<div align="center">**Household Survey Questionnaire**</div>

Wheat Seed Information Networks and Seed Acquisition Practices

ENUMERATOR: Please introduce the study:

Greetings! I have come as a member of a research team to collect information on the wheat seed information networks and seed acquisition practices in Ethiopia. This study is conducted by the non-profit organization International Maize and Wheat Improvement Center (CIMMYT). Same as in a lottery, you have been randomly selected to participate in this study. We would like to briefly introduce our work before asking you whether you are willing to participate.

In this project, we document the role of women and men farmers in the current wheat seed production practices and characteristics of farm households in Ethiopia. We are particularly interested in the existing wheat seed acquisition practices and associated knowledge networks in the research areas. The information collected through this survey is important for policymakers, researchers, and other stakeholders for making better decisions towards timely, effective, and equitable delivery of quality wheat seeds in the country. While there are no immediate and visible benefits from participating in this study, your responses would contribute to enhancing agricultural policies and practices from which you and your family may also benefit in the future.

If you participate in this study, we will ask you and your partner questions about your household's wheat production system and some additional household information. It will take about 1.5 hours of your time. You or other household members will not be exposed to any risks by participating in this study, not be identified personally in any study report or publication. All information about your household will be kept strictly confidential. Data may be shared with other CIMMYT researchers, but we are committed to ensuring absolute confidentiality.

Participation in this study is voluntary. If you choose to participate, you have the right to stop at any time or to not answer individual questions in the questionnaire without any consequences. You may ask any questions you have about the study. If you have questions later, they can be directed to Dr. Hom Gartaula (h.gartaula@cgiar.org) and/or Dr. Moti Jaleta (m.jaleta@cgiar.org); +251 116 172309, both working at CIMMYT.

Preliminary questions
0.1. Has the respondent given his/her consent to be interviewed? _____ (1=Yes, 0=no)
0.2. If not, proceed to the next sample Household in the list. If households in the list are already contacted, look for a replacement farmer).
0.3. Household ID (from the list provided): _____
0.4. If a respondent is a replacement household, give a new ID starting from 3001: _____
0.5. Have you cultivated wheat in any of your plots during the last 12 months? _____
   (1=Yes, 0=No; if no, stop the interview and go for the replacement farmer)

1 General household and farm information

1.1. Household identification

1. GPS coordinates of the main dwelling	*automatically*
2. Date of interview	*automatically*
3. Interviewer name (select from the drop-down list)	
4. District name (select from the drop-down list)	
5. Kebele name (select from the drop-down list)	
6. Interview ID (provided to the enumerator)	
7. Male household head (MHH) name	[If no male head, put NONE]
8. Female household head (FHH) name	[If no female head, put NONE]
9. Mobile phone number of MHH	[If no mobile, put 0]
10. Mobile phone number of FHH	[If no mobile, put 0]
11. Name of respondent, if not MHH or FHH (Please ensure that the respondent belongs to the study household)	
12. Mobile phone number of the respondent, if not MHH or FHH	[If no mobile, put 0]
13. Was this household interviewed in the last round of the survey (check from the list provided)?	1=Yes; 0=No

1.2. Household details (Both in Male and Female headed HHs, ask Woman HH head. Male HH head is asked only if Woman HH head is not available in the family)

1. How many adult members are there in your household in total? _____ (number of members of age 15 or above; Living in the house and eating from the same kitchen for at least 4 months during the past one year).
2. Number of children (below 15 years of age) in the household: Boys: _____ Girls: _____
3. Number of children (below 15 years of age) attending school (online or in person): Boys: _____ Girls: _____
4. Number of close family members, who stay outside for >4 months during the last 12 months, and whose husband/wife/parents (in case the person is unmarried) live in the surveyed household: Total: _____ For work: _____ For study: _____
5. Main language used by the household members: _____ (Code 1)
6. Religion of the MHH: _____ (Code 2)
7. Religion of the FHH: _____ (Code 2)
8. Household adult member (15 years or older) roster [*Number of rows = number of household members as in Q1*].

ID	1. Name of the member	2. Member Info					3. Primary occupation in the last 12 months *[Primary based on time spend]*			4. Secondary occupation in the last 12 months *[Secondary based on time spend]*			5. Can read and/or write any language (Yes = 1, No = 0	6. Education (Code 6)	7. Involved in decision-making regarding crop production? (Code 7)
		Gender: 0= Female, 1=Male; 2=other	Age (years)	Relation to HH head (Code 3)	Marital Status (Code 4)	Type of work (Code 5)	Months worked in the last 12 months *[Not if code 5 = 10-13]*	Working hours per week during months worked *[Not if code 5 = 10-13]*	Type of work (Code 5)	Months worked during last 12 months *[Not if code 5 = 10-13]*	Working hours per week during months worked *[Not if code 5 = 10-13]*			
1														
2														
3														
4														
5														

9. Close family members who live outside the household for >4 months out of the last 12 months and whose husband/wife or parents (in case the person is unmarried) live in the surveyed household.

