Producer´s ID |__|__| - |__|__| - |__|__|

Baseline Survey - Research and Support to Maize Fertilization Program (PIAFEM [for its acronym in Spanish])

Date (dd/mm/yyyy): |__|__|-|__|__|- |__|__|__|__|	*Editor's ID:* |__|__|__|
Enumerator's name:	*Enumerator's ID:* |__|__|__|
Start (HH:MM): |__|__|:|__|__|	End (HH:MM): |__|__|:|__|__|

INFORMED CONSENT

QUÉ FUNCIONA PARA EL DESARROLLO, a non-profit organization dedicated to evaluate social programs and ITAM researchers are implementing the evaluation phase of the pilot of the program of research and support to the fertilization of maize, PIAFEM, 2015. We would like to gather information about your farming practices and your plots. This information is strictly confidential and will be used only for statistical purposes to improve the design of the support program. Your name will not be published along with identifiable information. Your participation is voluntary and you can choose to answer or not, any of the questions

Apart from this survey we will make visits to your plot during the program implementation. Remember that answering this survey is entirely voluntary. If you feel that a question is too sensitive, you may choose not to answer it.

Is it clear that you have the right to participate or not in this survey?

1. ☐ YES 2. ☐ NO -> **Explain again and ask again until the information is clear**

GENERAL INSTRUCTIONS FOR THE ENUMERATOR:

- **BE CAREFUL WITH UNITS FOR SOME QUESTIONS REQUIRE TOTAL AMOUNTS AND OTHERS PER HECTARE.**
- **IF RESPONDENT DOES NOT KNOW THE ANSWER TO A QUESTION WRITE -888 AND IF HE/SHE DECIDES NOT TO RESPOND WRITE -999 AND IF NOT APPLICABLE WRITE -777**
- **TABLES WITH QUESTIONS BY PLOT, MAKE ALL QUESTIONS FOR EACH PLOT AND THEN GO TO NEXT PLOT (DO NOT POSE EACH QUESTION FOR ALL PLOTS AT A TIME).**
- **INDICATIONS FOR THE ENUMERATOR ARE HIGHLIGHTED AND ARE NOT READ TO THE PRODUCER.**

IF THE PRODUCER IS OLDER AND A RELATIVE/ TENANT WORKS HIS PLOT LONG AGO. REQUIRE THE ASISTANCE OF THE OTHER PERSON DURING THE SURVEY TO ANSWER QUESTIONS ABOUT CROP PRACTICES

ENUMERATOR COMMENTS: _____

_____

EDITOR COMMENTS: _____

_____

_____

In return I received a 'machete'

_____

Producer's signature

Producer´s ID |__|__| - |__|__| - |__|__|

1. LOCATION AND GENERAL INFORMATION OF THE PRODUCER

1.1. Name (s): |___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|

1.2. Last Name: |___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|

1.3. Second Last Name: |___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|

1.4. Alias: |___|___|___|___|___|___|___|___|___|___|___|___|___|___|___| ☐ -777. Not applicable.

1.5. Age: |___|___| -> Years old today ☐-888 NS ☐-999 NR

1.6. Gender: ☐ 1. Famale ☐ 2. Male

1.7. Street, highway, path: |___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|

1.8. Outdoor number: |__|__|__| ☐ -777 Without Number ☐-888 NS ☐-999 NR

1.9. Interior number: |__|__|__| ☐ -777 Without Number ☐-888 NS ☐-999 NR

1.10. Suburb, Town: |___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|

1.11. Locality: |___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|

1.12. Municipality: |___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|

1.13. Between Streets: |___|___|___|___|___|___|___|___|___|___|___|___|___|___| and |___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|

1.14. Property description: |___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|

|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|___|

1.15. How can we reach you? ____
____

1.16. Home phone: |__|__|__||__|__|__||__|__|__|__|		☐-777 Do not have ☐-888 NS ☐-999 NR
1.17. Cell phone: |__|__|__||__|__|__||__|__|__|__|		☐-777 Do not have ☐-888 NS ☐-999 NR
1.18. Participated in any evaluation of QFD in 2013?	☐ 1. Yes ☐2. No → Go to 1.20	1.19. ¿ Treatment? **(ENUMERATOR THIS QUESTION WILL BE FILLED IN THE OFFICE)** ☐ 1. SA ☐ 2. SA Control ☐ 3. PGT ☐ 4. PGT Control
1.20. Participated in any evaluation of QFD in 2014?	☐ 1. Yes ☐ 2. No→ Go to 1.22	1.21. ¿ Treatment? **(ENUMERATOR THIS QUESTION WILL BE FILLED IN THE OFFICE)** ☐ 1. Control ☐2. SA ☐ 3. SA + AES + CF ☐ 4. SA + AES + SF ☐ 5. SA + SF

1.22. Producer’s adreess’ GPS coordinates a) Latitude ____º ____´ _____” b) Length ____º ____´ _____” c) Altitude _________m.a.s.l.

2. LAND POSSESSION AND CHARACTERISTICS OF THE PLOT REGISTERED IN THE PROGRAM

2.1 Property and Land Productivity 2014

2.1.1	How many plots did you work as owner or tenant in 2014?	|__|__|__| ☐-888 NS ☐-999 NR
2.1.2	How many total hectares did you work as owner or tenant in 2014?	|__|__|__| ☐-888 NS ☐-999 NR
2.1.3	Do you usually follow the same preparation and fertilization practices in all maize plots?	☐1. Yes ☐2. No ☐-888 NS ☐-999 NR
2.1.4	How many total **maize hectares did you plant** in 2014 as owner or tenant?	|__|__|__| ☐-888 NS ☐-999 NR
2.1.5	**How many total tons of maize did you harvest** in 2014 as owner or tenant?	|__|__|__| ☐-888 NS ☐-999 NR

2.2 Characteristics of the plot registered in the program

ENUMERATOR READ: I will now ask some questions about the general characteristics of the plot you registered in the PIAFEM

2.2.1. What is the name of the plot you registered in the program? **[NAME]**	2.2.2. How many hectares does the plot **[NAME]** have?	2.2.3. How can we get to your plot **[NAME]**? **(ENUMERATOR ASK WHICH ROAD LEADS TO THE PLOT, ANY REFERENCES, I.E. RAVINE, TREES, RANCH, PLANTATION, ETC)**	2.2.4. How far, in minutes by car, is the plot **[NAME]** from a path accessible by car?	2.2.5. How far, in minutes by car, is the plot **[NAME]** from the nearest fertilizer supplier?	2.2.6. How far, in minutes by car, is the plot **[NAME]** from the nearest machinery lessor?	2.2.7. How far, in minutes walking, is the plot **[NAME]** from the nearest plot where maize is grown?	2.2.8. Do you have the property title to you plot **[NAME]**?
_____ _____ _____ _____ _____	|__|__|	_____ _____ _____ _____ _____	|__|__|__|__| mins by car.	|__|__|__|__| mins by car	|__|__|__|__| mins by car ☐-777 Does not rent Machinery	|__|__|__|__| mins walking ☐-888 NS ☐-999 NR	☐1. Yes ☐2. No ☐-888 NS ☐-999 NR

2.2.9. Are you the one who decides how to work this plot?	2.2.10. Are you the one who receives the profits of this plot's production?	2.2.11. Which crop will you establish in the 2015 in this plot **WRITE ALL**	2.2.12. How will you sow?	2.2.13. In which date will you plant maize on this plot in 2015? **(ASK ONLY IF HE ANSWERED MAIZE ON THE PREVIOUS QUESTION)**	2.2.14. How many tons of maize **per hectare** did you produce in ***2013*** in this plot?	2.2.15. What was the **total maize production** in the plot in ***2013***?

