) | B | Until …/…/… (Day/Month/Year) |

**274. What is the grain yield (marketable yield) that has been achieved for each growing area for corn?**

➔ *Please write down the grain yield for each growing area.*

| | Growing area A | Growing area B |
| --- | --- | --- |
| **Grain yield** | …………ton/ha | …………ton/ha |

**275. Please indicate the moisture content in percentage of the grain at harvest for each growing area of corn?**

➔ *Please indicate the moisture content in percentage of the grain at harvest for each growing area.*

| | Growing area A | Growing area B |
| --- | --- | --- |
| **Moisture content in percentage of the grain at harvest** | …………% | …………% |

**276. What percentage of the harvest of corn of each growing area is used for each purpose?**

➔ *Please note down what applies for each growing area. The sum of the percentages should add up to 100%.*

| | Growing area A | Growing area B |
| --- | --- | --- |
| 1.   Feeding livestock | ………… % | ………… % |
| 2.   Harvest sold | ………… % | ………… % |
| | **100%** | **100%** |

*IF Q276 2.HARVEST SOLD > 0% (entirely or partly)*

**277. What is the <u>price per ton per buyer</u> that has been obtained for each growing area for corn?**

➔ *Please write down the percentage of the yield that each buyer bought and the price they have paid. The sum of the percentages cannot exceed 100%.*

|  | Growing area A | | Growing area B | |
|---|---|---|---|---|
| **Buyer 1:** | a. …% | b. …………$/ton | a. …% | b. …………$/ton |
| **Buyer 2:** | a. …% | b. …………$/ton | a. …% | b. …………$/ton |
| **Buyer 3:** | a. …% | b. …………$/ton | a. …% | b. …………$/ton |
| **Buyer 4:** | a. …% | b. …………$/ton | a. …% | b. …………$/ton |
| **Buyer 5:** | a. …% | b. …………$/ton | a. …% | b. …………$/ton |

**278. What is the <u>grain weight</u> of 1000 harvested grains for each growing area for corn?**

➔ *Please write down the grain weight for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Weight of 1000 harvested grains** | …………kg | …………kg |

**279. What is the <u>average starch content</u> for each growing area for corn?**

➔ *Please write down the average starch content for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Average starch content** | …………% | …………% |

**280. What is the <u>percentage of grains damaged at harvest</u> (total lost – not marketable) for each growing area for corn?**

➔ *Please write down the percentage of grains damaged at harvest for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Percentage of grains damaged at harvest** | …………% | …………% |

| F. Harvest timing & quality per crop - COTTON |
| --- |

**281. When was the harvest period for each growing area for cotton?**
➔ *Please write down the harvest period for each growing area.*

| | | Growing area A | | Growing area B |
| --- | --- | --- | --- | --- |
| **Harvest period** | A | From …/…/… (Day/Month/Year) | A | From …/…/… (Day/Month/Year) |
| | B | Until …/…/… (Day/Month/Year) | B | Until …/…/… (Day/Month/Year) |

**282. What is the fibre/lint yield (marketable yield) that has been achieved for each growing area for cotton?**
➔ *Please write down the fibre/lint yield for each growing area.*

| | Growing area A | Growing area B |
| --- | --- | --- |
| **Fibre/lint yield** | …………ton/ha | …………ton/ha |

**283. What is the seed yield (marketable yield) that has been achieved for each growing area for cotton?**
➔ *Please write down the seed yield for each growing area.*

| | Growing area A | Growing area B |
| --- | --- | --- |
| **Seed yield** | …………ton/ha | …………ton/ha |

**284. What is the price per ton FIBRE yield per buyer that has been obtained for each growing area for cotton?**
➔ *Please write down the percentage of the yield that each buyer bought and the price they have paid. The sum of the percentages cannot exceed 100%.*

| | Growing area A | | Growing area B | |
| --- | --- | --- | --- | --- |
| **Buyer 1:** | a. …% | b. …………$/ton | a. …% | b. …………$/ton |
| **Buyer 2:** | a. …% | b. …………$/ton | a. …% | b. …………$/ton |
| **Buyer 3:** | a. …% | b. …………$/ton | a. …% | b. …………$/ton |
| **Buyer 4:** | a. …% | b. …………$/ton | a. …% | b. …………$/ton |
| **Buyer 5:** | a. …% | b. …………$/ton | a. …% | b. …………$/ton |

**285. What is the price per ton SEED yield per buyer that has been obtained for each growing area for cotton?**

➔ *Please write down the percentage of the yield that each buyer bought and the price they have paid. The sum of the percentages cannot exceed 100%.*

| | Growing area A | | | Growing area B | | |
|---|---|---|---|---|---|---|
| **Buyer 1:** | a. | …% | b. ………….$/ton | a. | …% | b. ………….$/ton |
| **Buyer 2:** | a. | …% | b. ………….$/ton | a. | …% | b. ………….$/ton |
| **Buyer 3:** | a. | …% | b. ………….$/ton | a. | …% | b. ………….$/ton |
| **Buyer 4:** | a. | …% | b. ………….$/ton | a. | …% | b. ………….$/ton |
| **Buyer 5:** | a. | …% | b. ………….$/ton | a. | …% | b. ………….$/ton |

**286. What is the fibre/lint quality (like fibre strength, fineness, …) for each growing area for cotton?**

➔ *Please select the fibre quality that applies best. (SR)*

| | Growing area A | Growing area B |
|---|---|---|
| **Good quality** | 1 | 1 |
| **Medium quality** | 2 | 2 |
| **Low quality** | 3 | 3 |
| Don't know / no answer | 99 | 99 |

**2860. What is the percentage of cotton fruits damaged at harvest (total lost – not marketable) for each growing area for cotton?**

➔ *Please write down the percentage of cotton fruits damaged at harvest for each growing area.*

| | Growing area A | Growing area B |
|---|---|---|
| **Percentage of cotton fruits damaged at harvest** | ………….% | ………….% |

| G. Harvest timing & quality per crop - RICE |
|---|

**287. When was the harvest period for each growing area for rice?**
➔ *Please write down the harvest period for each growing area.*

|  | | Growing area A | | Growing area B |
|---|---|---|---|---|
| **Harvest period** | A | From …/…/… (Day/Month/Year) | A | From …/…/… (Day/Month/Year) |
|  | B | Until …/…/… (Day/Month/Year) | B | Until …/…/… (Day/Month/Year) |

**288. What is the number of tillers per hill at harvest for each growing area for rice?**
➔ *Please indicate the number of tillers per hill.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Number of tillers per hill** | …………tillers/hill | …………tillers/hill |

**289. What is the grain yield (marketable yield) that has been achieved for each growing area for rice?**
➔ *Please write down the grain yield for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Grain yield** | …………ton/ha | …………ton/ha |

**290. Please indicate the moisture content in percentage of the grain at harvest for each growing area of rice?**
➔ *Please indicate the moisture content in percentage of the grain at harvest for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Moisture content in percentage of the grain at harvest** | …………% | …………% |

**291. What percentage of the harvest of rice of each growing area is used for each purpose?**
➔ *Please note down what applies for each growing area. The sum of the percentages should add up to 100%.*

|  | Growing area A | Growing area B |
|---|---|---|
| 1. Home consumption | …………% | ………… % |
| 2. Harvest sold | ………… % | ………… % |
|  | 100% | 100% |