ID	1. Name of the member	2. Member Info				3. Primary occupation in the last 12 months *[Primary based on time spend]*			4. How long has this member been staying outside the house? (years)	5. Current place this person resides (name)	6. Distance from house to the place of work (km)	7. Frequency of visit (once in ____ months)	8. Can read and/or write any language (Yes = 1, No = 0)	9. Education (Code 6)	10. Actively involved in decision-making regarding crop production (over phone or when he/she visits)? (Code 7)	11. Type of monetary flow (Code 8)
		Gender: 0= Female, 1=Male; 2=other	Age (years)	Relation to HH head (Code 3)	Marital Status (Code 4)	Type of work (Code 5)	Months worked in the last 12 months *[Not if code 5 = 10-13]*	Working hours per week during months worked *[Not if code 5 = 10-13]*								
1																
2																
3																

Code 1: Main household language

1 Afaan Oromo
2 Amharic
3 Guragegna
4 Kembatagna
5 Tigrigna
6 Others, specify

Code 2: Religion

0 Non-religious
1 Christian (Orthodox, Catholic, Protestant)
2 Muslim
3 Others (specify)
99 Can't say

Code 3: Relation to HH head

0 Self (Woman HH head)
1 Self (Male HH head)
2 Spouse
3 Son/Daughter
4 Grandchild
5 Father/Mother
6 Brother/Sister
7 Nephew/Niece
8 Uncle/Aunt
9 Son-in-law/Daughter-in-law
10 Father-in-law/Mother-in-law
11 Brother-in-law/Sister-in-law
12 Grandparent
13 Other relatives of head/spouse
14 Laborer (farm worker, herder, maid etc.)
15 Other unrelated person (e.g., friend)

Code 4: Marital Status

1 Married
2 Single
3 Divorced or Separated
4 Widowed

Code 5: Occupation

1 Household activities (e.g., taking care of kids, cleaning)
2 Self-employed in crop production
3 Self-employed in livestock production or fisheries
4 Self-employed outside agriculture locally (e.g., business)
5 Employed in agricultural sector, permanent (e.g., laborer working every day in a plantation)
6 Employed in agricultural sector, temporarily (or daily wages)
7 Employed outside agricultural sector, permanent
8 Employed outside agricultural sector, temporary (or daily wages)
9 Unpaid worker
10 Unemployed, being a student
11 Unemployed, but looking for work
12 Unemployed, and unable to work
13 Not in labor force because of old age
14 Others (specify)

Code 6: Education

0 = Did not complete 1st grade;
1 = Completed 1st grade;
2 = Completed 2nd grade;
3 = Completed 3rd grade;
4 = Completed 4th grade;
5 = Completed 5th grade;
6 = Completed 6th grade;
7 = Completed 7th grade;
8 = Completed 8th grade;
9 = Completed 9th grade;
10 = Completed 10th grade;
11 = Completed 11th grade;
12 = Completed 12th grade;
13 = Incomplete Bachelors;
14 = Completed Bachelors;
15 = Incomplete Masters;
16 = Completed Masters (or above);
97 = Adult literacy program;
98 = Religious education
99 = Others (specify).

Code 7: Decision making

1= Not at all
2 = Only in a few activities
3 = Majority of the activities
4 = All activities

Code 8: Money transfer

1 The person sends (gives) money to the household most of the time.
2 The household sends (gives) money to this member most of the time.
3 Money exchange happens in both ways.
4 No money exchange happened in the last 12 months.

1.3. Farm size of household (Ask household head mostly involved in the farming practices)

[Enumerator: Define the concept of the household before this section. Only record area that was owned or cultivated in the last 12 months. Season 1= Rainy/Summer, Season 2=Dry/Winter]

1. Local land unit (LU) followed by farmer* Please use this LU throughout the interview			
2. LU conversion rate	1 ha = _____LU		
3. Total cultivable area owned [LU]			
4. Area leased-in [LU]			
5. Lease-in charge [Birr/LU}			
6. Area leased-out [LU]			
7. Lease-out charge [Birr/LU]			
8. Total land area brought in under sharecropping arrangement [LU, if zero go to Q.10]			
9. Crops, area, and harvest shared under sharecropping (start from a crop with largest area under sharecropping)	Crop name [Code 1]	Area (LU)	Share of harvest obtained by HH (%)
a. Crop 1			
b. Crop 2			
c. Crop 3			
10. Area cultivated jointly with friends or family members **outside** the home [LU, if 0 go to Q.12]			
11. Crops, area, and harvest shared under joint farming with friends or family ((start from a crop with largest area under joint arrangement)	Crop name [Code 1]	Area (LU)	Share of harvest obtained by HH (%)
a. Crop 1			
b. Crop 2			
c. Crop 3			
12. Area of other land used for cultivation (e.g., community land) [LU]	[Include area obtained as mortgage etc. but not leased-in, owned or under sharecropping]		
13. Area of land mortgaged out to someone [LU]			
14. Total area cultivated in *Meher* season [LU]	[Check: Should be equal to or less than (3)+(4)+(8)+(10)+(12)-(6)-(13)]		
15. Total rice area cultivated in *Meher* season [LU]			
16. Total maize area cultivated in *Meher* season [LU]			
17. Total wheat area cultivated in *Meher* season [LU]			
18. Total area cultivated in *Belg* season [LU]	[Check: Should be equal to or less than (3)+(4)+(8)+(10)+(12)-(6)-(13)]		
19. Total rice area cultivated in *Belg* season [LU]			
20. Total maize area cultivated in *Belg* season [LU]			
21. Total wheat area cultivated in *Belg* season [LU]			
22. Total area cultivated (if any) between the two seasons (between *Meher* and *Belg*) [LU]	[Check: Should be equal to or less than (1)+(2)-(4)+(6) + (10)]		

Code 1: 0=Fallow, 1=Rice, 2=Wheat, 3=Maize, 4= Sorghum, 5=Pulses/legumes, 6= Millets/course cereals; 7=Mustard/Rapeseed, 8=Soybean, 9=groundnut; 10=other oil yielding crops; 11=Tobacco, 12=Vegetables, 13= Fruit trees, 14=Grass/fodder, 15=Potato, 16=Cotton, 17=jute; 18=Sugarcane, 19=Teff; 97=N/A; 99=other (specify)

2. Plot information (Ask MHH, or WHH if MHH is not available for the interview)

2.1a. During the last 12 months, on how many specific plots have you grown crops? _____

2.1b Plot data

[ENUMERATOR: Collect this information for each cultivable plot, starting with the largest in plot area. Include max. 8 plots.]