☐1. Yes ☐2. No ☐-888 NS ☐-999 NR	☐1. Yes ☐2. No ☐-888 NS ☐-999 NR	☐ 1. Maize ☐ 2. Oatmeal ☐ 3. Wheat ☐ 4. Barley ☐ 5. Beans ☐ 6. Sorghum ☐ 7. Tomato ☐ 8. Pumpkin ☐ 9. Other **(SPECIFY)** _____	☐1. Separated ☐2. Mixed ☐-777 will plant only maize ☐-888 NS ☐-999 NR	Between ____/____/2015 and ____/____/2015 ☐-888 NS ☐-999 NR	|__|__|.|__|ton/ha ☐-777 Did not plant maize	|__|__|.|__| ton ☐-777 Did not plant maize in 2013

2.2.16. Please indicate everything grown in this plot in the 2014 Spring-Summer Cycle 1. Maize 2. Oatmeal 3. Wheat 4. Barley 5.Beans 6.Sorghum 7. Tomato 8.Pumpkin 9. Other **(Specify)**	2.2.17. How many hectares did you plant of each of the previous crops in the 2014 SPRING-SUMMER cycle?	2.2.18. How did you sow?	2.2.19. How many hectares **of maize did you sow in 2014**?	2.2.20. How many tons of maize **per hectare** did you produce in **2014** in this plot?	2.2.21. What was the **<u>total maize production</u>** in the plot in **2014**?	2.2.22. Why did you choose this plot? **ENUMERATOR ENTER THE ANSWER LITERALLY GIVEN BY THE PRODUCER AND ENCODE**
A. |__|	A. |__| has ☐-888 NS ☐-999 NR	☐1. Separated ☐2. Mixed ☐-777 He/She planted one crop or Did not plant ☐-888 NS ☐-999 NR	|__|__| has	|__|__|.|__| ton/ha ☐-777 Did not plant maize	|__|__|.|__| ton ☐-777 Did not plant maize	_____ _____ _____ _____ ☐1 It is the most productive ☐2 It is the least productive ☐3 It is where maize was planted ☐4 It is the one for which I owe a title or leasing agreement ☐5 Is the only available plot ☐6 Other (specify)
B. |__|	B. |__| has ☐-888 NS ☐-999 NR					
C. |__|	C. |__| has ☐-888 NS ☐-999 NR					
D. |__|	D. |__| has ☐-888 NS ☐-999 NR					
E. |__|	E. |__| has ☐-888 NS ☐-999 NR					
☐-888 NS ☐-999 NR	☐-888 NS ☐-999 NR					

3. AGRICULTURAL PRACTICES

Filter

OBJECTIVE: SELECT PLOT TO ASK ABOUT AGRICULTURAL PRACTICES OF MAIZE CROP IN PREVIOUS YEARS.

ENUMERATOR READ: We continue asking some questions about the general characteristics of the plot you registered in the PIAFEM

3.0.1. Have you planted maize on the plot (NAME OF PLOT REGISTERED IN THE PROGRAM) in 2014?	☐1. Yes → **PLOT REGISTRED IN PIAFEM SELECTED TO ASK QUESTIONS RELATED TO THE YEAR 2014 → Go to 3.1.2** ☐2. No		
3.0.2. Have you planted maize on the plot (NAME OF PLOT REGISTERED IN THE PROGRAM) in 2013?	☐1. Yes → **PLOT REGISTRED IN PIAFEM SELECTED TO ASK QUESTIONS RELATED TO THE YEAR 2013 → Go to 3.1.2** ☐2. No		
3.0.3. Have you planted maize on any other plot in 2014?	☐1. Yes ☐2. No →**Go to section 4**		
3.0.4. Please indicate the name of the plot in which you planted maize in 2014 and **has had the highest productivity**	|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__		
3.0.5. Do you have the property title to your plot [NAME OF REPLACEMENT PLOT]?	☐1. Yes ☐2. No		
3.0.6. In which municipality it is [NAME OF REPLACEMENT PLOT] located?	|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__		
3.0.7. In which locality is [NAME OF REPLACEMENT PLOT] located?	|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__		
3.0.8. How many hectares does [NAME OF REPLACEMENT PLOT] have?	|__|__|__|__|		
3.0.9. How many hectares of maize did you plant in 2014 in [NAME OF REPLACEMENT PLOT]?	|__|__|__|__|		
3.0.10. What crops did you establish in 2014? ENUMERATOR CHECK ALL APPLICABLE CROPS	☐ 1. Maize ☐ 2. Oatmeal ☐ 3. Wheat ☐ 4. Barley	☐ 5. Beans ☐ 6. Sorghum ☐ 7. Tomato ☐ 8. Pumpkin	☐ 9. Other **(SPECIFY)** ________________
3.0.11. How will you sow?	☐1. Separated ☐2. Mixed	☐-777 He/She planted one crop or did not plant ☐-888 NS ☐-999 NR	
3.0.12. Do you decide how work is done in [NAME OF REPLACEMENT PLOT]?	☐1. Yes ☐2. No → **CHOOSE ANOTHER PLOT**		

3.1 Soil preparation and sowing 2014

ENUMERATOR COMPLETES ACCORDING TO THE FILTER AND READ: Please answer the following questions concerning your plot *(Name)*__________________ for your maize crop in the year ________________

3.1.1 ENUMERATOR PLEASE INDICATE THE PLOT ON WHICH THE QUESTIONS WILL BE ASKED	☐1. PLOT REGISTERED IN THE PROGRAM ☐2. Replacement plot
3.1.1.1 REPLACEMENT PLOT ID (TO BE COMPLETED IN THE OFFICE)	|__|__|-|__|__|-|__|__|-|__|__|

3.1.2. During SPRING-SUMMER (YEAR) cycle did you conduct soil preparation activities in this plot?	☐1. Yes ☐2. No **→Go to 3.1.**
3.1.3. How many times each activity? ENUMERATOR: ENTER 0 IF HE/SHE DID NOT MAKE OTHER ACTIVITY	1. Rastra/ pre-fallow 1.|____| ☐-888 NS ☐-999 NR 2. Subsoiling 2.|____| ☐-888 NS ☐-999 NR 3. Fallow 3.|____| ☐-888 NS ☐-999 NR 4. Hoeing 4.|____| ☐-888 NS ☐-999 NR 5. Other **(SPECIFY)** 5.|____| ☐-888 NS ☐-999 NR

3.1.4. What kind of maize seed did you plant in the (YEAR) cycle? **RECORD ALL THAT APPLY**	3.1.5. What kind of seed did you use in (YEAR)? **SHOW CATALOGUE**	3.1.6. How many seeds did you sow per hectare? (quantity/ha)	3.1.7. Register unit	3.1.8. How much of these seeds was purchased?	3.1.9. Register unit	3.1.10. In what area (size) of the plot did you plant this seed in the cycle SPRING-SUMMER (YEAR)	3.1.11. How much distance did you leave between each row?	3.1.12. How much distance did you leave between each plant?	3.1.13. How deep was the seed left?
☐1. Creole ☐2. Hybrid ENUMERATOR: FIRST ASK FOR THE CREOLE THEN FOR THE HYBRID	Creole: _____	Creole: |__|__|__|__|	Creole: ☐1. Kg/ha ☐2. Thousands/ha	Creole: |__|__|__|__|	Creole: ☐1. Kg/ha ☐2. Thousands/ha	Creole: |__|__|__|__| ha	Creole: |__|__|__|__ cm ☐-888 NS ☐-999 NR	Creole: |__|__|__|__| cm ☐-888 NS ☐-999 NR	Creole: |__|__|__|__| cm ☐-888 NS ☐-999 NR
	Hybrid: _____	Hybrid: |__|__|__|__|	Hybrid: ☐1. Kg/ha ☐2. Thousands/ha	Hybrid: |__|__|__|__|	Hybrid: ☐1. Kg/ha ☐2. Thousands/ha	Hybrid: |__|__|__|__| ha	Hybrid: |__|__|__|__| cm ☐-888 NS ☐-999 NR	Hybrid: |__|__|__|__| cm ☐-888 NS ☐-999 NR	Hybrid: |__|__|__|__| cm ☐-888 NS ☐-999 NR

3.1.14. How much money did you spend on seeds in total?	3.1.15. On what date did you sow?	3.1.16. How did you sow?	3.1.17. Was the mechanical drill own or rented?	3.1.18. What kind of machinery did you use? **RECORD ALL THAT APPLY**	3.1.19. How much per hectare did the machinery rental cost?	3.1.20. How much per hectare did the fuel cost?
|__|__|__|__| MXN	____/____/2014 ☐-888 NS ☐-999 NR	☐1. Manual **→Go to the next section.** ☐2. Mechanical Sowing ☐3. Both	☐1. Own ☐2. Rented ☐-777 Does not apply	☐1 Precision ☐2 Semiprecision ☐-777 Does not apply	|__|__|__|__| MXN ☐-777 Does not apply	|__|__|__|__| MXN ☐-777 Does not apply

3.2 Fertilization during sowing

3.3.0 Now I will show you a table with chemical fertilizers' names, have you ever applied any of these fertilizers at sowing? ENUMERATOR: SELECT ONLY THE FERTILIZERS USED	☐A Urea or White ☐B DAP or Black ☐C KCL o Red ☐D Granubor or Boron	☐E Ammonium sulfate ☐F Soil improvers ☐G Other (SPECIFY)_____ ☐I He never used any
3.3.1 Did you apply organic fertilizers before sowing in the SPRING-SUMMER (YEAR) cycle?	☐1 Yes ☐2 No	

