Africa RISING Machinga, Malawi Harvest Survey – April 2018   HHID_____

Consent Form

Title of the research project: Agro-ecological Intensification and Production among smallholder farmers in Malawi

Hello! My name is ___ and I am working for Africa RISING. Researchers from Michigan State University are trying to learn about the lives of farmers in Malawi. We are asking farmers, like you, if they would like to participate in a face-to-face interview about how you farm, and it will last about an hour. You must be at least 18 years old to participate.

We are not selling anything or offering any services to you right now. We are only gathering information, but hope that by understanding the lives of farmers in Malawi, Michigan State University and other organizations may provide better services in the future.

Your participation is completely voluntary. Choosing to participate will not increase your opportunities to get services; and choosing not to participate will not decrease your opportunities to receive services. If you choose to participate, I will ask you a number of questions about your household, your farm, and your opinions about farming. You can choose not to answer any question you wish. Your answers will be completely confidential and only the research staff will see your answers. When we do our reports, your answers will be grouped with other farmers' answers to give an overall picture of the lives of farmers in this area. No one in your community will know what your answers are unless you tell them.

There's no cost or compensation offered to participate.

If you have any questions about the study you may contact Dr. Regis Chikowo at IITA by phone at 0994-859-401, or Hannah Livuza by phone at 0999-938587.

Do you have any questions about this study or your participation?

Do you agree to participate in this interview (Enumerator, circle response)?   **YES**   **NO**

[If no:] Thank you for your time today.

	Sample: *1=Int.; 2=LC; 3=DC*		A3-Enumerated by:
EPA:			
Village:	**Date**		Checked by:
Household ID			Data entry by:
	_____/_____/2018		
A4-Name of household head		**A5-Name of respondent**	
NV0-When was the first rains in the area? *(1=Jan; 2=Feb…; 11=Nov; 12=Dec)*		**Month**	
(For weeks enter 1, 2, 3 or 4)		**Week**	

		Crop	Acres
NV1- Does the farmer confirm all fields were captured on the mid-season survey map? *(1=Yes; 2=No)* **If yes, skip to the next page**			
NV2 –How many ***additional fields*** should have been recorded on the mid-season survey?			
NV3 – What are the additional crops that should have been included on the mid-season survey, and how much area was planted			

EPA Codes		
12=Mtubwi	*13=Nsanama*	*14=Nyambi*

Village Codes			
120=Tambula	*130=Nwokiwa*	*137=Mkomola*	*140=Msigalira* *147=Mwalija*
121=Duwa	*131=Petekula petekula*	*138=Ntchema*	*141=Mkambili* *514=M'bawa-*
122=Mtonda	*132=Muntuwa*	*139=Maraka*	*142=Sale II* *Chimala*
123=Dija	*133=Shaibu Petekula*	*513=Namunde*	*143=Chapola* *614=Chimombo*
124=Mtila	*134=Thimakera*	*613=Likwakwa*	*144=Muhiwa*
512=Chilonga-Magadi	*135=Putheke*		*145=Mang'anda*
612=Chipamba	*136=Mwiriya*		*146=Msaka*

Fertility ___High___   **Field** _____   **Plot** _____

B1- Plot Name_____

					.					
lat- **Plot Latitude**	S				.					
long- **Plot Longitude**	E				.					

B3 – **Enumerator, Which image best represents the slope of this plot?** *(See visual aid)*	
B90- How were crops mixed on this field *(1=Monocrop; 2=Intercrop; 3=Strip intercrops)*	

FP19- **EXCLUDING UREA AND NPK** - How much **other fertilizer** was **applied** to this plot?	FP19-**QTY**	
If other fertilizer was not applied, enter "0" for QTY and skip to F03a) *(See unit codes below)*	FP20-**UNITS**	
FP23- (**If FP19=0, skip to F03a)** What was the name of the "other fertilizer"?		
FP23i- When was **other fertilizer** application finished? (*1=Jan; 2=Feb;... 11=Nov; 12=Dec)*	**Month**	
(For weeks enter 1, 2, 3 or 4)	**Week**	

Enumerator – Please ask the following for all crop types (not just those included in yield cuts)
IMPORTANT – MAKE SURE YOU ASK ABOUT MAIN CROP AND INTERCROPS (DO NOT JUST RELY ON THE MAP). This will serve as confirmation that we successfully captured these important crops during the mid-season survey.