Plot ID	1	2	3	4	5	6	7	8
1. Plot area [LU]								
2. Distance from home to this plot (minutes of walking)								
3. Name/area where the specific plot is located								
4. Primary crop during season 1 or rainy/Summer/Meher 2020/21 (Code 3)								
5. Primary crop during season 2 or Dry/winter/Belg 2021 (Code 3)								
6. Slope (1 = leveled field; 2 = gentle slope; 3 = steep slope)								
7. Soil type (1 = clayey, 2 = loamy; 3 = sandy)								
8. Soil fertility (1 = low fertile; 2 = medium fertile; 3 = high fertile)								
9. Have you had erosion problems with the plot? (1=yes; 0=no)								
10. Have you had soil salinity or sodicity problems with the plot? (1=yes, 0=no)								
11. Have you had soil acidity problems with the plot? (1=yes, 0=no)								
12. Have you had water logging problems with the plot? (1=yes, 0=no)								
13. Tenure status (1=owned, 2=shared-in, 3=leased-in, 4= others)								
14. If owned, is the plot of land inherited from parents? (1=yes, 0=no)								
15. Was this plot under your management 10 years back? (1=yes, 0=no)								
16. Land title available in the name of any of the family members? (1=yes, 0=no)								
17. If yes to Q16, who is the title holder? (Code 1)								
18. Who manages the crops grown in the plot for most time (Code 1)								
19. Is irrigation available for the specific plot? (0=never, 1=sometimes, 2=always)								
20. If irrigation is available at least (sometime or always), the source (Code 2)								
21. Have you constructed soil and water conservation structures in this plot during the last three years?								
22. Have you adopted chemical herbicides in this plot during the last two seasons?								
23. Have you adopted intercropping in this plot during the last two seasons?								

Code 1: 1=male member, 2=female member, 3=both male and female members

Code 2: 1=canal, 2=river, 3=pond, 4=tube well (electric), 5=tube well (diesel), 6=other (specify)

Code 3: 0=Fallow, 1=Rice, 2=Wheat, 3=Maize, 4= Sorghum, 5=Pulses/legumes, 6= Millets/course cereals; 7=Mustard/Rapeseed, 8=Soybean, 9=Groundnut; 10=Other oil yielding crops; 11=Tobacco, 12=Vegetables, 13= Fruit trees, 14=Grass/fodder, 15=Potato, 16=Cotton, 17=jute; 18=Sugarcane; 19: Tef; 97=N/A; 99=other (specify)

2.2.a Details of cultivation in the wheat random plot (selected from 2.1) in the last (Meher/Kiremt/Summer) season 2020/21.

1. Random plot ID (from 2.1; *take only the plots with wheat cultivation. Please reiterate the plot characteristics to the respondent once, to ensure that he is talking about the particular plot only*)	
2. Area [LU] of the plot	
3. Did you cultivate wheat in this plot in this season during 2020/21? (*If not, take a plot with wheat*). (1=Yes; 0=No)	
4. How many times the plot was tilled before sowing wheat?	
5. How much seed did you use for the entire plot? (kg)	
6. What was the wheat variety grown on this plot?	
7. Was wheat intercropped with other crops? (1=Yes; 0=No)	
8. What was the other/secondary crop (intercrop) (Code 1)	
9. What was the main crop grown during the previous season in this plot? (Code 1)	
10. Was the residue of previous crop (crop before wheat) burnt? (1=Yes; 0=No)	
11. If not, had you used the crop residue from the previous crop as mulch for wheat? (1=Yes; 0=No)	
12. Was the residue of previous wheat crop burnt (partly or all)? (1=Yes; 0=No)	
13. If not, had you used the wheat residue as mulch for the next crop? (1=Yes; 0=No)	
14. Week & month of sowing (of 2020)	
15. Did COVID-19 affect the sowing date/week? [1=yes, 0=no]	
16. Main seed source (Code 2)	
17. Varietal name (NI if farmer do not know the name)	
18. Week & month of harvesting (of 2020 or 2021) [If not harvested, expected week& month]	
19. Did COVID-19 affect the harvesting date/week? [1=yes, 0=no]	

20. Grain yield from this plot [If not harvested, expected yield]	Quantity: _____	Unit: _____ (Code 3)

21. Share of grain marketed (%) [If not harvested, expected share]	
22. Share stored for household consumption (%) [If not harvested, expected share]	
23. Average selling price (ETB/kg) [If not harvested, expected price]	
24. Income from selling the crop residue (ETB/plot) [If not harvested, expected income; 0 if not sold]	

Code 1: 0=Fallow, 1=Paddy, 2=Wheat, 3=Maize, 4= Sorghum, 5=Pulses/legumes, 6= Millets/course cereals; 7=Mustard/Rapeseed, 8=Soybean, 9=groundnut; 10=other oil yielding crops; 11=Tobacco, 12=Vegetables, 13= Fruit trees, 14=Grass/fodder, 15=Potato, 16=Cotton, 17=jute; 18=Sugarcane, 97=N/A; 99=other (specify).
Code 2: 1=farm-saved/own stocks, 2=friends/neighbors/relatives, 3=local market, 4=agro-input dealer/cooperatives, 5=community-based seed groups, 6=government agency, 7=NGOs, 8=contract growers, 9=other (specify)
Code 3: 1= kilogram, 2= quintal, 3=ton, 4= number, 5= dozen, 6 = bunch.

