

Draft questionnaire for the CCC Farming Project about selected farmers' opinion on mitigation measures

25/11/2020

Screening

Q.1. Are you responsible for the day-to-day running of the farm?

Single answer

Yes	1	
No	2	SCREEN OUT

Farm background

First I would like to ask questions about your farming activity in general.

Q.2. What is your role on the farm?

Single answer (and open)

Interviewer to read out

Occupier and manager (renting the farm)	1
Owner and manager	2
Employed farm manager	3
Other	4
If "Other" is chosen, ask: Please specify: _____	Q.2a

Q.3. What proportion (%) of the farming area (considering the whole farmed area, like grassland, cropland, woodland, etc.) is owned as opposed to rented?

Number (0%-100%)

Q.4. In a usual farming season (unaffected by Covid-19) how many people are working on your farm, both regarding yourself and your family and employees?

Interviewer to read out by rows

Numbers (0.0-100.0)

	Full-time (year round)	Part-time (year round)	Casual/ seasonal
You and your family	----- (Q.4.1.A)	----- (Q.4.1.B)	----- (Q.4.1.C)
Employees	----- (Q.4.2.A)	----- (Q.4.2.B)	----- (Q.4.2.C)

Q.5. Do you use contractors on the farm in a usual farming season?

Single answer

Yes	1
No	2

Q.6. [ONLY ASK if answered YES to the previous question (Q.5)]

Please list what type of work is done by contractors.

Open

Q.7. Some farm suppliers, buyers or other organisations require farmers to do a sustainability assessment or implement certain sustainable practices on the farm (for example the LEAF farming or Arla). Do you have any such agreements or contractual obligations?

Single answer

Yes	1
No	2

Q.8. [ONLY ASK if answered YES to the previous question (Q.7)]

Please, tell me with which buyers, suppliers or other organisations you have such an agreement.

Open

Q.9. Do you currently get any of the following payments?

Single answer per row

		Yes	No	Don't know
Q.9.A	CAP direct payment	1	2	3
Q.9.B	CAP greening payment	1	2	3
Q.9.C	Any other government or CAP payment for applying sustainable practices on your farm	1	2	3

Farmer background

Q.10. For how many years have you been working as a farmer?

Number (0-100)

Q.11. In 2019 how many **meetings** have you had with professionals to receive advice on **farm management**? Please, include farm advisors, extension agents, agricultural researchers, accountants, bank managers, vets, feeding companies, etc.

Number (0-100) or number range

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Q.12. [ONLY ASK if answered 1 or more to the previous question (Q.11)]

Please, list the type of professional and the number of times you met them in 2019. If you can, also add the topic you discussed.

Open

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Q.13. Are you involved in any **environmental or sustainability research projects or study group**? (For example operational group, demonstration project)

Single answer

Yes	1
No	2

Q.14. [ONLY ASK if answered YES to the previous question (Q.13)]

Please, tell me the names of the research projects or study groups you are involved in.

Open

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Q.15. In 2019 how many farming **events** have you attended (e.g. field visits, discussion groups) which were related to **improving the environment or sustainable farming**?

Number (0-100)

.....

Q.16. [ONLY ASK if answered 1 or more to the previous question (Q.15)]

Please, list, as you remember, the names of the events, the names of the organisers, and the topic of the meetings.

Open

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Q.17. Are you a member of any association, farmers' union or cooperative of farmers?

Single answer

No	1
Yes	2
If "Yes" is chosen, ask: Please specify:	Q.17a

Q.18. Has the COVID-19 epidemic impacted your farm business?

Single answer

Yes	1
No	2

Q.19. [ONLY ASK if answered YES to the previous question (Q.18)]

In what ways has the COVID-19 epidemic impacted your farm business?

Open

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Changes on the farm

Now I would like to talk with you about the changes you have made or planning to make on your farm.

Q.20. What bigger changes have you made on your farm in the past five years, not considering changes you might have done in response to the COVID-19 epidemic? (List both investment and management or operational changes)

Open

Q.21. What were the most important reasons for having made those changes on your farm?

Open

Q.22. Are there any external factors which you think might change in the coming five years and affect how you run your farm?

Single answer

Yes	1
No	2

Q.23. *[ONLY ASK if answered YES to the previous question (Q.22)]*

Please, list these external factors.