F03a- What is the **main crop** planted for the 2017 (current) harvest?	*(See codes below)*	
F03a2- Has the **main crop** been completely harvested?	*(1=Yes; 2=No)*	
F03a3- What is or will be the total **main crop** quantity harvested?	**QTY**	
	UNITS	
Were measured units shelled or unshelled? *(0=NA; 1=shelled; 2=unshelled)*	**SHELL**	
F03b- What is the **primary intercrop** planted for the 2017 (current) harvest? *(See codes–**Enter "0" if none)***		
F03b2- Has the **primary intercrop** been completely harvested?	*(1=Yes; 2=No)*	
F03b3- What is or will be the total **primary intercrop** quantity harvested?	**QTY**	
	UNITS	
Were measured units shelled or unshelled? *(0=NA; 1=shelled; 2=unshelled)*	**SHELL**	
F03c- What is the **second intercrop** planted for the 2017 (current) harvest? *(See codes–**Enter "0" if none)***		
F03c2- Has the **second intercrop** been completely harvested?	*(1=Yes; 2=No)*	
F03c3- What is or will be the total **second intercrop** quantity harvested?	**QTY**	
	UNITS	
Were measured units shelled or unshelled? *(0=NA; 1=shelled; 2=unshelled)*	**SHELL**	

Crop codes:		*Unit codes*
0 = None	*13=sorghum*	*1=kg*
1=local maize	*14=cassava*	*2=25 kg sacks*
2=hybrid maize	*15=sweet potato*	*3=50 kg sacks*
3=OPV/Composite maize	*16=Irish potato*	*4=20L bucket*
4=tobacco	*17=millet*	*5=5L pail*
5=cotton	*18=rice*	*6=Ndiwo plate (about 0.5 kg)*
6=pigeonpea	*19=pumpkin*	*7=Nsima plate (about 1 kg)*
7=groundnut	*20=Fallow*	*8=18L Bucket*
8=soya bean	*21=Finger millet*	*9=15L Bucket*
9=common bean	*87=Virgin land*	*10=10L pail*
10=velvet bean	*89=Used/owned by another farmer*	*11=Ox cart*
11=cowpea	*99=Other*	*12=Bunches*
12=bambara nut	*(Specify)_____*	*13=Heads/In total*
		99=Other (specify)

Fertility ___**High**___   **Field** _____   **Plot** _____

Enumerator – Please identify three fairly evenly spaced locations (call these A, B & C) across the diagonal of the plot, avoiding borders.

