Version 160615

Producer's ID |__|__|-|__|__|-||__|__|

Commercialization Survey of the Research and Support to Maize Fertilization Program (PIAFEM)

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

CONSENTIMIENTO INFORMADO

QUÉ FUNCIONA PARA EL DESARROLLO, a non-profit organization dedicated to the evaluation of social programs, together with ITAM researchers are performing the evaluation phase of the PIAFEM program. We would like to gather information about your farming practices and your plots. This information is strictly confidential and will only be used 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 Your name will not be published along with identifiable information.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 may choose not to answer any given question.

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

1. ☐ Yes 2. ☐ No -> **EXPLAIN AND ASK AGAIN UNTIL THE INFORMATION IS CLEAR**

GENERAL INSTRUCTIONS FOR THE ENUMERATOR:

- **BE CAREFUL WHEN REPORTING MEASURING UNITS. SOME QUESTIONS REFER TO TOTAL QUANTITIES AND OTHERS TO PER HECTARE.**
- **IF RESPONDENT DOES NOT KNOW THE ANSWER TO A QUESTION WRITE -888, IF HE/SHE DECIDES NOT TO ANSWER WRITE -999 AND IF NOT APPLICABLE WRITE -777.**
- **CHARTS WITH QUESTIONS BY PLOT, MAKE ALL QUESTIONS FOR EACH PLOT AND THEN GO TO NEXT PLOT (DO NOT ASK EACH QUESTION FOR ALL PLOTS AT A TIME).**
- **INDICATIONS FOR THE ENUMERATOR ARE HIGHLIGHTED, IN CAPITAL LETTERS AND ARE NOT READ TO THE PRODUCER.**

IF THE PRODUCER IS AN ELDERLY PERSON AND A RELATIVE OR TENANT HAS BEEN WORKING ON THE PLOT FOR A LONG TIME, IS REQUGO ED FOR THIS INDIVIDUAL TO BE PRESENT DURING THE INTERVIEW TO ANSWER THE QUESTIONS ABOUT PRACTICES IN THE CROPS.

ENUMERATOR COMMENTS: _____

_____

_____

_____

_____

_____

EDITOR COMMENTS: _____

_____

I received a Chedraui gift card No. XXXX in compensation for the participation, this card will be activated a week after this today.

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0. LOCATION AND GENERAL INFORMATION OF THE PRODUCER

ENUMERATOR CONFRIM THE PRODUCER INFORMATION

0.1. Producer's Name: **Carlos Alberto Ramírez López** 0.2. ID .**21.68.23** 0.3. Age: **45 years** 0.4. Gender: **2 Male** 0.5. Soil Analysis Year: A = 2013 0.6. Treatment: **T1**	0.7. Status 0.8. Address: **Las Fresas 25, Col. Guadalupe Cuauhtémoc, Huamantla** 0.9. House Reference: **red house** 0.10. Between streets: **vazquez y mella** 0.11. Telephone number(s): **246-4877-8784**

ENUMERATOR VERIFY THAT THE PRODUCER IS THE ONE THAT WORKED BOTH PLOTS, IF ANOTHER PERSON WORKED THOSE PLOTS REGISTER THE INFORMATION BELOW.

0.12. Did you work the plots? **NO**	0.13. Name **Jorge Ramírez Avendaño García**	0.14. Age **45** years	0.15. Gender **Male**	0.16. Relation with the producer **Brother**
0.17. Address	|__|__|__\

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☐ 1 Yes →GO S.1 ☐ 2 No ☐ 3 Jointly	_____ _____	|__|__|__|__| years	☐ 1 Male ☐ 2 Female	☐ 1 Spouse ☐ 2 Son/Daughter ☐ 3 Siblings ☐ 4 Parents ☐ 5 Other _____

1. HARVEST AND COMMERCIALIZATION 2015

1.1 Maize sowing 2015

According to our records, you sowed maize in the following plots. If you sowed in any other plot, please let me know:

ENUMERATOR ASK FOR THE SOWING DATES OF ALL OF HIS/HER PLOTS WITH MAIZE, IF THE PRODUCER ANNOUNCES NEW ONES, PLEASE REGISTER THEM IN THE BLANK SPACES BELOW.

1.1.1 Plot's ID	1.1.2 Name	1.1.3 Treatment or testimony	1.1.4 Plot's locality	1.1.5 Total surface of the plot in hectares	1.1.6 Total surface of the plot with maize in hectares	1.1.7 Did you confirm that you sowed maize in 2015?	1.1.8 In which date did you sow maize? dd/mm	1.1.9 Taking into account your production, would you rather sowed in another date?	1.1.10 In which date would you rather sowed?
.21.68.23.01	**El Ameyal**	**Treatment**	**Ejido Las Delicias, Huamantla**	**1.1 ha**	**0.9 ha**	☐ 1 Yes ☐ 2 No →**GO S.PAR**	Treatment |__|__|/|__|__|	☐ 1 Yes ☐ 2 No →**GO Control**	|__|__|/|__|__|
							Control |__|__|/|__|__|	☐ 1 Yes ☐ 2 No →**GO S.PAR**	|__|__|/|__|__|
.21.68.23.02	**El Capulín**	**Testimony**	**Ejido Las Delicias, Huamantla**	**0.7 ha**	**0.5 ha**	☐ 1 Yes ☐ 2 No →**GO S.PAR**	|__|__|/|__|__|	☐ 1 Yes ☐ 2 No →**GO S.PAR**	|__|__|/|__|__|
.21.68.23.03	**El arbolito**	**-**	**Ejido Las Delicias, Huamantla**	**1 ha**	**0.5 ha**	☐ 1 Yes ☐ 2 No **-→GO S.PAR**	|__|__|/|__|__|	☐ 1 Yes ☐ 2 No →**GO S.PAR**	|__|__|/|__|__|
.21.68.23.04	**La estación**	**-**	**Ejido Las Delicias, Huamantla**	**1 ha**	**0.5 ha**	☐ 1 Yes ☐ 2 No →**GO S.PAR**	|__|__|/|__|__|	☐ 1 Yes ☐ 2 No →**GO S.PAR**	|__|__|/|__|__|
						☐ 1 Yes ☐ 2 No →**GO S.PAR**	|__|__|/|__|__|	☐ 1 Yes ☐ 2 No →**GO S.PAR**	|__|__|/|__|__|
						☐ 1 Yes ☐ 2 No →**GO S.PAR**	|__|__|/|__|__|	☐ 1 Yes ☐ 2 No →**GO S.PAR**	|__|__|/|__|__|
						☐ 1 Yes ☐ 2 No →**GO S.PAR**	|__|__|/|__|__|	☐ 1 Yes ☐ 2 No →**GO S.PAR**	|__|__|/|__|__|
						☐ 1 Yes ☐ 2 No →**GO S.PAR**	|__|__|/|__|__|	☐ 1 Yes ☐ 2 No→**GO S.PAR**	|__|__|/|__|__|
						☐ 1 Yes ☐ 2 No→**GO S.PAR**	|__|__|/|__|__|	☐ 1 Yes ☐ 2 No →**GO S.PAR**	|__|__|/|__|__|

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						☐ 1 Yes ☐ 2 No →**GO S.PAR**	|__|__|/|__|__|	☐ 1 Yes ☐ 2 No →**GO S.PAR**	|__|__|/|__|__|

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1.2 Total grain production

1.2.1. In how many hectares did you sow with **creole** maize in the 2015 Spring-Summer cycle?	1.2.2. In how many hectares did you sow with **creole** maize in total?	1.2.3. How many tons did you sowed of **creole** maize in total?	1.2.4. Of the **XX** tons of **creole** maize that you produced, how many tons did you save for personal use? (seeds, human food, animal food)?	1.2.5. Of the **XX** tons of **creole** maize that you produced, how many did you sell?	1.2.6. Of the **XX** tons of **creole** maize that you produced, how many tons did you save for future selling?
|__|__|__|.|__| ha ☐ -777 Didn't sow creole→ **GO TO 1.2.7**	|__|__|__|.|__| ha	|__|__|__|.|__| t	|__|__|__|.|__| t	|__|__|__|.|__| t	|__|__|__|.|__| t

1.2.7. In how many hectares did you sow with **hybrid** maize in the 2015 Spring-Summer cycle?	1.2.8. In how many hectares did you sow with **hybrid** maize in total?	1.2.9. How many tons did you sowed of **hybrid** maize in total?	1.2.10. Of the **XX** tons of **hybrid** maize that you produced, how many tons did you save for personal use? (seeds, human food, animal food)?	1.2.11. Of the **XX** tons of **hybrid** maize that you produced, how many did you sell?	1.2.12. Of the **XX** tons of **hybrid** maize that you produced, how many tons did you save for future selling?
|__|__|__|.|__| ha ☐ -777 Didn't sow hybrid → **GO TO S.1.2.13**	|__|__|__|.|__| ha	|__|__|__|.|__| t	|__|__|__|.|__| t	|__|__|__|.|__| t	|__|__|__|.|__| t

1.2.13. In terms of your total production, do you think that in 2015 you did better or worse than in **2013?**	☐ 1 Better ☐ 2 Worse ☐ 3 Same
1.2.14. In terms of your total production, do you think that in 2015 you did better or worse than in **2014?**	☐ 1 Better ☐ 2 Worse ☐ 3 Same

1.3 Total grain commercialization

You sold in total **(READ ANSWER 1.2.5)** tons of creole maize and **(READ ANSWER 1.2.11)** tons of hybrid maize.

ENUMERATOR: IF THE PRODUCER MADE SEVERAL SALE OF LESS THAN ½ TONS INCLUDE THEM IN ONE SALE

1.3.1. How many times did you sell maize today? |__|__| times **IFTHE ANSWER IS 0 (ZERO) GO TO S.2**

	1.3.2. Date dd/mm /yy	1.3.3. Who did you sell it to?	1.3.4. What type of maize did you sell?	1.3.5. Variety of the grain that you sold?	1.3.6. How much did you get paid per ton?	1.3.7. How many tons did you sell?	1.3.8. Did you get any discount for any of this reasons? **CHECK ALL THAT APPLY READ ANSWERS**			1.3.9. How much discount did you get per ton?	1.3.10. How much did you get paid in total?
1st	|__|__|/ |__|__|/ |__|__|	☐ 1 Tortilla shop ☐ 2 Local buyer ☐ 3 Foreign buyer ☐ 4 Storehouse ☐ 5 Other_____	☐ 1 Creole	☐ 1 SC1 campeón ☐ 2 SC2 blanca ☐ 3 SC3 azul ☐ 4 SC4 Amarillo ☐ 5 Other: _____	|__|__|__|__| $/t	|__|__|.|__|__|t	☐ 1 Broken ☐ 2 Mixed ☐ 3 Dirty	☐ 4 Rotten ☐ 5 Humidity ☐ 6 Other_____	☐-777 No discount	|__|__|__|__|$/t	|__|__|__|__|__|$
			☐ 2 Hybrid → **GO 1.3.6**		|__|__|__|__| $/t	|__|__|.|__|__|t	☐ 1 Broken ☐ 2 Mixed ☐ 3 Dirty	☐ 4 Rotten ☐ 5 Humidity ☐ 6 Other_____	☐-777 No discount	|__|__|__|__|$/t	
2nd	|__|__|/ |__|__|/ |__|__|	☐ 1 Tortilla shop ☐ 2 Local buyer ☐ 3 Foreign buyer	☐ 1 Creole	☐ 1 SC1 campeón ☐ 2 SC2 blanca ☐ 3 SC3 azul	|__|__|__|__| $/t	|__|__|.|__|__|t	☐ 1 Broken ☐ 2 Mixed ☐ 3 Dirty	☐ 4 Rotten ☐ 5 Humidity ☐ 6 Other_____	☐-777 No discount	|__|__|__|__|$/t	|__|__|__|__|__|$