Open

Q.24. Do you already have plans to adapt to these changes?

Single answer

Yes	1
No	2

Q.25. *[ONLY ASK if answered YES to the previous question (Q.24)]*

What are the changes you are planning to make to adapt to the external factors you mentioned before?

Open

Q.26. Usually whose opinion and advice do you consider most in your decision to make a change on your farm? List up to five sources of advice you trust most.

Open for each row

Q.26.A	
Q.26.B	
Q.26.C	
Q.26.D	
Q.26.E	

Q.27. How far do you agree or disagree with the following statements?

Please chose between strongly agree, agree, unsure, disagree or strongly disagree.

Single answer per row

		Strongly agree	Agree	Unsure	Disagree	Strongly disagree
Q.27.A	Farmers have the obligation to contribute to environmental protection as much as possible	1	2	3	4	5
Q.27.B	I am willing to take environmental protection measures on my farm even if it is at the expense of revenues	1	2	3	4	5
Q.27.C	The negative environmental effects of farming are often overestimated by the public	1	2	3	4	5
Q.27.D	An individual farmer cannot do anything to reduce greenhouse gas emissions	1	2	3	4	5
Q.27.E	Climate change impacts are already noticeable	1	2	3	4	5
Q.27.F	Sustainable farming practices can create business opportunities	1	2	3	4	5

Q.28. Which of the following statement best represents you in general?

Single answer

I am usually not interested in new technologies	5
I am sceptical about new technologies	4
I prefer to wait and see	3
I am willing to try new technologies	2
I am often one of the first persons to try new technologies	1

[The following question needs to be printed to a separate sheet so that if the farmers prefer they can fill it out themselves.]

Q.29. How important are the following management activities in **the long-term financial viability** of your farm?

Please, only tick one answer in each row.

		Absolutely important	Very important	Moderately important	Of little importance	Not important at all	Not applicable
		1	2	3	4	5	6
Q.29.A	Animal feeding						
Q.29.B	Animal breeding						
Q.29.C	Animal health						
Q.29.D	Livestock housing and manure storage						
Q.29.E	Fertiliser and manure application and soil management						
Q.29.F	Irrigation and/or drainage						
Q.29.G	Other aspects of grassland and grazing management (e.g. reseeding, cutting regime)						
Q.29.H	Other aspects of crop cultivation (e.g. rotation, cover crops, varieties)						
Q.29.I	Business management (contracts and labour)						
Q.29.J	Machinery and fuel use						
Q.29.K	Technology and automation						
Q.29.L	Other(s), please, specify: _____						
Q.29.M	Other(s), please, specify: _____						

Greenhouse gas mitigation measures

The following questions will relate to greenhouse gases.

Q.30. Have you heard about greenhouse gases or carbon footprint?

Single answer

Yes	1	If Yes, continue with next question
No	2	If No, GO TO QUESTION Q.1

Q.31. *[ONLY ASK if answered YES to the previous question (Q.30)]*

Do you think that agriculture contributes to greenhouse gas emissions?

Single answer

Yes, a lot	1
Yes, a little bit	2
No	3

Q.32. *[ONLY ASK if answered YES to question Q.30]*

Have you ever had your farm's greenhouse gas footprint estimated (also called carbon footprint)?

Single answer

Yes	1
No	2

Q.33. *[ONLY ASK if answered YES to the previous question (Q.32)]*

Which carbon calculator was used?

Open

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Q.34. [ONLY ASK if answered YES to question Q.30]

In your view how likely it is that you'll change your farm structure, management or operations in the next five years due to the following circumstances?

Please indicate as very likely, fairly likely or not likely at all.

Single answer per row

		Very likely	Fairly likely	Not likely at all
Q.34.A	Increased expectations from the general public on reducing greenhouse gas emissions from my farm	1	2	3
Q.34.B	Increased requirements from my buyers or milk processing company to reduce greenhouse gas emissions from my farm	1	2	3
Q.34.C	Increased availability of subsidies to reduce greenhouse gas emissions from my farm	1	2	3
Q.34.D	Increased pressure from local community on reducing greenhouse gas emissions from farm	1	2	3
Q.34.E	Increased regulatory requirements to reduce greenhouse gas emissions from my farm	1	2	3
Q.34.F	Increasing educational programs on sustainable farming practices	1	2	3

Q.35. [ONLY ASK if answered YES to question Q.30]

Have you made any changes on your farm ever to reduce greenhouse gas emissions or increase carbon sequestration on it?