2.2.b Material inputs on random plot for wheat crop in the last rainy (Meher/Kiremt/Summer) season 2020/21 *(please refer to the same plot as identified in 2.2.a)*

Inputs	Name of input	Unit of measurement	Total quantity used (QU/plot/season) *(not per times)*	Average price of input as used during last season (Birr per measurement) * Please put 0 if the input was free or from the same farm.	Did the COVID-19 situation affected your expected use of the specific input? *(1=Yes, 0=No)*
1. Manure: Plant residue		Per quintals			
2. Manure: Animal waste/manure		Per quintals			
3. Chemical fertilizers		Per kg			
		Per kg			
		Per kg			
		Per kg			
		Per kg			
4. Herbicides		Per Lt or kg			
		Per Lt or kg			
		Per Lt or kg			
5. Other pesticides (fungicides and insecticides)		Per Lt or kg			
		Per Lt or kg			
		Per Lt or kg			
6. Lime or soil conditioner		Per kg			
7. Irrigation fuel cost (excluding labor cost)		Per application			
8. Electricity cost		Per Unit		_____ (total cost per month)	

9

2.2.c Labor requirements for random plot in the last rainy (Meher/Kiremt/Summer) season 2020/21
(please refer to the same plot as identified in 2.2.a)

	No. of operations per season	No. of days required to complete 1 operation	Number of times the activity was contracted out (≤ total number of operations)	Average no. of hired labor/machine used per day of operation				If not contracted out all the time, the wage rate paid (ETB. per day)				If contracted out *at least once*, rental fee (ETB. per operation)	No. of own labor and animal/machine used per day of work			
				Male	Female	Animal	Machine	Male	Female	Animal	Machine		Male	Female	Animal	Machine
1. Land levelling and cleaning																
2. Land preparation (tillage)																
3. Seeding/planting/sowing																
4. Manual weeding (pre-sowing)																
5. Manual weeding (post-sowing)																
6. Chemical weeding (pre-sowing)																
7. Chemical weeding (post- sowing)																
8. Irrigation																
9. Fertilizer application																
10. Manure application																
11. Herbicide application																
12. Pesticide/Fungicide application																
13. Lime application																
14. Harvesting																
15. Transporting																
16. Threshing																
17. Cleaning and drying																

3. Socioeconomic and biophysical constraints to wheat production
(Ask both MHH and FHH in a separate questionnaire)

3.1. Plan for the next Rainy/Meher/Kiremt season.

1. Would there be a change in the area under wheat in the coming wheat season?	Code 1
2. If Code 1=1 or 2, is this change related to the effect of COVID-19?	1=Yes, 0=No
3. If Code 1 = 1, which crop would be replaced by wheat?	(Code 2)
4. If Code 1 = 2, what would be the new crop replacing wheat?	(Code 2)
5. If Code 1 = 2, would you be not cultivating wheat in the next season?	1=Yes, 0=No
6. If Code 1 = 1 or 2, the reason for change in area under wheat	(Code
7. Would there be a change in the quantity of [wheat] seed you expect to sow per LU?	0=No, 1=Yes, 2= No idea
8. If Q7 is answered with NO, do you have a plan to use more inputs for wheat per LU?	1=Yes, 0=No
9. If yes, why do you want to increase the intensity of wheat production?	(Code 3)

Code 1: 1: Yes, increase; 2 = Yes, reduce; 3 = No, will be the same; 4 = No idea.
Code 2: 0=Fallow, 1=Rice, 2=Wheat, 3=Maize, 4= Sorghum, 5=Pulses/legumes, 6= Millets/course cereals; 7=Mustard/Rapeseed, 8=Soybean, 9=groundnut; 10=other oil yielding crops; 11=Tobacco, 12=Vegetables, 13= Fruit trees, 14=Grass/fodder, 15=Potato, 16=Cotton, 17=jute; 18=Sugarcane, 19=Tef; 97=N/A; 99=other (specify).
Code 3: 1=lack of fertile land, 2=access to more land, 3=lack of labor, 4=access to more labor, 5=lack of seed, 6=better access to seeds, 7=free seeds available, 8=increase in seed price, 9=decrease in seed price, 10=decrease of wheat/grain price, 11=guaranteed selling price of wheat grain, 12=secure market, 13=increased need at household level, 14=lack of tools and equipment, 99=Others (specify)

3.2. Have you experienced the following constraints in terms of wheat production in the past 5 years?

Constraints	Is it one of the **major** constraints in wheat production (1=Yes, 0 No)	Rank the three most important constraints (1=most important, 2=second most important and 3=Third most important)
Socioeconomic		
1. Timely unavailability of improved seeds		
2. High price of improved seeds		
3. Poor quality of seeds		
4. Lack of access to credit to buy seeds		
5. Timely unavailability of fertilizer		
6. High price of fertilizer		
7. Unavailability of credit to buy fertilizer		
8. Poor quality of chemical fertilizers		
9. Timely unavailability of human labor		
10. High wage rate		
11. Low skilled labor force		
12. Timely unavailability of chemical herbicides		
13. High price of herbicides		
14. Unavailability of credit to buy herbicides		
15. Poor quality of herbicides		

16. Lack of access to output markets		
17. Lack of access to information		12
18. Low grain prices		
19. Reduction in family labor availability		
Biophysical		
20. Prolonged draught		
21. Frequent/irregular floods		
22. High heat during the milking stage		
23. Increased pest infestation		
24. Increased disease infestation (including rust)		
25. Soil fertility decline		

4. Access to new wheat varieties (Ask both MHH and FHH separately)

4.1. Sources of wheat seeds for the entire wheat crop (across plots)

Please provide us the following information about difference sources of seed you cultivated last wheat season.