If the plot has been partially harvested, take locations in the areas that have <u>not</u> been harvested.
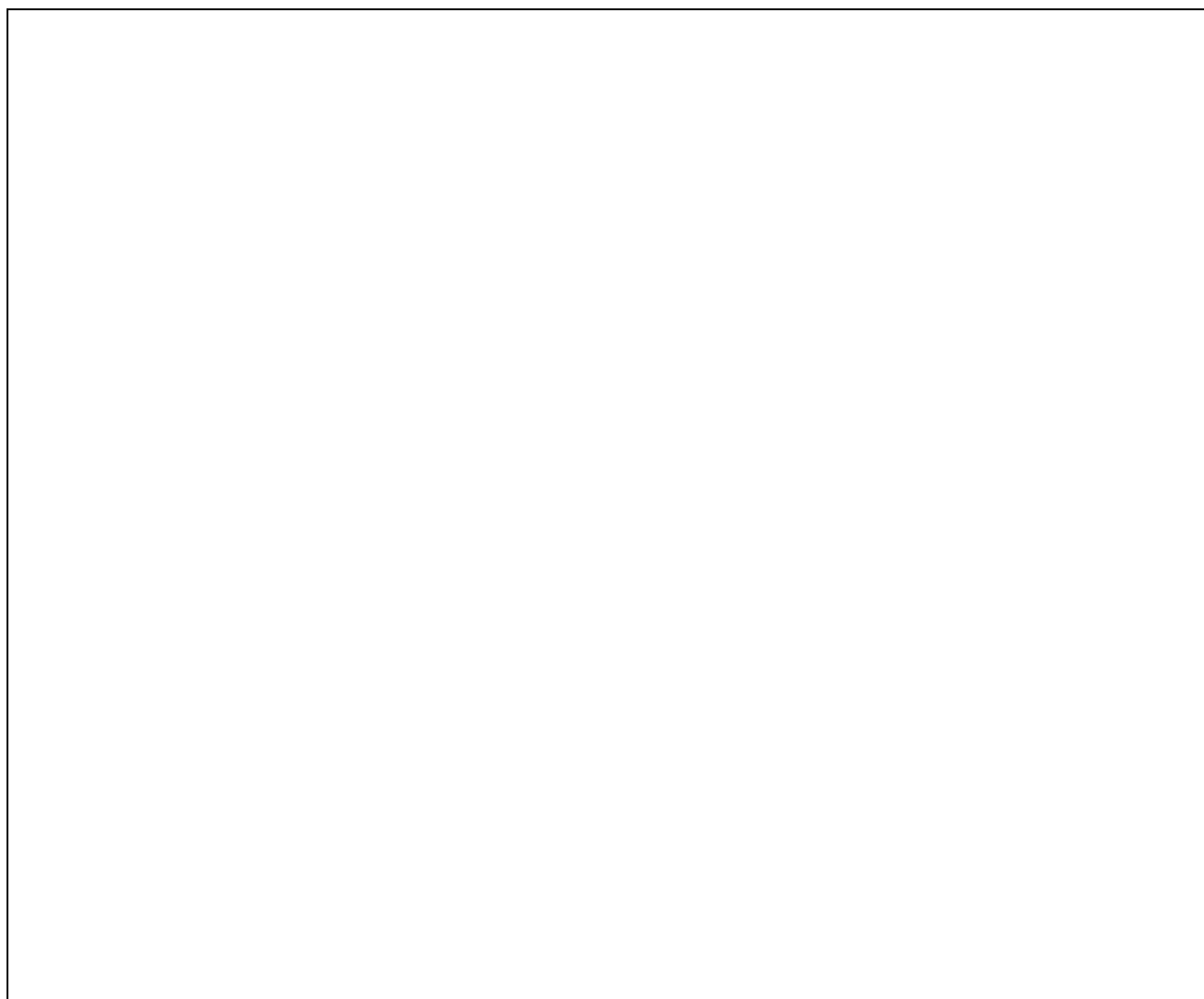
Roughly illustrate the plot in the space provided below. In the illustration, please show:

*Whether plot is fertilized (**"F"**) or unfertilized (**"UF"**)*
*Area where the **main crop** has been **harvested** indicated by **hash lines (#)***
Describe the crop pattern in the notes section, or using the illustration if that is helpful
*Label locations "**A**", "**B**", and "**C**"*

Enumerator notes:

Fertility   High   **Field   _____**   **Plot   _____**

Enumerator – Please answer each of the following questions for locations A, B & C
If a question cannot be answered, indicate why with the following codes:
-7=strip cropping (intercrops not present at this location)
-8= crop has been harvested and shelled or harvested and removed from the household
-9=crop is not ready to be harvested

	Location A	Location B	Location C
C2- What is the **spacing between ridges** (center-to-center) in *centimeters*?			
C90- How were crops mixed at this location? *(1=Monocrop; 2=Intercrop; 3= Strip crop)*			