Single answer

Yes	1	If Yes, continue with next question
No	2	If No, GO TO QUESTION Q.44

Q.36. *[ONLY ASK if answered YES to previous question (Q.35)]*

What changes have you made in the past on your farm to reduce greenhouse gas emissions or increase carbon sequestration?

Open

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[Record first two below (and on help sheet) as Practice 1 and Practice 2]

Open

	Practice 1	Q.36.a
	Practice 2	Q.36.b

Q.37. *[ONLY ASK if have Practice 1 recorded from previous question (Q.36)]*

What were the reasons why you decided to adopt *[add here the name of Practice 1]*?

Open

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Q.38. [ONLY ASK if have **Practice 2** recorded from question Q.36]

What were the reasons why you decided to adopt [add here the name of Practice 2]?

Open

Q.39. [ONLY ASK if answered **YES** to question Q.30]

Have you ever considered making any changes to reduce greenhouse gas emissions from your farm or increase carbon sequestration on it but finally dropped that idea?

Single answer

Yes	1	If Yes, continue with next question
No	2	If No, GO TO QUESTION Q.45

Q.40. [ONLY ASK if answered **YES** to previous question (Q.39)]

What changes have you considered to make to reduce greenhouse gas emissions from your farm or increase carbon sequestration on it but finally decided not to do?

Open

[Record first two below (and on help sheet) as Practice 3 and Practice 4]

Open

	Practice 3	Q.40.a
	Practice 4	Q.40.b

Q.41. *[ONLY ASK if have **Practice 3** recorded from previous question (Q.40)]*

What were the reasons why you decided not to adopt [\[add here the name of Practice 3\]](#)?

Open

Q.42. *[ONLY ASK if have **Practice 3** recorded from question Q.40]*

What could make you adopt [\[add here the name of Practice 3\]](#)?

Open

Q.43. *[ONLY ASK if have **Practice 4** recorded from question Q.40]*

What were the reasons why you decided not to adopt [\[add here the name of Practice 4\]](#)?

Open

Q.44. [ONLY ASK if have **Practice 4** recorded from question Q.40]

What could make you adopt [add here the name of Practice 4]?

Open

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Q.45. [ONLY ASK if answered **YES** to question Q.30]

Are you considering to make any changes in the next five years to reduce greenhouse gas emissions from your farm or to increase carbon sequestration on it?

Single answer

Yes	1	If Yes, continue with next question
No	2	If No, GO TO QUESTION Q.49

Q.46. [ONLY ASK if answered **YES** to previous question (Q.45)]

What changes are you considering to make in the next five years to reduce greenhouse gas emissions from your farm or to increase carbon sequestration on it?

Open

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[Record first two below (and on help sheet) as Practice 5 and Practice 6]

Open

	Practice 5	Q.46.a
	Practice 6	Q.46.b

Q.47. *[If answering YES to Q.39]*

What are the reasons why you are considering to adopt [[add here the name of Practice 3](#)]?

Open

Q.48. *[If answering YES to Q.39]*

What are the reasons why you are considering to adopt [[add here the name of Practice 4](#)]?

Open

The following two questions need to be printed to separate sheets so that if the farmers prefer they can fill it out themselves.

Q.49. [ONLY ASK if answered YES to the question Q.30] If you were **to reduce your farm's greenhouse gas emissions**, how important would be to change the following farming activities? Please, only tick one answer in each row.

		Absolutely important	Very important	Moderately important	Of little importance	Not important at all	Not applicable
		1	2	3	4	5	6
Q.49.A	Animal feeding						
Q.49.B	Animal breeding						
Q.49.C	Animal health						
Q.49.D	Livestock housing and manure storage						
Q.49.E	Fertiliser and manure application and soil management						
Q.49.F	Irrigation and/or drainage						
Q.49.G	Other aspects of grassland and grazing management (e.g. reseeding, cutting regime)						
Q.49.H	Other aspects of crop cultivation (e.g. rotation, cover crops, varieties)						
Q.49.I	Business management (contracts and labour)						
Q.49.J	Machinery and fuel use						
Q.49.K	Technology and automation						
Q.49.L	Other(s), please, specify: _____						
Q.49.M	Other(s), please, specify: _____						

Farm practices

Q.50. *[Ask to all participants]* I would like to ask you about farm practices. Please choose the statement which best describes your situation.