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	1.3.2. Date dd/mm /yy	1.3.3. Who did you sell it to?	1.3.4. What type of maize did you sell?	1.3.5. Variety of the grain that you sold?	1.3.6. How much did you get paid per ton?	1.3.7. How many tons did you sell?	1.3.8. Did you get any discount for any of this reasons? **CHECK ALL THAT APPLY READ ANSWERS**			1.3.9. How much discount did you get per ton?	1.3.10. How much did you get paid in total?
		☐ 4 Storehouse ☐ 5 Other_____	☐ 2 Hybrid → **GO 1.3.6**	☐ 4 SC4 Amarillo ☐ 5 Other: _____	|__|__|__|__| $/t	|__|__|.|__|__|t	☐ 1 Broken ☐ 2 Mixed ☐ 3 Dirty	☐ 4 Rotten ☐ 5 Humidity ☐ 6 Other_____	☐-777 No discount	|__|__|__|__|$/t	
3rd	|__|__|/ |__|__|/ |__|__|	☐ 1 Tortilla shop ☐ 2 Local buyer ☐ 3 Foreign buyer ☐ 4 Storehouse ☐ 5 Other_____	☐ 1 Creole	☐ 1 SC1 campeón ☐ 2 SC2 blanca ☐ 3 SC3 azul ☐ 4 SC4 Amarillo ☐ 5 Other: _____	|__|__|__|__| $/t	|__|__|.|__|__|t	☐ 1 Broken ☐ 2 Mixed ☐ 3 Dirty	☐ 4 Rotten ☐ 5 Humidity ☐ 6 Other_____	☐-777 No discount	|__|__|__|__|$/t	|__|__|__|__|__|$
			☐ 2 Hybrid → **GO 1.3.6**		|__|__|__|__| $/t	|__|__|.|__|__|t	☐ 1 Broken ☐ 2 Mixed ☐ 3 Dirty	☐ 4 Rotten ☐ 5 Humidity ☐ 6 Other_____	☐-777 No discount	|__|__|__|__|$/t	
4th	|__|__|/ |__|__|/ |__|__|	☐ 1 Tortilla shop ☐ 2 Local buyer ☐ 3 Foreign buyer ☐ 4 Storehouse ☐ 5 Other_____	☐ 1 Creole	☐ 1 SC1 campeón ☐ 2 SC2 blanca ☐ 3 SC3 azul ☐ 4 SC4 Amarillo ☐ 5 Other: _____	|__|__|__|__| $/t	|__|__|.|__|__|t	☐ 1 Broken ☐ 2 Mixed ☐ 3 Dirty	☐ 4 Rotten ☐ 5 Humidity ☐ 6 Other_____	☐-777 No discount	|__|__|__|__|$/t	|__|__|__|__|__|$
			☐ 2 Hybrid → **GO 1.3.6**		|__|__|__|__| $/t	|__|__|.|__|__|t	☐ 1 Broken ☐ 2 Mixed ☐ 3 Dirty	☐ 4 Rotten ☐ 5 Humidity ☐ 6 Other_____	☐-777 No discount	|__|__|__|__|$/t	
5th	|__|__|/ |__|__|/ |__|__|	☐ 1 Tortilla shop ☐ 2 Local buyer ☐ 3 Foreign buyer ☐ 4 Storehouse ☐ 5 Other_____	☐ 1 Creole	☐ 1 SC1 campeón ☐ 2 SC2 blanca ☐ 3 SC3 azul ☐ 4 SC4 Amarillo ☐ 5 Other: _____	|__|__|__|__| $/t	|__|__|.|__|__|t	☐ 1 Broken ☐ 2 Mixed ☐ 3 Dirty	☐ 4 Rotten ☐ 5 Humidity ☐ 6 Other_____	☐-777 No discount	|__|__|__|__|$/t	|__|__|__|__|__|$
			☐ 2 Hybrid → **GO TO1.3.6**		|__|__|__|__| $/t	|__|__|.|__|__|t	☐ 1 Broken ☐ 2 Mixed ☐ 3 Dirty	☐ 4 Rotten ☐ 5 Humidity ☐ 6 Other_____	☐-777 No discount	|__|__|__|__|$/t	

2. HARVEST, PRODUCTION AND LABOR IN THE TEST HECTARE

ENUMERATOR READ: We will verify the information about production and disasters suffered in the test **[TREATMENT PLOT]** located in **[PLOT LOCALITY]**.

2.1 Grain Production

2.1.1 Which type of maize grain did you produce in the test hectare of the program?	2.1.2 Which type of seed did you use? **CHECK ALL THAT APPLY** **IN OTHER, USE CATALOGUE**		2.1.3 In which surface of the test hectare did you sow each grain type?		2.1.4 How many tons of grain did you produce in the test hectare of the program?		2.1.5 How many tons of grain did you save for personal use (seeds, food or animals)?	
☐ 1 Creole	1. Creole	2. Hybrid	1. Creole	2. Hybrid	1. Creole	2. Hybrid	1. Creole	2. Hybrid

☐ 2 Hybrid ☐ 3 Ambos ☐ -777 Didn't sow maize in the test HA → **GO S.3** ☐ -888 DK ☐ -999 DA	☐ 1 SC1 campeón ☐ 2 SC2 blanca ☐ 3 SC3 azul ☐ 4 SC4 Amarillo ☐ 5 Other:_____	☐ 1 H-C8 ☐ 2 Gladiador ☐ 3 722 ☐ 4 Z60 ☐ 5 Faisán ☐ 6 Other: _____ _____	|__|__|.|__|__| ha ☐ -888. DK ☐ -999. DA	|__|__|.|__|__| ha ☐ -888. DK ☐ -999. DA	|__|__|.|__|__| t ☐-666 Silaged → **GO S 2.2** ☐-777 Total loss →**GO S 2.2** ☐ -888 DK ☐ -999 DA	|__|__|.|__|__| t ☐-666 Silaged → **GO TO 2.2** ☐-777 Total loss →**GO S 2.2** ☐ -888 DK ☐ -999 DA	|__|__|.|__|__| t ☐ -888 DK ☐ -999 DA	|__|__|.|__|__| t ☐ -888 DK ☐ -999 DA

2.2 Access to irrigation in the test hectare

2.2.1 Did your test hectare have irrigation in the 2015 Spring-Summer cycle?	2.2.2 How many times did you irrigate the hectare during the 2015 Spring-Summer cycle?	2.2.3 How much did each irrigation cost per hectare?	2.2.4 How much did you invest in total irrigating during the entire 2015 Spring-Summer cycle?
☐ 1 Yes ☐ 2 No → **GO TO S.2.3** ☐ -888 DK ☐ -999 DA	|__|__| times ☐ -888 DK ☐ -999 DA	|__|__|__|__| $/ha ☐ -888 DK ☐ -999 DA	|__|__|, |__|__|__| $/ha ☐ -888 DK ☐ -999 DA

2.3 Grain loss

2.3.1 Did you experience plagues in your test hectare?	☐ 1 Yes ☐ 2 No ☐ -888 DK ☐ -999 DA
2.3.2 How humid was your test hectare during sowing? **READ OPTIONS**	☐ 1 Low ☐ 2 Sufficient ☐ 3 Excessively ☐ -888 DK ☐ -999 DA
2.3.3 How humid was your test hectare during emergence? **READ OPTIONS**	☐ 1 Low ☐ 2 Sufficient ☐ 3 Excessively ☐ -888 DK ☐ -999 DA
2.3.4 How humid was your test hectare during gleaning? **READ OPTIONS**	☐ 1 Low ☐ 2 Sufficient ☐ 3 Excessively ☐ -888 DK ☐ -999 DA
2.3.5 How humid was your test hectare during silking? **READ OPTIONS**	☐ 1 Low ☐ 2 Sufficient ☐ 3 Excessively ☐ -888 DK ☐ -999 DA
2.3.6 Do you consider that your test hectare suffered of drought?	☐ 1 Yes ☐ 2 No →**GO TO 2.3.9** ☐ -888 DK ☐ -999 DA
2.3.7 Compared with 2014, how was the drought in 2015? **READ 3 FIRST OPTIONS**	☐ 1 Shorter ☐ 2 Same length ☐3 Longer ☐ -777 Didn't experience drought
2.3.8 Compared with 2013, how was the drought in 2015? **READ 3 FIRST OPTIONS**	☐ 1 Shorter ☐ 2 Same length ☐3 Longer ☐ -777 Didn't experience drought

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2.3.9 Did you experience any weather disaster, problems with the machinery, problems with neighbors, cob theft, etc. that caused loss in productivity?
☐ 1. Yes ☐ 2. No →**GO TO S.2.4**

2.3.10 Describe each one of the events	2.3.11 When did it happen?	2.3.12 How many tons do you estimate that were wasted due to the event?	2.3.13 Do you know of any strategy to reduce the productivity loss due to the **[EVENT]?**	2.3.14 Did you implement it?	2.3.15 Why didn't you implement it?
Event 1 ☐1 Hail ☐7 Rotten ☐2 Drought ☐8 Cob theft ☐3 Flood ☐9 Plagues ☐4 Frost ☐10 Problems with seed drill ☐5 Fire ☐11 Other:_____ ☐6 Root lodging	From |__|__|/|__|__|/2015 to |__|__|/|__|__|/2015 ☐−888 DK	|__|__|.|__|__| t	Strategy 1: _____ _____ _____	☐ 1 Yes →**GO ES2** ☐ 2 No	☐ 1 Lack of resource ☐ 2 Lack of machinery ☐ 3 Lack of time ☐ 4 Lack of coordination ☐ 5 Other:
			Strategy 2: _____ _____ _____ ☐ -777 None →**GO EV2**	☐ 1 Yes →**GO EV2** ☐ 2 No	☐ 1 Lack of resource ☐ 2 Lack of machinery ☐ 3 Lack of time ☐ 4 Lack of coordination ☐ 5 Other
Event 2 ☐1 Hail ☐7 Rotten ☐2 Drought ☐8 Cob theft ☐3 Flood ☐9 Plagues ☐4 Frost ☐10 Problems with seed drill ☐5 Fire ☐11 Other:_____ ☐6 Root lodging	From |__|__|/|__|__|/2015 to |__|__|/|__|__|/2015 ☐−888 DK	|__|__|.|__|__| t	Strategy 1: _____ _____ _____	☐ 1 Yes →**GO ES2** ☐ 2No	☐ 1 Lack of resource ☐ 2 Lack of machinery ☐ 3 Lack of time ☐ 4 Lack of coordination ☐ 5 Other:
			Strategy 2: _____ _____ _____ ☐ -777 None →**GO EV3**	☐ 1 Yes →**GO EV3** ☐ 2No	☐ 1 Lack of resource ☐ 2 Lack of machinery ☐ 3 Lack of time ☐ 4 Lack of coordination ☐ 5 Other
Event 3 ☐1 Hail ☐7 Rotten ☐2 Drought ☐8 Cob theft ☐3 Flood ☐9 Plagues ☐4 Frost ☐10 Problems with seed drill ☐5 Fire ☐11 Other:_____ ☐6 Root lodging	From |__|__|/|__|__|/2015 to |__|__|/|__|__|/2015 ☐−888 DK	|__|__|.|__|__| t	Strategy 1: _____ _____ _____	☐ 1 Yes →**GO ES2** ☐ 2No	☐ 1 Lack of resource ☐ 2 Lack of machinery ☐ 3 Lack of time ☐ 4 Lack of coordination ☐ 5 Other:
			Strategy 2: _____ _____ _____ ☐ -777 None →**GO EV4**	☐ 1 Yes →**GO EV4** ☐ 2No	☐ 1 Lack of resource ☐ 2 Lack of machinery ☐ 3 Lack of time ☐ 4 Lack of coordination ☐ 5 Other
Event 4 ☐1 Hail ☐7 Rotten ☐2 Drought ☐8 Cob theft ☐3 Flood ☐9 Plagues	From |__|__|/|__|__|/2015 to |__|__|/|__|__|/2015	|__|__|.|__|__| t	Strategy 1: _____ _____ _____	☐ 1 Yes →**GO ES2** ☐ 2No	☐ 1 Lack of resource ☐ 2 Lack of machinery ☐ 3 Lack of time ☐ 4 Lack of coordination ☐ 5 Other:

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☐4 Frost ☐5 Fire ☐6 Root lodging	☐10 Problems with seed drill ☐11 Other:_____	☐−888 DK		Strategy 2: _____ _____ _____ ☐ -777 None →**GO S.2.4**	☐ 1 Yes **→GO S. 2.4** ☐ 2No	☐ 1 Lack of resource ☐ 2 Lack of machinery ☐ 3 Lack of time ☐ 4 Lack of coordination ☐ 5 Other