*IF Q291 2.HARVEST SOLD > 0% (entirely or partly)*

**292.** **What is the price per ton per buyer that has been obtained for each growing area for rice?**

➔ *Please write down the percentage of the yield that each buyer bought and the price they have paid. The sum of the percentages cannot exceed 100%.*

|  | Growing area A | | Growing area B | |
|---|---|---|---|---|
| **Buyer 1:** | a. …% | b. …………$/ton | a. …% | b. …………$/ton |
| **Buyer 2:** | a. …% | b. …………$/ton | a. …% | b. …………$/ton |
| **Buyer 3:** | a. …% | b. …………$/ton | a. …% | b. …………$/ton |
| **Buyer 4:** | a. …% | b. …………$/ton | a. …% | b. …………$/ton |
| **Buyer 5:** | a. …% | b. …………$/ton | a. …% | b. …………$/ton |

**293.** **What is the milling rate (amount of polished white rice obtained from unhusked white rice) in percentage for each growing area for rice?**

➔ *Please write down the milling rate for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Milling rate** | …………% | …………% |

**294.** **What is the head rice recovery (percentage whole grains of milled rice that can be obtained from a given quantity of clean rough rice – paddy) in percentage for each growing area for rice?**

➔ *Please write down the head rice recovery for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Head rice recovery** | …………% | …………% |

**295.** **What is the level of brokens (percentage of grains broken in the milling process) in percentage for each growing area for rice?**

➔ *Please write down the level of brokens for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Level of brokens** | …………% | …………% |

**296.** **What is the level of chalkiness (percentage of chalky grains through lose packing of amiloplasts) in percentage for each growing area for rice?**

➔ *Please write down the level of chalkiness for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Level of chalkiness** | …………% | …………% |

**297. What is the <u>percentage of colored grains and contaminants</u> for each growing area for rice?**

➔ *Please write down the percentage of colored grains and contaminants for each growing area.*

| | Growing area A | Growing area B |
|---|---|---|
| **Percentage of colored grains and contaminants** | ………….% | ………….% |

| H. Harvest timing & quality per crop - POTATO |
|---|

**298. When was the <u>harvest period</u> for each growing area for potato?**
➔ *Please write down the harvest period for each growing area.*

|  |  | Growing area A |  | Growing area B |
|---|---|---|---|---|
| **Harvest period** | A | From …/…/…<br>(Day/Month/Year) | A | From …/…/…<br>(Day/Month/Year) |
|  | B | Until …/…/…<br>(Day/Month/Year) | B | Until …/…/…<br>(Day/Month/Year) |

**299. What is the <u>tuber yield</u> (marketable yield) that has been achieved for each growing area for potato?**
➔ *Please write down the tuber yield for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Tuber yield** | …………ton/ha | …………ton/ha |

**300. What is the <u>price per ton per buyer</u> that has been obtained for each growing area for potato?**
➔ *Please write down the percentage of the yield that each buyer bought and the price they have paid. The sum of the percentages cannot exceed 100%.*

|  | Growing area A | | Growing area B | |
|---|---|---|---|---|
| **Buyer 1:** | a. …% | b. …………$/ton | a. …% | b. …………$/ton |
| **Buyer 2:** | a. …% | b. …………$/ton | a. …% | b. …………$/ton |
| **Buyer 3:** | a. …% | b. …………$/ton | a. …% | b. …………$/ton |
| **Buyer 4:** | a. …% | b. …………$/ton | a. …% | b. …………$/ton |
| **Buyer 5:** | a. …% | b. …………$/ton | a. …% | b. …………$/ton |

**301. What is the <u>starch content</u> per potato for each growing area?**
➔ *Please write down the starch content per potato for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Starch content per potato** | …………% | …………% |

**302. What is the <u>percentage of decay</u> for each growing area for potato?**
➔ *Please write down the percentage of decay for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Percentage of decay** | …………% | …………% |

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**303. What is the <u>percentage of shrink loss</u> for each growing area for potato?**

➔ *Please write down the percentage of shrink loss for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Percentage of shrink loss** | ............% | ............% |

**304. What is the <u>sugar content</u> of the potatoes for each growing area?**

➔ *Please write down the sugar content per potato for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Sugar content** | ............% | ............% |

**I. Harvest timing & quality per crop – OILSEED RAPE**

**305. When was the <u>harvest period</u> for each growing area for oilseed rape?**
➔ *Please write down the harvest period for each growing area.*

|  |  | Growing area A |  | Growing area B |
|---|---|---|---|---|
| **Harvest period** | A | From …/…/… (Day/Month/Year) | A | From …/…/… (Day/Month/Year) |
|  | B | Until …/…/… (Day/Month/Year) | B | Until …/…/… (Day/Month/Year) |

**306. What is the <u>seed yield</u> (marketable yield) that has been achieved for each growing area for oilseed rape?**
➔ *Please write down the seed yield for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Seed yield** | …………ton/ha | …………ton/ha |

**307. Please indicate the <u>moisture content in percentage of the grain at harvest</u> for each growing area of oilseed rape?**
➔ *Please indicate the moisture content in percentage of the grain at harvest for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Moisture content in percentage of the grain at harvest** | …………% | …………% |

**308. What is the <u>price per ton per buyer</u> that has been obtained for each growing area for oilseed rape?**
➔ *Please write down the percentage of the yield that each buyer bought and the price they have paid. The sum of the percentages cannot exceed 100%.*

|  | Growing area A |  | Growing area B |  |
|---|---|---|---|---|
| **Buyer 1:** | a. …% | b. …………$/ton | a. …% | b. …………$/ton |
| **Buyer 2:** | a. …% | b. …………$/ton | a. …% | b. …………$/ton |
| **Buyer 3:** | a. …% | b. …………$/ton | a. …% | b. …………$/ton |
| **Buyer 4:** | a. …% | b. …………$/ton | a. …% | b. …………$/ton |
| **Buyer 5:** | a. …% | b. …………$/ton | a. …% | b. …………$/ton |

**309. Have you been meeting the requirements of the crushers in terms of <u>oil content</u> for each growing area for oilseed rape?**
➔ *Please tick what applies for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Yes** | 1 | 1 |
| **No** | 2 | 2 |

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**310.** Have you been meeting the requirements of the crushers in terms of <u>glucosinolate content</u> for each growing area for oilseed rape?

➔ *Please tick what applies for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| Yes | 1 | 1 |
| No | 2 | 2 |

**311.** What is the <u>percentage of grains damaged at harvest</u> (total lost – not marketable) for each growing area for oilseed rape?