Wheat crop in the last season	Seed Sources				
	1	2	3	4	5
1. Source name (Code 1)					
2. Did you select the source based on your past experience with the source? (Yes / No / Don't know)					
3. Number of wheat varieties procured from this source in the last 12 months.					
4. Quantity of seed that you obtained from this source during the wheat season 2020/21? (kg)					
5. Name of the main varieties obtained from this source (more than one name possible)					
6. What type of variety was that? (Code 2)					
7. How was the seed acquired from this source? (Code 3)					
8. Who was involved in arranging seeds from this source? (Code 4)					
9. Did you select the variety to be cultivated before selecting this seed source? (Yes/No/ NI)					
10. At what time was the seed available? (Code 5)					
11. Where did you obtain the seeds from? (Code 6)					
12. How did you acquire the seed? (Code 7)					
13. If acquired cash, credit or bartered, how was the price or the term of trade? (Code 8)					
14. Was the seed clean? (Code 9)					
15. How was the germination of the seed? (Code 10)					
16. How do you rate the yield performance of the variety? (Code 11)					
17. How do you rate the performance of biproducts (straw, biomass, etc.) of the variety? (Code 11)					
18. Why did you choose to use this variety? (Code 12)					

Code 1: 1=home-saved/own stocks, 2=friends/neighbors/relatives, 3=local market, 4=agro-input dealer/Cooperative, 5=community-based seed groups, 6=government agency, 7=NGOs, 8=contract growers, 9=other (specify);

Code 2: 0=no idea, 1= landrace, 2=improved bread wheat, 3=improved durum wheat, 4=improved, but don't know bread or durum;

Code 3: 1=save/own stocks, 2=exchange/barter, 3=gift (friend/neighbor/relatives), 4=purchase/buy from seed company/agro-dealer, 5=purchase from cooperatives, 5=vouchers/coupons, 6=direct seed distribution, 7=seed loan, 8=food aid, 9=money credit, 10=seed for labor, 11=other (specify);

Code 4: 1=myself, 2=my wife/husband, 3=Both of us, 4=others in the household (specify);

Code 5: 1=Before sowing season, 2=at the start of sowing season, 3=mid-season of the sowing time, 4=towards the end of sowing season;

Code 6: 1=within the village, 2=neighboring village, 3=neighboring district, 4=from far away;

Code 7: 1=cash, 2=on credit, 3=bartered, 4=on subsidy, 5=free (gift);
Code 8: 1=affordable, 2=expensive, 3=very expensive;
Code 9: 1=clean (no impurities, no damage), 2=fairly clean (some impurities, no damage), 3=not clean (some impurities, damage) [*Note to enumerators: damage refers to physical, pest infestation or both*];
Code 10: 1=good, 2=fair, 3=poor;
Code 11: 1=good, 2=average, 3=poor;
Code 12: 1=it gives high yield, 2=it has better taste, 3=it has better Injera/bread making quality, 4=no or less insect pest incidence, 5=it is heat tolerant, 6=it grows on less water/irrigation, 7=others, specify

4.2. In the last 5 years, have you ever cultivated a new wheat variety?_____1=Yes; 0=No

4.3. If yes, how many of the wheat varieties cultivated by you in the last 5 years were new for you? _____

4.4. List name(s) of the new variety(ies) grown over the past 5 years: 1_____, 2 _____, 3, _____, 4_____, 5, _____

4.5. Please provide the following information to each of the new variety that you cultivated in the past 5 years.

Variety name (same number of varieties reported above)	Source of seed (Code 1, option 3-10)	How did you acquire the seeds? (Code 2, option 2-11)	When did you get for the first time? (Ethiopian Calendar, year)	Are you still growing it? (1=Yes; 0=No)	If still growing, why? (Code 3)	If discontinued, why? (Code 4)

Code 1: 2=friends/neighbors/relatives, 3=local market, 4=agro-input dealer/cooperatives, 5=community-based seed groups, 6=government agency, 7=NGOs, 8=contract growers, 9=other (specify);
Code 2: 2=exchange/barter, 3=gift (friend/neighbor/relatives), 4=purchase/buy), 5=vouchers/coupons, 6=direct seed distribution, 7=seed loan, 8=food aid, 9=money credit, 10=seed for labor, 11=other (specify);
Code 3: 1=no other varieties available, 2=for its higher yield, 3=good taste, 4=high grain prices, 5=good market for grain, 6=others (specify).
Code 4: 1=seed not available, 2=lack of cash to buy, 3=susceptible to disease/pests, 4=poor taste, 5=low yield, 6=low grain prices, 7=no market, 8=others (specify).

4.6. If you were to choose improved wheat varieties, which of the characteristics/traits would you prefer?

Varieties that ….	Are these traits important in selecting varieties? (1=Yes; 0=No)	If important, rank the three main attributes (1 = most important)
1. Have high yielding potential (yield) under ideal conditions		
2. Can yield in good weather years or bad weather years (adaptation)		
3. Have high straw yield		
4. Are taller in height		
5. Are shorter in height		
6. Lodging tolerance		
7. Are disease resistant		
8. Have bold grain (grain size)		
9. Have shorter or longer duration (maturity or crop cycle time difference or months or days between sowing and harvesting		
10. Have good tillering capacity		
11. Require less seed (seed rate) per LU		
12. Can be threshed easily (grains can be separated easily)		
13. Can be stored longer (storability) without damage		
14. Have appealing flour color		
15. Are fortified with minerals (e.g., zinc) for better nutrition		
16. Are good for injera/bread making		
17. Have better protein content (how elastic the dough is?)		
18. Have better Fiber content		
19. Taste of the cooked product		
20. Milling quality/de-husking		
21. Price of grain		

4.7. Overall, considering the following seed sources, what do you think whether there will be enough wheat seeds available for the farmers?

Sources of seed	Enough availability (1=Yes, 0=No)
Own production/saving	
Social networks	
Markets	
Community-based seed groups	
Government agency	
Non-Government agency	
Other (specify)	

4.8. If you buy seed from market, from which market would you buy your wheat seed from? Market 1 (name of the place): _____, Market 2 (name of the place):_____

4.9. Please answer the following questions, if you have used own saved wheat seed in the last *Meher*/rainy/*Kiremt* season.