2.4 Production and sale of forage

2.4.1 What did you do with your forage?	2.4.2 What percentage of your forage was used to…? **VERIFY THAT THE SUM IS 100%**	2.4.3 How much did you get paid in total for selling the forage of your test hectare?	2.4.4 Did you use your forage as payment in kind for silage, packing, mowing or cutting jobs?	2.4.5 Which of the following jobs did you pay in kind for?	2.4.6 What was the approximate cost of this job?	2.4.7 How many baled forages did you produce in the test hectare?	2.4.8 How many baled forages did you sell?	2.4.9 What was the selling price per bale?	2.4.10 What was the total cost to silage the test hectare?
☐ 1 Incorporated into the soil ☐ 2 Packed for personal use ☐ 3 Packed for sale/exchange ☐ 4 Grounded for personal use ☐ 5 Grounded for sale/exchange ☐ 6 Residual for personal use ☐ 7 Residual for sale/exchange ☐ 8 Silaged for personal use ☐ 9 Silaged for sale/exchange ☐ 10 Other	1 |__|__|__|% 2 |__|__|__|% 3 |__|__|__|% 4 |__|__|__|% 5 |__|__|__|% 6 |__|__|__|% 7 |__|__|__|% 8 |__|__|__|% 9 |__|__|__|% 10|__|__|__|%	|__|__|__|__|$ ☐ -777 Didn't sell ☐ -888. DK ☐ -999. DA	☐ 1 Yes ☐ 2 No **→GO TO 2.4.7**	☐ 1 Silaged ☐ 2 Packing ☐ 3 Silaged ☐ 4 Cutting ☐ 5 Other _____	|__|__|__|__|$ |__|__|__|__|$ |__|__|__|__|$ |__|__|__|__|$ |__|__|__|__|$	|__|__|__|__| Bales ☐ -777 Didn't produce bales **→GO TO 2.4.10** ☐ -888 DK ☐ -999 DA	|__|__|__|__| Bales ☐ -777 Didn't sell **→GO TO S.2.5** ☐ -888 DK ☐ -999 DA	|__|__|.|__||__| $/bale ☐ -888 DK ☐ -999 DA	|__|__|__|__| $/ha ☐ -777 Didn't silage

2.5 Maize Harvest Machinery

2.5.1 Was the harvest carried out mechanically or manually?	2.5.2 Was the thresher of QFD, owned or rented?	2.5.3 What was the per hectare cost of threshing?	2.5.4 What was the per hectare cost of the diesel?	2.5.5 How much did you pay or spend in the maize transportation from the plot to your house/silo?	2.5.6 Did you have any problem with the thresher? **LISTEN AND CHECK ALL THAT APPLY**	2.5.7 How much area did you harvest with thresher?	2.5.8 By any chance, did you know the owner of the thresher?	2.5.9 Did the owner of the thresher sow before you?	2.5.10 Does the owner of the thresher have an irrigation system?

☐1 Mechanical ☐2 Manual **→GO TO 2.5.5** ☐ 3 Both ☐ -777 Silaged **→GO TO S.4**	☐1 Owned **→GO TO 2.5.4** ☐ 2 Rented ☐ 3 QFD **→GO TO 2.5.6**	|__|__|__|__| $/ha **→GO TO 2.5.5** ☐ -888 DK ☐ -999 DA	|__|__|__|__| $/ha ☐ -888 DK ☐ -999 DA	|__|__|__|__|$ ☐ -777 QFD ☐ -888 DK ☐ -999 DA **→ SI LA COSECHA FUE MANUAL PASAR A LA 2.5.11**	☐ 1 Broken grain ☐ 2 Dirty maize ☐ 3 Left maize with grains ☐ 4 Machine driver was rude ☐ 5 Machine stopped working ☐ 6 Machine driver didn't work well ☐7 Other: _____ ☐ -777 Didn't have problems ☐ -888 DK ☐ -999 DA	|__|.|__|__| ha	☐ 1 Yes ☐ 2 No ☐ -777 owned machinery **→GO TO 2.5.11**	☐ 1 Yes ☐ 2 No ☐ -888 DK	☐ 1 Yes ☐ 2 No ☐ -888 DK

Producer's ID |__|__|-|__|__|-||__|__|

2.5.11 Was the shelling carried out manually or with a sheller?	2.5.12 Was the sheller from QFD, owned or rented?	2.5.13 What was the per ton cost of the sheller rent?	2.5.14 What was the total cost of fuel for the sheller?	2.5.15 Did you have any problem with the sheller?
☐ 1 Manually →**GO TO 2.5.16** ☐ 2 Sheller ☐ -777 Threshed →**GO TO 2.5.16** ☐ -888 DK ☐ -999 DA	☐1 Owned → **GO TO 2.5.14** ☐2 Borrowed → **GO TO 2.5.14** ☐3 Rented ☐4 QFD →**GO TO 2.5.15**	|__|__|__|__| $/t →**GO TO 2.5.15** ☐ -888 DK ☐ -999 DA	|__|__|__|__| $ ☐ -777 It's electric ☐ -888 DK ☐ -999 DA	☐ 1 Broken Grain ☐ 2 Dirty maize of residues ☐ 3 Machine left grains in the corncob ☐ 4 Other_____ ☐ -777 Didn't have problems ☐ -888 DK ☐ -999 DA

2.5.16 How did you harvest the rest of the plot?	2.5.17 What did you do in order to not mix the grain/plants of the test hectare with the rest of your crops? **LISTEN AND CHECK ALL THAT APPLY**	2.5.18 Is it probable that plants and cobs that didn't belong to the test hectare were included in the threshing or shelling carried out by QFD?	2.5.19 Do you think that the other producers could distinguish between the test hectare and the rest pf the plot?
☐1 Mechanical ☐ 2 Manual ☐ 3 Both ☐ -777 the plot only contained the demonstrative area ☐ -888 Silaged	☐ 1 It was the only ha of maize ☐ 2 It was the only ha in which I sowed that type of maize ☐ 3 I used QFD sacks ☐ 4 I stored them in different places of the house ☐ 5 I cut them in different dates ☐ 6 The ha was well defined ☐ -777 It did mix ☐Other:_____ _____ _____	☐ 1 Yes ☐ 2 No ☐ -777 Producer harvested by himself ☐ -888 DK ☐ -999 DA	☐ 1 Yes ☐ 2 No ☐ -888 DK ☐ -999 DA

Producer's ID |__|__|-|__|__|-||__|__|

2.6 Labor

ENUMERATOR READ I will now ask you to think about all the tasks that you did during harvest of your **test hectare** **[TREATMENT PLOT]** in the 2015 Spring-Summer cycle and tell me how much time and labor it took to carry it out. Please don't take account of the QFD or IPAMPA plant personnel.

2.6.1 Including yourself, how many people labored in tasks of mowing?	2.6.2 Including yourself, how many people labored in task of cutting?	2.6.3 Including yourself, how many people labored in tasks of threshing?	2.6.4 Including yourself, how many people labored in tasks of shelling?	2.6.5 **ENTER THE TOTAL NUMBER OF WORKERS (ADD 2.6.1 TO 2.6.4) THIS TOTAL MUST AGREE WITH THE NUMBER OF CHECKED BOXES IN QUESTION 2.6.6**
|__|__| ☐ -777 Didn't mow	|__|__| ☐ -777 Didn't cut	|__|__| ☐ -777 Didn't thresh	|__|__| ☐ -777 Didn't shell	|__|__|

[NAME]	2.6.6 **[NAME]** is a relative or a laborer?	2.6.7 In which stages did he/she participate in **[NAME]**? **[ACTIVITY]**	2.6.8 How many days did he/she work during **[ACTIVITY]?**	2.6.9 On average, what was the day's wage to **[NAME]?**	2.6.10 Who and how the payment was made? **CHECK ALL THAT APPLY** 1 QFD paid in cash 2.Producer paid in cash 3.Producer paid in cash 4 Unpaid work 5 Included in the rent
Producer		1 ☐ mowing	|__|__|		
		2 ☐ cutting	|__|__|	|__|__|__|$	☐ 1 QFD ☐ 2 P. CASH ☐ 3 P. IN KIND ☐ 4.NO ☐ 5.Rent
		3 ☐ threshing	|__|__|		
		4 ☐ shelling	|__|__|		
Worker 1	1 ☐ relative 2 ☐ laborer	1 ☐ mowing	|__|__|	|__|__|__|$	☐ 1 QFD ☐ 2 P. CASH. ☐ 3 P. IN KIND ☐ 4 NO ☐ 5 Rent
		2 ☐ cutting	|__|__|	|__|__|__|$	☐ 1 QFD ☐ 2 P. CASH. ☐ 3 P. IN KIND ☐ 4 NO ☐ 5 Rent
		3 ☐ threshing	|__|__|	|__|__|__|$	☐ 1 QFD ☐ 2 P. CASH. ☐ 3 P. IN KIND ☐ 4 NO ☐ 5 Rent
		4 ☐ shelling	|__|__|	|__|__|__|$	☐ 1 QFD ☐ 2 P. CASH. ☐ 3 P. IN KIND ☐ 4 NO ☐ 5 Rent
Worker 2	1 ☐ relative 2 ☐ laborer	1 ☐ mowing	|__|__|	|__|__|__|$	☐ 1 QFD ☐ 2 P. CASH. ☐ 3 P. IN KIND ☐ 4 NO ☐ 5 Rent
		2 ☐ cutting	|__|__|	|__|__|__|$	☐ 1 QFD ☐ 2 P. CASH. ☐ 3 P. IN KIND ☐ 4 NO ☐ 5 Rent
		3 ☐ threshing	|__|__|	|__|__|__|$	☐ 1 QFD ☐ 2 P. CASH. ☐ 3 P. IN KIND ☐ 4 NO ☐ 5 Rent
		4 ☐ shelling	|__|__|	|__|__|__|$	☐ 1 QFD ☐ 2 P. CASH. ☐ 3 P. IN KIND ☐ 4 NO ☐ 5 Rent
Worker 3	1 ☐ relative 2 ☐ laborer	1 ☐ mowing	|__|__|	|__|__|__|$	☐ 1 QFD ☐ 2 P. CASH. ☐ 3 P. IN KIND ☐ 4 NO ☐ 5 Rent
		2 ☐ cutting	|__|__|	|__|__|__|$	☐ 1 QFD ☐ 2 P. CASH. ☐ 3 P. IN KIND ☐ 4 NO ☐ 5 Rent
		3 ☐ threshing	|__|__|	|__|__|__|$	☐ 1 QFD ☐ 2 P. CASH. ☐ 3 P. IN KIND ☐ 4 NO ☐ 5 Rent
		4 ☐ shelling	|__|__|	|__|__|__|$	☐ 1 QFD ☐ 2 P. CASH. ☐ 3 P. IN KIND ☐ 4 NO ☐ 5 Rent
Worker 4	1 ☐ relative 2 ☐ laborer	1 ☐ mowing	|__|__|	|__|__|__|$	☐ 1 QFD ☐ 2 P. CASH. ☐ 3 P. IN KIND ☐ 4 NO ☐ 5 Rent
		2 ☐ cutting	|__|__|	|__|__|__|$	☐ 1 QFD ☐ 2 P. CASH. ☐ 3 P. IN KIND ☐ 4 NO ☐ 5 Rent
		3 ☐ threshing	|__|__|	|__|__|__|$	☐ 1 QFD ☐ 2 P. CASH. ☐ 3 P. IN KIND ☐ 4 NO ☐ 5 Rent
		4 ☐ shelling	|__|__|	|__|__|__|$	☐ 1 QFD ☐ 2 P. CASH. ☐ 3 P. IN KIND ☐ 4 NO ☐ 5 Rent
Worker 5	1 ☐ relative 2 ☐ laborer	1 ☐ mowing	|__|__|	|__|__|__|$	☐ 1 QFD ☐ 2 P. CASH. ☐ 3 P. IN KIND ☐ 4 NO ☐ 5 Rent
		2 ☐ cutting	|__|__|	|__|__|__|$	☐ 1 QFD ☐ 2 P. CASH. ☐ 3 P. IN KIND ☐ 4 NO ☐ 5 Rent
		3 ☐ threshing	|__|__|	|__|__|__|$	☐ 1 QFD ☐ 2 P. CASH. ☐ 3 P. IN KIND ☐ 4 NO ☐ 5 Rent
		4 ☐ shelling	|__|__|	|__|__|__|$	☐ 1 QFD ☐ 2 P. CASH. ☐ 3 P. IN KIND ☐ 4 NO ☐ 5 Rent
Worker 6	1 ☐ relative 2 ☐ laborer	1 ☐ mowing	|__|__|	|__|__|__|$	☐ 1 QFD ☐ 2 P. CASH. ☐ 3 P. IN KIND ☐ 4 NO ☐ 5 Rent
		2 ☐ cutting	|__|__|	|__|__|__|$	☐ 1 QFD ☐ 2 P. CASH. ☐ 3 P. IN KIND ☐ 4 NO ☐ 5 Rent