		<i>Please, only tick one of these five options in each row.</i>				
		I haven't heard about this practice	I am using this practice	I am planning to use this practice in the next five years	I have used this practice in the past and would not like to use it again	I have not used this practice before and not planning to use it in the next five years
		1	2	3	4	5
0.A	Increase milk production per cow					
0.B	Increase longevity of stock					
0.C	Use grass clover mix in pastures					
0.D	Increase fertilisation efficiency					
0.E	Separate faeces from urine					
0.F	Increase roughage production per ha					
0.G	Provide lower crude protein content feed					
0.H	Provide higher fat content feed					
0.I	Add feed additives to ration					
0.J	Cool the manure store					
0.K	Acidify the manure					
0.L	Dilute the manure					
0.M	Compost the manure					
0.N	Increase soil organic matter					
0.O	Anaerobic digestion of manure					
0.P	Capture the methane from the manure store and burn or purify it (without anaerobic digestion)					

Ammonia emission mitigation measures

Now I would like to discuss the reduction of ammonia emissions with you.

Q.51. Have you heard about ammonia emissions?

Single answer

Yes	1	If Yes, continue with next question
No	2	If No, GO TO QUESTION Q.61

Q.52. *[ONLY ASK if answered YES to the previous question (Q.51)]*

Do you think that agriculture contributes to ammonia emissions?

Single answer

Yes, a lot	1
Yes, a little bit	2
No	3

Q.53. *[ONLY ASK if answered YES to question Q.51]*

Have you made any changes on your farm ever to reduce ammonia emissions?

Single answer

Yes	1	If Yes, continue with next question
No	2	If No, GO TO QUESTION Q.57

Q.54. *[ONLY ASK if answered YES to previous question (Q.53)]*

What changes have you made in the past on your farm to reduce ammonia emissions?

Open

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[Record first two below (and on help sheet) as Practice 7 and Practice 8]

Open

	Practice 7	Q.54.a
	Practice 8	Q.54.b

Q.55. *[ONLY ASK if have **Practice 7** recorded from previous question (Q.54)]*

What were the reasons why you decided to adopt *[add here the name of Practice 7]*?

Open

Q.56. *[ONLY ASK if have **Practice 8** recorded from question Q.54]*

What were the reasons why you decided to adopt *[add here the name of Practice 8]*?

Open

Q.57. *[ONLY ASK if answered **YES** to question Q.51]*

Are you considering to make any changes in the next five years to reduce ammonia emissions from your farm?

Single answer

Yes	1	If Yes, continue with next question
No	2	If No, GO TO QUESTION Q.61

Q.58. *[ONLY ASK if answered YES to previous question (Q.57)]*

What changes are you considering to make in the next five years to reduce ammonia emissions from your farm?

Open

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[Record first two below (and on help sheet) as Practice 9 and Practice 10]

Open

	Practice 9	Q.58.a
	Practice 10	Q.58.b

Q.59. *[ONLY ASK if have Practice 9 recorded from previous question (Q.58)]*

What were the reasons why you decided to adopt [add here the name of Practice 9]?

Open

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Q.60. [ONLY ASK if have **Practice 10** recorded from question Q.58]

What were the reasons why you decided to adopt [\[add here the name of Practice 10\]](#)?

Open

Support for environmental action

SKIP THIS AND THE NEXT SECTION AND GO TO Q.70 if the farmer hasn't heard about GHG emissions AND hasn't heard about ammonia emissions (i.e. if **No to Q.30** and **No to Q.51**)

Q.61. If you were to be asked by regulation or your buyer(s) to reduce the greenhouse gas or ammonia (or both) emissions from your farm, what kind of support would help you to achieve such a goal?

Open

Q.62. Do you see a role for your farming community in supporting each other in reducing greenhouse gas or ammonia emissions (or both)?

Single answer

Yes	1
No	2
I do not know	3

Q.63. *[ONLY ASK if answered YES to previous question (Q.62)]*

In what ways could your farming community supporting each other in reducing greenhouse gas or ammonia emissions (or both)?

