Africa RISING Soil Fertility Panel Survey
September 2016

Enumerator code:		Date of visit:		Visit number:				
District: *1=Dedza; 2=Ntcheu*		**EPA:**						
Village:		**House GPS coordinates**	*S*			.		
			E			.		
Sample group: *1=Int.; 2=LC; 3=DC*		**Household code:**						
Entered by:		**Checked by:**						

Section A. Household Information
Enumerator (say to respondent): First, I will ask you some questions about your household and assets.

A4. *What is the **name** of the Primary Respondent?*	

A5. *What is your **age**? (Write age **in years**)*	
A6. *What is your **gender**? (1=Male; 2=Female)*	
A7. *Are you the head of this household? (1=Yes; 2=No)* **If Yes, skip to Question A11**	
A8. *What is your relationship to the head of this household (**The head of this household is my_____**)?* *2=Spouse; 3=Son/Daughter; 4 = Father/Mother; 5 = Brother/Sister* *6=grandparent* *99 = Other (specify)_____*	
A9. *What is the **name** of the household head?*	
A10. *What is the **gender** of the household head? ? (1=Male; 2=Female)*	
A11. *Over the past 12 months, how many months has the household head **resided elsewhere**?*	

Village Codes
1=Mkuwazi	7=Dauka	11=Wilson	17=Gonthi
2=Mbidzi	8=Katsese	12=Pitala	18=Kampanje
3=Msamala	9=Chawa	13=Kakhome	19=Hauya
4=Kalumo	(Simenti, Chinthu, Zilionge, Mbalame)	14=Chikawola	20=Kahowela
5=Amosi (Hiwa)	10=Kabango	15=Sitolo (Chidika)	21=Malinda
6=Nzililongwe	(Kaupsa, Kaputeni, Kasakula, Malata, Chilenga, Matewera)	16=Sukasuka	22=Njolomole

EPA Codes
1=Linthipe
2=Golomoti
3=Kandeu
4=Nsipe
5=Mtakataka

Africa RISING Soil Fertility Panel Survey
September 2016

*Please list the **head of household** and working-age adults (between ages of 16 to 70) living in this household as well as the sons/daughters who reside elsewhere*							
A17. Member ID	*Name*	**A18.** *What is the **gender** of _____? 1= Male 2=Female*	**A19.** *What is the **age** of _____? (years)*	**A20.** *What is the **marital status** of_____? (See codes below)*	**A21.** *What has been the **primary occupation** of _____ in terms of time over past 12 months? (See codes below)*	**A22.** *Relation-ship to household head (**The head of household is my_____**) (See codes below)*	**A23.** *What is the **education level** of _____? (See codes below)*
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							

Before moving on, ask: Is there anyone else in the immediate family who does NOT currently reside in the household? If yes, return to table above and fill out for this member.

A20. Codes:	**A21. Codes:**	**A22. Codes:**	**A23. Codes:**
1=Married	*0 = Not working*	*1=Head*	*1=No schooling*
2=Widowed	*1=Working on your farm (Not a relative's farm)*	*2=Spouse*	*2=Some primary*
3=Divorced	*2= Informal business*	*3=Son/Daughter*	*3=Completed primary*
4=Separated	*3=Casual farm labour (Someone else's farm-ganyu labor)*	*4=Father/Mother*	*4=Some secondary*
5=Never married	*4=Salaried/wage labour (formal employment/business)*	*5=Brother/Sister*	*5=Completed secondary*
	5=Student	*6=Grandparent*	*6=Post-secondary*
	*99=Other (**specify above or in margin**)*	*99=Other (**specify above or in margin**)*	*7 =Adult literacy*

Africa RISING Soil Fertility Panel Survey
September 2016

A32. *How many children aged 0-9 years are in this household?*	
A33. *How many children aged 10-15 are in this household?*	
A34. *How many people aged 70 years or above are in this household?*	

0=no change *1=more* *2=less* *3=New household (<10 years)* *99=unsure*	**A35. Over the past 12 months,** *do the adults in the household spend more or less time working on the family farm than they did 10 years ago?*	
	A36. Over the past 12 months, *do the adults in the household spend more or less time working on non-farm business activities compared to 10 years ago?*	