Producer's ID |__|__|-|__|__|-||__|__|

[NAME]	2.6.6 **[NAME]** is a relative or a laborer?	2.6.7 In which stages did he/she participate in **[NAME]**? **[ACTIVITY]**	2.6.8 How many days did he/she work during **[ACTIVITY]?**	2.6.9 On average, what was the day's wage to **[NAME]?**	2.6.10 Who and how the payment was made? **CHECK ALL THAT APPLY** 1 QFD paid in cash 2.Producer paid in cash 3.Producer paid in cash 4 Unpaid work 5 Included in the rent
		3 ☐ threshing	|__|__|	|__|__|__|$	☐ 1 QFD ☐ 2 P. CASH. ☐ 3.P. IN KIND ☐ 4 NO ☐ 5 Rent
		4 ☐ shelling	|__|__|	|__|__|__|$	☐ 1 QFD ☐ 2 P. CASH. ☐ 3.P. IN KIND ☐ 4 NO ☐ 5 Rent
Worker 7	1 ☐ relative 2 ☐ laborer	1 ☐ mowing	|__|__|	|__|__|__|$	☐ 1. QFD ☐ 2 P. CASH. ☐ 3.P. IN KIND ☐ 4 NO ☐ 5 Rent
		2 ☐ cutting	|__|__|	|__|__|__|$	☐ 1. QFD ☐ 2 P. CASH. ☐ 3.P. IN KIND ☐ 4 NO ☐ 5 Rent
		3 ☐ threshing	|__|__|	|__|__|__|$	☐ 1. QFD ☐ 2 P. CASH. ☐ 3.P. IN KIND ☐ 4 NO ☐ 5 Rent
		4 ☐ shelling	|__|__|	|__|__|__|$	☐ 1. QFD ☐ 2 P. CASH. ☐ 3.P. IN KIND ☐ 4 NO ☐ 5 Rent
Worker 8	1 ☐ relative 2 ☐ laborer	1 ☐ mowing	|__|__|	|__|__|__|$	☐ 1. QFD ☐ 2 P. CASH. ☐ 3.P. IN KIND ☐ 4 NO ☐ 5 Rent
		2 ☐ cutting	|__|__|	|__|__|__|$	☐ 1. QFD ☐ 2 P. CASH. ☐ 3.P. IN KIND ☐ 4 NO ☐ 5 Rent
		3 ☐ threshing	|__|__|	|__|__|__|$	☐ 1. QFD ☐ 2 P. CASH. ☐ 3.P. IN KIND ☐ 4 NO ☐ 5 Rent
		4 ☐ shelling	|__|__|	|__|__|__|$	☐ 1. QFD ☐ 2 P. CASH. ☐ 3.P. IN KIND ☐ 4 NO ☐ 5 Rent
Worker 9	1 ☐ relative 2 ☐ laborer	1 ☐ mowing	|__|__|	|__|__|__|$	☐ 1. QFD ☐ 2 P. CASH. ☐ 3.P. IN KIND ☐ 4 NO ☐ 5 Rent
		2 ☐ cutting	|__|__|	|__|__|__|$	☐ 1. QFD ☐ 2 P. CASH. ☐ 3.P. IN KIND ☐ 4 NO ☐ 5 Rent
		3 ☐ threshing	|__|__|	|__|__|__|$	☐ 1. QFD ☐ 2 P. CASH. ☐ 3.P. IN KIND ☐ 4 NO ☐ 5 Rent
		4 ☐ shelling	|__|__|	|__|__|__|$	☐ 1. QFD ☐ 2 P. CASH. ☐ 3.P. IN KIND ☐ 4 NO ☐ 5 Rent

3. HARVEST, PRODUCTION AND LABOR IN THE <u>TESTIMONY PLOT OR REST OF THE PLOT</u>

ENUMERATOR: only use the appendix of this section if the farmer sowed another thing in his/her test hectare. Verify the list and check accordingly

- |__| Option 1: The rest of the plot where the trial hectare was **[TREATMENT PLOT]** located in **[PLOT LOCALITY]**.
- |__| Option 2: Your plot **[CONTROL PLOT]** located in **[PLOT LOCALITY]**.

ENUMERATOR READ: We are going to verify the information about production and disasters.

Producer's ID |__|__|-|__|__|-||__|__|

4. CHANGES IN PRACTICES, SATISFACTION & TRUST 2015

4.0 Subsidies and Income 2015

4.0.1. Did you receive any support for drought loss?		4.0.2. How much money did you receive in total from this support?	4.0.3. Did you use this support in the test hectare **[TREATMENT PLOT]** in the Spring-Summer 2015 cycle?	
☐ 1 Yes ☐ 2 No → **GO 4.0.4**	☐-888 DK ☐-999 DA	|__|__|__|__|__| MXN	☐ 1 Yes ☐ 2 No	☐-888 DK ☐-999 DA ☐-777 didn't sow maize
4.0.4. Did you receive any support from PROCAMPO in 2015?		4.0.5. For how many hectares the support was granted to?	4.0.6. Did you used this support in the test hectare **[TREATMENT PLOT]** in the Spring-Summer 2015 cycle?	
☐ 1 Yes ☐ 2 No→ **GO 4.0.7**	☐-888 DK ☐-999 DA	|__|__| ha	☐ 1 Yes ☐ 2 No	☐-888 DK ☐-999 DA ☐-777 didn't sow maize
4.0.7. Did you receive PIMAF in 2015?		4.0.8. For how many hectares the support was granted to?	4.0.9. Did you used this support in the test hectare **[TREATMENT PLOT]** in the Spring-Summer 2015 cycle?	
☐ 1 Yes ☐ 2No → **GO 4.0.10**	☐-888 DK ☐-999 DA	|__|__| ha	☐ 1 Yes ☐ 2 No	☐-888 DK ☐-999 DA ☐-777 didn't sow maize

4.0.10. Did you receive any support for hybrid seed?	4.0.11. What type of support did you get?	4.0.12. In which seed type did they offer the subsidy? **SEE CATALOGUE WITE DOWN ALL THE ONES THE PRODUCER INDICATES**	4.0.13. How much did you pay for the seeds bulge?	4.0.14. How many bulges did you buy?	4.0.15. Did you used this seeds in the test hectare **[TREATMENT PLOT]** in the Spring-Summer 2015 cycle?
☐ 1. Yes ☐ 2. No → **GO TO 4.0.16** ☐-888 DK ☐-999 DA	☐ 1 Free hybrid seeds ☐ 2 Subsidized hybrid seeds	☐ 1 H-C8	|__|__|__|__|.|__|__|$	|__|__| bulges	☐ 1 Yes ☐ 2 No
		☐ 2 Gladiador	|__|__|__|__|.|__|__|$	|__|__| bulges	☐ 1 Yes ☐ 2 No
		☐ 3 722	|__|__|__|__|.|__|__|$	|__|__| bulges	☐ 1 Yes ☐ 2 No
		☐ 4 Z60	|__|__|__|__|.|__|__|$	|__|__| bulges	☐ 1 Yes ☐ 2 No
		☐ 5 Faisán	|__|__|__|__|.|__|__|$	|__|__| bulges	☐ 1 Yes ☐ 2 No
		☐ 6 Other:_____	|__|__|__|__|.|__|__|$	|__|__| bulges	☐ 1 Yes ☐ 2 No
		☐ 1 H-C8	|__|__|__|__|.|__|__|$	|__|__| bulges	☐ 1 Yes ☐ 2 No
		☐ 2 Gladiador	|__|__|__|__|.|__|__|$	|__|__| bulges	☐ 1 Yes ☐ 2 No
		☐ 3 722	|__|__|__|__|.|__|__|$	|__|__| bulges	☐ 1 Yes ☐ 2 No
		☐ 4 Z60	|__|__|__|__|.|__|__|$	|__|__| bulges	☐ 1 Yes ☐ 2 No
		☐ 5 Faisán	|__|__|__|__|.|__|__|$	|__|__| bulges	☐ 1 Yes ☐ 2 No
		☐ 6 Other:_____	|__|__|__|__|.|__|__|$	|__|__| bulges	☐ 1 Yes ☐ 2 No

4.0.16. Did you receive the subsidies in prices program from the Tlaxcala Government?	4.0.17. Which of the following fertilizers did you subsidize? **MARQUE TODAS LAS QUE APLIQUEN**	4.0.18. How many bulges did you buy?	4.0.19. How much did you pay for a 50 kg bulge?
☐ 1 Yes ☐ 2 No → **S.4.0.20** ☐-888 DK ☐-999 DA	☐1. Urea or White	|__|__|__| bulges	|__|__|__|.|__|__|$ per bulge
	☐2. DAP or Black	|__|__|__| bulges	|__|__|__|.|__|__|$ per bulge
	☐3. KCL or Red	|__|__|__| bulges	|__|__|__|.|__|__|$ per bulge
	☐4. Granubor o Boron	|__|__|__| bulges	|__|__|__|.|__|__|$ per bulge
	☐5. Ammonium sulfate	|__|__|__| bulges	|__|__|__|.|__|__|$ per bulge
	☐6. Soil improvers	|__|__|__| bulges	|__|__|__|.|__|__|$ per bulge
	☐7. Government's mixture	|__|__|__| bulges	|__|__|__|.|__|__|$ per bulge
	☐8. Other_____	|__|__|__| bulges	|__|__|__|.|__|__|$ per bulge

Producer's ID |__|__|-|__|__|-||__|__|

Income 2015

ENUMERATOR READ: I will now ask you to think in all the activities that you performed from **January to December of 2015** for which you obtained a payment.

[SOURCE]	4.0.20. In this period, did you obtain any payment from [SOURCE]	4.0.21. How much money did you obtain [SOURCE]…	4.0.22. Last year how many/much…
1. For maize grain sale in your plots including forage?	☐ 1 Yes ☐ 2 No →GO NEXT SOURCE	….last year |__|__|__|__|__|__|. |__||__|$ ☐-888 DK ☐-999 DA	
2. For other crops or agricultural products from your plots sale?	☐ 1 Yes ☐ 2 No →GO NEXT SOURCE	….last year |__|__|__|__|__|__|. |__||__|$ ☐-888 DK ☐-999 DA	
3. Working for someone else for higher wage (builder, day laborer, etc.)?	☐ 1 Yes ☐ 2 No →GO NEXT SOURCE	….last year |__|__|__|__|__|__|. |__||__|$ ☐-888 DK ☐-999 DA	
4. For animals' sale?	☐ 1 Yes ☐ 2 No →GO NEXT SOURCE	….last year |__|__|__|__|__|__|. |__||__|$ ☐-888 DK ☐-999 DA	
5. Send from abroad?	☐ 1 Yes ☐ 2 No →GO NEXT SOURCE	….last year |__|__|__|__|__|__|. |__||__|$ ☐-888 DK ☐-999 DA	
6. For pension or retirement payment?	☐ 1 Yes ☐ 2 No →GO NEXT SOURCE	….each month |__|__|__|__|__|__|. |__||__|$ ☐-888 DK ☐-999 DA	…month received pension: |__|__| ☐ -888 DK ☐ -999 DA
7. From Oportunidades/ Prospera programs?	☐ 1 Yes ☐ 2 No →GO NEXT SOURCE	….each two months|__|__|__|__|__|__|. |__||__|$ ☐-888 DK ☐-999 DA	…two months periods received pension : |__|__| ☐-888 DK ☐-999 DA
8. From "65 y más" program?	☐ 1 Yes ☐ 2 No →GO NEXT SOURCE	….each two months|__|__|__|__|__|__|. |__||__|$ ☐-888 DK ☐-999 DA	…two months periods received money : |__|__| ☐-888 DK ☐-999 DA
9. Another source (specify) _____	☐ 1 Yes ☐ 2 No →GO NEXT SOURCE	….last year |__|__|__|__|__|__|. |__||__|$ ☐-888 DK ☐-999 DA	