Enumerator note – The main crop is (transfer F03a)_____ *Main crop yield cuts (These question apply only to the crop in F03a):*	Location A	Location B	Location C
D5i- **If** the main crop was/is **maize** (*F03a=1, 2 or 3*) how many plants were standing in the **2-ridge X 2-meter** area in this location? *(If F03a>3, skip to E3i)*			
D6ai- What was/is the total **number of cobs** that have been/ will be harvested in this **2-ridge X 2-meter** area in this location?			
D6bi- What is the **weight of all of the unshelled cobs** that were harvested from **Location B**? *+ (If this cannot be done, use codes above)*			
D8i- Weigh and remove a sample of three **(3) cobs** to measure grain moisture later *(Place label from the back page in a plastic bag inside sample and **record weight here**)*			
D8i_moisture- Record **initial moisture** reading here:			
D8i_dryweight- Record **dry weight** here:			
D8i_drymoisture- Record **moisture** reading **after drying** here:			
E3i- **If** the main crop was/is a **legume** *(F03a is within 6-12)*, how many plants were standing in the **1-ridge X 2-meter** area in this location? *(If the [6>F03a>12], skip to E10i)*			
E4ai- What was/is the total **number of pods** that have been/will be harvested in a **1-ridge X 2-meter** area? *(If this cannot be done, use codes above)*			
E4bi- What is the **weight of all of the unshelled pods** that were harvested from **Location B**? *(If this cannot be done, use codes above)*			
E6i- Take a sample of nine **(9) pods**, **shelled**, to measure moisture later *(Place **label** from the back page in a plastic bag inside sample and **record weight here**)*			
E6i_moisture- Record **initial moisture** reading here:			
E6i_dryweight- Record **dry weight** here:			
E6i_drymoisture- Record **moisture** reading **after drying** here:			
E10i- If the **main crop** was neither maize nor legume *(F03a is 4,5, or within 13-19, or 99)*, **how many plants** were standing in the **1-ridge X 2-meter** area in this location? *(If the main crop was maize or a legume, skip to the primary intercrop yield cut table)*			

Enumerator note – The primary intercrop is (transfer F03b)_____ *Primary intercrop crop yield cuts (These question apply only to the crop in F03b):*	Location A	Location B	Location C
D5ii- If the primary intercrop was/is **maize** (*F03b=1, 2 or 3*) how many plants were standing in the **2-ridge X 2-meter** area in this location? *(If F03b>3, skip to E3ii)*			
D6aii- What was/is the total **number of cobs** that have been/ will be harvested in this **2-ridge X 2-meter** area in this location?			
D6bii- What is the **weight of all of the unshelled cobs** to be harvested from **Location B**? *(If this cannot be done, use codes above)*			
D8ii- Weigh and remove a sample of three **(3) cobs** to measure grain moisture later *(Place a **label** from the back page in a plastic bag inside sample **and record weight here**)*			
D8ii_moisture- Record **initial moisture** reading here:			
D8ii_dryweight- Record **dry weight** here:			
D8ii_drymoisture- Record **moisture** reading **after drying** here:			

Fertility _____High_____   **Field** _____   **Plot** _____

Enumerator – Please answer each of the following questions for locations A, B & C
        If a question cannot be answered, indicate why with the following codes:
-7=strip cropping (intercrops not present at this location)
-8= crop has been harvested and shelled or harvested and removed from the household
-9=crop is not ready to be harvested

	Location A	Location B	Location C
E3ii **If** the primary intercrop was/is a **legume** *(F03b is within 6-12)*, how many plants were standing in the **1-ridge X 2-meter** area *(If the [6>F03b>12], skip to E10i)*			
E4aii- What was/is the total **number of pods** that have been/will be harvested in a **1-ridge X 2-meter** area? *(If this cannot be done, use codes above)*			
E4bii- What is the **weight of all of the unshelled pods** that were harvested from **Location B**? *(If this cannot be done, use codes above)*			
E6ii- Take a sample of nine **(9) pods**, **shelled**, to measure moisture later *(Place **label** from the back page in a plastic bag inside sample and **record weight here**)*			
E6ii_moisture- Record **initial moisture** reading here:			
E6ii_dryweight- Record **dry weight** here:			
E6ii_drymoisture- Record **moisture** reading **after drying** here:			
E10ii- If the primary intercrop was neither maize nor legume *(F03a is 4,5, or within 13-19, or 99)*, **how many plants** were standing in the **1-ridge X 2-meter** area in this location? *(If the main crop was maize or a legume, skip to the primary intercrop yield cut table)*			