Variety name from above	Did you store wheat selected for seed separate from other wheat? [1=Yes, 0=No]	Where do you store the seed? (Code 1)	What storage problem do you have? (Code 2)	Did you experience any disease problems with the variety? (Code 3)	On average, how often do you replace your wheat seed? [Once in ---- number of years]	What is the unique character that you find useful in this variety (Code 4)

Code 1: 1=in bags kept in house, 2=in bags kept in storage area outside the house, 3=in pots, 4= in bamboo baskets, 5=other (specify); 99 = Not applicable;
Code 2: 1=no storage problem, 2=storage weevils, 3=storage rodents, 4=humidity/fungi, 5=others (specify); 99 = Not applicable;
Code 3: 1=no, 2=yellow rust, 3=stem rust, 4=Septoria, 5=spot blotch, 6=others (specify)
Code 4: 1 = higher yield; 2 = drought tolerance; 3 = disease tolerance; 4 = taste; 5 = long duration; 3 = short duration; 5 = grain color; 6 = grain size; 7 = high market price; 8 = low input requirement; 9 = others (specify) _____

5. Role in household decision-making around production and income generated
(In both MHH and FHH interviews)

Now I would like to ask you some questions about your participation in certain types of work activities and on making decisions on various aspects of household livelihood activities.

Activity	Did you yourself participate in [ACTIVITY] in the past 12 months, from [PRESENT MONTH] last year to [PRESENT MONTH] this year? (**Code 1**)	When decisions are made regarding [ACTIVITY], who is it that **normally** takes the decision? (**Code 2**)	How much influence did you have in making decisions about [ACTIVITY]? *[If no decisions made, move to next activity]* (**Code 3**)	To what extent do you feel you can make your own personal decisions regarding [ACTIVITY] if you want(ed) to? (**Code 4**)	How much influence did you have in decisions on the use of income generated from [ACTIVITY] (**Code 3**)
A. **Overall crop farming**: These are crops that are grown primarily for household food consumption					
B. Selection of crops					
C. Selection of varieties					
D. Selection of plots for seed production					
E. Seed selection					
F. Seed marketing					
G. Allocation of seed for next season					

Code 1: 0= No; 1 = yes, 2 = maybe. *If no, go to the next activity.*
Code 2: 1=Self; 2 = Spouse/husband; 3 = Other HH member; 4 = Other non-HH member; 98 = Not applicable. *If not applicable, go to the next activity.*
Code 3: 1=no or negligible influence; 2=influence into some decisions; 3=influence into most or all decisions; 4=no decisions made.
Code 4: 1 =not at all; 2 = small extent; 3 =medium extent; 4 = high extent.

7. **Access to information** (Ask both MHH and FHH separately)

7.1 I would like to ask about your household's experience with accessing information on farming in the past 12 months.

Source name	Has anyone in **your household got access to information** from [SOURCE] in the past 12 months? (**Code 1**)	If **not accessed**, the reason. (**Code 2**)	If accessed, Who made the **decision to access** [SOURCE] most of the time? (**Code 3**)
1. Government extension agent			
2. Other formal extension agencies			
3. Progressive farmers (in general)			
4. NGOs			
5. Farmer groups and organizations			
6. Traders and dealers			

Code 1: 1= yes, more than once; 2 = yes, once; 3 = no; 99 = don't know.

Code 2: 1=was not aware of the existence of the source; 2=the source was not present in the nearest locality; 3=not easy to access the source although it was present in the locality; 4=information will not be useful or up-to-date; 5=have other more useful sources of information; 6=there was no need to get the information last year (e.g., no particular problem); 7=others (specify); 99=can't tell.

Code 3: 1=Self; 2 = Spouse/husband; 3 = Other HH member; 4 = Other non-HH member; 98 = Not applicable.

8. Social Capital and Networking (Ask both MHH and FHH separately.)

8.1 Have you been a member of formal and informal institutions associated with farming in the last 3 years? _____1=Yes; 0=No

8.2. Membership in formal and informal institutions in the last 3 years. One group per row.

Type of group you are/were a member of (Code 1)	Three most important group functions (Code 2)			Year joined (ETH Calendar) (YYYY)	Role in the group (Code 3)	Still a member now? (Yes/No)	If no, in previous column, reason/s for leaving the group (Codes 4)		
	1st	2nd	3rd				1st	2nd	3rd

Code 1: 1=input supply/farmer coops/union, 2=crop/seed producer and marketing group/coops, 3=local administration, 4=farmers' association, 5=women's, association, 6=youth association, 7=church/mosque association/congregation, 8=saving and credit group, 9=funeral association, 10=government team, 11=water user's association, 12=Edir, 13=Equb, 14=Other, specify.........
Code 2: 1=produce marketing, 2=input access/marketing, 3=seed production, 4=farmer research group, 5=savings and credit, 6=funeral group, 7=tree planting and nurseries, 8=soil & water conservation, 9=church group /congregation, 10=input credit, 11=Other, specify.....
Code 3: 1=official, 2=ex-official, 3=ordinary member
Code 4: 1=left because organization was not useful/profitable, 2=left because of poor management, 3=unable to pay annual subscription fee, 4=group ceased to exist, 5=Other, specify...........