4.1 Changes in Practices 2015

4.1.1. Did you perform any of the following activities in your test hectare of you plot in 2015 **[TREATMENT PLOT]**? **READ ONE BY ONE AND CHECK ALL THAT APPLY**	☐1 Performed fallow ☐2 Performed rake ☐3 Performed subsoiling ☐4 Sowed hybrid seeds ☐5 Used precision seed drill ☐6 Fertilized the sowing ☐7 Applied urea (white) ☐8 Applied DAP (black)	☐9 Applied KCL (red) ☐10 Applied microelements (Zn, B, Mg) ☐11 Performed 2 or more fertilizations ☐12 Used sealer herbicides ☐13 Used herbicides in the crops development ☐14 Used pesticides ☐15 Used foliar fertilizers	☐16 Covered the fertilizer the same day ☐17 Applied fertilizer with hose ☐18 Performed threshing ☐19 Applied YARA fertilizers ☐20 Other_____ ☐-777 didn't sow maize in his/her test hectare →GO A 4.1.3
4.1.2. From the activities that you checked, which of them haven't you performed prior in the **trial ha**?	☐1. Yes→ **INSERT CODE (4.1.1)** ____, ____, ____, _____, ____	☐2. None	
4.1.3. Did you perform any of the following activities in your testimony plot in 2015 **[TESTIMONY PLOT]**? **READ ONE BY ONE AND CHECK ALL THAT APPLY**	☐1 Performed fallow ☐2 Performed rake ☐3 Performed subsoiling ☐4 Sowed hybrid seeds ☐5 Used precision seed drill ☐6 Fertilized the sowing	☐9 Applied KCL (red) ☐10 Applied microelements (Zn, B, Mg) ☐11 Performed 2 or more fertilizations ☐12 Used sealer herbicides ☐13 Used herbicides in the crops development	☐16 Covered the fertilizer the same day ☐17 Applied fertilizer with hose ☐18 Performed threshing ☐19 Applied YARA fertilizers ☐20 Other ☐-777 doesn't have testimony plot →GO

Producer's ID |__|__|-|__|__|-||__|__|

	☐7 Applied urea (white) ☐8 Applied DAP (black)	☐14 Used pesticides ☐15 Used foliar fertilizers	TO 4.1.5
4.1.4. From the activities that you checked, which of them haven't you performed prior in your **testimony plot**?	☐1. Yes→ **INSERT CODE (4.1.3)** ____, ____, ____, _____, ____	☐2. None ☐-777 Not applicable	
4.1.5. Did you receive recommendations about the maize production in the Spring-Summer cycle?	☐1. Yes ☐2. No → **GO TO 4.1.9**		
4.1.6. Who did those recommendations about the maize production? **CHECK ALL THAT APPLY**	☐1 QFD ☐2 IPAMPA ☐3 Government's technician	☐4 A relative/friend ☐5 Neighbor ☐6 Other: _____	☐-888 DK ☐-999 DA
4.1.7. Which recommendations did they tell you to perform about maize production? **LISTEN AND CHECK ALL THAT APPLY**	☐1 Perform fallow ☐2 Perform rake ☐3 Perform subsoiling ☐4 Sow hybrid seeds ☐5 Use precision seed drill ☐6 Fertilize the showing ☐7 Apply urea (white)	☐8 Apply DAP (black) ☐9 Apply KCL (red) ☐10 Apply microelements (Zn, B, Mg) ☐11 Perform 2 or more fertilizations ☐12 Use sealer herbicides ☐13 Use herbicides in the crops development	☐14 Use pesticides ☐15 Use foliar fertilizers ☐16 Cover fertilizer the same day ☐17 Apply fertilizer with hose ☐18 Perform threshing ☐19 Apply YARA fertilizers ☐20 Other_____
4.1.8. Did you follow the recommendations of the soil analysis (the last year you performed it) in your plot **[TESTIMONY PLOT]**?	☐1 All ☐2 Almost all	☐3 Some ☐4 Few	☐5 None ☐-777 Not applicable ☐-888 DK ☐-999 N
4.1.9. In the test ha, did you do better, worst or same that in the rest of your plots?	☐ 1 Better ☐ 2 Worst ☐ 3 The same in all plots ☐ -777 only have one HA→ **GO TO S. 4.2** ☐ -778 didn't' sow maize in the test ha → **GO TO S. 4.2**		
4.1.10. What do you think about why there was or wasn't a difference?	_____ _____		
4.1.11. Before the drought, do you think that the test ha was doing better, worst or the same than the rest of your plots?	☐ 1 Better ☐ 2 Worst ☐ 3 The same in all plots ☐-777 Didn't experience drought		

4.2 Satisfaction with the PIAFEM program (only for T1 and T4 participants)

ENUMERATOR READ: I will now ask you some questions about the different components of the program and your satisfaction level

4.2.1 Did you receive recommendations about fertilization based on the soil analysis?	☐ 1 Yes ☐ 2 No
4.2.2 Your recommendations were personalized or average?	☐ 1 Personalized ☐ 2 Average ☐-777 Didn't receive rec ☐-888 DK ☐-999 DA
4.2.3 From 1 to 10 How clear were the recommendations?	|__|__| ☐-777 Didn't receive recommendations
4.2.4 From 1 to 10 How useful were the recommendations?	|__|__| ☐-777 Didn't receive recommendations
4.2.5 Did you use the precision seed drill of the program?	☐ 1 Yes ☐ 2 No
4.2.6 From 1 to 10 How would you grade the quality of your sowing?	|__|__| ☐-777 Didn't use the precision seed drill
4.2.7 Did you use the first YARA fertilizers package?	☐ 1 Yes ☐ 2 No
4.2.8 Did you use the second YARA fertilizers package?	☐ 1 Yes ☐ 2 No
4.2.9 From 1 to 10 How would you grade the quality of the YARA fertilizers?	|__|__| ☐-777 Didn't use YARA
4.2.10 When we gave your soil analysis, did free technical assistance was offered? Did you accept it?	☐ 1 Yes → **GO TO 4.2.12** ☐ 2 No

4.2.11 Why didn't you accept the assistance?	☐ 1 Because I didn't have the money to follow your recommendations ☐ 2 Because I already know what my plots need ☐ 3 Because I don't trust in technicians ☐ 4 Because he/she told me to pay for it → How much? _____ $ ☐ 5 Other:_____
4.2.12 Did you ask the technician to go to your plot?	☐ 1 Yes →**GO TO 4.2.14** ☐ 2 No
4.2.13 Why didn't you ask for it?	☐ 1 Because I didn't have the money to follow your recommendations ☐ 2 Because I already know what my plots need ☐ 3 Because I don't trust in technicians ☐ 4 Because he/she told me to pay for it → How much? _____ $ ☐ 5 The technician was the one that contacted me to see the plot ☐ 6 Other:_____
4.2.14 How many times did the technician go with you to your plot?	|__| visits
4.2.15 From 1 to 10 How would you grade the IPAMPA technician visits to your plot?	|__|__| ☐-777 The technician never visited my plot
4.2.16 The technician gave three courses in your locality, to how many of the courses did you go?	|__| courses **IF ANSWER IS 3→ GO TO 4.2.18**
4.2.17 Why didn't you go to all three courses?	☐ 1 Because I work in that time ☐ 2 Because I didn't have time ☐ 3 Because I wasn't invited to the courses ☐ 4 Because I don't understand the technician ☐ 5 Because in the courses I didn't learn anything interesting ☐ 6 Other:_____
4.2.18 From 1 to 10 How would you grade the technician's courses?	|__|__| ☐-777 Didn't go to any course
4.2.19 From 1 to 10 How would you grade the recommendations in general from your technician?	|__|__| ☐-777 The technician never gave recommendations
4.2.20 What do you think about the program in general?:	

4.3 Trust

ENUMERATOR READ: If one of the next persons or organizations gives you a recommendation about how to **sow, fertilize and/or harvest, How much do you trust in them?**

4.3.1 YARA **READ OPTIONS**	4.3.2 Qué Funciona para el Desarrollo (QFD) **READ OPTIONS**	4.3.3 Neighbors **READ OPTIONS**	4.3.4 IPAMPA Office **READ OPTIONS**
☐1 Always trust them ☐2 Almost always trust them ☐3 Sometimes trust them ☐4 Rarely trust them ☐5 Never trust them ☐-777 Doesn't know them ☐-888 DK	☐1 Always trust them ☐2 Almost always trust them ☐3 Sometimes trust them ☐4 Rarely trust them ☐5 Never trust them ☐-777 Doesn't know them ☐-888 DK	☐1 Always trust them ☐2 Almost always trust them ☐3 Sometimes trust them ☐4 Rarely trust them ☐5 Never trust them ☐-777 Doesn't know them ☐-888 DK	☐1 Always trust them ☐2 Almost always trust them ☐3 Sometimes trust them ☐4 Rarely trust them ☐5 Never trust them ☐-777 Doesn't know them ☐-888 DK

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☐-999 DA	☐-999 DA	☐-999 DA	☐-999 DA

4.4 Beliefs

4.4.1 If you had a plot that is doing well and another one that is doing normal and a drought is approaching, to which plot would you more resources and commitment?	☐ 1 Plot that is doing well ☐ 2 Plot that is doing normal ☐ 3 Neither ☐ 4 Both equally
4.4.2 In which stage, a 20 days' drought would be more harmful to productivity?	☐1 Sowing ☐2 When the ear of the maize is emerging ☐3 When it's silking ☐4 Other:_____
4.4.3 What is the probability of performing soil analysis in any of your plots in the next five years? SHOW TABLE	☐1 Impossible ☐2 Unlikely ☐3 Maybe yes, maybe not ☐4 Likely ☐5 Certain
I will now show you two different fertilizers packages SHOW TABLE: Package 1: Urea (kg) 270; DAP (kg) 55; KCl (kg) 0; Micro(kg) 0; Total (kg) 325 Package 2: Urea (kg) 180; DAP (kg) 35; KCl (kg) 35; Micro(kg) 35; Total (kg) 285	Package 1 recommends you to apply 325 kg of fertilizers per hectare: 270 kg of Urea (White), 55 kg of DAP (Black), 0 kg of Potassium Chloride (Red) and 0 kg of Micronutrients Package 2 recommends you to apply 285 kg of fertilizers per hectare: 180 kg of Urea (White), 35 kg of DAP (Black), 35 kg of Potassium Chloride (Red) and 35 kg of Micronutrients
4.4.4 Imagine that you have a plot with 2 hectares, in one hectare you apply package 1 and in the other you apply package 2, do you think that there will be a difference in the crops or that both will produce the same?	☐1 There will be a difference between productivities of the two hectares ☐2 Both hectares will produce the same **-> GO TO 4.4.6**
4.4.5 Which of the two hectares will have a greater maize output?	☐1 Hectare where package 1 was applied ☐2 Hectare where package 2 was applied
4.4.6 Why?	☐1 Because package 1 has more kilograms in total ☐2 Because package 1 has more Urea and DAP ☐3 Because package 2 has more micronutrients ☐4 Because package 2 is more balanced ☐5 Because the land isn't very productive ☐5 Because of bad weather ☐6. Other:_____
4.4.7 You could buy a package with 260 kg of Urea + 55 kg of DAP + 10kg of KCL in YARA for a cost of $2,400, while in the government's storehouses you could buy it for approximately $1,820 pesos. Which one would you choose?	☐1 Yara package for $2,400 pesos ☐2 Government package for $1.820 pesos
4.4.8 How much do you think you would get paid for a ton of maize in February of the next year?	_____ $/t
Now imagine that you have $8,500 pesos to invest in a maize hectare considering that the weather is good and two technological packages exists.	The first one is for a 4 tons per hectare production, with a cost of $8,500 pesos including labor tasks. The second is for a 3 tons per hectare production, with a cost of $4,500 pesos including labor tasks.
4.4.9 Which package would you buy?	☐1 package 1 ☐2 package 2
4.4.10 Why?	☐1 Because package 1 has greater productivity ☐2 Because package 2 costs less ☐3 Because package 2 gives me more profit ☐4 Other:_____