3.3.2 Did you apply organic fertilizers during sowing in the SPRING-SUMMER (YEAR) cycle?	☐1 Yes	☐2 No
3.3.3 Did you apply chemical fertilizers during sowing in the SPRING-SUMMER (YEAR) cycle?	☐1 Yes	☐2 No **→Go to section 3.3**

ENUMERATOR READ: Now I want to ask you about the fertilizers you used during sowing at your plot *(Name)*_____

[Fertilizer]	3.3.4 Did you use [fertilizer] during sowing in cycle Spring Summer (YEAR)	3.3.5 How much [fertilizer] did you apply at sowing per hectare?	3.3.6 Unit	3.3.7 What was the total cost per hectare of [fertilizer]?	3.3.8 Was the application manual or mechanical?	3.3.9 How did you get it? ENUMERATOR CHECK ALL THAT APPLY	
A) Urea or White	☐ 1. Yes ☐2. No →**NEXT FERTILIZER** ☐-888 NS ☐-999 NR	|__|__|__|__|	☐ 1. Kg/ha ☐ 2. Pkg 25 kg/ha ☐ 3. Pkg 50 kg/ha	|__|__|__|__| $/ha	☐ 1. Manual ☐ 2. Mechanical ☐ 3. Both	☐ 1. Purchased from distributor at normal price in cash ☐ 2. Government's subsidized price purchase	☐ 3. Purchase loan ☐ 4. Government fertilizer delivery ☐ 5 Other_____
B) DAP or Black	☐ 1. Yes ☐2. No →**NEXT FERTILIZER** ☐-888 NS ☐-999 NR	|__|__|__|__|	☐ 1. Kg/ha ☐ 2. Pkg 25 kg/ha ☐ 3. Pkg 50 kg/ha	|__|__|__|__| $/ha	☐ 1. Manual ☐ 2. Mechanical ☐ 3. Both	☐ 1. Purchased in cash from distributor at normal price ☐ 2. Purchase government subsidized price	☐ 3. Purchase loan ☐ 4. Government fertilizer delivery ☐ 5 Other_____
C) KCL o Red	☐ 1. Yes ☐2. No →**NEXT FERTILIZER** ☐-888 NS ☐-999 NR	|__|__|__|__|	☐ 1. Kg/ha ☐ 2. Pkg 25 kg/ha ☐ 3. Pkg 50 kg/ha	|__|__|__|__| $/ha	☐ 1. Manual ☐ 2. Mechanical ☐ 3. Both	☐ 1. Purchase from distributor at normal price in cash ☐ 2. Government's subsidized price purchase	☐ 3. Purchase loan ☐ 4. Government fertilizer delivery ☐ 5 Other_____
D) Granubor or Boron	☐ 1. Yes ☐2. No →**NEXT FERTILIZER** ☐-888 NS ☐-999 NR	|__|__|__|__|	☐ 1. Kg/ha ☐ 2. Pkg 25 kg/ha ☐ 3. Pkg 50 kg/ha	|__|__|__|__| $/ha	☐ 1. Manual ☐ 2. Mechanical ☐ 3. Both	☐ 1. Purchase from distributor at normal price in cash ☐ 2. Government's subsidized price purchase	☐ 3. Purchase loan ☐ 4. Government fertilizer delivery ☐ 5 Other_____
E) Ammoniu m sulfate	☐ 1. Yes ☐2. No →**NEXT FERTILIZER** ☐-888 NS ☐-999 NR	|__|__|__|__|	☐ 1. Kg/ha ☐ 2. Pkg 25 kg/ha ☐ 3. Pkg 50 kg/ha	|__|__|__|__| $/ha	☐ 1. Manual ☐ 2. Mechanical ☐ 3. Both	☐ 1. Purchase from distributor at normal price in cash ☐ 2. Government's subsidized price purchase	☐ 3. Purchase loan ☐ 4. Government fertilizer delivery ☐ 5 Other_____
F) Soil improvers	☐ 1. Yes ☐2. No →**NEXT FERTILIZER** ☐-888 NS ☐-999 NR	|__|__|__|__|	☐ 1. Kg/ha ☐ 2. Pkg 25 kg/ha ☐ 3. Pkg 50 kg/ha	|__|__|__|__| $/ha	☐ 1. Manual ☐ 2. Mechanical ☐ 3. Both	☐ 1. Purchase from distributor at normal price in cash ☐ 2. Government's subsidized price purchase	☐ 3. Purchase loan ☐ 4. Government fertilizer delivery ☐ 5 Other_____
G) Other _____ (See catalogue)	☐ 1. Yes ☐2. No →**NEXT FERTILIZER** ☐-888 NS ☐-999 NR	|__|__|__|__|	☐ 1. Kg/ha ☐ 2. Pkg 25 kg/ha ☐ 3. Pkg 50 kg/ha	|__|__|__|__| $/ha	☐ 1. Manual ☐ 2. Mechanical ☐ 3. Both	☐ 1. Purchase from distributor at normal price in cash ☐ 2. Government's subsidized price purchase	☐ 3. Purchase loan ☐ 4. Government fertilizer delivery ☐ 5 Other_____

3.3 Fertilization during crop development

CROP DEVELOPMENT

3.3.0.1 Now I will show you a table with names of chemical fertilizers, can you tell me if you ever applied some of these fertilizers in the first fertilization after sowing? ENUMERATOR: SELECT ONLY THE FERTILIZERS USED	☐A Urea or White ☐B DAP or Black ☐C KCL o Red ☐D Granubor or Boron	☐E Ammonium sulfate ☐F Soil improvers ☐G Other (SPECIFY)_____ ☐I He never used any
3.3.0.2 Did you apply chemical fertilizers sometime during crop development in Spring Summer Cycle (YEAR)?	☐1 Yes ☐2 No →**Go to 3.3.0.3**	
3.3.0.3 How many times did you fertilize during crop development in the Spring Summer Cycle (YEAR)?	|__|__| ENUMERATOR: DEPENDING ON NUMBER OF FERTILIZATIONS MADE YOU MUST COMPLETE SECTIONS 3.3.1, 3.3.2 Y 3.3.3 ACCORDINGLY. IF THE NUMBER OF FERTILIZATIONS IS 0 (ZERO) ANSWER	
3.3.0.4 On which dates did you fertilize?	1.1st Fertilization after sowing Date ___/___/2014 2. 2nd Fertilization after sowing Date ___/___/2014 3. 3rd Fertilization after sowing Date ___/___/2014	

3.3.0.5 Did you apply chemical fertilizer at least once during crop development in the SS Cycle (YEAR) besides sowing in the SPRING-SUMMER (year) cycle?	☐1 Yes ☐2 No→ **Go to 3.4 WORK**

ENUMERATOR READ: Now I want to ask you about fertilizer use in the first fertilization did after sowing in your plot *(Name)*_____

3.3.1 First fertilization after sowing

[Fertilizer]	3.3.1.1 Used [fertilizer] during the 1st fertilization after sowing in SS (year) C	3.3.1.2 How much [fertilizer] did you apply in the 1st fertilization after sowing per hectare?	3.3.1.3 Unit	3.3.1.4 What was the total cost per hectare of [fertilizer]?	3.3.1.5 The application was manual or mechanical?	3.3.1.6 How did you get it? ENUMERATOR CHECK ALL THAT APPLY	
A) Urea or White	☐ 1. Yes ☐2. No → **Next Fertilizer** ☐-888 NS ☐-999 NR	|__|__|__|__|	☐ 1. Kg/ha ☐ 2. Pkg 25 kg/ha ☐ 3. Pkg 50 kg/ha	|__|__|__|__| $/ha	☐ 1. Manual ☐ 2. Mechanical ☐ 3. Both	☐ 1. Purchased from distributor at normal price in cash ☐ 2. Government's subsidized price purchase	☐ 3. Purchase loan ☐ 4. Government fertilizer delivery ☐ 5 Other_____
B) DAP or Black	☐ 1. Yes ☐2. No → **Next Fertilizer** ☐-888 NS ☐-999 NR	|__|__|__|__|	☐ 1. Kg/ha ☐ 2. Pkg 25 kg/ha ☐ 3. Pkg 50 kg/ha	|__|__|__|__| $/ha	☐ 1. Manual ☐ 2. Mechanical ☐ 3. Both	☐ 1. Purchased from distributor at normal price in cash ☐ 2. Government's subsidized price purchase	☐ 3. Purchase loan ☐ 4. Government fertilizer delivery ☐ 5 Other_____
C) KCL o Red	☐ 1. Yes ☐2. No → **Next Fertilizer** ☐-888 NS ☐-999 NR	|__|__|__|__|	☐ 1. Kg/ha ☐ 2. Pkg 25 kg/ha ☐ 3. Pkg 50 kg/ha	|__|__|__|__| $/ha	☐ 1. Manual ☐ 2. Mechanical ☐ 3. Both	☐ 1. Purchased from distributor at normal price in cash ☐ 2. Government's subsidized price purchase	☐ 3. Purchase loan ☐ 4. Government fertilizer delivery ☐ 5 Other_____
[Fertilizer]	3.3.1.7 Used [fertilizer] during the 1st fertilization after sowing in SS (year) C	3.3.1.3 How much [fertilizer] did you apply in the 1st fertilization after	3.3.1.4 Unit	3.3.1.5 What was the total cost per hectare of [fertilizer]?	3.3.1.6 The application was manual or mechanical?	3.3.1.7 How did you get it? ENUMERATOR CHECK ALL THAT APPLY	

