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APPENDIX 1: QUESTIONNAIRE

RESEARCH QUESTIONNAIRE FOR SMALLHOLDER MAIZE PRODUCTION IN BENUE STATE NIGERIA

Please carefully read and complete the questionnaire. All revealed information will be treated confidentially. Where exact figures are not available, please provide careful estimates. This questionnaire should be completed for the 2008/2009 farming season

PART A. GENERAL INFORMATION

1. Household Identification number……..

2. Local Government Area…….

3. District……

4. Village/community……

5. Name of Interviewer……..Date of Interview……

PART B. RESPONDENT (HOUSEHOLD HEAD)

6. Name…….

7. Age……years

8. Sex: Male ( ) Female ( )

9. Ethnic/Language Group……

10. Educational Level:

(a) No formal Education ( )
(b) Primary school ( )
(c) Secondary school ( )
(d) University ( )
(e) Other (specify)……...

11. Total number of years of formal education if any……Years

12. Main occupation:

(a) Farmer ( )

(b) Civil Servant ( )

(c) Self-employed ( )

(d) Employee in a private company ( )

13. What is your household size including yourself? Please specify below:

Household member	**Number**
Adult male (age 15 years and above)	
Adult female (age 15 years and above)	
Children (below 15 years of age)	
Total household size	

14. How long have you been farming? ……..……years

PART C: COMPOSITION AND TOTAL LAND AREA IN HECTARES

(Note: 1 hectare (ha) is about 2.5 acres or equivalent of a standard football field; 1 acre =0.4 hectares. Please always indicate the area unit if not in hectares)

15. Total land owned by you and farmed on by yourself……...(hectares)

16. Total land not owned by you but on which you farm

Share farming……..……..(hectares)

Rented/leased from others ……..…….(hectares)

17. Total land owned by you and rented or leased out to others**……...**(hectares)

PART D: INPUT UTILIZATION AND COST OF PRODUCTION OF MAIZE

(Note: 1 kg is approximately a muudu; 50kg =a bag of fertilizer; 1000kg = 20 bags of fertilizer. Illustrate this clearly to the farmer for all quantities to be specified in kg).

19. What area of land did you cultivate **maize** during the last farming season?.....ha

20. Did you rent any part of the cultivated maize farm in No. 19? Yes ☐ No ☐

21. If yes, how many hectares did you rent for maize production?.....

22. How much did a hectare of farm land cost last farming season?……..₦

23. What quantity of maize seed did you plant last farming season?.....Kg

24. How much did you spend on purchase of maize seed for planting?.....₦

25. Are you aware of any improved maize seed variety? Yes ☐ No ☐

26. If yes give names of the improved maize seeds you know:

(a)……

(b)……

(c)……

(d)……

(e)……

27. Please indicate if you use/apply any of the following technology on your **maize** farm last farming season?

Type of technology	**Yes**	**No**
Improved/hybrid maize seed		
Inorganic fertilizer		
Herbicide		
Pesticide/insecticide		
Organic fertilizer		

28. If yes to any in No. 27 complete the table below for the technology (ies) used

Type of chemical	**Quantity used**	**Unit e.g. kg, litre etc**	**Cost per unit ₦**	**Total amount spent ₦**	**Area of total maize farm (ha) cultivated with**	**Source e.g open market, govt, friend, etc**
Improved seed						
Inorganic Fertilizer						
Pesticide/insecticide						
Herbicide						
Organic fertilizer						

29. How much was a kg (muudu) of local maize seed last farming season?.....₦

30. How much was a kg of improved maize seed last farming season?.....₦

31. Please give an estimate of the number of days and hours per day each of this category of your family members (including yourself) was involved in the following operations done on maize farm last farming season?