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FERTILIZER	**4.4.11** ¿If you would like to buy **[fertilizer]** for your plot, where would you go to get it?	**4.4.12** How much time would it take to get to that place?	**4.4.13**. What would be the costs per bulge of 50 kg? -888 DK -999 DA
UREA (white)	☐1 Government's storehouse in locality ☐2 Distributor in the locality ☐3 Government's storehouse in a neighboring locality ☐4 Distributor in a neighboring locality ☐5 YARA Huamantla ☐6 YARA Cuapiaxtla ☐7 Other State:_____ ☐8 Other town:_____ ☐9 Other:_____	|__|__| hrs |__|__| min	|__|__|__|__|__|$
DAP (black)	☐1 Government's storehouse in locality ☐2 Distributor in the locality ☐3 Government's storehouse in a neighboring locality ☐4 Distributor in a neighboring locality ☐5 YARA Huamantla ☐6 YARA Cuapiaxtla ☐7 Other State:_____ ☐8 Other town:_____ ☐9 Other:_____	|__|__| hrs |__|__| min	|__|__|__|__|__|$
KCL (red)	☐1 Government's storehouse in locality ☐2 Distributor in the locality ☐3 Government's storehouse in a neighboring locality ☐4 Distributor in a neighboring locality ☐5 YARA Huamantla ☐6 YARA Cuapiaxtla ☐7 Other State:_____ ☐8 Other town:_____ ☐9 Other:_____	|__|__| hrs |__|__| min	|__|__|__|__|__|$
MICRONUTRIENTS (granubor, boron, zinc, minab-r, etc.)	☐1 Government's storehouse in locality ☐2 Distributor in the locality ☐3 Government's storehouse in a neighboring locality ☐4 Distributor in a neighboring locality ☐5 YARA Huamantla ☐6 YARA Cuapiaxtla ☐7 Other State:_____ ☐8 Other town:_____ ☐9Other:_____ ☐-777 doesn't know what micronutrients are	|__|__| hrs |__|__| min	|__|__|__|__|__|$

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ENUMERATOE READ: A personalized soil analysis consists of taking samples from your plot and the results are exclusively of your plot; in the average soil analysis case, the samples are taken from several plots of the locality and the same result is given to all the participants.

Do I make myself clear about what I've explained? ☐ 1 Yes ☐ 2 No **-> REPEAT UNTIL THE INFROMATION IS CLEAR TO HIM/HER**

FOR THE NEXT QUESTIONS FIRST COMPLETE THE QUESTION WITH "Personalized of you plot" **AND THEN ASK** "and for the average of your locality's plots"

	personalized	**average**
4.4.11 How much would you be willing to pay for recommendations about fertilization from a soil analysis that is…?	|__|__|__|__|.|__|__|$ ☐-888 DK ☐-999 DA	|__|__|__|__|.|__|__|$ ☐-888 DK ☐-999 DA
4.4.12 What is the probability to follow the recommendations about fertilization based on the soil analysis that is…? **SHOW TABLE**	☐1.Impossible ☐2.Unlikely ☐3.Maybe yes, maybe not ☐4.Likely ☐5.Certain	☐1.Impossible ☐2.Unlikely ☐3.Maybe yes, maybe not ☐4.Likely ☐5.Certain
4.4.13 What are the benefits of following the recommendations based on the soil analysis that is…? **LISTEN AND CHECK ALL THAT APPLY**	☐1.Tells me which nutrients my plot needs ☐2.Tells me which fertilizers my plot needs ☐3.Because I can use the recommendations in my other plots ☐4.Because I can share it with other "ejidatarios" (communal land holders)/smallholders ☐5.Other:_____ ☐-888 DK ☐-999 DA	☐1.Tells me which nutrients my plot needs ☐2.Tells me which fertilizers my plot needs ☐3.Because I can use the recommendations in my other plots ☐4.Because I can share it with other "ejidatarios"(communal land holders)/smallholders ☐5.Other:_____ ☐-888 DK ☐-999 DA
4.4.14 Why would you NOT follow the recommendations based on the soil analysis that is…? **LISTEN AND CHECK ALL THAT APPLY**	☐1. Because the recommended fertilizers are expensive ☐2. Because he/she doesn't have the resources ☐3. Because he/she doesn't know where to find the mixtures ☐4. Doesn't trust in the recommendations ☐5. Because my land is different from the rest ☐6. Because is more likely that doesn't work ☐7. Other:_____ ☐-888 DK ☐-999 DA	☐1. Because the recommended fertilizers are expensive ☐2. Because he/she doesn't have the resources ☐3. Because he/she doesn't know where to find the mixtures ☐4. Doesn't trust in the recommendations ☐5. Because my land is different from the rest ☐6. Because is more likely that doesn't work ☐7. Other:_____ ☐-888 DK ☐-999 DA

4.4.15 From the following types of recommendations about fertilization, which one would you choose if you had to pay for it?	☐ Option 1: recommendations based in a soil analysis of your plot ☐ Option 2: recommendations based in a soil analysis of your locality's plots		
4.4.16 Imagine that a Nonprofit Organization offers you two types of recommendations about fertilization for free. Listen the options carefully and tell me, which one would you choose?	☐ Option 1: personalized recommendations each 5 years ☐ Option 2: average recommendations each year		
4.4.17 How much would you be willing to pay for subsoiling a hectare?	|__|__|__|__|.|__|__|$/ha	☐-888 DK	☐-999 DA
4.4.18 How much would you be willing to pay for fallow a hectare?	|__|__|__|__|.|__|__|$/ha	☐-888 DK	☐-999 DA
4.4.19 How much would you be willing to pay for renting a precision seed drill for a hectare?	|__|__|__|__|.|__|__|$/ha	☐-888 DK	☐-999 DA
4.4.20 How much would you be willing to pay for a bag with 60,000 hybrid seeds?	|__|__|__|__|.|__|__|$/ha	☐-888 DK	☐-999 DA
4.4.21 How much would you be willing to pay for technical assistance from an agronomical engineer during sowing and fertilization in a hectare?	|__|__|__|__|.|__|__|$/ha	☐-888 DK	☐-999 DA

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4.5 Soil analysis and recommendations 2015

4.5.1 If you would like to produce 4.5 tons of maize, how many times would you use chemical fertilizers?	º|__| times ☐-777. Doesn't use fertilizers → **GO TO S.5** ☐-888 DK ☐-999 DA				
4.5.2 In which stages would you apply chemical fertilizers?	☐1. In sowing ☐2. In first hoeing ☐3. In second hoeing		☐4. In the fourth true leaf ☐5. Glean (tap) ☐6. Young maize	☐7 Other_____ _____	
4.5.3 Which fertilizers would you use in **[STAGE]** and what amount per hectare? **LISTEN AND CHECK ALL THAT APPLY**	1. Sowing	☐1.Urea (white) ☐2.DAP (black) ☐3.KCL (red)	|__|__|__|__| kg |__|__|__|__| kg |__|__|__|__| kg	☐4. Microelements ☐5. Other (specify) _____	|__|__|__|__| kg |__|__|__|__| kg
	2. 1st hoeing	☐1.Urea (white) ☐2.DAP (black) ☐3.KCL (red)	|__|__|__|__| kg |__|__|__|__| kg |__|__|__|__| kg	☐4. Microelements ☐5. Other (specify) _____	|__|__|__|__| kg |__|__|__|__| kg
	3. 2nd hoeing	☐1.Urea (white) ☐2.DAP (black) ☐3.KCL (red)	|__|__|__|__| kg |__|__|__|__| kg |__|__|__|__| kg	☐4. Microelements ☐5. Other (specify) _____	|__|__|__|__| kg |__|__|__|__| kg
	4. 4th true leaf	☐1.Urea (white) ☐2.DAP (black) ☐3.KCL (red)	|__|__|__|__| kg |__|__|__|__| kg |__|__|__|__| kg	☐4. Microelements ☐5. Other (specify) _____	|__|__|__|__| kg |__|__|__|__| kg
	5. Glean	☐1.Urea (white) ☐2.DAP (black) ☐3.KCL (red)	|__|__|__|__| kg |__|__|__|__| kg |__|__|__|__| kg	☐4. Microelements ☐5. Other (specify) _____	|__|__|__|__| kg |__|__|__|__| kg
	6. Young maize	☐1.Urea (white) ☐2.DAP (black) ☐3.KCL (red)	|__|__|__|__| kg |__|__|__|__| kg |__|__|__|__| kg	☐4. Microelements ☐5. Other (specify) _____	|__|__|__|__| kg |__|__|__|__| kg
	7. Other:_____	☐1.Urea (white) ☐2.DAP (black) ☐3.KCL (red)	|__|__|__|__| kg |__|__|__|__| kg |__|__|__|__| kg	☐4. Microelements ☐5. Other (specify) _____	|__|__|__|__| kg |__|__|__|__| kg
4.5.4 Do you have your soil analysis?	☐1. Yes ☐2. No				

5. CHANGES IN TECHNOLOGIES AND EXPECTATIONS 2016

5.1Changes in practices 2016 in all your maize plots

5.1.1 How many plots do you labor in the 2016 Spring-Summer cycle?	|__|__|__|
5.1.2 How many hectares do you labor in the 2016 Spring-Summer cycle?	|__|__|__|
5.1.3 How many plots did you sow with maize in the 2016 Spring-Summer cycle?	|__|__|__| ☐ -777 Didn't sow maize→ **GO TO S.5.2**
5.1.4 How many hectares did you sow with maize in the 2016 Spring-Summer cycle?	|__|__|__|
5.1.5 Did you hire technical assistance from agronomical engineers for your maize plots?	☐ 1 Yes ☐ 2 No → **GO TO 5.1.11**
5.1.6 What is the name of your engineer or the office that will help you in this cycle?	☐ 1 IPAMPA ☐ 2 Other _____:

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From the following plots, in which of them did you sow maize in 2016?

ENUMERATOR FIRST ASK IN WHICH PLOTS FROM THE LAST YEAR WOULD (OR HAD) HE/SHE SOW(ED) MAIZE AGAIN THIS YEAR, IF HE/SHE DIDN'T SOW MAIZE INSERT ZERO IN HECTARE AND CONTINUE WITH THE NEXT PLOT READ:

