

Appendices

Appendix 1: Questionnaire for data collection

Members Questionnaire

This questionnaire has been designed to execute a research purposely for academic work. The principal objective is to analyze the economic performance of input subsidies among cooperative members in Zambia. All information provided will solely and exclusively used for academic purpose and all respondents will remain anonymous to the public domain. Information provided would be used to make sound empirical analysis and suggest policy recommendations that would help improve the distribution of subsidized inputs as well as the socio-economic well-being and standard of living of cooperative members in the region. The entire interview will take 30 minutes of your time and you are kindly requested to provide honest and genuine answers within your possible best.

Interview date...../...../20.....

Section One: General Information

- 1. GPS coordinates
.....
- 2. Name of province
.....
- 3. Name of ward/community
.....
- 4. Name of the cooperative
.....

Section Two: Socio-economic Characteristics

- 5. Gender [] Male [] Female
- 6. Age of respondent (years)
.....
- 8. Years of education of respondent.....
- 10. What is your total land holding area (in hectares)?
- 11. How many of the total land holding area do you use (cultivate) for maize production [in hectares]?

16. What is your main product? Maize Others (specify)

19. Please indicate the number of years for which you have been a member of this cooperative (years)
20. What position do you occupy in the cooperative?

21. What is the distance of your residence to the cooperative headquarter? (in km)

Section Three: Factors Influencing Access to Input Subsidy

22. How would you describe your level of communication with the cooperative leaders?
 Never Rarely Sometimes Often Always
23. Are you related to any of the cooperative leaders? No Yes
24. In the last year, how many times did you meet extension workers for advice or consultancy?
 None One time Two times Three times Five times or more
25. Did you buy seeds or fertilizer from a commercial source within the last two years?
 No Yes
26. Please rate your level of attendance of cooperative meetings out of 100.

27. What quantity of your produce do you sell through the cooperative?
 None 1 - 25% 26 -50% 51 – 75% Above 75%
26. Please specify how much you pay as share in the cooperative?ZKw
28. How affordable is the remittance fee for input subsidy to you? Not affordable Slightly affordable Moderately affordable Very affordable Extremely affordable

Section Four : Input Costs and Revenue

29. Labor

- a. Please indicate the total quantity of hired labor that you utilized in your last farming period (per year)

- b. Please indicate the total number of days that you utilized hired labor

- c. Please indicate the total quantity of family labor that you utilized in your last farming period (per year)

- d. Please indicate the total number of days that you utilized family labor

- e. What was the cost per unit (in ZKw) of labor in your last farming period?

f. How much do you spend in total on labor per year (bush clearing, ploughing, planting, weeding, harvesting etc.) in ZKw?
.....

g. Did you use cattle (animal traction) on your farm during the last farming period? []
Yes [] No

h. If YES, indicate the number of days?
.....

i. If YES, indicate the amount per day?
.....

30. Seeds

j. Please indicate the quantity of seeds (in kg) that you utilized in your last period of farming.....

k. What was the cost per unit (in ZKw) of seeds in your last period of farming?
.....

31. Fertilizer

l. Please indicate the quantity of fertilizer (in kg) that you utilized on maize production in your last period of farming
.....

m. What was the cost per unit (in ZKw) of this fertilizer?
.....

32. Pesticide

n. Please indicate the quantity of pesticide (in liters) that you utilized on maize production in your last period of farming
.....

o. What was the cost per unit (in ZKw) of this pesticide?
.....

33. Herbicide

p. Please indicate the quantity of herbicide (in liters) that you utilized on maize production in your last period of farming
.....

q. What was the cost per unit (in ZKw) of this herbicide?
.....

34. Beneficiaries of Input Subsidy

r. Please indicate the quantity (in kg) of maize seed subsidy received last year
.....

s. Please indicate the quantity (in kg) of fertilizer subsidy received last year
.....

35. Revenue

- a. What quantity (in bags) of maize were you able to harvest in your last period of farming?
- b. What quantity (in bags) of maize were you able to sell in your last season of farming?
- c. What was the price of maize per bag in your last season of farming?
.....

Section Four

Subjective Feelings of Members

Please indicate how much you agree with the following statements

- 36. My fellow cooperative members are completely honest with me
 Strongly Disagree Partly Agree Neither agree nor disagree Partly Agree Strongly Agree
- 38. My fellow cooperative members like me
 Strongly Disagree Partly Agree Neither agree nor disagree Partly Agree Strongly Agree
- 39. My fellow cooperative members include me in what they are doing
 Strongly Disagree Partly Agree Neither agree nor disagree Partly Agree Strongly Agree
- 40. My voice counts in cooperative matters
 Strongly Disagree Partly Agree Neither agree nor disagree Partly Agree Strongly Agree
- 40. My fellow cooperative members are completely open with me
 Strongly Disagree Partly Agree Neither agree nor disagree Partly Agree Strongly Agree

Thank you.

Annexes

Testing for Multicollinearity of Variables included in the Probit Model for Access to Input Subsidy

Test for multicollinearity between the variables to be included in the regression model for access to input subsidy was performed to check for the correlation that exist between the independent variables.

Result of the Pearson correlation matrix in the Table 11 below shows that there is no issue of multicollinearity between the variables included in the Probit regression model since none of the variables had correlation coefficient of 0.8 or higher.

Table 1. Matrix of correlation (access to input subsidy)

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
(1) Age	.00													
(2) Land size	.18	.00												
(3) Gender	0.05	.14	.00											
(4) Farm size	.10	.78	.16	.00										
(5) Position in the cooperative	.16	.17	.17	.19	.00									
(6) Share investment	.08	.27	.17	.31	.07	.00								
(7) Cooperative as marketing channel	.06	.09	.20	.06	.02	.22	.00							
(8) Cooperative experience	.30	.32	.08	.32	.18	.50	.30	.00						
(9) Communication with leaders	.13	.12	0.04	.09	0.03	.04	.06	.19	.00					
(10) Extension access	.12	0.07	.14	.01	.15	0.01	.21	.11	.10	.00				
(11) Active participation	.06	.11	.06	.16	.32	.18	.30	.24	.22	.24	.00			
(12) Reciprocity of relationship	.01	.02	.06	.11	0.04	.13	.11	.17	.18	.13	.11	.00		
(13) Acceptance	.15	.14	.07	.20	.18	.07	.18	.19	.37	.16	.34	.24	.00	
(14) Voice	0.01	0.01	0.04	.08	0.03	0.07	.08	.01	.20	.15	.18	.36	.32	.00