➔ *Please write down the percentage of grains damaged at harvest for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| Percentage of grains damaged at harvest | …………% | …………% |

**312.** What is the <u>percentage of pod shattering at harvest</u> for each growing area for oilseed rape?

➔ *Please write down the percentage of pod shattering at harvest for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| Percentage of pod shattering | …………% | …………% |

**J. Harvest timing & quality per crop – SUNFLOWER**

**313. When was the harvest period for each growing area for sunflower?**
➔ *Please write down the harvest period for each growing area.*

|  |  | Growing area A |  | Growing area B |
|---|---|---|---|---|
| **Harvest period** | A | From …/…/… (Day/Month/Year) | A | From …/…/… (Day/Month/Year) |
|  | B | Until …/…/… (Day/Month/Year) | B | Until …/…/… (Day/Month/Year) |

**314. What is the seed yield (marketable yield) that has been achieved for each growing area for sunflower?**
➔ *Please write down the seed yield for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Seed yield** | …………ton/ha | …………ton/ha |

**315. Please indicate the moisture content in percentage of the grain at harvest for each growing area of sunflower?**
➔ *Please indicate the moisture content in percentage of the grain at harvest for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Moisture content in percentage of the grain at harvest** | …………% | …………% |

**316. What is the price per ton per buyer that has been obtained for each growing area for sunflower?**
➔ *Please write down the percentage of the yield that each buyer bought and the price they have paid. The sum of the percentages cannot exceed 100%.*

|  | Growing area A |  | Growing area B |  |
|---|---|---|---|---|
| **Buyer 1:** | a. …% | b. …………$/ton | a. …% | b. …………$/ton |
| **Buyer 2:** | a. …% | b. …………$/ton | a. …% | b. …………$/ton |
| **Buyer 3:** | a. …% | b. …………$/ton | a. …% | b. …………$/ton |
| **Buyer 4:** | a. …% | b. …………$/ton | a. …% | b. …………$/ton |
| **Buyer 5:** | a. …% | b. …………$/ton | a. …% | b. …………$/ton |

**317. What is the oil content for each growing area for sunflower?**
➔ *Please write down the oil content for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Oil content** | …………% | …………% |

**318. What is the** <u>percentage of sunflower kernels damaged at harvest</u> **(total lost – not marketable) for each growing area for sunflower?**

➔ *Please write down the percentage of sunflower kernels damaged at harvest for each growing area.*

| | Growing area A | Growing area B |
|---|---|---|
| **Percentage of sunflower kernels damaged at harvest** | ............% | ............% |

**K. Harvest timing & quality per crop - SUGARCANE**

**319. When was the <u>harvest period</u> for each growing area for sugarcane?**
➜ *Please write down the harvest period for each growing area.*

|  |  | Growing area A |  | Growing area B |
|---|---|---|---|---|
| **Harvest period** | A | From …/…/… (Day/Month/Year) | A | From …/…/… (Day/Month/Year) |
|  | B | Until …/…/… (Day/Month/Year) | B | Until …/…/… (Day/Month/Year) |

**320. What is the <u>total tons of cane per hectare</u> that has been achieved for each growing area for sugarcane?**
➜ *Please write down the total tons of canes per hectare for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Total tons of canes per hectare** | …………ton/ha | …………ton/ha |

**321. What is the <u>TRS (total recovered sugar)</u> for each growing area for sugarcane?**
➜ *Please write down the TRS for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **TRS** | …………ton/ha | …………ton/ha |

**322. What is the <u>use of the sugarcane harvest</u> in percentage for each growing area?**
➜ *Please write down the percentage of usage. Please write down others if needed.*

|  | Growing area A | Growing area B |
|---|---|---|
| 1. **Ethanol production** | …% | …% |
| 2. **Refined sugar production** | …% | …% |
| **96.** Other. Specify 1: … | …% | …% |
| **97.** Other. Specify 2: … | …% | …% |
| **98.** Other. Specify 3: … | …% | …% |
| Don't know / no answer | 99 | 99 |

**323. What is the <u>price per <mark>ton</mark> per buyer</u> that has been obtained for each growing area for sugarcane?**

➔ *Please write down the percentage of the yield that each buyer bought and the price they have paid. The sum of the percentages cannot exceed 100%.*

|  | Growing area A | | Growing area B | |
|---|---|---|---|---|
| **Buyer 1:** | a. …% | b. …………$/ton | a. …% | b. …………$/ton |
| **Buyer 2:** | a. …% | b. …………$/ton | a. …% | b. …………$/ton |
| **Buyer 3:** | a. …% | b. …………$/ton | a. …% | b. …………$/ton |
| **Buyer 4:** | a. …% | b. …………$/ton | a. …% | b. …………$/ton |
| **Buyer 5:** | a. …% | b. …………$/ton | a. …% | b. …………$/ton |

**324. What is the <u>nitrogen</u> (N) <u>content</u> for each growing area for sugarcane?**

➔ *Please write down the nitrogen content of sugar cane for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Nitrogen (N) content** | …………% | …………% |

**325. What is the <u>percentage of canes damaged at harvest</u> (total lost – not marketable) for each growing area for sugarcane?**

➔ *Please write down the percentage of canes damaged at harvest for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Percentage of canes damaged at harvest** | …………% | …………% |

| L. Harvest timing & quality per crop – TOMATO |
|---|

**326. When was the <u>harvest period</u> for each growing area for tomato?**
➔ *Please write down the harvest period for each growing area.*

| | | Growing area A | | Growing area B |
|---|---|---|---|---|
| **Harvest period** | A | From …/…/… (Day/Month/Year) | A | From …/…/… (Day/Month/Year) |
| | B | Until …/…/… (Day/Month/Year) | B | Until …/…/… (Day/Month/Year) |

**327. Please indicate the <u>number of harvests</u> per year for each growing area for tomato?**
➔ *Please write down the number of harvests for each growing area.*

| | Growing area A | Growing area B |
|---|---|---|
| **Number of harvests per year** | …. Harvests/year | …. Harvests/year |

**328. What is the <u>yield</u> (marketable yield) that has been achieved for each growing area for tomato?**
➔ *Please write down the yield for each growing area.*

| | Growing area A | Growing area B |
|---|---|---|
| **Yield** | …………ton/ha | …………ton/ha |

**329. What is the <u>price per ton per buyer</u> that has been obtained for each growing area for tomato?**
➔ *Please write down the percentage of the yield that each buyer bought and the price they have paid. The sum of the percentages cannot exceed 100%.*

| | Growing area A | | Growing area B | |
|---|---|---|---|---|
| **Buyer 1:** | a.    …% | b. …………$/ton | a.    …% | b. …………$/ton |
| **Buyer 2:** | a.    …% | b. …………$/ton | a.    …% | b. …………$/ton |
| **Buyer 3:** | a.    …% | b. …………$/ton | a.    …% | b. …………$/ton |
| **Buyer 4:** | a.    …% | b. …………$/ton | a.    …% | b. …………$/ton |
| **Buyer 5:** | a.    …% | b. …………$/ton | a.    …% | b. …………$/ton |

**330. What is the <u>percentage of tomato fruits damaged at harvest</u> (total lost – not marketable) for each growing area for tomato?**
➔ *Please write down the percentage of tomato fruits damaged at harvest for each growing area.*

| | Growing area A | Growing area B |
|---|---|---|
| **Percentage of tomato fruits damaged at harvest** | …………% | …………% |

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**M. Harvest timing & quality per crop – PEPPER**

**331. When was the <u>harvest period</u> for each growing area for pepper?**
➔ *Please write down the harvest period for each growing area.*

|  | Growing area A | | Growing area B | |
|---|---|---|---|---|
| **Harvest period** | A | From …/…/… (Day/Month/Year) | A | From …/…/… (Day/Month/Year) |
|  | B | Until …/…/… (Day/Month/Year) | B | Until …/…/… (Day/Month/Year) |