A38. *Does this household own a_____?* *1=Yes* *2=No*	a. Dimba (Wetland/Irrigated field)			
	b. Sprayer			
	c. Treadle pump			
	d. Ox cart			
	e. Plough			
A39i. *Does this household own a_____?* *1=Yes* *2=No* **If yes, ask A39ii**	a. Cell phone		**A39ii**. *How many _____ does this household own?*	a. Cell phones	
	b. Bicycle			b. Bicycles	
	c. Radio			c. Radios	
	d. Television			d. Televisions	
	e. Sofa set			e. Sofa sets	
	f. Improved wood/caol stove			f. Improved wood/caol stoves	
	g. Kerosene or gas stove			g. Kerosene or gas stoves	
	h. Motorbike			h. Motorbikes	
	i. Cars or truck			i. Cars or trucks	
	j. Solar panel			j. Solar panels	

*Indicate the **estimated household income** between **August 2015 and July 2016** (include in-kind receipts to the household* **(Enumerators**: **fill out EITHER columns b & c OR column d)**

Income source	**A42a** Code	**A42aii** *Did the household earn any income from _____? 1=Yes; 2=No* **If No, Skip to next income source**	**A42b.** *Number of months income received*	**A42c.** *Average monthly income during these months (MWK)*	**A42d.** *Annual income (MWK)*
Agricultural labour on another farm (ganyu)	1				
Non-agricultural labour	2				
Remittances (includeing domestic/international migrants)	3				
Informal business (e.g. selling firewood)	4				
Formal business (e.g. tailor)	5				
Selling animal products (eggs/milk/meat/animals)	6				
Donations/gifts	7				
Other non-farm income (specify) _____	99				

Africa RISING Soil Fertility Panel Survey
September 2016

A45. *During the past growing season, what was the wage rate for ganyu labour for ridge making (land preparation)?*	**A45a**. *Amount*	
	A45b *Unit: 1=MWK 2=kg maize*	
	A45c *Per 1=acre 2=day 3=rows/ridges 4=plant*	
A47. *Over the past 12 months, how much would it cost to rent 1 acre of good quality land in this area for one season? (Indicate price in MWK per acre)*		

Section B. Farm-level management and sales
Enumerator say to respondent:
For these questions, a field is defined as a continuous area of land, and a plot is defined as a section of a field that is dedicated to a specific crop (or intercrops).

B1. *How many fields did you plant this past growing season (2015/6), including rented in fields? (Write in number of fields)*	
B2. *What is the total area in **acres** that was **actually** cultivated this past growing season (2015/16) , including rented in fields?*	
B3a. *Were any fields or portions of fields left fallow this past growing season (2015/16)? (1=Yes; 2=No)* **IF NO, Skipt to B5**	
B3b. *Why were the fields left fallow?* *0=not applicable; 1=to improve the soil; 2=no material inputs 3=shortage of labour 4=dispute over land tenure 99=other (specify)_____*	

B5. *Since the **2016** harvest, have you **sold maize** or do you plan to sell maize? 1=Yes; 2=No; 99=undecided* **If no, skip to MAP ON NEXT PAGE**		
B6. *During **which month** was (or do you expect to have) your largest sale)?* *(1=January; 2=February…12=December; 99=undecided)*		
B7. ***How much** have you **sold** or plan to sell **in total**?* *(For units, see codes below)*	**a.** *Amount*	
	b. *Units*	
B8. *How much did you sell or plan to sell in your largest transaction?* *(For units, see codes below)* **(If sale has not yet occurred, SKIP to B10)**	**a.** *Amount*	
	b. *Units*	
B9. *What was the price you received for this sale? (Kwacha per unit)* *(For units, see codes below)*	**a.** *Amount (MWK)*	
	b. *Units*	
B10. *To whom was (or will be) the largest sale?* ***If more than one sale is the same size as the largest sale, ask about the <u>earliest</u> sale.***	*1=other household 2=small trader 3=large trader 99=other (specify)*	
B11a. *Where was (or will be) the **maize exchange made** for largest sale?* *1 = On the farm 3 = Trading center/local market 5= In the Boma 99=Other (Specify) 2 = From the house 4= Within the village (not on the farm or at market) 6=Admarc*		
B11b. *What was the distance **in kilometres** from the house to the point of the maize exchange made for largest sale?*		
B12. *How much (MWK) did you pay (or expect to pay) to transport the maize to the point of exchange*		
B7b, B8b, B9, Unit Codes *2=25 kg bags* *4=20 L bucket /* Ndowa *6=In total* *1=kilograms* *3=50 kg bags* *5=ox carts /* Ngolo *99=other (specify)*		