		sowing per hectare?					
D) Granubor or Boron	☐ 1. Yes ☐2. No → **Next Fertilizer** ☐-888 NS ☐-999 NR	|__|__|__|__|	☐ 1. Kg/ha ☐ 2. Pkg 25 kg/ha ☐ 3. Pkg 50 kg/ha	|__|__|__|__| $/ha	☐ 1. Manual ☐ 2. Mechanical ☐ 3. Both	☐ 1. Purchased from distributor at normal price in cash ☐ 2. Government's subsidized price purchase	☐ 3. Purchase loan ☐ 4. Government fertilizer delivery ☐ 5 Other_____
E) Ammonium sulfate	☐ 1. Yes ☐2. No → **Next Fertilizer** ☐-888 NS ☐-999 NR	|__|__|__|__|	☐ 1. Kg/ha ☐ 2. Pkg 25 kg/ha ☐ 3. Pkg 50 kg/ha	|__|__|__|__| $/ha	☐ 1. Manual ☐ 2. Mechanical ☐ 3. Both	☐ 1. Purchased from distributor at normal price in cash ☐ 2. Government's subsidized price purchase	☐ 3. Purchase loan ☐ 4. Government fertilizer delivery ☐ 5 Other_____
F) Soil improvers	☐ 1. Yes ☐2. No → **Next Fertilizer** ☐-888 NS ☐-999 NR	|__|__|__|__|	☐ 1. Kg/ha ☐ 2. Pkg 25 kg/ha ☐ 3. Pkg 50 kg/ha	|__|__|__|__| $/ha	☐ 1. Manual ☐ 2. Mechanical ☐ 3. Both	☐ 1. Purchased from distributor at normal price in cash ☐ 2. Government's subsidized price purchase	☐ 3. Purchase loan ☐ 4. Government fertilizer delivery ☐ 5 Other_____
G) Other _____ (List)	☐ 1. Si ☐2. No → **Next Fertilizer** ☐-888 NS ☐-999 NR	|__|__|__|__|	☐ 1. Kg/ha ☐ 2. Pkg 25 kg/ha ☐ 3. Pkg 50 kg/ha	|__|__|__|__| $/ha	☐ 1. Manual ☐ 2. Mechanical ☐ 3. Both	☐ 1. Purchased from distributor at normal price in cash ☐ 2. Government's subsidized price purchase	☐ 3. Purchase loan ☐ 4. Government fertilizer delivery ☐ 5 Other_____

3.3.2 Second fertilization after planting

3.3.2.1 Now I will show you a table with names of chemical fertilizers, can you tell me if you ever applied some of these fertilizers in the second fertilization after sowing? ENUMERATOR: SELECT ONLY THE FERTILIZERS USED	☐A Urea or White ☐B DAP or Black ☐C KCL o Red ☐D Granubor or Boron	☐E Ammonium sulfate ☐F Soil improvers ☐G Other (SPECIFY)_____ ☐I He never used any
3.3.2.2 Did you apply chemical fertilizers at least twice during crop development in the Spring Summer Cycle (YEAR) besides sowing?	☐1 Yes ☐2 No -> → **Go to 3.4 WORK**	

ENUMERATOR **READ**: Now I want to ask you about the fertilizers you used in the second fertilization you did after sowing in your plot *(Name)*_____

[Fertilizer]	3.3.2.3 Used [fertilizer] during the 2nd fertilization after sowing in Summer Spring cycle (year)	3.3.2.4 How much [fertilizer] per hectare was applied during the 2nd fertilization after sowing?	3.3.2.5 Unit	3.3.2.6 What was the total cost per hectare of the [fertilizer]?	3.3.2.7 The application was manual or mechanical?	3.3.2.3 How did you get it? ENUMERATOR CHECK ALL THAT APPLY

A) Urea or White	☐ 1. Yes ☐2. No → **Next Fertilizer** ☐-888 NS ☐-999 NR	|__|__|__|__|	☐ 1. Kg/ha ☐ 2. Pkg 25 kg/ha ☐ 3. Pkg 50 kg/ha	|__|__|__|__| $/ha	☐ 1. Manual ☐ 2. Mechanical ☐ 3. Both	☐ 1. Purchased from distributor at normal price in cash ☐ 2. Government's subsidized price purchase	☐ 3. Purchase loan ☐ 4. Government fertilizer delivery ☐ 5 Other_____
B) DAP or Black	☐ 1. Yes ☐2. No → **Next Fertilizer** ☐-888 NS ☐-999 NR	|__|__|__|__|	☐ 1. Kg/ha ☐ 2. Pkg 25 kg/ha ☐ 3. Pkg 50 kg/ha	|__|__|__|__| $/ha	☐ 1. Manual ☐ 2. Mechanical ☐ 3. Both	☐ 1. Purchased from distributor at normal price in cash ☐ 2. Government's subsidized price purchase	☐ 3. Purchase loan ☐ 4. Government fertilizer delivery ☐ 5 Other_____
C) KCL or Red	☐ 1. Yes ☐2. No → **Next Fertilizer** ☐-888 NS ☐-999 NR	|__|__|__|__|	☐ 1. Kg/ha ☐ 2. Pkg 25 kg/ha ☐ 3. Pkg 50 kg/ha	|__|__|__|__| $/ha	☐ 1. Manual ☐ 2. Mechanical ☐ 3. Both	☐ 1. Purchased from distributor at normal price in cash ☐ 2. Government's subsidized price purchase	☐ 3. Purchase loan ☐ 4. Government fertilizer delivery ☐ 5 Other_____
D) Granubor or Boron	☐ 1. Yes ☐2. No → **Next Fertilizer** ☐-888 NS ☐-999 NR	|__|__|__|__|	☐ 1. Kg/ha ☐ 2. Pkg 25 kg/ha ☐ 3. Pkg 50 kg/ha	|__|__|__|__| $/ha	☐ 1. Manual ☐ 2. Mechanical ☐ 3. Both	☐ 1. Purchased from distributor at normal price in cash ☐ 2. Government's subsidized price purchase	☐ 3. Purchase loan ☐ 4. Government fertilizer delivery ☐ 5 Other_____
E) Ammonium sulfate	☐ 1. Yes ☐2. No → **Next Fertilizer** ☐-888 NS ☐-999 NR	|__|__|__|__|	☐ 1. Kg/ha ☐ 2. Pkg 25 kg/ha ☐ 3. Pkg 50 kg/ha	|__|__|__|__| $/ha	☐ 1. Manual ☐ 2. Mechanical ☐ 3. Both	☐ 1. Purchased from distributor at normal price in cash ☐ 2. Government's subsidized price purchase	☐ 3. Purchase loan ☐ 4. Government fertilizer delivery ☐ 5 Other_____
F) Soil improvers	☐ 1. Yes ☐2. No → **Next Fertilizer** ☐-888 NS ☐-999 NR	|__|__|__|__|	☐ 1. Kg/ha ☐ 2. Pkg 25 kg/ha ☐ 3. Pkg 50 kg/ha	|__|__|__|__| $/ha	☐ 1. Manual ☐ 2. Mechanical ☐ 3. Both	☐ 1. Purchased from distributor at normal price in cash ☐ 2. Government's subsidized price purchase	☐ 3. Purchase loan ☐ 4. Government fertilizer delivery ☐ 5 Other_____
G) Other _____ (See catalogue)	☐ 1. Yes ☐2. No → **Next Fertilizer** ☐-888 NS ☐-999 NR	|__|__|__|__|	☐ 1. Kg/ha ☐ 2. Pkg 25 kg/ha ☐ 3. Pkg 50 kg/ha	|__|__|__|__| $/ha	☐ 1. Manual ☐ 2. Mechanical ☐ 3. Both	☐ 1. Purchased from distributor at normal price in cash ☐ 2. Government's subsidized price purchase	☐ 3. Purchase loan ☐ 4. Government fertilizer delivery ☐ 5 Other_____