**332. Please indicate the <u>number of harvests</u> per year for each growing area for pepper?**
➔ *Please write down the number of harvests for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Number of harvests per year** | …. Harvests/year | …. Harvests/year |

**333. What is the <u>yield</u> (marketable yield) that has been achieved for each growing area for pepper?**
➔ *Please write down the yield for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Yield** | …………ton/ha | …………ton/ha |

**334. What is the <u>price per ton per buyer</u> that has been obtained for each growing area for pepper?**
➔ *Please write down the percentage of the yield that each buyer bought and the price they have paid. The sum of the percentages cannot exceed 100%.*

|  | Growing area A | | Growing area B | |
|---|---|---|---|---|
| **Buyer 1:** | a. …% | b. …………$/ton | a. …% | b. …………$/ton |
| **Buyer 2:** | a. …% | b. …………$/ton | a. …% | b. …………$/ton |
| **Buyer 3:** | a. …% | b. …………$/ton | a. …% | b. …………$/ton |
| **Buyer 4:** | a. …% | b. …………$/ton | a. …% | b. …………$/ton |
| **Buyer 5:** | a. …% | b. …………$/ton | a. …% | b. …………$/ton |

**335. What is the <u>percentage of pepper fruits damaged at harvest</u> (total lost – not marketable) for each growing area for pepper?**
➔ *Please write down the percentage of pepper fruits damaged at harvest for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Percentage of pepper fruits damaged at harvest** | …………% | …………% |

| N. Harvest timing & quality per crop – WATERMELON |
|---|

**336. When was the <u>harvest period</u> for each growing area for watermelon?**
➔ *Please write down the harvest period for each growing area.*

|  | | Growing area A | | Growing area B |
|---|---|---|---|---|
| **Harvest period** | A | From …/…/… (Day/Month/Year) | A | From …/…/… (Day/Month/Year) |
| | B | Until …/…/… (Day/Month/Year) | B | Until …/…/… (Day/Month/Year) |

**337. What is the <u>yield</u> (marketable yield) that has been achieved for each growing area for watermelon?**
➔ *Please write down the yield for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Yield** | …………ton/ha | …………ton/ha |

**338. What is the <u>price per ton per buyer</u> that has been obtained for each growing area for watermelon?**
➔ *Please write down the percentage of the yield that each buyer bought and the price they have paid. The sum of the percentages cannot exceed 100%.*

|  | Growing area A | | | | Growing area B | | | |
|---|---|---|---|---|---|---|---|---|
| **Buyer 1:** | a. | …% | b. | …………$/ton | a. | …% | b. | …………$/ton |
| **Buyer 2:** | a. | …% | b. | …………$/ton | a. | …% | b. | …………$/ton |
| **Buyer 3:** | a. | …% | b. | …………$/ton | a. | …% | b. | …………$/ton |
| **Buyer 4:** | a. | …% | b. | …………$/ton | a. | …% | b. | …………$/ton |
| **Buyer 5:** | a. | …% | b. | …………$/ton | a. | …% | b. | …………$/ton |

**3380. What is the <u>percentage of watermelon fruits damaged at harvest</u> (total lost – not marketable) for each growing area for watermelon?**
➔ *Please write down the percentage of watermelon fruits damaged at harvest for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Percentage of watermelon fruits damaged at harvest** | …………% | …………% |

| O. Harvest timing & quality per crop - BANANA |
|---|

**339. When was the <u>harvest period</u> for each growing area for banana?**
➔ *Please write down the harvest period for each growing area.*

| | | Growing area A | | Growing area B |
|---|---|---|---|---|
| **Harvest period** | A | From …/…/… (Day/Month/Year) | A | From …/…/… (Day/Month/Year) |
| | B | Until …/…/… (Day/Month/Year) | B | Until …/…/… (Day/Month/Year) |

**340. In which months does the <u>harvest peak</u> for each growing area for banana?**
➔ *Please circle the harvest peak months for each growing area. (MR)*

| | Growing area A | Growing area B |
|---|---|---|
| January | 1 | 1 |
| February | 2 | 2 |
| March | 3 | 3 |
| April | 4 | 4 |
| May | 5 | 5 |
| June | 6 | 6 |
| July | 7 | 7 |
| August | 8 | 8 |
| September | 9 | 9 |
| October | 10 | 10 |
| November | 11 | 11 |
| December | 12 | 12 |
| Don't know / no answer | 99 | 99 |

**341. What is the <u>yield per hectare</u> or the <u>number of boxes per hectare</u> (standard box of 18,14 kg box) that has been achieved for each growing area for banana?**
➔ *Please write down the banana yield for each growing area.*

| | Growing area A | Growing area B |
|---|---|---|
| 1. **Banana yield in boxes per hectare** | …………boxes/ha | …………boxes/ha |
| 2. **Banana yield in ton per hectare** | …………ton/ha | …………ton/ha |

**342. What is the ratio as <u>number of boxes per bunch</u> (standard box of 18,14 kg box) for each growing area for banana?**
➔ *Please write down the number of boxes per bunch for each growing area.*

| | Growing area A | Growing area B |
|---|---|---|
| **Number of boxes per bunch** | …………boxes/bunch | …………boxes/bunch |

**343. What is the <u>price per box per buyer</u> that has been obtained for each growing area for banana?**

➜ *Please write down the percentage of the yield that each buyer bought and the price they have paid. The sum of the percentages cannot exceed 100%.*

| | | Growing area A | | Growing area B | |
|---|---|---|---|---|---|
| **Buyer 1:** | a. …% | b. …………$/box | a. …% | b. …………$/box | |
| **Buyer 2:** | a. …% | b. …………$/box | a. …% | b. …………$/box | |
| **Buyer 3:** | a. …% | b. …………$/box | a. …% | b. …………$/box | |
| **Buyer 4:** | a. …% | b. …………$/box | a. …% | b. …………$/box | |
| **Buyer 5:** | a. …% | b. …………$/box | a. …% | b. …………$/box | |

**344. Which percentage of the yield of each growing area for banana is <u>exported</u> and which percentage is used for <u>local market</u>?**

➜ *Please give the percentage of the yield that is exported and the percentage that is used for the local market. The sum should be 100%.*

| | Growing area A | Growing area B |
|---|---|---|
| 1.    **Percentage exportable fruits** | …% | …% |
| 2.    **Percentage for local market** | …% | …% |
| | 100% | 100% |

**345. What is the percentage <u>fruit losses</u> for each growing area for banana?**

➜ *Please write down the percentage fruit losses for each growing area.*

| | Growing area A | Growing area B |
|---|---|---|
| **Percentage fruit losses** | …………% | …………% |

**346. What is the <u>number of leaves at harvest</u> for each growing area for banana?**

➜ *Please write down the number of leaves for each growing area.*

| | Growing area A | Growing area B |
|---|---|---|
| **Number of leaves at harvest** | …………leaves | …………leaves |

**347. What is <u>bunch weight</u> in kilogram for each growing area for banana?**

➜ *Please write down the bunch weight in kilogram for each growing area.*

| | Growing area A | Growing area B |
|---|---|---|
| **Bunch weight** | …………kg | …………kg |

