

**Parts of the survey questionnaire relevant to this manuscript**

**Study Subject ID.....**

**Part one: Survey of general information and potential confounding factors**

Q1. Farming system / Working area ?

Large scale closed	
Small scale irrigated	
Large scale open	
Small scale rain fed	
Office and others	

Q2. What is your sex?

Female	
Male	

Q3. How old are you?

.....

Q4. The highest education level you have attended?

No formal education	
Elementary education(Grade 1-6)	
Primary secondary education(Grade 7-8)	
Senior Secondary education(Grade 9-12)	
Diploma level	
First degree level	

Q5. What is your monthly income? (In Ethiopian Birr) .....

Q6. Have you / your family ever been under any of the food security projects?

Yes	
No	

Q7. What is your current marital status?

Married	
Divorced	
Widowed	
Single	

Q8. Have you ever use alcoholic beverages?

Yes	
No	

Q 9. Do you currently use alcoholic beverages?

Yes	
No	

Q10. Have you ever smoked cigarettes?

Yes	
No	

Q11. Do you currently smoke cigarettes? (If yes go to 12 and 13, if no go to 14 and 15)

Yes	
No	

Q12. For how long do you smoke cigarettes?

..... (Years)

Q13 How many cigarettes/pack of cigarette do you smoke per day?

.....

Q14. If you quit smoking now but smoked in the past how long did you smoke cigarettes before you quit?

..... (Years)

Q15 How many cigarettes /pack of cigarettes did you smoked in the past, per day?

.....

Q16 Do you share your bed room with someone smoking?

Yes	
No	

Q17 what fuel is used most for cooking in your home?

<b>Fuel</b>	yes	no
Coal		
Wood		
Fuel oil, kerosene		
Electricity		
Any other		

Q18 Have you ever chew *khat*?

Yes	
No	

Q19 Do you currently chew *khat*?

Yes	
No	

Q20. Have you ever use cannabis?

Yes	
No	

Q21. Do you currently use cannabis?

Yes	
No	

Q22. How do you describe your current health situation?

Excellent	
Very good	
Fair	
Poor	
Very poor	

Q 23 Have you ever diagnosed with the following disease condition (s)?

<b>Disease condition</b>	<b>Yes</b>	<b>No</b>	<b>Year of diagnosis</b>
Psychiatric illness			
Head injury/loss of			

consequesness			
Epilepsy			
Pulmonary Tuberculosis			
Pneumonia			
Sexually transmitted diseases(STD) e.g. Syphilis			
Any other			

Q24. Do you have one or more episodes of rhinitis in the past 12 months?

Yes	
No	

Q25. Do you have one or more episodes of Eczema in the past 12 months?

Yes	1
No	0

**Part Two: Survey of Health effects**

**Section one: survey of chronic respiratory symptoms**

Q26. Do you usually cough on most days for 3 consecutive months or more during the past 12 months?

Yes	
No	

Q27. Do you bring up phlegm on most days for 3 consecutive months or more during the 12 months?

Yes	
No	

Q28. Does your chest ever sound wheezy or whistling, occasionally apart from colds the 12 months?

Yes	
No	

Q29. Do you have to stop for breath when hurrying on a level ground or walking up a slight hill?

Yes	
No	

**Part Three: Survey of exposure factors**

Q30. Occupational exposure status?

Exposed	
Not exposed	

Direct (application)	
In direct (re-entry)	

Q31. How long have you worked as applicator/re-entry worker in this farm? ..... (Years)

Q32. How many days (on average) do you work as applicator/re-entry worker per year? ..... (Days)

Q33. How many hours (on average) do you work as applicator/re-entry worker per day? ..... (Hours)

Q34. Which application method/s do you use? (Only applicators)

Pesticide application method/s	Seldom	Some times	all ways

Q35. What is the farm size? ..... (Hectares).(Only applicators)

Q36. How many pesticides (liter /kg) on average do you use per each spraying day? (Only applicators) .....

Yes	
No	

Q37. Do you usually mix and then spray? (Only applicators)

Q38. Do you usually wash the spray equipment after work? (Only applicators)

Yes, always	
Yes, some times	
No	

Q39. Do you usually repair spray equipment ? (Only applicators)

Yes, always	
Yes, some times	
No	

Q40. Which Personal Protective Equipment(s) do you usually use while mixing /loading of pesticides? (Tell all that apply)

PPEs	Yes	No
Apron		
Boots		
Gloves		
Face mask		
Goggles/Eye mask		
Overall		
Air respirator		
Any other		
No PPE		

Q41. Which Personal Protective Equipment(s) do you usually use while pesticide spraying? (Tell all that apply)

PPEs	Yes	No
Apron		
Boots		
Gloves		
Face mask		
Goggles/Eye mask		
Overall		
Air respirator		

Any other		
No PPE		

Q42. Which Personal Protective Equipment(s) do you usually use while re-entry works? (Tell all that apply)

PPEs	Yes	No
Apron		
Boots		
Gloves		
Face mask		
Goggles/Eye mask		
Overall		
Air respirator		
Any other		
No PPE		

Yes, always	
Yes, some times	
Yes, seldom	
Not at all	

Q43. Do you use un-fit or worn out PPEs?

Q44. Do you usually wash your hands immediately after work?

Yes	
No	

Q45. Do you usually take a bath just after work?

Yes	
No	

Q46. Anthropometric measurements

Hight (m) ..... weight (kg) .....