Enumerator note – The second intercrop is (transfer F03c)_____ *Second intercrop yield cuts (These question apply only to the crop in F03c):*	Location A	Location B	Location C
D5iii- If the second intercrop was/is **maize** *(F03c=1, 2 or 3)* how many plants were standing in the **2-ridge X 2-meter** area in this location? *(If F03c>3, skip to E3iii)*			
D6aiii- What was/is the total **number of cobs** that have been/ will be harvested in this **2-ridge X 2-meter** area in this location?			
D6biii- What is the **weight of all of the unshelled cobs** to be harvested from **Location B**? *(If this cannot be done, use codes above)*			
D8iii- Weigh and remove a sample of three **(3) cobs** to measure grain moisture later *(Place a **label** from the back page in a plastic bag inside sample **and record weight here**)*			
D8iii_moisture- Record **initial moisture** reading here:			
D8iii_dryweight- Record **dry weight** here:			
D8iii_drymoisture- Record **moisture** reading **after drying** here:			
E3iii **If** the second intercrop was/is a **legume** *(F03c is within 6-12)*, how many plants were standing in the **1-ridge X 2-meter** area? *(If the [6>F03c>12], skip to E10ii)*			
E4aiii- What was/is the total **number of pods** that have been/will be harvested in a **1-ridge X 2-meter** area? *(If this cannot be done, use codes above)*			
E4biii- What is the **weight of all of the unshelled pods** that were harvested from **Location B**? *(If this cannot be done, use codes above)*			
E6iii- Take a sample of nine **(9) pods**, **shelled**, to measure moisture later *(Place **label** from the back page in a plastic bag inside sample and **record weight here**)*			
E6iii_moisture- Record **initial moisture** reading here:			
E6iii_dryweight- Record **dry weight** here:			
E6iii_drymoisture- Record **moisture** reading **after drying** here:			
E10iii- If the second intercrop was neither maize nor legume *(F03a is 4,5, or within 13-19, or 99)*, **how many plants** were standing in the **1-ridge X 2-meter** area in this location? *(If the main crop was maize or a legume, skip to the primary intercrop yield cut table)*			

Fertility __High__   **Field** _____   **Plot** _____

How many complete weedings have been done *since the last Africa RISING survey*?		
When was the **first weeding since our last visit** completed? *(Use month codes)*	**Month**	
(Leave blank if there were 0 weedings) *(Week=1, 2, 3 or 4)*	**Week**	
Type of first weeding? *(1=pulling plants; 2=banking; 3=scraping)*	**Type**	
When was the **second weeding since our last visit** completed? *(Use month codes)*	**Month**	
(Leave blank if there were 0 weedings) *(Week=1, 2, 3 or 4)*	**Week**	
Type of first weeding? *(1=pulling plants; 2=banking; 3=scraping)*	**Type**	

Recent labor on HIGH fertility field (represented plot)

	How many hh **members under 16** provide labor for _____? *If LAB01=0 skip to LAB03*	How many **days** did hh **members under 16** provide labor for _____?	**How many** hh **MEN 16 – 70 years** provide labor for _____? *If LAB03=0 skip to LAB05*	How many **days** did hh **MEN 16 – 70 years** provide labor for _____?	**How many** hh **WOMEN 16 – 70 years** provide labor for _____? *If LAB05=0 skip to LAB07*	How many **days** did hh **WOMEN 16 – 70 years** provide labor for _____?	**How many** hh **members over 70** provide labor for _____? *If LAB07=0 skip to LAB09*	How many **days** did hh **members over 70** provide labor for _____?	**How many MEN were hired to** provide labor for _____? *If LAB09=0 skip to LAB11*	How many **days** did **hired MEN** provide labor for _____?	**How many WOMEN were hired to** provide labor for _____? *If LAB11=0 skip LAB12*	How many **days** did **hired WOMEN** provide labor for _____?
LAB_Activity	**LAB01**	**LAB02**	**LAB03**	**LAB04**	**LAB05**	**LAB06**	**LAB07**	**LAB08**	**LAB09**	**LAB10**	**LAB11**	**LAB12**
6=Weeding *(First weeding)*												
6b=Weeding *(Second weeding)*												
7=Harvesting												

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Fertility ___Low_____   **Field** _____   **Plot** _____

B1- Plot Name_____

lat-	**Plot Latitude**	**S**				.					
long-	**Plot Longitude**	**E**				.					