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**348. What is for each growing area for banana the <u>ratooning</u>, i.e. the number of harvests per year?**

➔ *Please write down the ratooning for each growing area.*

| | Growing area A | Growing area B |
|---|---|---|
| **Ratooning (number of harvests per year)** | …………harvest(s) per year | …………harvest(s) per year |

| P. Harvest timing & quality per crop – APPLE |
|---|

**349. When was the <u>harvest period</u> for each growing area for apple?**
➔ *Please write down the harvest period for each growing area.*

| | | Growing area A | | Growing area B |
|---|---|---|---|---|
| **Harvest period** | A | From …/…/… (Day/Month/Year) | A | From …/…/… (Day/Month/Year) |
| | B | Until …/…/… (Day/Month/Year) | B | Until …/…/… (Day/Month/Year) |

**350. In which months does the <u>harvest peak</u> for each growing area for apple?**
➔ *Please circle the harvest peak months for each growing area. (MR)*

| | Growing area A | Growing area B |
|---|---|---|
| January | 1 | 1 |
| February | 2 | 2 |
| March | 3 | 3 |
| April | 4 | 4 |
| May | 5 | 5 |
| June | 6 | 6 |
| July | 7 | 7 |
| August | 8 | 8 |
| September | 9 | 9 |
| October | 10 | 10 |
| November | 11 | 11 |
| December | 12 | 12 |
| Don't know / no answer | 99 | 99 |

**351. A. What is the <u>yield</u> (immediately after harvest) that has been achieved for each growing area for apple?**
➔ *Please write down the apple yield for each growing area.*

| | Growing area A | Growing area B |
|---|---|---|
| **Apple yield (after harvest)** | …………ton/ha | …………ton/ha |

**B. What is the <u>yield</u> (after storage) that has been achieved for each growing area for apple?**
➔ *Please write down the apple yield for each growing area.*

| | Growing area A | Growing area B |
|---|---|---|
| **Apple yield (after storage)** | …………ton/ha | …………ton/ha |

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**352. A. Could you please indicate the <u>after storage harvest</u> in ton/ha for each of the apple sizes that apply for each growing area for apple?**

→ *Please write down the harvest in ton/ha for each apple size that applies.*

| Size in millimeter | Growing area A | Growing area B |
|---|---|---|
| 60-65 | …………ton/ha | …………ton/ha |
| 65-70 | …………ton/ha | …………ton/ha |
| 70-75 | …………ton/ha | …………ton/ha |
| 75-80 | …………ton/ha | …………ton/ha |
| 80-85 | …………ton/ha | …………ton/ha |
| rot | …………ton/ha | …………ton/ha |
| total | …………ton/ha | …………ton/ha |

**B. Could you please indicate the <u>after storage harvest</u> in ton/ha for each of the pear sizes that apply for each growing area for pear?**

→ *Please write down the harvest in ton/ha for each pear size that applies.*

| Size in millimeter | Growing area A | Growing area B |
|---|---|---|
| 45-50 | …………ton/ha | …………ton/ha |
| 50-55 | …………ton/ha | …………ton/ha |
| 55-60 | …………ton/ha | …………ton/ha |
| 60-65 | …………ton/ha | …………ton/ha |
| 65-70 | …………ton/ha | …………ton/ha |
| 70-75 | …………ton/ha | …………ton/ha |
| 75-80 | …………ton/ha | …………ton/ha |
| 80-85 | …………ton/ha | …………ton/ha |
| rot | …………ton/ha | …………ton/ha |
| total | …………ton/ha | …………ton/ha |

**353. What is the <u>price per <mark>ton</mark> per buyer</u> that has been obtained for each growing area for apple?**

➔ *Please write down the percentage of the yield that each buyer bought and the price they have paid. The sum of the percentages cannot exceed 100%.*

| | Growing area A | | Growing area B | |
|---|---|---|---|---|
| **Buyer 1:** | a.   …% | b. …………$/ton | a.   …% | b. …………$/ton |
| **Buyer 2:** | a.   …% | b. …………$/ton | a.   …% | b. …………$/ton |
| **Buyer 3:** | a.   …% | b. …………$/ton | a.   …% | b. …………$/ton |
| **Buyer 4:** | a.   …% | b. …………$/ton | a.   …% | b. …………$/ton |
| **Buyer 5:** | a.   …% | b. …………$/ton | a.   …% | b. …………$/ton |

**354. Which percentage of the yield of each growing area for apple can be <u>sold</u> and which percentage is used in the <u>processing industry</u> ?**

➔ *Please give the percentage of the yield that can be sold and the percentage that is used in the processing industry. The sum should be 100%.*

| | Growing area A | Growing area B |
|---|---|---|
| 1.   **Percentage salable product** | …% | …% |
| 2.   **Percentage for processing industry** | …% | …% |
| | **100%** | **100%** |

**3540. What is the <u>percentage of apple fruits damaged at harvest</u> (total lost – not marketable) for each growing area for apple?**

➔ *Please write down the percentage of apple fruits damaged at harvest for each growing area.*

| | Growing area A | Growing area B |
|---|---|---|
| **Percentage of apple fruits damaged at harvest** | …………% | …………% |

| Q. Harvest timing & quality per crop - STONE FRUIT |
|---|

**355. When was the <u>harvest period</u> for each growing area for stone fruit?**
➔ *Please write down the harvest period for each growing area.*

| | | Growing area A | | Growing area B |
|---|---|---|---|---|
| **Harvest period** | A | From …/…/… (Day/Month/Year) | A | From …/…/… (Day/Month/Year) |
| | B | Until …/…/… (Day/Month/Year) | B | Until …/…/… (Day/Month/Year) |

**356. In which months does the <u>harvest peak</u> for each growing area for stone fruit?**
➔ *Please circle the harvest peak months for each growing area. (MR)*

| | Growing area A | Growing area B |
|---|---|---|
| January | 1 | 1 |
| February | 2 | 2 |
| March | 3 | 3 |
| April | 4 | 4 |
| May | 5 | 5 |
| June | 6 | 6 |
| July | 7 | 7 |
| August | 8 | 8 |
| September | 9 | 9 |
| October | 10 | 10 |
| November | 11 | 11 |
| December | 12 | 12 |
| Don't know / no answer | 99 | 99 |

**357. What is the <u>stone fruit yield</u> (marketable yield) that has been achieved for each growing area for stone fruit?**
➔ *Please write down the stone fruit yield for each growing area.*

| | Growing area A | Growing area B |
|---|---|---|
| **Stone fruit yield** | …………ton/ha | …………ton/ha |

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**358. What is the price per ton per buyer that has been obtained for each growing area for stone fruit?**

➔ *Please write down the percentage of the yield that each buyer bought and the price they have paid. The sum of the percentages cannot exceed 100%.*

|  | Growing area A | | Growing area B | |
|---|---|---|---|---|
| **Buyer 1:** | a.   …% | b. …………$/ton | a.   …% | b. …………$/ton |
| **Buyer 2:** | a.   …% | b. …………$/ton | a.   …% | b. …………$/ton |
| **Buyer 3:** | a.   …% | b. …………$/ton | a.   …% | b. …………$/ton |
| **Buyer 4:** | a.   …% | b. …………$/ton | a.   …% | b. …………$/ton |
| **Buyer 5:** | a.   …% | b. …………$/ton | a.   …% | b. …………$/ton |