3.3.3 Third fertilization after sowing

3.3.3.1 Now I will show you a table with names of chemical fertilizers, can you tell me if you ever applied some of these fertilizers in the third fertilization after sowing? 3.3.3.2 ENUMERATOR: SELECT ONLY THE FERTILIZERS USED	☐A Urea or White ☐B DAP or Black ☐C KCL o Red ☐D Granubor or Boron	☐E Ammonium sulfate ☐F Soil improvers ☐G Other (SPECIFY)_____ ☐I He never used any
3.3.3.3 Did you apply chemical fertilizers at least three times during crop development in the SS C (YEAR) besides sowing?	☐1 Yes ☐2 No -> **Go to 3.4 WORK**	

ENUMERATOR READ: Now I want to ask you about the fertilizers you used in the third fertilization you did after sowing in your plot *(Name)*_____

[Fertilizer]	3.3.2.8 Used [fertilizer] during the 3rd fertilization after sowing last year	3.3.3.4 How much [fertilizer] per hectare was applied during the 3rd fertilization after sowing?	3.3.3.5 Unit	3.3.3.6 What was the total cost per hectare of [fertilizer]?	3.3.3.7 The application was manual or mechanical?	3.3.2.4 How did you get it? ENUMERATOR CHECK ALL THAT APPLY	
A) Urea or White	☐ 1. Yes ☐ 2. No → **Next Fertilizer** ☐-888 NS ☐-999 NR	|__|__|__|__|	☐ 1. Kg/ha ☐ 2. Pkg 25 kg/ha ☐ 3. Pkg 50 kg/ha	|__|__|__|__| $/ha	☐ 1. Manual ☐ 2. Mechanical ☐ 3. Both	☐ 1. Purchased from distributor at normal price in cash ☐ 2. Government's subsidized price purchase	☐ 3. Purchase loan ☐ 4. Government fertilizer delivery ☐ 5 Other_____
B) DAP or Black	☐ 1. Yes ☐ 2. No → **Next Fertilizer** ☐-888 NS ☐-999 NR	|__|__|__|__|	☐ 1. Kg/ha ☐ 2. Pkg 25 kg/ha ☐ 3. Pkg 50 kg/ha	|__|__|__|__| $/ha	☐ 1. Manual ☐ 2. Mechanical ☐ 3. Both	☐ 1. Purchased from distributor at normal price in cash ☐ 2. Government's subsidized price purchase	☐ 3. Purchase loan ☐ 4. Government fertilizer delivery ☐ 5 Other_____
C) KCL or Red	☐ 1. Yes ☐ 2. No → **Next Fertilizer** ☐-888 NS ☐-999 NR	|__|__|__|__|	☐ 1. Kg/ha ☐ 2. Pkg 25 kg/ha ☐ 3. Pkg 50 kg/ha	|__|__|__|__| $/ha	☐ 1. Manual ☐ 2. Mechanical ☐ 3. Both	☐ 1. Purchased from distributor at normal price in cash ☐ 2. Government's subsidized price purchase	☐ 3. Purchase loan ☐ 4. Government fertilizer delivery ☐ 5 Other_____
D) Granubor or Boron	☐ 1. Yes ☐ 2. No → **Next Fertilizer** ☐-888 NS ☐-999 NR	|__|__|__|__|	☐ 1. Kg/ha ☐ 2. Pkg 25 kg/ha ☐ 3. Pkg 50 kg/ha	|__|__|__|__| $/ha	☐ 1. Manual ☐ 2. Mechanical ☐ 3. Both	☐ 1. Purchased from distributor at normal price in cash ☐ 2. Government's subsidized price purchase	☐ 3. Purchase loan ☐ 4. Government fertilizer delivery ☐ 5 Other_____
E) Ammonium sulfate	☐ 1. Yes ☐ 2. No → **Next Fertilizer** ☐-888 NS ☐-999 NR	|__|__|__|__|	☐ 1. Kg/ha ☐ 2. Pkg 25 kg/ha ☐ 3. Pkg 50 kg/ha	|__|__|__|__| $/ha	☐ 1. Manual ☐ 2. Mechanical ☐ 3. Both	☐ 1. Purchased from distributor at normal price in cash ☐ 2. Government's subsidized price purchase	☐ 3. Purchase loan ☐ 4. Government fertilizer delivery ☐ 5 Other_____
F) Soil improvers	☐ 1. Yes ☐ 2. No → **Next Fertilizer** ☐-888 NS ☐-999 NR	|__|__|__|__|	☐ 1. Kg/ha ☐ 2. Pkg 25 kg/ha ☐ 3. Pkg 50 kg/ha	|__|__|__|__| $/ha	☐ 1. Manual ☐ 2. Mechanical ☐ 3. Both	☐ 1. Purchased from distributor at normal price in cash ☐ 2. Government's subsidized price purchase	☐ 3. Purchase loan ☐ 4. Government fertilizer delivery ☐ 5 Other_____
G) Other _____ (List)	☐ 1. Yes ☐ 2. No → **Next Fertilizer** ☐-888 NS ☐-999 NR	|__|__|__|__|	☐ 1. Kg/ha ☐ 2. Pkg 25 kg/ha ☐ 3. Pkg 50 kg/ha	|__|__|__|__| $/ha	☐ 1. Manual ☐ 2. Mechanical ☐ 3. Both	☐ 1. Purchased from distributor at normal price in cash ☐ 2. Government's subsidized price purchase	☐ 3. Purchase loan ☐ 4. Government fertilizer delivery ☐ 5 Other_____

3.4 Work

ENUMERATOR READ: Now I will ask you to think about all the tasks you did in your plot *(Name)*_____ in the Spring Summer (year) cycle and tell me how much time and labor it took to perform them.

3.4.1 How many people worked in the tasks carried out during sowing including yourself?	3.4.2 How many people worked in the tasks carried out during crop development including yourself?	3.4.3 How many people worked in the tasks carried out during harvest including yourself?	3.4.4 ENUMERATOR REGISTER THE TOTAL NUMBER OF WORKERS (ADD 3.4.1 to 3.4.3) THIS TOTAL MUST MATCH THE NUMBER OF BOXES MARKED IN QUESTIONS 3.4.5
|__|__|	|__|__|	|__|__|	|__|__|

[NAME]	3.4.5 In which stages of the process did the worker [NAME] help? [ACTIVITY]	3.4.6 How many days did this person work during the activities [ACTIVITIES]? (Include the producer)	3.4.7 What was the average per day payment for [NAME] ?	3.4.8 Is [NAME] a relative or a pawn?
PRODUCER	1 ☐ sowing	|__|__|	|__|__|__|$ ☐ -777 I do not pay him	1 ☐ relative 2 ☐ unrelated worker 3 ☐ the producer himself
	2 ☐ crop development	|__|__|	|__|__|__|$ ☐ -777 I do not pay him	
	3 ☐ harvest	|__|__|	|__|__|__|$ ☐ -777 I do not pay him	
WORKER 1 _____	1 ☐ sowing	|__|__|	|__|__|__|$ ☐ -777 I do not pay him	1 ☐ relative 2 ☐ unrelated worker 3 ☐ the producer himself
	2 ☐ crop development	|__|__|	|__|__|__|$ ☐ -777 I do not pay him	
	3 ☐ harvest	|__|__|	|__|__|__|$ ☐ -777 I do not pay him	
WORKER 2 _____	1 ☐ sowing	|__|__|	|__|__|__|$ ☐ -777 I do not pay him	1 ☐ relative 2 ☐ unrelated worker 3 ☐ the producer himself
	2 ☐ crop development	|__|__|	|__|__|__|$ ☐ -777 I do not pay him	
	3 ☐ harvest	|__|__|	|__|__|__|$ ☐ -777 I do not pay him	
WORKER 3 _____	1 ☐ sowing	|__|__|	|__|__|__|$ ☐ -777 I do not pay him	1 ☐ relative 2 ☐ unrelated worker 3 ☐ the producer himself
	2 ☐ crop development	|__|__|	|__|__|__|$ ☐ -777 I do not pay him	
	3 ☐ harvest	|__|__|	|__|__|__|$ ☐ -777 I do not pay him	
[NAME]	3.4.9 In which stages of the process did the worker [NAME] help? [ACTIVITY]	3.4.10 How many days did this person work during the activities [ACTIVITIES]? (Include the producer)	3.4.11 What was the average per day payment for [NAME] ?	3.4.12 Is [NAME] a relative or a pawn?