5.1.7 Plot	5.1.8 Name	5.1.9 Plot's locality	5.1.10 Status	5.1.11 In how many hectares did you sow maize in 2016?	5.1.12 Did you perform subsoiling in 2016?	5.1.13 Did you perform fallow in 2016?	5.1.14 When did you perform the sowing?	5.1.15 How did you perform the sowing? **E: READ OPTIONS**	5.1.16 Did you sow with hybrid seeds?	5.1.17 Did you apply fertilizers to the sowing?	5.1.18 Did you apply sealer herbicide in the week after the sowing?	5.1.19 How many fertilizer implementations have you done until today? (including the sowing)	5.1.20 Did you apply the fertilizers thru broadcasting, with a hose or a fertilizing machine?	5.1.21 Did you cover the fertilizer the same day you used it?	5.1.22 Did you use or do you will use the fertilization formulas that we gave you last year?	5.1.23 At the moment of buying, how would you or how did you request this formula?	5.1.24 Did you use or will you use YARA fertilizers?
.21.68.23.01	**El Ameyal**	**Ejido Las Delicias, Huamantla**	**Treatment**	|__|__|.|__| ha → **IF IT'S ZERO GO TO NEXT PLOT**	☐ 1 Yes ☐ 2 No	☐ 1 Yes ☐ 2 No	|__|__| / |__|__| /2016	☐ 1 Shovel ☐ 2 Animal powered ☐ 3 Conventional Seed drill (Bush) ☐ 4 Precision seed drill (Row)	☐ 1 Yes ☐ 2 No	☐ 1 Yes ☐ 2 No	☐ 1 Yes ☐ 2 No	|__| ☐ -777 Doesn't use chemical fertilizers	☐ 1 Broadcasting ☐ 2 Hose ☐ 3 Fertilizer machine	☐ 1 Yes ☐ 2 No	☐ 1 Yes ☐ 2 No -> **GO TO 5.1.31** ☐ -777 Control-> **GO TO 5.1.31**	☐ 1. Label ☐ 2. Sack ☐ 3. Soil analysis ☐ 4. Other _____	☐ 1 Yes ☐ 2 No
.21.68.23.02	**El Capulín**	**Ejido Las Delicias, Huamantla**	**Control**	|__|__|.|__| ha → **IF IT'S ZERO GO TO NEXT PLOT**	☐ 1 Yes ☐ 2 No	☐ 1 Yes ☐ 2 No	|__|__| / |__|__| /2016	☐ 1 Shovel ☐ 2 Animal powered ☐ 3 Conventional Seed drill (Bush) ☐ 4 Precision seed drill (Row)	☐ 1 Yes ☐ 2 No	☐ 1 Yes ☐ 2 No	☐ 1 Yes ☐ 2 No	☐ ☐ -777 Doesn't use chemical fertilizers	☐ 1 Broadcasting ☐ 2 Hose ☐ 3 Fertilizer machine	☐ 1 Yes ☐ 2 No	☐ 1 Yes ☐ 2 No -> **GO TO 5.1.31** ☐ -777 Control-> **GO TO 5.1.31**	☐ 1. Label ☐ 2. Sack ☐ 3. Soil analysis ☐ 4. Other _____	☐ 1 Yes ☐ 2 No
.21.68.23.03	**El arbolito**	**Ejido Las Delicias, Huamantla**	**Practices**	|__|__|.|__| ha → **IF IT'S ZERO GO TO NEXT PLOT**	☐ 1 Yes ☐ 2 No	☐ 1 Yes ☐ 2 No	|__|__| / |__|__| /2016	☐ 1 Shovel ☐ 2 Animal powered ☐ 3 Conventional Seed drill (Bush) ☐ 4 Precision seed drill (Row)	☐ 1 Yes ☐ 2 No	☐ 1 Yes ☐ 2 No	☐ 1 Yes ☐ 2 No	|__| ☐ -777 Doesn't use chemical fertilizers	☐ 1 Broadcasting ☐ 2 Hose ☐ 3 Fertilizer machine	☐ 1 Yes ☐ 2 No	☐ 1 Yes ☐ 2 No -> **GO TO 5.1.31** ☐ -777 Control-> **GO TO 5.1.31**	☐ 1. Label ☐ 2. Sack ☐ 3. Soil analysis ☐ 4. Other_____ _____	☐ 1 Yes ☐ 2 No
.21.68.23.04	**La estación**	**Ejido Las Delicias, Huamantla**	**Practices**	|__|__|.|__| ha → **IF IT'S ZERO GO TO NEXT PLOT**	☐ 1 Yes ☐ 2 No	☐ 1 Yes ☐ 2 No	|__|__| / |__|__| /2016	☐ 1 Shovel ☐ 2 Animal powered ☐ 3 Conventional Seed drill (Bush) ☐ 4 Precision seed drill (Row)	☐ 1 Yes ☐ 2 No	☐ 1 Yes ☐ 2 No	☐ 1 Yes ☐ 2 No	|__| ☐ -777 Doesn't use chemical fertilizers	☐ 1 Broadcasting ☐ 2 Hose ☐ 3 Fertilizer machine	☐ 1 Yes ☐ 2 No	☐ 1 Yes ☐ 2 No -> **GO TO 5.1.31** ☐ -777 Control-> **GO TO 5.1.31**	☐ 1. Label ☐ 2. Sack ☐ 3. Soil analysis ☐ 4. Other _____	☐ 1 Yes ☐ 2 No

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READ: Did you sow maize in any other plot in 2016?

5.1.7 Plot	5.1.8 Name	5.1.9 Plot's locality	5.1.10 Status	5.1.11 In how many hectares did you sow maize in 2016?	5.1.12 Did you perform subsoiling in 2016?	5.1.13 Did you perform fallow in 2016?	5.1.14 When did you perform the sowing?	5.1.15 How did you perform the sowing? **E: READ OPTIONS**	5.1.16 Did you sow with hybrid seeds?	5.1.17 Did you apply fertilizers to the sowing?	5.1.18 Did you apply sealer herbicide in the week after the sowing?	5.1.19 How many fertilizer implementations have you done until today? (including the sowing)	5.1.20 Did you apply the fertilizers thru broadcasting, with a hose or a fertilizing machine?	5.1.21 Did you cover the fertilizer the same day you used it?	5.1.22 Did you use or do you will use the fertilization formulas that we gave you last year?	5.1.23 At the moment of buying, how would you or how did you request this formula?	5.1.24 Did you use or will you use YARA fertilizers?
			New plot 2016	|__|__|.|__| ha → **IF IT'S ZERO GO TO NEXT PLOT**	☐ 1 Yes ☐ 2 No	☐ 1 Yes ☐ 2 No	|__|__| / |__|__| /2016	☐ 1 Shovel ☐ 2 Animal powered ☐ 3 Conventional Seed drill (Bush) ☐ 4 Precision seed drill (Row)	☐ 1 Yes ☐ 2 No	☐ 1 Yes ☐ 2 No	☐ 1 Yes ☐ 2 No	|__| ☐ -777 Doesn't use chemical fertilizers	SOWING ☐ 1 Broadcasting ☐ 2 Hose ☐ 3 Fertilizer machine OTHER(S) FERT. ☐ 1 Broadcasting ☐ 2 Hose ☐ 3 Fertilizer machine	☐ 1 Yes ☐ 2 No	☐ 1 Yes ☐ 2 No **-> GO TO 5.1.31** ☐ -777 Control**-> GO TO 5.1.31**	☐ 1. Label ☐ 2. Sack ☐ 3. Soil analysis ☐ 4. Other _____	☐ 1 Yes ☐ 2 No
			New plot 2016	|__|__|.|__| ha → **IF IT'S ZERO GO TO NEXT PLOT**	☐ 1 Yes ☐ 2 No	☐ 1 Yes ☐ 2 No	|__|__| / |__|__| /2016	☐ 1 Shovel ☐ 2 Animal powered ☐ 3 Conventional Seed drill (Bush) ☐ 4 Precision seed drill (Row)	☐ 1 Yes ☐ 2 No	☐ 1 Yes ☐ 2 No	☐ 1 Yes ☐ 2 No	|__| ☐ -777 Doesn't use chemical fertilizers	SOWING ☐ 1 Broadcasting ☐ 2 Hose ☐ 3 Fertilizer machine OTHER(S) FERT. ☐ 1 Broadcasting ☐ 2 Hose ☐ 3 Fertilizer machine	☐ 1 Yes ☐ 2 No	☐ 1 Yes ☐ 2 No **-> GO TO 5.1.31** ☐ -777 Control**-> GO TO 5.1.31**	☐ 1. Label ☐ 2. Sack ☐ 3. Soil analysis ☐ 4. Other _____ __	☐ 1 Yes ☐ 2 No
			New plot 2016	|__|__|.|__| ha → **IF IT'S ZERO GO TO NEXT PLOT**	☐ 1 Yes ☐ 2 No	☐ 1 Yes ☐ 2 No	|__|__| / |__|__| /2016	☐ 1 Shovel ☐ 2 Animal powered ☐ 3 Conventional Seed drill (Bush) ☐ 4 Precision seed drill (Row)	☐ 1 Yes ☐ 2 No	☐ 1 Yes ☐ 2 No	☐ 1 Yes ☐ 2 No	|__| ☐ -777 Doesn't use chemical fertilizers	SOWING ☐ 1 Broadcasting ☐ 2 Hose ☐ 3 Fertilizer machine OTHER(S) FERT. ☐ 1 Broadcasting ☐ 2 Hose ☐ 3 Fertilizer machine	☐ 1 Yes ☐ 2 No	☐ 1 Yes ☐ 2 No **-> GO TO 5.1.31** ☐ -777 Control**-> GO TO 5.1.31**	☐ 1. Label ☐ 2. Sack ☐ 3. Soil analysis ☐ 4. Other_____ _____	☐ 1 Yes ☐ 2 No

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5.1.25 Please indicate me in which plots did you apply urea/white (ENTER THE LAST TWO DIGITS OF THE PLOT'S CODE)	|__|__|, |__|__|, |__|__|, |__|__|, |__|__|,|__|__| ☐ -777 Didn't apply UREA in any of his/her plots
5.1.26 Please indicate me in which plots did you apply dap/black (ENTER THE LAST TWO DIGITS OF THE PLOT'S CODE)	|__|__|, |__|__|, |__|__|, |__|__|, |__|__|,|__|__| ☐ -777 Didn't apply DAP in any of his/her plots
5.1.27 Please indicate me in which plots did you apply kcl/red (ENTER THE LAST TWO DIGITS OF THE PLOT'S CODE)	|__|__|, |__|__|, |__|__|, |__|__|, |__|__|,|__|__| ☐ -777 Didn't apply KCL in any of his/her plots
5.1.28 Please indicate me in which plots did you apply microelements like boron, zinc, magnesium (ENTER THE LAST TWO DIGITS OF THE PLOT'S CODE)	|__|__|, |__|__|, |__|__|, |__|__|, |__|__|,|__|__| ☐ -777 Didn't apply microelements in any of his/her plots
5.1.29 Why do you adopt this new practices only in some plots? ☐ -777 Didn't adopt new practices **-> go to 5.1.38**	
5.1.30 How do you decide in which plots apply the new practices?	
5.1.31 Did you request an agricultural credit for your maize plots in this 2016 Spring-Summer cycle?	☐ 1 Yes ☐ 2 No**-> go to 5.1.40**
5.1.32 Did you obtain it?	☐ 1 Yes ☐ 2 No
5.1.33 Did you contract an agricultural insurance for your maize plots in this 2016 Spring-Summer cycle?	☐ 1 Yes ☐ 2 No

5.2 Maize plot selection 2016

CHOOSE ONE OF THE FOLLOWING OPTIONS; TREATMENT PLOT AS FIRST OPTION IF HE/SHE SOWED MAIZE IN THIS ONE, TESTIMONY PLOT AS SECOND OPTION AND PLOT WITH GREATER MAIZE SURFACE AS LAST OPTION.
IF THE PRODUCER DIDN'T SOW MAIZE IN ANY PLOT CHOOSE THE TREATMENT PLOT FROM THE PROGRAM

☐1 Treatment plot ID |__|__|-|__|__|-|__|__|__||__|__|
☐2 Testimony plot ID |__|__|-|__|__|-|__|__|__||__|__|
☐3 Plot with greater maize surface ID |__|__|-|__|__|-|__|__|__||__|__|
READ: I will now ask you some questions about your plot **[CHOSEN PLOT]**

5.2.1 How many plots do you have in total?	5.2.2 How many hectares are arable?	5.2.3 Which of the following options better describes the situation of the plot? **READ OPTIONS**	5.2.4 What was the last year in which you sowed maize in this plot?	5.2.5 What was the total maize production of the plot in the last year in which you sowed?	5.2.6 On which date did you sow maize?	5.2.7 How humid was your plot during th2 sowing in the 2016 Spring-Summer cycle? **READ OPTIONS**	5.2.8 Did your **[CHOSEN PLOT]** experienced drought after the sowing?	5.2.9 What was the start and finish date of the drought?	5.2.10 On which date did you implement the 1st fertilization after sowing?	5.2.11 ¿On which date did you implement the 2nd fertilization after sowing?
|__|__| ha ☐-888 DK ☐-999 DA	|__|__| ha ☐-888 DK ☐-999 DA	☐1 "Ejidatario" (Communal land holder) ☐2 Owner ☐4 Leaseholder ☐5 Owner's son ☐6 Owner's spouse ☐7. Other:_____ ☐-888 DK ☐-999 DA	|__|__|__|__| ☐-777 it's the first time he/she sow in this plot	|__|__|.|__||__|t ☐-777 it's the first time he/she sow in this plot	|__|__| / |__|__| /2016 ☐ -777Didn't sow maize **→ GO TO 5.2.15**	☐ 1 Low ☐ 2 Sufficient ☐ 3 Excess ☐ -888 DK ☐ -999. DA	☐ 1 Yes ☐ 2 No→ **GO TO 5.2.10**	From |__|__| / |__|__| /2016 UNTIL|__|__| / |__|__| /2016	|__|__| / |__|__| /2016 ☐ -777 Doesn't fertilize	|__|__| / |__|__| /2016 ☐ -777 Doesn't fertilize