Africa RISING Soil Fertility Panel Survey

NAME OF FARMER: VILLAGE:
WHO GAVE TOUR OF FARM (name):
MEMBER ID OF PERSON GIVING TOUR:

DRAW MAP OF THE FARM (to be done by the enumerator)

Enumerator: 1) Number each field & plot that is owned or cultivated in 2015/16.
2) Name each field
3) List the crops planted in 2015 and harvested in 2016,
4) Record the area for each **plot** in acres – **Use the conversion table to write in decimal form**.
5) Finally, identify the plots the farmer indicated as high (H) and low (L) fertility **during the March Maize Response Survey**

Conversion table:
1/2 = 0.50
1/3 = 0.33
1/4 = 0.25
1/5 = 0.20
1/6 = 0.17
1/7 = 0.14
1/8 = 0.125
1/9 = 0.11

2/3 = 0.67
2/4 = 0.50
2/5 = 0.40
2/6 = 0.33
2/7 = 0.29
2/8 = 0.25
2/9 = 0.22

House

Africa RISING Soil Fertility Panel Survey
September 2016

Enumerator: Transcribed the data from the map on the previous page into these columns. (For Primary and intercrops, use crop codes on the next page)								*Enumerator – Only ask these seed questions if the primary crop is maize, groundnut or pigeon pea. That is, ask if: F18a=1; F18a =2; F18a =3; F18a =6; F18a =7 For the primary crop, what was the seed _____ ?*					*Enumerator – Only ask these seed questions if the main intercrop is maize, groundnut or pigeon pea That is, ask if: F18b=1; F18b =2; F18b =3; F18b =6; F18b =7 For the main intercrop, what was the seed _____ ?*				
Field	**Plot**	**E1** Acres	*High/Low* **Fertility** *plots.* **(H & L)** *Label only two fields.*	**F18a** Primary crop	**F18b** Main Inter-crop	**F18bii** Second inter-crop	**F18biii** Border crop	*Quuantity*		**PType** *Type* *See codes*	**PVariety** *Variety*	**PSource** *Main Source*	*Quantity*		**IType** *Type* *See codes*	**IVariety** *Variety*	**ISource** *Main Source*
				See crop codes below				**PSQty**	**PSUnit**				**ISQty**	**ISUnit**			

Crop codes:		**Seed Units**	**Type codes**	**Seed Source codes**	**Enumerator notes:**
1=local maize	11=cowpea	1=kilograms	1=Local	1=Recycled from last year	
2=hybrid maize	12=bambara nut	2=25 kg sack	2=Newly acquired hybrid	2=Other household	
3=OPV/Composite maize	13=sorghum	3=50 kg sack	3=Saved hybrid	3=Extension agent	
4=tobacco	14=cassava	4=Bucket	4=OPV/Composite	4=Local store/market	
5=cotton	15=sweet potato	5=Plate		5=FISP	
6=pigeonpea	16=Irish potato	6=Ox cart		6=Inputs for Assets	
7=groundnut	17=millet	99=other		7=Other NGO	
8=soya bean	18=rice	(specify)		8=Wage for ganyu labour	
9=common bean	19=pumpkin			9=From FISP beneficiary	
10=velvet bean	20=Fallow			10=Africa RISING	
	99=Other (Specify)			11=Agro-dealer	
				99=Other (specify)	

Africa RISING Soil Fertility Panel Survey

September 2016

Enumerator: *Please transcribe the **Field** and **Plot** numbers from the previous page from the **High** and **Low** fertility plots. Then, ask questions F2 – F21b for each plot.*