B3 – **Enumerator, Which image best represents the slope of this plot?** *(See visual aid)*	
B90- How were crops mixed on this field *(1=Monocrop; 2=Intercrop; 3=Strip intercrops)*	

FP19- **EXCLUDING UREA AND NPK** - How much **other fertilizer** was **applied** to this plot?	FP19-**QTY**	
If other fertilizer was not applied, enter "0" for QTY and skip to B3) *(See unit codes below)*	FP20-**UNITS**	
FP23- (**If FP19=0, skip to B3)** What was the name of the "other fertilizer"?		
FP23i- When was **other fertilizer** application finished? (*1=Jan; 2=Feb;… 11=Nov; 12=Dec*)	**Month**	
(For weeks enter 1, 2, 3 or 4)	**Week**	

Enumerator – Please ask the following for all crop types (not just those included in yield cuts)
IMPORTANT – MAKE SURE YOU ASK ABOUT MAIN CROP AND INTERCROPS (DO NOT JUST RELY ON THE MAP). This will serve as confirmation that we successfully captured these important crops during the mid-season survey

F03a- What is the **main crop** planted for the 2017 (current) harvest?	*(See codes below)*	
F03a2- Has the **main crop** been completely harvested?	*(1=Yes; 2=No)*	
F03a3- What is or will be the total **main crop** quantity harvested?	**QTY**	
	UNITS	
Were measured units shelled or unshelled? *(0=NA; 1=shelled; 2=unshelled)*	**SHELL**	
F03b- What is the **primary intercrop** planted for the 2017 (current) harvest? *(See codes–**Enter "0" if none**)*		
F03b2- Has the **primary intercrop** been completely harvested?	*(1=Yes; 2=No)*	
F03b3- What is or will be the total **primary intercrop** quantity harvested?	**QTY**	
	UNITS	
Were measured units shelled or unshelled? *(0=NA; 1=shelled; 2=unshelled)*	**SHELL**	
F03c- What is the **second intercrop** planted for the 2017 (current) harvest? *(See codes–**Enter "0" if none**)*		
F03c2- Has the **second intercrop** been completely harvested?	*(1=Yes; 2=No)*	
F03c3- What is or will be the total **second intercrop** quantity harvested?	**QTY**	
	UNITS	
Were measured units shelled or unshelled? *(0=NA; 1=shelled; 2=unshelled)*	**SHELL**	

Crop codes:		*Unit codes*
0 = None	*13=sorghum*	*1=kg*
1=local maize	*14=cassava*	*2=25 kg sacks*
2=hybrid maize	*15=sweet potato*	*3=50 kg sacks*
3=OPV/Composite maize	*16=Irish potato*	*4=20L bucket*
4=tobacco	*17=millet*	*5=5L pail*
5=cotton	*18=rice*	*6=Ndiwo plate (about 0.5 kg)*
6=pigeonpea	*19=pumpkin*	*7=Nsima plate (about 1 kg)*
7=groundnut	*20=Fallow*	*8=18L Bucket*
8=soya bean	*87=Virgin land*	*9=15L Bucket*
9=common bean	*89=Used/owned by another farmer*	*10=10L pail*
10=velvet bean	*99=Other*	*11=Ox cart*
11=cowpea	*(Specify)_____*	*12=Bunches*
12=bambara nut		*13=Heads/In total*
		99=Other (specify)

Africa RISING Machinga, Malawi Harvest Survey – April 2018   HHID_____

Fertility ____Low____   **Field** _____   **Plot** _____

Enumerator – Please identify three fairly evenly spaced locations (call these A, B & C) across the diagonal of the plot, avoiding borders.

If the plot has been partially harvested, take locations in the areas that have <u>not</u> been harvested.