**359. Which percentage of the yield of each growing area for stone fruit can be sold and which percentage is used in the processing industry ?**

➔ *Please give the percentage of the yield that can be sold and the percentage that is used in the processing industry. The sum should be 100%.*

|  | Growing area A | Growing area B |
|---|---|---|
| 1.   Percentage salable product | …% | …% |
| 2.   Percentage for processing industry | …% | …% |
|  | 100% | 100% |

**3590.  What is the percentage of stone fruits damaged at harvest (total lost – not marketable) for each growing area for stone fruit?**

➔ *Please write down the percentage of stone fruits damaged at harvest for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Percentage of stone fruits damaged at harvest** | …………% | …………% |

| R. Harvest timing & quality per crop - COFFEE |
|---|

**360. When was the <u>harvest period</u> for each growing area for coffee?**
➜ *Please write down the harvest period for each growing area.*

| | | Growing area A | | Growing area B |
|---|---|---|---|---|
| **Harvest period** | A | From …/…/… (Day/Month/Year) | A | From …/…/… (Day/Month/Year) |
| | B | Until …/…/… (Day/Month/Year) | B | Until …/…/… (Day/Month/Year) |

**361. In which months does the <u>harvest peak</u> for each growing area for coffee?**
➜ *Please circle the harvest peak months for each growing area. (MR)*

| | Growing area A | Growing area B |
|---|---|---|
| January | 1 | 1 |
| February | 2 | 2 |
| March | 3 | 3 |
| April | 4 | 4 |
| May | 5 | 5 |
| June | 6 | 6 |
| July | 7 | 7 |
| August | 8 | 8 |
| September | 9 | 9 |
| October | 10 | 10 |
| November | 11 | 11 |
| December | 12 | 12 |
| Don't know / no answer | 99 | 99 |

**362. What is the <u>coffee yield</u> (marketable yield) that has been achieved for each growing area for coffee?**
➜ *Please write down the coffee yield for each growing area.*

| | Growing area A | Growing area B |
|---|---|---|
| **Coffee yield** | …………ton/ha | …………ton/ha |

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**363. What is the <u>price per <mark>ton</mark> per buyer</u> that has been obtained for each growing area for coffee?**

➔ *Please write down the percentage of the yield that each buyer bought and the price they have paid. The sum of the percentages cannot exceed 100%.*

|  | Growing area A | | Growing area B | |
|---|---|---|---|---|
| **Buyer 1:** | a. …% | b. ………….$/ton | a. …% | b. ………….$/ton |
| **Buyer 2:** | a. …% | b. ………….$/ton | a. …% | b. ………….$/ton |
| **Buyer 3:** | a. …% | b. ………….$/ton | a. …% | b. ………….$/ton |
| **Buyer 4:** | a. …% | b. ………….$/ton | a. …% | b. ………….$/ton |
| **Buyer 5:** | a. …% | b. ………….$/ton | a. …% | b. ………….$/ton |

**3630. What is the <u>percentage of coffee fruits damaged at harvest</u> (total lost – not marketable) for each growing area for coffee?**

➔ *Please write down the percentage of coffee fruits damaged at harvest for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Percentage of coffee fruits damaged at harvest** | …………% | …………% |

| S. Harvest timing & quality per crop - COCOA |
|:---:|

**364. When was the <u>harvest period</u> for each growing area for cocoa?**
➔ *Please write down the harvest period for each growing area.*

| | | Growing area A | | Growing area B |
|---|---|---|---|---|
| **Harvest period** | A | From …/…/… (Day/Month/Year) | A | From …/…/… (Day/Month/Year) |
| | B | Until …/…/… (Day/Month/Year) | B | Until …/…/… (Day/Month/Year) |

**365. In which months does the <u>harvest peak</u> for each growing area for cocoa?**
➔ *Please circle the harvest peak months for each growing area. (MR)*

| | Growing area A | Growing area B |
|---|:---:|:---:|
| January | 1 | 1 |
| February | 2 | 2 |
| March | 3 | 3 |
| April | 4 | 4 |
| May | 5 | 5 |
| June | 6 | 6 |
| July | 7 | 7 |
| August | 8 | 8 |
| September | 9 | 9 |
| October | 10 | 10 |
| November | 11 | 11 |
| December | 12 | 12 |
| Don't know / no answer | 99 | 99 |

**366. What is the <u>yield</u> (marketable yield) that has been achieved for each growing area for cocoa?**
➔ *Please write down the yield for each growing area.*

| | Growing area A | Growing area B |
|---|:---:|:---:|
| **Yield** | …………ton/ha | …………ton/ha |

**367. What is the price per ton per buyer that has been obtained for each growing area for cocoa?**

➔ *Please write down the percentage of the yield that each buyer bought and the price they have paid. The sum of the percentages cannot exceed 100%.*

|  | Growing area A | | Growing area B | |
|---|---|---|---|---|
| **Buyer 1:** | a. …% | b. …………$/ton | a. …% | b. …………$/ton |
| **Buyer 2:** | a. …% | b. …………$/ton | a. …% | b. …………$/ton |
| **Buyer 3:** | a. …% | b. …………$/ton | a. …% | b. …………$/ton |
| **Buyer 4:** | a. …% | b. …………$/ton | a. …% | b. …………$/ton |
| **Buyer 5:** | a. …% | b. …………$/ton | a. …% | b. …………$/ton |

**368. What is the percentage of cocoa damaged at harvest (total lost – not marketable) for each growing area for cocoa?**

➔ *Please write down the percentage of cocoa damaged at harvest for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Percentage of cocoa damaged at harvest** | …………% | …………% |

**369. What is the weight of the dried cocoa yield at the end of the post-harvest process (with humidity close to 8%) for each growing area for cocoa?**

➔ *Please write down the weight of dried cocoa yield for each growing area.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Weight dried yield** | …………ton/ha | …………ton/ha |

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| T. Harvest timing & quality per crop – CAULIFLOWER FOR PROCESSING INDUSTRY |
|---|

**370. When was the harvest period for each growing area for cauliflower?**
➔ *Please write down the harvest period for each growing area.*

| | | Growing area A | | Growing area B |
|---|---|---|---|---|
| **Harvest period** | A | From …/…/… (Day/Month/Year) | A | From …/…/… (Day/Month/Year) |
| | B | Until …/…/… (Day/Month/Year) | B | Until …/…/… (Day/Month/Year) |

**371. How many times do you pick each variety on each cauliflower field?**
➔ *Please write down the number of harvests for each variety for each field.*

| | Growing area A | | Growing area B | |
|---|---|---|---|---|
| | **Variety** | **Number of harvests** | **Variety** | **Number of harvests** |
| **Number of harvests variety 1:** | | | | |
| **Number of harvests variety 2:** | | | | |
| **Number of harvests variety 3:** | | | | |
| **Number of harvests variety 4:** | | | | |
| **Number of harvests variety 5:** | | | | |