Open

Q.64. What do you think could be policy, market, social, information provision or other changes that could encourage more farmers to adopt practices to reduce greenhouse gas or ammonia emissions (or both)?

Open

Q.65. Usually whose opinion and advice do you consider most in your decision to make a change on your farm specifically to reduce greenhouse gas or ammonia emissions? List up to five sources of advice you trust most.

Open for each row

Q.65.A	
Q.65.B	
Q.65.C	
Q.65.D	
Q.65.E	

Greenhouse gas and ammonia knowledge

SKIP THIS SECTION AND GO TO Q.70 if the farmer hasn't heard about GHG emissions AND hasn't heard about ammonia emissions (i.e. if **No to Q.30** and **No to Q.51**)

The following questions are about the technical and scientific aspects of greenhouse gases and ammonia emissions. These questions are challenging even for scientists who have slightly different specialisations. You do not need to answer them if you feel you do not know the answer.

Q.66. *[SKIP this question if the farmer hasn't heard about GHG emissions (i.e. if **No to Q.30**)]*

What do you think are the main greenhouse gases related to farming?

Open

Q.67. *[SKIP this question if the farmer hasn't heard about ammonia emissions (i.e. if **No to Q.51**)]*

What do you think are the main sources of ammonia losses from farms?

Open

Q.68. *[SKIP this question if the farmer hasn't heard about GHG emissions (i.e. if No to Q.30)]*

Which food product cause higher greenhouse gas emissions?

Single answer

Interviewer to read out

I do not know	1
Wheat	2
Beef meat	3

Q.69. *[SKIP this question if the farmer hasn't heard about ammonia emissions (i.e. if No to Q.51)]*

What are the circumstances which can cause high ammonia emissions from manure storage?

Single answer

Interviewer to read out

I do not know	1
Warm weather	2
Cold weather	3

Farmer background – part 2

Finally, we would like to ask some more personal questions. Feel free to not answer these.

Q.70. Name of respondent

Single answer and open

Prefers not to say	1
Name: _____	Q.70.a

Q.71. Please state your highest formal education qualification

Open

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Q.72. Do you have any agricultural education or training?

Single answer and open

No	1
Yes	2
If "Yes" is chosen, ask: Please specify: _____	Q.72.a

Q.73. Have you identified a successor for your farm

Single answer

Yes	1
No	2
Not sure	3

Q.74. Using a range of 10.000€ can you indicate your annual gross farm income (income less costs, not including subsidies)? (e.g. under 10.000€ or between 51.000€ to 60.000€)

Single answer and open

Prefers not to say	1
Income: _____	Q.74.a

Q.75. Approximately what proportion (%) of your total farm income is from agricultural diversification activities (e.g. farm shop, tourism, creamery, forestry)?

Number (0%-100%)

Q.76. Approximately what proportion (%) of your total family income (considering also the income of those living in the same household as you) is from off farm activities (e.g. another job, investment)?

Number (0%-100%)

Q.77. How old are you?

Single answer

Interviewer to read out

Prefers not to say	1
Under 35	2
Between 36 and 45	3
Between 46 and 55	4
Between 56 and 65	5
Between 66 and 75	6
Above 76	7

Q.78. What gender do you identify as?

Single answer and open

Prefers not to say	1
Gender: _____	Q.78.a

Q.79. What was your impression of the interview? Please, feel free to express your views.

Open

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This is the end of the interview. Thank you very much for giving up your time to answer our questions.

See next page for questions for the interviewer.

INTERVIEWER TO FILL IN, DO NOT ASK

Q.80. Date of the interview

Date

Q.81. Farm ID in the project

Text

Q.82. Name of the interviewer

Text

Q.83. What was the comprehension level of the questions by the interviewed?

Single answer

Very good	1
Good	2
Moderate	3
Poor	4
Very poor	5

Q.84. Please, add any comments or remark on the whole interview if you wish.

Open

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Q.85. Does the farm have organic production?

Single answer

Yes, the whole farm	1
Yes, part of the farm	2
No	3

Q.86. Is the farm in a Nitrate Vulnerable Zone?

Single answer

Yes, the whole farm	1
Yes, part of the farm	2
No	3

Q.87. How far (in kilometres) is the closest Natura 2000 area from the farm?

Number (0-500)