WORKER 4 _____	1 ☐ sowing	|__|__|	|__|__|__|$ ☐ -777 I do not pay	1 ☐ relative 2 ☐ unrelated worker 3 ☐ the producer himself
	2 ☐ crop development	|__|__|	|__|__|__|$ ☐ -777 I do not pay	
	3 ☐ harvest	|__|__|	|__|__|__|$ ☐ -777 I do not pay	
WORKER 5 _____	1 ☐ sowing	|__|__|	|__|__|__|$ ☐ -777 I do not pay	1 ☐ relative 2 ☐ unrelated worker 3 ☐ the producer himself
	2 ☐ crop development	|__|__|	|__|__|__|$ ☐ -777 I do not pay	
	3 ☐ harvest	|__|__|	|__|__|__|$ ☐ -777 I do not pay	
WORKER 6 _____	1 ☐ sowing	|__|__|	|__|__|__|$ ☐ -777 I do not pay	1 ☐ relative 2 ☐ unrelated worker 3 ☐ the producer himself
	2 ☐ crop development	|__|__|	|__|__|__|$ ☐ -777 I do not pay	
	3 ☐ harvest	|__|__|	|__|__|__|$ ☐ -777 I do not pay	
WORKER 7 _____	1 ☐ sowing	|__|__|	|__|__|__|$ ☐ -777 I do not pay	1 ☐ relative 2 ☐ unrelated worker 3 ☐ the producer himself
	2 ☐ crop development	|__|__|	|__|__|__|$ ☐ -777 I do not pay	
	3 ☐ harvest	|__|__|	|__|__|__|$ ☐ -777 I do not pay	
WORKER 8 _____	1 ☐ sowing	|__|__|	|__|__|__|$ ☐ -777 I do not pay	1 ☐ relative 2 ☐ unrelated worker 3 ☐ the producer himself
	2 ☐ crop development	|__|__|	|__|__|__|$ ☐ -777 I do not pay	
	3 ☐ harvest	|__|__|	|__|__|__|$ ☐ -777 I do not pay	
WORKER 9 _____	1 ☐ sowing	|__|__|	|__|__|__|$ ☐ -777 I do not pay	1 ☐ relative 2 ☐ unrelated worker 3 ☐ the producer himself
	2 ☐ crop development	|__|__|	|__|__|__|$ ☐ -777 I do not pay	
	3 ☐ harvest	|__|__|	|__|__|__|$ ☐ -777 I do not pay	

3.5 Maize harvest & Production

ENUMERATOR READ: Now we will talk about the harvest and sale of your maize production at plot *(Name)*_____ in the spring-summer cycle of (YEAR)

3.5.1 How many hectares of maize did you harvest in this plot?	3.5.2 How many tons of maize did you harvest in this plot last year in TOTAL? **(NOT PER HECTARE)**	3.5.3 Due to droughts, pests or other problems, how many tons of maize were lost in this plot last year TOTAL? **(NOT PER HECTARE)**	3.5.4 Was the harvesting carried out mechanically or manually? **CHECK ALL THAT APPLY**	3.5.5 Was the thresher own or rented?	3.5.6 What was the threshing cost per hectare?	3.5.7. What was the cost of diesel per hectare?	3.5.8 How many tons of what was produced were sold?	3.5.9 How many times did you carry out sales activities after the harvest [YEAR]?	3.5.10 What was the average sales price per ton?	3.5.11 How much did you pay or spend on transporting your maize from your plot or home to the point of sale in total? (includes cost of gasoline or transport rent and all trips)
|__|__|.|__| ha	|__|__|.|__| TN	|__|__|.|__| TN	☐1 Mechanical ☐2.Manual **-> go to 3.5.8**	☐1.Own **→Go to 3.5.7** ☐2.Rent	|__|__|__|__| $/ha **→Go to 3.5.8**	|__|__|__|__| $/ha	|__|__|__|__| Ton ☐-777 It did not sell **-> go to the next section 3.6**	|__|__| TIMES	|__|__|__|__| $/ton	|__|__|__|__| $

3.6 Governmental support

ENUMERATOR READ: I will now ask questions about the support granted during the SPRING-SUMMER CYCLE IN (YEAR) by the Government

Government Program	3.6.1 Received the program (PROGRAM NAME)	3.6.2 How much money did you receive in total for all your plots?	3.6.3 How much money (from the program) was invested in the plot (NAME)? (ENUMERATOR WRITE 0 IF NO PROGRAM MONEY WAS INVESTED IN THIS PLOT)	3.6.4 How many of the following fertilizers and agrochemicals were received? (ENUMERATOR WRITE IN PKGS OF 50 KG)		3.6.5 How many of the following fertilizers and agrochemicals received were applied in the plot (NAME) in the cycle (YEAR)? (ENUMERATOR WRITE IN PKGS OF 50 KG)	
1 Procampo	☐ 1. Yes ☐ 2. No → **Go to the next program** ☐-888 NS ☐-999 NR	|__|__|__|__|__|__|$ ☐ -777 did not receive **->go to 3.6.4**	|__|__|__|__|__|__|$	☐A Urea or White ☐B DAP or Black ☐C KCL or Red ☐D Granubor or Boron ☐E Ammonium sulfate ☐F Soil improvers ☐G Others_____ ☐ -777 did not receive support in kind → **Go to the next program**	|__|__| Pkgs |__|__| Pkgs |__|__| Pkgs |__|__| Pkgs |__|__| Pkgs |__|__| Pkgs |__|__| Pkgs |__|__| Pkgs |__|__| Pkgs	☐A Urea or White ☐B DAP or Black ☐C KCL or Red ☐D Granubor or Boron ☐E Ammonium sulfate ☐F Soil improvers ☐G Others_____ ☐ -777 No in kind support was invested in this plot → **Go to the next program**	|__|__| Pkgs |__|__| Pkgs |__|__| Pkgs |__|__| Pkgs |__|__| Pkgs |__|__| Pkgs |__|__| Pkgs |__|__| Pkgs |__|__| Pkgs

2 PiMAF/High performance	☐ 1. Yes ☐ 2. No → **Go to the next program** ☐-888 NS ☐-999 NR	|__|__|__|__|__|$ ☐ -777 did not receive **->go to 3.6.4**	|__|__|__|__|__|$	☐A Urea or White ☐B DAP or Black ☐C KCL or Red ☐D Granubor or Boron ☐E Ammonium sulfate ☐F Soil improvers ☐G Others_____ ☐ -777 did not receive support in kind → **Go to the next program**	|__|__| Pkgs |__|__| Pkgs |__|__| Pkgs |__|__| Pkgs |__|__| Pkgs |__|__| Pkgs |__|__| Pkgs |__|__| Pkgs |__|__| Pkgs	☐A Urea or White ☐B DAP or Black ☐C KCL or Red ☐D Granubor or Boron ☐E Ammonium sulfate ☐F Soil improvers ☐G Others_____ ☐ -777 No in kind support was invested in this plot → **Go to the next program**	|__|__| Pkgs |__|__| Pkgs |__|__| Pkgs |__|__| Pkgs |__|__| Pkgs |__|__| Pkgs |__|__| Pkgs |__|__| Pkgs |__|__| Pkgs
3 ☐ PiMAF / Low performance	☐1. Yes ☐2. No → **Go to the next program** ☐-888 NS ☐-999 NR	|__|__|__|__|__|$ ☐ -777 did not receive **-> go to 3.6.4**	|__|__|__|__|__|$	☐A Urea or White ☐B DAP or Black ☐C KCL or Red ☐D Granubor or Boron ☐E Ammonium sulfate ☐F Soil improvers ☐G Others_____ ☐ -777 did not receive support in kind → **Go to the next program**	|__|__| Pkgs |__|__| Pkgs |__|__| Pkgs |__|__| Pkgs |__|__| Pkgs |__|__| Pkgs |__|__| Pkgs |__|__| Pkgs |__|__| Pkgs	☐A Urea or White ☐B DAP or Black ☐C KCL or Red ☐D Granubor or Boron ☐E Ammonium sulfate ☐F Soil improvers ☐G Others_____ ☐ -777 No in kind support was invested in this plot → **Go to the next program**	|__|__| Pkgs |__|__| Pkgs |__|__| Pkgs |__|__| Pkgs |__|__| Pkgs |__|__| Pkgs |__|__| Pkgs |__|__| Pkgs |__|__| Pkgs
4 ☐ *Masagro*	☐ 1. Yes ☐ 2. No → **Go to the next program** ☐ -888 NS ☐ -999 NR	|__|__|__|__|__|$ ☐ -777 did not receive **->go to 3.6.4**	|__|__|__|__|__|$	☐A Urea or White ☐B DAP or Black ☐C KCL or Red ☐D Granubor or Boron ☐E Ammonium sulfate ☐F Soil improvers ☐G Others_____ ☐ -777 did not receive support in kind → **Go to the next program**	|__|__| Pkgs |__|__| Pkgs |__|__| Pkgs |__|__| Pkgs |__|__| Pkgs |__|__| Pkgs |__|__| Pkgs |__|__| Pkgs |__|__| Pkgs	☐A Urea or White ☐B DAP or Black ☐C KCL or Red ☐D Granubor or Boron ☐E Ammonium sulfate ☐F Soil improvers ☐G Others_____ ☐ -777 No in kind support was invested in this plot → **Go to the next program**	|__|__| Pkgs |__|__| Pkgs |__|__| Pkgs |__|__| Pkgs |__|__| Pkgs |__|__| Pkgs |__|__| Pkgs |__|__| Pkgs |__|__| Pkgs
5 ☐ *Agro-incentivos*	☐1. Yes ☐2. No → **Go to the next program** ☐-888 NS ☐-999 NR	|__|__|__|__|__|$ ☐ -777 did not receive **->go to 3.6.4**	|__|__|__|__|__|$	☐A Urea or White ☐B DAP or Black ☐C KCL or Red ☐D Granubor or Boron ☐E Ammonium sulfate ☐F Soil improvers	|__|__| Pkgs |__|__| Pkgs |__|__| Pkgs |__|__| Pkgs |__|__| Pkgs |__|__| Pkgs |__|__| Pkgs |__|__| Pkgs |__|__| Pkgs	☐A Urea or White ☐B DAP or Black ☐C KCL or Red ☐D Granubor or Boron ☐E Ammonium sulfate ☐F Soil improvers	|__|__| Pkgs |__|__| Pkgs |__|__| Pkgs |__|__| Pkgs |__|__| Pkgs |__|__| Pkgs |__|__| Pkgs |__|__| Pkgs |__|__| Pkgs