**372. What is the yield (marketable yield – bolted cauliflower) that has been achieved for each growing area for cauliflower?**
➔ *Please write down the yield for each growing area.*

| | Growing area A | Growing area B |
|---|---|---|
| **Yield** | …………ton/ha | …………ton/ha |

**373. What is the total yield in ton per hectare for the total production of cauliflower for the processing industry?**
➔ *Please write down the total yield for the total production of cauliflower for the processing industry.*

| | |
|---|---|
| **Total yield** | …………ton/ha |

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**374. What is the <u>price per <mark>ton</mark> per buyer</u> that has been obtained for each growing area for cauliflower?**

➜ *Please write down the percentage of the yield that each buyer bought and the price they have paid. The sum of the percentages cannot exceed 100%.*

| | Growing area A | | Growing area B | |
|---|---|---|---|---|
| **Buyer 1:** | a. …% | b. …………$/ton | a. …% | b. …………$/ton |
| **Buyer 2:** | a. …% | b. …………$/ton | a. …% | b. …………$/ton |
| **Buyer 3:** | a. …% | b. …………$/ton | a. …% | b. …………$/ton |
| **Buyer 4:** | a. …% | b. …………$/ton | a. …% | b. …………$/ton |
| **Buyer 5:** | a. …% | b. …………$/ton | a. …% | b. …………$/ton |

**375. What is the <u>percentage of cauliflower fruits damaged at harvest</u> (total lost – not marketable) for each growing area for cauliflower?**

➜ *Please write down the percentage of cauliflower fruits damaged at harvest for each growing area.*

| | Growing area A | Growing area B |
|---|---|---|
| **Percentage of cauliflower fruits damaged at harvest** | …………% | …………% |

## PART V – OTHER INPUTS – AFTER HARVEST

**376. Please fill out the <u>unique code</u>, given by the interviewer (has to be the same as in Q1):**
UNIQUE CODE: XX X XXX

Country code ☐☐    **(See country codes Q2)**

Farm type ☐    **(1=RF and 2=BF)**

Respondent number ☐☐☐    **(Unique respondent number)**

| A. Input costs |
|---|

**377. What is the estimated revenue in dollars per hectare for each growing area of [TARGET CROP]?**
➔ *Please write down in $/ha.*

| | Growing area A | Growing area B |
|---|---|---|
| **Estimated revenue** | ... $/ha | ... $/ha |
| Don't know / no answer | 99 | 99 |

*IF Q377=99 (don't know) for growing area A or B*
**378. Could you please indicate the estimated revenue for [TARGET CROP] in general?**
➔ *Please write down the general estimated revenue in $/ha.*

| | |
|---|---|
| **Estimated revenue** | ... $/ha |

**379. How would you rate your profitability for each growing area for [TARGET CROP]?**
➔ *Please circle what applies. (SR)*

| | Growing area A | Growing area B |
|---|---|---|
| **Very high** | 5 | 5 |
| **High** | 4 | 4 |
| **Average** | 3 | 3 |
| **Low** | 2 | 2 |
| **Very low** | 1 | 1 |
| Don't know / no answer | 99 | 99 |

**380. What is your total input cost for each growing area of [TARGET CROP] from first field preparation until harvest? Please consider trees/seeds, fertilizers, pesticides, labor, machinery, water use, fuel, electricity, gas.**
➔ *Please write down in $/ha.*

| | Growing area A | Growing area B |
|---|---|---|
| **Total input cost** | ... $/ha | ... $/ha |

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**381. And how would you split this out in <u>percentages</u> for each category in terms of importance of the total input cost for each growing area for [TARGET CROP]?**

➔ *Please indicate the percentage for each category. The sum should add up to 100%.*

|  | Growing area A | Growing area B |
|---|---|---|
| 1. Trees/Seeds | … % | … % |
| 2. Fertilizers | … % | … % |
| 3. Pesticides | … % | … % |
| 4. Labor | … % | … % |
| 5. Machinery | … % | … % |
| 6. Water use | … % | … % |
| 7. Fuel | … % | … % |
| 8. Electricity | … % | … % |
| 9. Gas | … % | … % |
| Don't know / no answer | 99 | 99 |

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382. **Please describe per growing area the <u>type of machinery</u> used and indicate the <u>amount of labor</u> used for each operation performed during the season for [TARGET CROP].**

➔ *Please fill out the table. If not applicable, please leave the row open.*
    *A.   Number of hours spent by all workers for that operation (e.g. if 5 workers worked 8 hours for clearing the field, this represents 40 hours)*
    *B.   Number of people that were involved in this operation*
    *C.   Type of machinery that was used for each operation (e.g. 2 tractors and 1 plough)*
    *D.   Number of machinery hours*

| | Growing area A | | | |
|---|---|---|---|---|
| | a. Number of hours spent by all workers | b. Number of people involved | c. Type of machinery used | d. Number of machinery hours |
| 1. Clearing | | | | |
| 2. Ploughing | | | | |
| 3. Digging | | | | |
| 4. Ridging | | | | |
| 5. Ripping | | | | |
| 6. Land levelling | | | | |
| 7. Greenhouse management operations | | | | |
| 8. Applying fertilizers | | | | |
| 9. Mulching | | | | |
| 10. Sowing or planting | | | | |
| 11. Scouting for pests and diseases | | | | |
| 12. Applying pesticides | | | | |
| 13. Irrigating | | | | |
| 14. Pruning | | | | |
| 15. Weeding (mechanical) | | | | |
| 16. Harvesting | | | | |
| 17. Post-harvest handling (incl. dipping) | | | | |
| 18. Processing (incl. sorting) | | | | |
| 19. Transport | | | | |
| 96. Other major operation 1: Specify: | | | | |
| 97. Other major operation 2: Specify: | | | | |
| 98. Other major operation 3: Specify: | | | | |

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| | Growing area B | | | |
|---|---|---|---|---|
| | a. Number of hours spent by all workers | b. Number of people involved | c. Type of machinery used | d. Number of machinery hours |
| 1.  Clearing | | | | |
| 2.  Ploughing | | | | |
| 3.  Digging | | | | |
| 4.  Ridging | | | | |
| 5.  Ripping | | | | |
| 6.  Land levelling | | | | |
| 7.  Greenhouse management operations | | | | |
| 8.  Applying fertilizers | | | | |
| 9.  Mulching | | | | |
| 10. Sowing or planting | | | | |
| 11. Scouting for pests and diseases | | | | |
| 12. Applying pesticides | | | | |
| 13. Irrigating | | | | |
| 14. Pruning | | | | |
| 15. Weeding (mechanical) | | | | |
| 16. Harvesting | | | | |
| 17. Post-harvest handling (incl. dipping) | | | | |
| 18. Processing (incl. sorting) | | | | |
| 19. Transport | | | | |
| 96. Other major operation 1: Specify: | | | | |
| 97. Other major operation 2: Specify: | | | | |
| 98. Other major operation 3: Specify: | | | | |

| B. Abiotic stress |
|---|

**383.** <u>During and right after planting</u> of [TARGET CROP], did you face an <u>external stress problem</u> that impacted your planting operations or crop development (e.g. emergence)?

➔ *Please tick what applies. (SR)*

| Yes | 1 |
|---|---|
| No | 2 |

**384.** <u>Which</u> kind of external stress problems were you faced with <u>during and right after planting</u> of [TARGET CROP]?