Producer's ID |__|__|-|__|__|-||__|__|

5.2.12 Which fertilizers did you use in the sowing, of which brand and what amount?	Product	Brand(s) 1 Agrogen 2 Yara 3 ADM 4 FYPA	Brand(s) 5 Other (Specify) -888 DK -999 DA	Amount	Units	Total Cost
☐-777. Didn't fertilize the sowing→ **GO 5.2.13** ☐ He/she already fertilized	☐1. Urea (white)	|__|		|__|__|__|__|	☐ 1Kg ☐ 2 Bulges (50)	|__|__|__|__|__| $
		|__|		|__|__|__|__|	☐ 1Kg ☐ 2 Bulges (50)	|__|__|__|__|__| $
	☐2. DAP (black)	|__|		|__|__|__|__|	☐ 1Kg ☐ 2 Bulges (50)	|__|__|__|__|__| $
		|__|		|__|__|__|__|	☐ 1Kg ☐ 2 Bulges (50)	|__|__|__|__|__| $
	☐3. KCL (red)	|__|		|__|__|__|__|	☐ 1Kg ☐ 2 Bulges (50)	|__|__|__|__|__| $
		|__|		|__|__|__|__|	☐ 1Kg ☐ 2 Bulges (50)	|__|__|__|__|__| $
	☐4. Triple super phosphate	|__|		|__|__|__|__|	☐ 1Kg ☐ 2 Bulges (50)	|__|__|__|__|__| $
	☐5. Ammonium sulfate	|__|		|__|__|__|__|	☐ 1Kg ☐ 2 Bulges (50)	|__|__|__|__|__| $
	☐6. Microelements	|__|		|__|__|__|__|	☐ 1Kg ☐ 2 Bulges (50)	|__|__|__|__|__| $
	☐7. Other:_____	|__|		|__|__|__|__|	☐ 1Kg ☐ 2 Bulges (50)	|__|__|__|__|__| $
	☐8. Other:_____	|__|		|__|__|__|__|	☐ 1Kg ☐ 2 Bulges (50)	|__|__|__|__|__| $
5.2.13 Which fertilizers did you use **(or will use)** in the first fertilization after the sowing, of which brand and what amount? ☐-777. Didn't fertilize after the sowing→ **GO 5.2.14** ☐ He/she already fertilized ☐ He/she will fertilize in the next 8 days	☐1. Urea (white)	|__|		|__|__|__|__|	☐ 1Kg ☐ 2 Bulges (50)	|__|__|__|__|__| $
		|__|		|__|__|__|__|	☐ 1Kg ☐ 2 Bulges (50)	|__|__|__|__|__| $
	☐2. DAP (black)	|__|		|__|__|__|__|	☐ 1Kg ☐ 2 Bulges (50)	|__|__|__|__|__| $
		|__|		|__|__|__|__|	☐ 1Kg ☐ 2 Bulges (50)	|__|__|__|__|__| $
	☐3. KCL (red)	|__|		|__|__|__|__|	☐ 1Kg ☐ 2 Bulges (50)	|__|__|__|__|__| $
		|__|		|__|__|__|__|	☐ 1Kg ☐ 2 Bulges (50)	|__|__|__|__|__| $
	☐4. Triple super phosphate	|__|		|__|__|__|__|	☐ 1Kg ☐ 2 Bulges (50)	|__|__|__|__|__| $
	☐5. Ammonium sulfate	|__|		|__|__|__|__|	☐ 1Kg ☐ 2 Bulges (50)	|__|__|__|__|__| $
	☐6. Microelements	|__|		|__|__|__|__|	☐ 1Kg ☐ 2 Bulges (50)	|__|__|__|__|__| $
	☐7. Other:_____	|__|		|__|__|__|__|	☐ 1Kg ☐ 2 Bulges (50)	|__|__|__|__|__| $
	☐8. Other:_____	|__|		|__|__|__|__|	☐ 1Kg ☐ 2 Bulges (50)	|__|__|__|__|__| $

Producer's ID |__|__|-|__|__|-||__|__|

5.2.14 Which fertilizers did you use **(or will use)** in the second fertilization after the sowing, of which brand and what amount?? ☐1 He/she already fertilized ☐ 2 He/she will fertilize in the next 8 days ☐-777. Doesn't do a second fertilization → **GO 5.2.15**	Product	Brand(s) 1 Agrogen 2 Yara 3 ADM 4 FYPA	Amount 5 Other (Specify) -888 DK -999 DA	Units	Total Cost
	☐1. Urea (white)	|__|	|__|__|__| __|	☐ 1Kg ☐ 2 Bulges (50)	|__|__|__|__|__| $
		|__|	|__|__|__| __|	☐ 1Kg ☐ 2 Bulges (50)	|__|__|__|__|__| $
	☐2. DAP (black)	|__|	|__|__|__| __|	☐ 1Kg ☐ 2 Bulges (50)	|__|__|__|__|__| $
		|__|	|__|__|__| __|	☐ 1Kg ☐ 2 Bulges (50)	|__|__|__|__|__| $
	☐3. KCL (red)	|__|	|__|__|__| __|	☐ 1Kg ☐ 2 Bulges (50)	|__|__|__|__|__| $
		|__|	|__|__|__| __|	☐ 1Kg ☐ 2 Bulges (50)	|__|__|__|__|__| $
	☐4. Triple super phosphate	|__|	|__|__|__| __|	☐ 1Kg ☐ 2 Bulges (50)	|__|__|__|__|__| $
	☐5. Ammonium sulfate	|__|	|__|__|__| __|	☐ 1Kg ☐ 2 Bulges (50)	|__|__|__|__|__| $
	☐6. Microelements	|__|	|__|__|__| __|	☐ 1Kg ☐ 2 Bulges (50)	|__|__|__|__|__| $
	☐7. Other:_____	|__|	|__|__|__| __|	☐ 1Kg ☐ 2 Bulges (50)	|__|__|__|__|__| $
	☐8. Other:_____	|__|	|__|__|__| __|	☐ 1Kg ☐ 2 Bulges (50)	|__|__|__|__|__| $

ENCUESTADOR LEA: Looking at the table please tell me, what is the probability of…

5.2.15 your plot suffering a drought of less than 20 days in July-August?	☐1.Impossible ☐4.Likely	☐2.Unlikely ☐5.Certain	☐3.Maybe yes, maybe not
5.2.16 your plot suffering a drought of more than 20 days in July-August?	☐1.Impossible ☐4.Likely	☐2.Unlikely ☐5.Certain	☐3.Maybe yes, maybe not
5.2.17 your plot suffering a very strong hail before your plants are at a waist height?	☐1.Impossible ☐4.Likely	☐2.Unlikely ☐5.Certain	☐3.Maybe yes, maybe not ☐-777 Didn't sow maize → **GO S.5.20**
5.2.18 your plot suffering a very strong hail after your plants are at a waist height?	☐1.Impossible ☐4.Likely	☐2.Unlikely ☐5.Certain	☐3.Maybe yes, maybe not
5.2.19 your plot suffering a very strong frost before the harvest?	☐1.Impossible ☐4.Likely	☐2.Unlikely ☐5.Certain → **GO S.5.3.**	☐3.Maybe yes, maybe not
Now suppose that you have sowed maize in your hectare this year... What us the probability of…			
5.2.20 your plot suffering a plague that will affect your productivity?	☐1.Impossible ☐4.Likely	☐2.Unlikely ☐5.Certain	☐3.Maybe yes, maybe not
5.2.21 your plot suffering a very strong hail before your plants were at a waist height?	☐1.Impossible ☐4.Likely	☐2.Unlikely ☐5.Certain	☐3.Maybe yes, maybe not ☐-777 Didn't sow maize
5.2.22 your plot suffering a very strong hail after your plants were at a waist height?	☐1.Impossible ☐4.Likely	☐2.Unlikely ☐5.Certain	☐3.Maybe yes, maybe not
5.2.23 your plot suffering a very strong frost before the harvest?	☐1.Impossible ☐4.Likely	☐2.Unlikely ☐5.Certain	☐3.Maybe yes, maybe not

5.2.24 your plot suffering a plague that affects your productivity?	☐1.Impossible	☐2.Unlikely	☐3.Maybe yes, maybe not
	☐4.Likely	☐5.Certain	→

5.3 Productivity expectations of the plot in 2016

5.3.1. In a scale from 0 to 10, where 10 is the most productive plot in the town and 0 is the least productive plot in the town, how productive do you think your plot **[CHOSEN PLOT]** will be in the 2016 Spring-Summer cycle?	|__|__|

ENUMERATOR TAKE A COIN AND SHOW IT TO THE PRODUCER

5.3.2. Let's flip this coin; what is the probability to get tails? How sure are you of this possibility? **ENUMERATOR WRITE DOWN THE ANSWER TO THE FIRST QUESTION WHEN THE PRODUCER SAYS HE/SHE IS ABSOLUTELY SURE.**	|__|__|__|%
5.3.3. Just a moment ago you rated your plot **[CHOSEN PLOT]** with an XX for its productivity, how sure are you of this rate?	☐1. Absolutely sure ☐2. Fairly sure ☐3. Slightly sure ☐4. Not sure at all

ENUMERATOR READ: Now we will play with this board and 20 chips, note that each box in the board represents the production you might obtain this year in your plot

ENUMERATOR: HAND THE 20 CHIPS TO THE PARTICIPANT AND ASK HIM/HER:

5.3.4. What do you think will (would) be the per hectare production of the plot **[CHOSEN PLOT]** in 2016? **WAIT FOR THE ANSWER AND TELL THE PRODUCER TO PLACE A CHIP IN THAT BOX**	Between |__|.|__| t and |__|.|__|t
5.3.5. **THEN READ:** What do you think will (would) be the per hectare production of the plot **[CHOSEN PLOT]** in 2016 if the weather is very bad? **WAIT FOR THE ANSWER AND TELL THE PRODUCER TO PLACE A CHIP IN THAT BOX**	Between |__|.|__| t and |__|.|__| t
5.3.6. **THEN READ:** What do you think will (would) be the per hectare production of the plot **[CHOSEN PLOT]** in 2016 if the weather is very good? **WAIT FOR THE ANSWER AND TELL THE PRODUCER TO PLACE A CHIP IN THAT BOX**	Between |__|.|__| t and |__|.|__| t

ENUMERATOR POINT AT THE FIRST AND THE LAST BOX WHERE THERE IS A CHIP, THEN READ: Now distribute the remaining 20 chips in the boxes between the interval that you think are more probable. You have to use all the chips, but you may leave empty boxes. If you don't place any chips in a box it means that you believe that option won't happen in the future. If you believe that an outcome is more probable than other, place more chips in the box of the outcome you believe has more probability of happening.

0	Won't harvest	6	More than 2.5 t/ha to 3 t/ha	12	More than 6 t/ha to 7 t/ha
1	Half a t/ha or less	7	More than 3 t/ha to 3.5 t/ha	13	More than 7 t/ha ____ How much?
2	More than half t/ha to 1 t/ha	8	More than 3.5 t/ha to 4 t/ha		
3	More than 1 t/ha to 1 y media t/ha	9	More than 4 t/ha to 4.5 t/ha		
4	More than 1.5 t/ha to 2 t/ha	10	More than 4.5 t/ha to 5 t/ha		
5	More than 2 t/ha to 2.5 t/ha	11	More than 5 t/ha to 6 t/ha		

Producer's ID |__|__|-|__|__|-||__|__|

5.4 Didn't sow maize in 2016

Enumerator: Only ask this section if the producer DIDN'T sow maize in 2016 in the plot registered to the program or in a plot from the program.

5.4.1 Why DIDN'T you sow maize in the plot registered to the program?	☐ 1. Crop rotation ☐ 2. Maize price is low ☐ 3. Other crops are more profitable ☐ 4. Sold or rented the plot ☐ 5. Gave the rights of the plot ☐ 6. Doesn't have money to work the plot ☐ 7. Disease, disability or death ☐ 8. Other:_____ _____ ☐ -888 DK ☐ -999 DK
5.4.2 Why DIDN'T you sow maize in any of your plots?	☐ 1. Crop rotation ☐ 2. Maize price is low ☐ 3. Other crops are more profitable ☐ 4. Sold or rented his/her plots ☐ 5. Gave the rights of all his/her plots ☐ 6. Doesn't have money to work his/her plots ☐ 7. Disease, disability or death ☐ 8. Other:_____ _____ ☐ -777 NA Only has the plot that he/she registered to the program ☐ -888 DK ☐ -999 DK