				☐G Others_____ ☐ -777 did not receive support in kind → **Go to the next section 4**		☐G Others_____ ☐ -777 No in kind support was invested in this plot → **Go to the next program**	

	Received the program? (PROGRAM NAME)	Which type of seed was offered a subsidy? VIEW CATALOGUE WRITE ALL INDICATED BY THE PRODUCER	Do you know what percentage of the price of the seeds they discounted?	Did you use these seeds in this field [NAME] in [YEAR]?	Which of the following fertilizer were subsidized for you? ENUMERATOR CHECK ALL THAT APPLY	Do you know what percentage of the price of fertilizer were you discounted?	Did you use this fertilizer on his plot [NAME] in [YEAR]?
6 ☐ Subsidy on fertilizer and seed prices	☐1. Yes ☐ 2. No → **Go to the next program** ☐-888 NS ☐-999 NR	|__|__|	|__|__| %	☐ 1. Yes ☐ 2. No	☐ A Urea or White ☐B DAP or Black ☐C KCL or Red ☐D Granubor or Boron ☐E Ammonium sulfate ☐F Soil improvers ☐G Others_____ ☐ -777 received fertilizer subsidy	|__|__| % |__|__| % |__|__| % |__|__| % |__|__| % |__|__| % |__|__| % |__|__| %	☐ 1. Yes ☐ 2.No ☐ 1. Yes ☐ 2.No ☐ 1. Yes ☐ 2.No ☐ 1. Yes ☐ 2.No ☐ 1. Yes ☐ 2.No ☐ 1. Yes ☐ 2.No ☐ 1. Yes ☐ 2.No ☐ 1. Yes ☐ 2.No
		|__|__|	|__|__|%	☐ 1. Yes ☐ 2. No			

4. AGRICULTURAL TECHNOLOGY

ENUMERATOR READ: From now on I will ask about your practices, not only in your plot *(Name)*_____ but ***in all your plots.***

4.1. Soil analysis

4.1.1 How much would you be willing to pay for a soil test that provides personalized recommendations on the correct use of fertilizers?	4.1.2 Have you done a soil test sometime before 2015?	4.1.3 Why have you never done a soil test? **ENUMERATOR LISTEN AND RECORD ALL THAT APPLY→ Go to 4.2. TECHNICAL ASSISTANCE**	4.1.4 What was the last year you did one? (year)	4.1.5 How much did it cost (the last year you did one)? (pesos)	4.1.6 Did they make recommendations about fertilization due to the soil analysis, such as how much of each type of fertilizer to apply?	4.1.7 Did you follow the recommendations delivered from the soil analysis (last year you did)?	4.1.8 Why didn't you follow all the recommendations from the soil test? **ENUMERATOR LISTEN AND RECORD ALL THAT APPLY**

|__|__|__|__| MXN ☐-888 NS ☐-999 NR	☐1. Yes → **Go to 4.1.4** ☐ 2. No ☐-888 NS ☐-999 NR	☐1. Because I didn't know that it had to be done ☐2. Because I do not have money ☐3. Because I have no technical advice ☐4. Because I've always worked like this ☐5. Because I do not see the benefit ☐6. There are no places to do it ☐7. I do not trust the results ☐8. Other **Specify** _____ ☐-888 NS ☐-999 NR	|__|__|__|__| ☐-888 NS ☐-999 NR	|__|__|__|__| MXN ☐-888 NS ☐-999 NR	☐1. Yes ☐2. No → **Go to 4.2 TECHNICAL ASSISTANCE** ☐-888 NS ☐-999 NR	☐1. All → **Go to 4.2 TECHNICAL ASSISTANCE** ☐2. Almost all ☐3. Some ☐4. Few ☐5. Any ☐6. I was not given recommendations → **Go to 4.2 TECHNICAL ASSISTANCE** ☐-888 NS ☐-999 NR	☐1. He did not have enough money to follow ☐2. They didn't seem good to me ☐3. I considered them too risky ☐4. I did not understand the recommendations made ☐5. I didn't find the inputs that they requested to apply ☐6. Other **SPECIFY** _____ _____ ☐-888 NS ☐-999 NR

4.2. Technical assistance

4.2.1 How much would you be willing to pay for personalized technical assistance during 3 visits to your plots to learn how to fertilize at sowing, and implement recommendations?	4.2.2 Have you ever received technical assistance sometime before 2015?	4.2.3 Why have you never required technical assistance? **ENUMERATOR LISTEN AND RECORD ALL THAT APPLY** **→ Go to 4.3 hybrid seeds, fertilizers and herbicides**	4.2.4 What was the last year in which you received? (year)	4.2.5 How much did it cost (last year it was received) (pesos)	4.2.6 Did the technician make personalized recommendations about fertilization such as how much of each type of fertilizer to apply?	4.2.7 Did you follow the advice given to you (last year you had technical assistance)?	4.2.8 Why didn't you follow all the technician's recommendations? **ENUMERATOR LISTEN AND RECORD ALL THAT APPLY**
|__|__|__|__| MXN ☐-888 NS ☐-999 NR	☐1. Yes → **Go to 4.2.4** ☐ 2. No ☐-888 NS ☐-999 NR	☐1. Because I didn't know it existed ☐2. Because I do not have money ☐4. Because I've always worked this way ☐5. Because I do not see the benefit ☐6. There are no places to hire technicians	|__|__|__|__| ☐-888 NS ☐-999 NR	|__|__|__|__| MXN ☐-888 NS ☐-999 NR	☐1. Yes ☐2. No → **Go to 4.3 SEEDS** ☐-888 NS ☐-999 NR	☐1. All→ **Go to 4.3** ☐2. Almost all ☐3. Some ☐4. Few ☐5. Any ☐6. I was not given recommenda	☐1. He did not have enough money to follow ☐2. They didn't seem good to me ☐3. I considered them too risky ☐4. I did not understand the recommendations made ☐5. I didn't find the inputs that they requested to apply ☐6. Other **SPECIFY** _____

		☐7. I do not trust the technicians ☐8. Other **Specify** _____ ☐-888 NS ☐-999 NR				tions → **Go to 4.3 SEEDS** ☐-888 NS ☐-999 NR	_____ ☐-888 NS ☐-999 NR

4.3. Hybrid seeds, fertilizers and herbicides

4.3.1. Have you used hybrid or improved seeds over the past 5 years?	4.3.2. What was the last year you did? (year)	4.3.3. Have you used chemical fertilizers on your plots over the past 5 years?	4.3.4. What was the last year in which you used? (year)	4.3.5. Have you used foliar fertilizers on your plots over the past 5 years?	4.3.6. What was the last year you did? (year)	4.3.7. Have you used herbicides or pesticides over the past 5 years?	4.3.8. What was the last year you did? (year)
☐1. Yes ☐ 2. No → **Go to 4.3.3** ☐-888 NS ☐-999 NR	|__|__|__|__| ☐-888 NS ☐-999 NR	☐1. Yes ☐ 2. No → **Go to 4.3.5** ☐-888 NS ☐-999 NR	|__|__|__|__| ☐-888 NS ☐-999 NR	☐1. Yes ☐ 2. No → **Go to 4.3.7** ☐-888 NS ☐-999 NR	|__|__|__|__| ☐-888 NS ☐-999 NR	☐1. Yes ☐ 2. No → **Go to next section** ☐-888 NS ☐-999 NR	|__|__|__|__| ☐-888 NS ☐-999 NR

5. CREDIT AND INSURANCE

ENUMERATOR READ: Now I will ask you about your financial needs to plant in all your plots last year.