➔ *Please tick all that applies. Note down other if not in list. (MR)*

| | |
|---|---|
| Excess of rain | 1 |
| Lack of rain | 2 |
| Heat | 3 |
| Frost | 4 |
| Wind | 5 |
| Hail | 6 |
| Destruction by animals | 7 |
| Lack of beneficial insects (e.g. pollinators) | 8 |
| **96.** Other. Specify 1: … | 96 |
| **97.** Other. Specify 2: … | 97 |
| **98.** Other. Specify 3: … | 98 |
| Don't know / no answer | 99 |

**385.** <u>During the season</u> of [TARGET CROP], did you face an <u>external stress problem</u> that impacted your crop operations or crop development (e.g. flowering, fruit development, etc.)?

➔ *Please tick what applies. (SR)*

| Yes | 1 |
|---|---|
| No | 2 |

**386.** <u>Which</u> kind of external stress problems were you faced with <u>during the season</u> of [TARGET CROP]?

➔ *Please tick all that applies. Note down other if not in list.*

| | |
|---|---|
| Excess of rain | 1 |
| Lack of rain | 2 |
| Heat | 3 |
| Frost | 4 |
| Wind | 5 |
| Hail | 6 |
| Destruction by animals | 7 |
| Lack of beneficial insects (e.g. pollinators) | 8 |
| **96.** Other. Specify 1: … | 96 |
| **97.** Other. Specify 2: … | 97 |
| **98.** Other. Specify 3: … | 98 |
| Don't know / no answer | 99 |

*IF Q385=1 (if problem)*
**387. What was the impact on the [TARGET CROP]?**
➔ *Please tick what applies, multiple answers possible. Note down other if not in list.*

| | |
|---|---|
| Reduced yield | **1** |
| Reduced yield quality | **2** |
| No impact | **90** |
| **96.** Other. Specify 1: … | 96 |
| **97.** Other. Specify 2: … | 97 |
| **98.** Other. Specify 3: … | 98 |
| Don't know / no answer | 99 |

**388. Would you say the rain level during the season was …?**
➔ *Please tick what applies. (SR)*

| | |
|---|---|
| A lot less than usual | **1** |
| Somewhat less than usual | **2** |
| The same as usual | **3** |
| Somewhat more than usual | **4** |
| A lot more than usual | **5** |
| Don't know / no answer | 99 |

| C. Irrigation |
|---|

**389. What is the <u>main water source</u> of each growing area of [TARGET CROP]?**
➔ *Please tick what applies. Note down other if not in list. (SR)*

|  | Growing area A | Growing area B |
|---|---|---|
| Irrigated | 1 | 1 |
| Rain-fed | 2 | 2 |
| Swamp/wetland | 3 | 3 |
| **98.** Other. Specify 1: | … | … |
| Don't know / no answer | 99 | 99 |

*IF Q389=1 (if irrigation)*
**390. What is the <u>number of days you have been irrigating</u> each growing area of [TARGET CROP]?**
➔ *Please write down the number of days.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Number of days of irrigation** | …days | …days |

*IF Q389=1 (if irrigation)*
**391. What is the <u>average amount of hours per day you have been irrigating</u> each growing area of [TARGET CROP]?**
➔ *Please write down the average amount of hours per day.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Average amount of hours per day** | …hours/day | …hours/day |

*IF Q389=1 (if irrigation)*
**392. What is the <u>amount of liters that is discharged per hour</u> on each growing area of [TARGET CROP]?**
➔ *Please write down the average amount of liters per hour.*

|  | Growing area A | Growing area B |
|---|---|---|
| **Average amount of liters per hour** | …L/hour | …L/hour |

*IF Q389=1 (if irrigation) AND IF DIFFICULTY TO GIVE AN ANSWER PER GROWING AREA*
**393. What is the <u>number of days you have been irrigating</u> in total?**
➔ *Please write down the number of days.*

| **Number of days of irrigation** | …….days |
|---|---|

*IF Q389=1 (if irrigation) AND IF DIFFICULTY TO GIVE AN ANSWER PER GROWING AREA*
**394. What is the <u>average amount of hours per day you have been irrigating</u> in total?**
➔ *Please write down the average amount of hours per day.*

| **Average amount of hours per day** | ……….hours/day |
|---|---|

*IF Q389=1 (if irrigation) AND IF DIFFICULTY TO GIVE AN ANSWER PER GROWING AREA*
**395. What is the <u>amount of liters that is discharged per hour</u> in total?**
➔ *Please write down the average amount of hours per day.*

| **Average amount of liters per hour** | ……….L/hour |
|---|---|

*ONLY FOR BELGIUM: IF Q389=1 (if irrigation)*

**396. <u>When</u> do you irrigate each growing area of cauliflower?**

➔ *Please tick what applies. (MR)*

|  | Growing area A | Growing area B |
|---|---|---|
| **In the morning** | 1 | 1 |
| **At noon** | 2 | 2 |
| **In the evening** | 3 | 3 |
| Don't know / no answer | 99 | 99 |

| PART VI – FEEDBACK |
|---|

**397. Have you received a <u>recommended growing protocol</u> from an agricultural advisor for each growing area of [TARGET CROP]?**

➔ *Please tick what applies. (SR)*

|  | Growing area A | Growing area B |
|---|---|---|
| Yes | 1 | 1 |
| No | 2 | 2 |

*IF Q397=1 (have received a recommended growing protocol)*

**398. Have you <u>followed</u> the recommended <u>protocol</u> for each growing area of [TARGET CROP]?**

➔ *Please tick what applies. (SR)*

|  | Growing area A | Growing area B |
|---|---|---|
| Yes | 1 | 1 |
| No | 2 | 2 |

*IF Q397=1 (have received a recommended growing protocol)*

**399. Please <u>explain</u> why you follow or do not follow the protocol.**

➔ *Please write down why you have or have not followed the protocol.*

| Growing area A | Growing area B |
|---|---|
|  |  |

*IF Q398=1 (follow the recommended protocol)*

**400. What are or would be the <u>benefits</u> to your farm when using the recommended protocol for each growing area of [TARGET CROP]?**

➔ *Please note the benefits.*

| Growing area A | Growing area B |
|---|---|
|  |  |

*IF Q398=1 (follow the recommended protocol)*

**401. What are or would be the <u>disadvantages</u> to your farm when using the recommended protocol for each growing area of [TARGET CROP]?**
➔ *Please note the disadvantages.*

| Growing area A | Growing area B |
|---|---|
|  |  |

**402. Generally, what do you think is the <u>most important</u> to achieve a good crop yield or quality?**
➔ *Please note the most important aspects.*

**403. What are the <u>main problems</u> that you face as a farmer with growing and selling crops?**
➔ *Please note the main problems.*

*IF REFERENCE FARM*

**404. Next to the crop protection program, what <u>additional services</u> did you receive from Syngenta?**
➔ *Please note additional services.*

*IF BENCHMARK FARM*

**405. Next to the crop protection program, what <u>additional services</u> did you receive from a crop input supplier?**
➔ *Please note additional services.*

**This completes the data collection guide.  Thank you for your cooperation!**

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