To be transcribed by the enumerator.			F2. Who is respon-sible for manag-ing this plot? (See codes)	F3. Do you own this land? 1=Yes 2=No	F12ai How was the residue from the 2015 harvest used in this plot? (See codes)	F12aii What tillage method was used on this plot? (See codes)	F12aiii Was animal tractio n used to prepar-e this plot? 1=Yes 2=No	F12b In which month was land prepara-tion finished? See codes	NV1 In which month was plot planted ? See codes	F13 What soil conserve-ation methods do you use on this plot? See codes)					F17a. What is the main crop you plan to plant in the 2016/17 season? (See codes)	F17b. What inter-crop do you plan to plant in the 2016/17 season? (See codes)	F19a. What is the main crop you planted in the 2014/15 season? (See codes)	F19b. What inter-crop did you plant in the 2014/15 season? (See codes)	F20a. What is the main crop you planted in the 2013/14 season? (See codes)	F20b. What inter-crop did you plant in the 2013/14 season? (See codes)	F21a. What is the main crop you planted in the 2012/13 season? (See codes)	F21b. What inter-crop did you plant in the 2012/13 season? (See codes)
Field	Plot	Ferti-lity								a	b	c	d	e								
		H																				
		L																				

F17 – F21 Crop codes:

0 = None	6=pigeonpea	11=cowpea	16=Irish potato
1=local maize	7=groundnut	12=bambara nut	17=millet
2=hybrid maize	8=soya bean	13=sorghum	18=rice
3=OPV/Composite maize	9=common bean	14=cassava	19=pumpkin
4=tobacco	10=velvet bean	15=sweet potato	20=Fallow
5=cotton			99=Other (specify)

F2 Codes

1=household head	**F12ai Codes:**	**F12aii Codes:**
2=spouse	1= incorporate residues early (after harvest)	4=level soil
3=both	2=incorporate residues late winter	5=align ridges
99=other (specify)_____	3 = burn residues	6=build mounds
	10 = removed residues from field	7=dig planting basins
	11=Other (Specifiy)	9=zero tillage
		99=Other (Specify

Month codes

1=January	7=July
2=February	8=August
3=March	9=September
4=April	10=October
5=May	11=November
6=June	12=December

F13. Codes:

1=mulching	6=terracing	11=ripping	15=burning of residues
2=farm yard manure	7=grass strips	12=drainage (water logging)	16=late incorporation of residues (waiting until fall rains, then preparing ridges
3=compost	8=crop residues	13=early incorporation of residues in furrow (just after harvest)	99= Other (a)_____
4=slash and burn	9=planting basins	14=mid-winter incorporation of residues in furrow (before the rains)	99= Other (b)_____
5=green manure	10=minimal/zero tillage		

Africa RISING Soil Fertility Panel Survey
September 2016

HIGH FERTILITY SPACING DETAILS

Place the crop code of the plant on the grid where it is located on the ridge

cm	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	cm
30																						30
25																						25
20																						20
15																						15
10																						10
5																						5
0	CTR																					CTR
5																						5
10																						10
15																						15
20																						20
25																						25
30																						30
cm	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	Cm

SPACING OF ROWS:	ROWS 1&2	ROWS 2&3

Crop codes:
1=local maize   *6=pigeonpea*   *11=cowpea*   *16=Irish potato*
2=hybrid maize   *7=groundnut*   *12=bambara nut*   *17=millet*
3=OPV/Composite maize *8=soya bean* *13=sorghum*   *18=rice*
4=tobacco   *9=common bean*   *14=cassava*   *19=pumpkin*
5=cotton   *10=velvet bean*   *15=sweet potato*   *99=Other (specify)*

Africa RISING Soil Fertility Panel Survey
September 2016

LOW FERTILITY SPACING DETAILS

Place the crop code of the plant on the grid where it is located on the ridge

cm	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	cm
30																						30
25																						25
20																						20
15																						15
10																						10
5																						5
0	CTR																					CTR
5																						5
10																						10
15																						15
20																						20
25																						25
30																						30
cm	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	Cm

SPACING OF ROWS:	ROWS 1&2	ROWS 2&3

Crop codes:

1=local maize	6=pigeonpea	11=cowpea	16=Irish potato
2=hybrid maize	7=groundnut	12=bambara nut	17=millet
3=OPV/Composite maize	8=soya bean	13=sorghum	18=rice
4=tobacco	9=common bean	14=cassava	19=pumpkin
5=cotton	10=velvet bean	15=sweet potato	99=Other (specify)