5.1. Credit

5.1.1 In the last cycle, did you have enough money to buy the fertilizer and the material you needed **for sowing**?	☐1. Yes → **Go to 5.1.3** ☐2.No
5.1.2 How much money per hectare were you missing in order **to sow** the way you would have wanted?	|__|__|__|__| MXN
5.1.3 Last year did you have enough money to buy the fertilizer and the material that you needed **for the maintenance of the crop throughout the cycle**?	☐1. Yes → **Go to 5.1.5** ☐2.No
5.1.4 How much money did you lack to **track your plot the way you would have wanted?**	|__|__|__|__| MXN
5.1.5 Did you find everything you wanted to buy?	☐1. Yes → **Go to 5.1.7** ☐2.No
5.1.6 What would you have liked to buy that you didn't find? **WRITE ACCORDING TO CATALOGUE IF POSSIBLE IF NOT WRITE ON THE LINE DESIGNATED FOR IT**	|__|__|__|__| , |__|__|__|__| |__|__|__|__| , |__|__|__|__| _____

5.1.7 Have you ever, in your entire life, applied for credit or a loan for matters related to agriculture?	5.1.8 ¿Why not? **WRITE ALL** → **Go to the next section**		5.1.9 How much did you request? (pesos or monetary value of what was requested in kind)	5.1.10 Was it granted?	5.1.11 What annual rate they gave you? (percentage)	5.1.12 Could you pay it?
☐1. Yes → **Ir a 5.1.9** ☐2.No	☐1. They ask for many requirements ☐2. Due to high interest rates/ they are expensive ☐3. Doesn't like to be indebted ☐4. He has not had the need ☐5. Acquaintances' bad experiences	☐6. He does not know whom to ask ☐7. Takes a lot of time ☐8. Other **SPECIFY** _____ ☐9. He didn't have a warranty ☐-888 NS ☐-999 NR	|__|__|__|__|__|__|MXN ☐-888 N/S ☐-999 N/R	☐1. Yes ☐2. No → **Go to next section** ☐3. it is still pending → **Go to next section** ☐-888 N/S ☐-999 N/R	_____% ☐-888 N/S ☐-999 N/R	☐1.Yes ☐2.No

5.2 Insurance

5.2.1 Have you ever had agricultural insurance (even if you didn't pay for it)?	5.2.2 When was the last time? (insert year)	5.2.3 What was the cost of the last agricultural insurance? ($/ha)	5.2.4 What risk factors were covered by the last agricultural insurance? **CHECK ALL THAT APPLY**	
☐1.Yes ☐2.No → **Go to the next section** ☐-888 NS ☐-999 NR	|__|__|__|__| ☐-888 NS ☐-999 NR	|__|__|__|__| MXN ☐-888 NS ☐-999 NR	☐1. Frost ☐2. Hail ☐3. Drought ☐4. Winds ☐5. Floods ☐6. Fire	☐7. Plague ☐8. Other **SPECIFY** _____ ☐-888 NS ☐-999 NR

6. PREFERENCES

6.1. Do you consider yourself a risk taker? You would say: ENUMERATOR READ CHOICES	☐1. Does not like taking risks ☐2. Almost never take risks ☐3. Sometimes yes sometimes no	☐4. Almost always takes risks ☐5. Always likes to take risks ☐-888 Does not know ☐-999 NR
6.2. Do you think that if you lost your maize harvest this year and produce less than 1 ton / ha, the supply of food for your family would be jeopardized?	☐1.Yes ☐2.No	☐-888 Does not know ☐-999 NR

6.3. When you start something, do you usually finish it? ENUMERATOR READ CHOICES	☐1. Generally, yes ☐2. Sometimes I finish things sometimes I do not ☐3. No, usually I can not finish	
6.4. During the past 5 years, have you changed your way of growing maize in order to increase production? For example using another type of seed, fertilizer or machinery.	☐1.Yes ☐2.No → **Go to the next section**	☐-888 Does not know ☐-999 NR
6.5. How did you find out this new technique might be useful?	☐1. A neighbor told me/ I watched from a neighbor ☐2 An agronomist told me ☐3. The supplies' trader told me	☐4. Other **SPECIFY** _____ ☐-888 Does not know ☐-999 NR
6.6. Did the new technique work?	☐1.Yes → **Next section** ☐2.No	☐-888 Does not know ☐-999 NR
6.7. Why not?	☐1. I didnt do it right ☐2 The rains were not good for the innovation that I made	☐3. I had no money to complete the process correctly ☐4. Other **SPECIFY** _____ ☐-888 Does not know ☐-999 NR

7. CONFIDENCE

ENUMERATOR SHOWING THE TABLE OF TRUST ASK:

7.1. How much do you trust each of the following regarding recommendations about how to sow and harvest:
ENUMERATOR READ THE CHOICES

A. Technician	☐1. I always believe them ☐ 2. I almost always believe them ☐3. I sometimes believe them ☐4. I almost never believe them ☐5. I never believe them	B. SEFOA	☐1. I always believe them ☐ 2. I almost always believe them ☐3. I sometimes believe them ☐4. I almost never believe them ☐5. I never believe them	C. Input supplier	☐1.I always believe them ☐2. I almost always believe them ☐3. I sometimes believe them ☐4. I almost never believe them ☐5. I never believe them
D. Neighbors	☐1. I always believe them ☐ 2. I almost always believe them ☐3. I sometimes believe them ☐4. I almost never believe them ☐5. I never believe them	E. SAGARPA	☐1. I always believe them ☐ 2. I almost always believe them ☐3. I sometimes believe them ☐4. I almost never believe them ☐5. I never believe them	F. IPAMPA	☐1. I always believe them ☐2. I almost always believe them ☐3. I sometimes believe them ☐4. I almost never believe them ☐5. I never believe them

G.	Civil Association Qué funciona para el desarrollo (QFD)	☐1. I always believe them ☐ 2. I almost always believe them ☐3. I sometimes believe them ☐4. I almost never believe them ☐5. I never believe them			

7.2.	Generally, would you say that most people can be trusted or that you should always be careful when dealing with people? **ENUMERATOR: LISTEN AND RECORD**	☐1. "most people can be trusted" ☐2. "One should always be careful"
7.3.	Do you think most people try to take advantage of you if they have the opportunity or they try to be fair to you? **ENUMERATOR: LISTEN AND RECORD**	☐1. "they will try to take advantage" ☐2. "they will try to be fair"
7.4.	Would you say that most people try to help others, or that they only care about their own welfare? **ENUMERATOR: LISTEN AND RECORD**	☐1. "they try to help others" ☐2. "they only care about their own welfare"
7.5.	Think of a ladder with steps numbered from 0 to 10, where 0 is the worst life possible and 10 the best life possible, what step would you place yourself on?	|_____|

8. ENVIRONMENT

ENUMERATOR ASK: Finally, we will ask you some questions about your environment/surroundings:

8.1. Do you think that your neighbors use a lower, equal to or greater fertilizer amount than you?	8.2. Do you think YOUR CLOSEST NEIGHBORS use Hybrid seeds?	8.3. Do you think that YOUR NEIGHBORS do soil analysis?	8.4. Do you think YOUR CLOSEST NEIGHBORS produce a lower, equal or greater quatity per hectare than you?
☐1 Lower ☐2 Equal ☐3 Greater ☐-888 Does not know ☐-999 NR	☐1. Yes ☐2. No ☐-888 Does not know ☐-999 NR	☐1. Yes ☐2. No ☐-888 Does not know ☐-999 NR	☐1 Lower ☐2 Equal ☐3 Greater ☐-888 Does not know ☐-999 NR