Type of activity	Adult male		Adult female		Children	
	No. of members	**No. of Days**	**No. of members**	**No. of Days**	**No. of members**	**No. of Days**
Land preparation						
Planting						
Weeding						
Fertilizer application						
Spraying						
Harvesting						
Total						

32. What was labour cost **per day** in your area last farming season for an adult male……₦; an adult female……₦; Children……

33. Did you hire labour to work on your maize farm last farming season? Yes ☐ No ☐

34. If yes please fill the table below with respect to hired labour on your maize farm?

Type of activity	**Adult male**			**Adult female**			**Children**		
	No. of hired labour	**No. of Days worked**	**Cost (₦) for**	**No. of hired labour**	**No. of Days**	**Cost (₦) for**	**No. of hired labour**	**No. of Days**	**Cost (₦) for**
Land preparation									
Planting									
Weeding									
Fertilizer application									
Spraying									
Harvesting									
Total									

35. Please give an estimate of the amount it costs to hire labour to carry out all the farm operations listed above for **a hectare** of maize farm?..... (₦)

36. Did you do any form of soil conservation on your maize farm last season? Yes ☐ No ☐

37. If yes please tick the type of soil conservation practice (s) you did:

(a) Composting ( )

(b) Terracing ( )

(c) Fallowing ( )

(d) Crop rotation ( )

(e) Mulching ( )

(f) Contour ploughing ( )

(h) Minimum tillage ( )

(i) No tillage ( )

(j) Manuring ( )

(k) Planting of trees ( )

(l) Other (specify)……

38. If you paid money for any of the conservation practices done, how much?.....₦

39. If you sold all or part of your last season maize output in the market, how much did you pay for transport to and fro the market……. ……₦

PART E: PRODUCTION AND GROSS FARM INCOME

(Note: 1 kg is approximately a muudu; 50kg =a bag of fertilizer; 1000kg = 20 bags of fertilizer. Illustrate this clearly to the farmer for all quantities to be specified in kg).

40. Please complete the table below for your maize production last farming season.

Area planted (ha)	**Area harvested (ha)**	**Quantity harvested (kg)**	**Quantity sold (kg)**	**Price per kg (₦)**	**Income from maize farm (₦)**

41. How much did a standard 100kg bag of maize cost last farming season in your area?.....₦

42. Apart from income earned from your own farming operations and lease or renting out of land, did you have any other income last agricultural seaso Yes ☐ No ☐

43. If yes to no. 42, specify how much you received from any of the following sources?

(a) Farm work done for other farmers.....₦

(b) Money as remittance from friends/relatives etc……₦

(c) Wages from non-agricultural work……....₦

(d) Pension……₦

(e) Other sources (specify).....……...……₦

PART F – ACCESS TO SERVICES

44. Are you a member of any farmer group or cooperative? Yes ☐ No ☐

Yes ☐ No ☐

45. Were you visited by extension agent(s) last farming season?

46. If yes, how many times were you visited by the extension agent(s)?.....

47. Did you receive credit for maize farming from any source last season? Yes ☐ No ☐

48. If yes, please indicate the source (s) of your farm credit last farming season:

(a) Commercial Banks ( )

(b) Friends and relatives ( )

(c) Farmer organizations ( )

(d) Private money lenders ( )

(e) Other (Specify)……..

49. How far is the nearest market from your house?.....Km

PART G: TECHNOLOGY CHARACTERISTICS AND FARMER PERCEPTION

50. Do you think hybrid maize produces more than the local maize? Yes No

51. Do you think hybrid seed is sweeter than the local maize variety? Yes No

52. Do you always get fertilizer at the right time and quantity? Yes No

53. What are your expectations about rainfall this year? Low High

54. Do you perceive a need for weed control in your maize farm? Yes No

55. How would you assess the dangers of herbicide use to the environment? Low High

56. Please can you assess the topographic nature of your maize farm (s)? Flat Steep

57. Do you think that soil erosion is a problem in your maize farm? Yes No

PART H: PROBLEMS ENCOUNTERED IN MAIZE FARMING

58. In general what are the five (5) most important problems in your maize farming?

(a)…….

(b)…….

(c)……

(d)……

(e)……