8.3. Social Networks

1. How many years have you been living in this Kebele?_____

	Number of		
	Relatives	Friends	Acquaintances
2. People whom you can rely on for critical support in times of financial need **within** this Kebele			
3. People you can rely on for support in times of financial need **outside** this kebele			
4. People in leadership positions in formal or informal institutions within and outside this kebele?			
5. People that you can rely on for quality wheat seeds **within** this Kebele			
6. People you can rely on for quality wheat seeds **outside** this kebele			
7. Grain traders that you know as friends or relatives **within** this Kebele who could buy wheat grain from you			
8. Grain traders that you know as friends or relatives outside this Kebele who could buy your grain			
9. People that you can rely on for information access on farming activities (e.g., opinion on new wheat varieties) **within** this Kebele			
10. People that you can rely on for information access on farming activities **outside** this Kebele			

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11. Generally speaking, do you say that most traders can be trusted.	**Code 1**
12. If answer in Q7 above is 1, 2, or 3, then which types of traders do you trust more	**Code 2**
13. And why do you thrust these types of traders more? (Open ended, few keywords)	
14. Do you think you can rely on government support (subsidies, food aid, etc.) if your crop fails? [1=Yes, 0=No]	
15. Did you rely on government support during the last 1 year (due to COVID or lockdown)? [1=Yes, 0=No]	
16. Are you confident enough on the skills of government officials including extension workers to do their job?	**Code 1**

Code 1: 1=strongly disagree, 2=disagree, 3=slightly disagree, 4=slightly agree, 5=agree, 6=strongly agree
Code 2: 1=wholesalers, 2=retailers, 3=assemblers, 4=brokers, 5=others, specify

9. Assets and amenities (Ask MHH or FHH separately)

9.1. Does the household have the following amenities (over the last 12 months)?

	Amenity	Response (0=no; 1=yes)
1	Electricity	
2	Piped water	
3	Cooking gas	
4	Internet (broadband)	
5	Landline phone connection	
6	Mobile phone connection	
7	Private toilet (for the family)	
8	Road access for 4wheelers to the house	
9	Stone / brick / concrete / cement walls (strong house)	
10	Concrete roofing	
11	Concrete or tiled floor	
12	Protected (fenced or walled) compound	

9.2. Now I want to ask you about your household's ownership of a number of items in the last 12 months.

	Asset name	Number of items owned by the household (if 0, go to next item)	Was the decision to purchase it (most recently) yours? (Code 1)	In whose name is the recently bought item? (Code 2)
1	Houses / buildings			
2	Plough sets (iron attachments)			
3	Seed drills			
4	Carts			
5	Tractors			
6	Chaff Cutter			
7	Sprayer			
8	Fishing equipment			
9	Electric / diesel water pump			
10	Thresher			
11	Power-tiller (2-wheel tractor)			
12	Irrigation tube well (private)			
13	Wheelbarrow			
14	Gas or diesel electric generator			
15	Bicycle			
16	Two-wheeler (e.g., Motorbike)			
17	Four-wheeler (e.g., car, truck)			
18	Radio			
19	TV			
20	DVD player			
21	Mobile phone			
22	Gas/electric stove (for cooking)			
23	Refrigerator			
24	Electric cooler			
25	Air conditioner (AC)			
26	Electric fan			
27	Computer			
28	Washing machine			

Code 1: 0=no, 1=partly, 2=fully, 98=cannot tell, 99=not applicable
Code 2: 1=respondent, 2=spouse/husband of respondent, 3=other male member of household, 4=other female member of the household, 5=others, outside the household, 98=cannot tell, 99=not applicable

10. Food Insecurity (Ask both MHH and FHH separately)

Now I would like to ask you some questions about your food consumption in the last 12 months.

How many months in a year can your own wheat grain production support the consumption of your household? _____ (Code 2)

During the **LAST 12 MONTHS**, was there a time when.

		Response **(Code 1)**	If the answer is *yes*,	
			For how long? **(Code 2)**	Did the situation worsen due to COVID and associated lockdown in the last 12 months? **(Code 1)**
1	You were **worried** you would run out of food because of a lack of money or other resources?			
2	You were **unable to eat healthy and nutritious food** because of a lack of money or other resources?			
3	You ate only **a few kinds of foods** because of a lack of money or other resources?			
4	You had to **skip a meal** because there was not enough money or other resources to get food?			
5	You **ate less than you thought you should** because of a lack of money or other resources?			
6	Your household **ran out of food** because of a lack of money or other resources?			
7	You were **hungry but did not eat** because there was not enough money or other resources for food?			
8	You **went without eating for a whole day** because of a lack of money or other resources?			

Code 1: 0 = No; 1 = Yes; 98 = Don't know; 99 = Cannot answer.
Code 2: 1=0 to <3 months, 2=3 to <6 months, 3=6 to <9 months, 4=9 to <12 months, 5=12 months and more

11. Dietary diversity (Ask both MHH and FHH separately)

11.1. How would you rate your personal health currently? _____ (Good=1; Sometimes good and sometimes poor=2; Poor=3) 11.2. Were you diagnosed as COVID positive in last 2 years? (Yes=1; No=0) _____ 11.3. If yes, the month and year of COVID infection:_____ 11.4. Are you a vegetarian? (Yes=1; No=0)_____ 11.5. If available, do you consume eggs? (Yes=1; No=0)_____ 11.6. If available, do you consume milk and milk products? (Yes=1; No=0)_____

11.7. Food eaten by you in the **LAST 24 HOURS** (**yesterday** 4am until today 4am)

Food item	Did you eat? (Yes=1; No=0)
1. CEREALS (Rice, wheat, millet, maize, ragi, other millets)	
2. WHITE ROOTS, TUBERS AND OTHER STARCHES (White potatoes, yam, sweet potato, cassava, arrow root, elephant foot yam)	
3. PULSES, BEANS, PEAS, LENTILS, COWPEA (Pulses- green gram, red gram, Bengal gram, black gram, horse gram, kidney beans, lentils, red peas, dried beans, lentils, dal etc.)	
4. NUTS AND SEEDS (groundnut, sesame, almonds, cashew nuts, walnuts, flax seed, rapeseed, sunflower etc.)	
5. MILK AND MILK PRODUCTS (milk, cheese, yoghurt, butter or other milk products)	
6. FLESH FOODS (chicken, mutton/meat, fish, fish products)	
7. EGGS (eggs from chicken, duck, guinea fowl or any other egg)	
8. DARK GREEN LEAFY VEGETABLES (drum stick leaves, spinach, fenugreek, coriander leaves, amaranths, mint leaves, mustard green, cabbage, radish leaves)	
9. VITAMIN A RICH FRUITS (Mango, papaya etc.)	
10. VITAMIN A RICH VEGETABLES AND TUBERS (pumpkin, carrot, capsicum, dark yellow- or orange-fleshed sweet potato)	
11. ANY OTHER VEGETABLES (eggplant, cauliflower, beets, tomatoes, all gourds (snake gourd, bottle gourd), onion)	
12. ANY OTHER FRUITS (other fruits, including bananas, gooseberry, all berries, jackfruit, pomegranates wild fruits and 100% fruit juice)	
13. OILS AND FATS (Butter, Cream, Vegetable/fruit/nut/oils)	
12. CONDIMENTS AND SEASONINGS (fresh or dried herbs, spices, chili peppers, ginger root, garlic, fish powder, bean paste, fermented bean paste, tomato paste and seeds)	
14. SAVORY AND FRIED SNACKS (Samosas, Potato chips, Crisps, Doughnuts/fried dough/"fry bread")	
15. SWEETS (Cakes, Candies, Jam, Honey, Chocolate, Biscuits (sweet), Pastries)	
16. SUGAR SWEETENED BEVERAGES (Tea with sugar, fruit drinks, malt drinks, soft drinks/soda)	
17. ALCOHOL	

12. Food consumption by the households (In FMM interview)

12.1. In the **past 30 days**, how much did your household consume of the following items, and what was the equivalent value in ETB? (**Ask for all goods consumed, including own-produced, bought, gifts and received in-kind**.) If the respondent does now know, indicate as 9999.

Item	Quantity (Kg/Lit.)	Value (ETB)	Item	Quantity (Kg/Lit.)	Value (ETB)
Staple foods			**Vegetables**		
1. Maize (dry)			42. Tomatoes		
2. Maize (green)			43. Onions		
3. Teff			44. Cabbage		
4. Wheat			45. Spinach		
5. Barley			46. Kale		
6. Rice			47. Carrot		
7. Sorghum			48. Okra		
8. Finger millet			49. Pumpkin		
9. Pearl millet			50. Egg plant		
10. Cassava			51. Cucumber		
11. Potatoes			52. Pepper		
12. Beans dry			53. Garlic		
13. Beans fresh			54. Other specify...		
14. Cowpea fresh grain			55		
15. Cowpea dry grain			**Fruits**		
16. Cowpea leaves			56. Oranges		
17. Groundnut fresh			57. Mangoes		
18. Groundnut dry			58. Pawpaws		
19. Soybean			59. Pineapple		
20. Pigeon pea fresh			60. Bananas (ripe)		
21. Pigeon pea dry			61. Apple		
22. Green gram			62. Guava		
23. Bananas			63. Coconut		
24. Other specify			64. Sugar cane		
25.			65. Other.		
Beverages and drinks			66.		
26. Tea (leaves)			**Meat & other animal products**		
27. Tea (liquid)			67. Beef		
28. Coffee (powder)			68. Goat meat		
29. Coffee (liquid)			69. Sheep meat		
30. Soft drinks			70. Pig meat		
31. Juices			71. Chicken		
32. Local beer					
33. Bottled beer					
34. Wine			74. Bush meat		
35. Liquor			75. Fish		
36. Coffee beans			76. Eggs		
37. Water for livestock			77. Milk		
38. Water for other uses			78. Cheese/Ghee		
39. Drinking water			79. Butter		
40. Other.			80. Yoghurt		
			81. Honey		
			82. Other.		

12.1. Contd.

Item	Quantity (Kg/Lit.)	Value (ETB)	Item	Quantity (Kg/Lit.)	Value (ETB)
Fats, oils, sweeteners, snacks and others			**Other items**		
83. Cooking fat/oil			98. Cooked meals bought outside or received as wages (*number*)		
84. Margarine			99. Teashops, hotels (times)		
85. Groundnut oil			100. Cigarettes/ Tobacco/ Pan/ Bidi etc.		
86. Coconut oil			101. Transport/ travel		
87. Bread			102. Newspapers, books and entertainment		
88. Biscuits			103. Fuel, gas, charcoal, kerosene oil		
89. Popcorn			104. Electricity		
90. Cashew nuts			105. Household cleaning & personal care (soap, shampoo, hair oil etc.)		
91. Sugar			106. Barber (haircutting, shaving)		
92. Salt			107. Telephone bill (incl. mobile phone)		
93. Chocolate			108. Other specify		
94. Curry					
95. Ginger					
96. Other. ….					

23.2 Household consumption in the past 12 months (In FMM Survey)

(Ask for all items consumed, incl. own produce, bought, gifts and received in-kind.)

	Money value *In ETB*	Compared to the previous 5 years, was spending low last year? (yes/no)
1. Household items (dishes, pots, towels, beddings etc.)		
2. Clothing & footwear (e.g., ready-made garments, shawls, cloth for garments, tailoring charges)		
3. Medicine and health costs (doctor charges, medication, and medical devices, e.g., glasses)		
4. Ceremonies (weddings, festivals, housewarming, special occasions)		
5. Education (books, school fees, uniforms etc.)		
6. Remittances / transfers sent to other households or individuals		
7. Taxes, litigation, and other charges (water tax, farm tax, house tax, house rent)		
8. Other services (repairs of machinery, of equipment, the house, etc.)		
9. Other major non-food expenses (SPECIFY)		

End of the interview. Please thank the respondent for his/her time and cooperation.