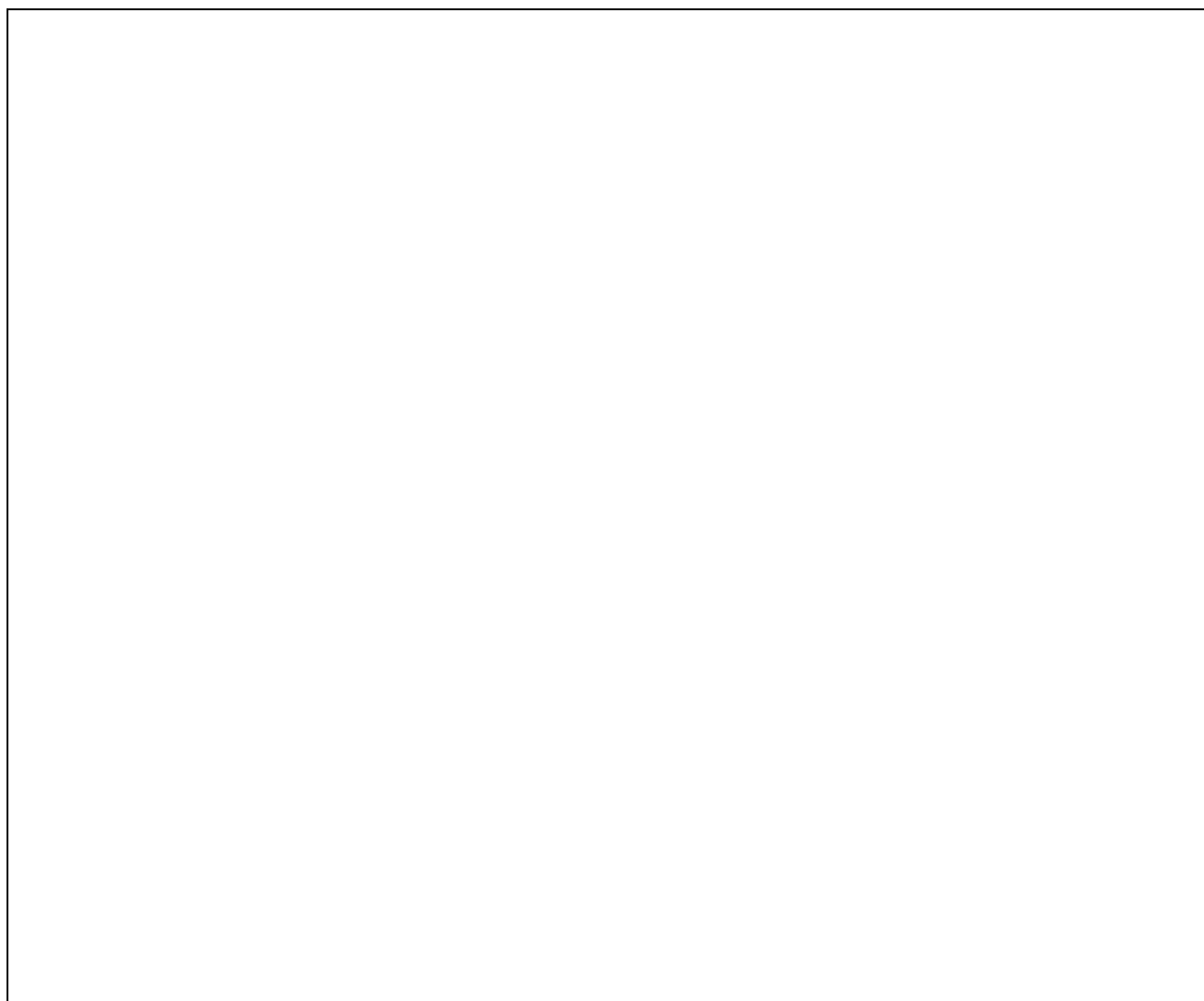**Roughly illustrate the plot in the space provided below. In the illustration, please show:**

*Whether plot is fertilized (**"F"**) or unfertilized (**"UF"**)*
*Area where the **main crop** has been **harvested** indicated by **hash lines (#)***
Describe the crop pattern in the notes section, or using the illustration if that is helpful
*Label locations "**A**", "**B**", and "**C**"*

Enumerator notes:

Fertility   Low_____   Field _____   Plot _____

Enumerator – Please answer each of the following questions for locations A, B & C
       If a question cannot be answered, indicate why with the following codes:
-7=strip cropping (intercrops not present at this location)
-8= crop has been harvested and shelled or harvested and removed from the household
-9=crop is not ready to be harvested

	Location A	Location B	Location C
C2- What is the **spacing between ridges** (center-to-center) in *centimeters*?			
C90- How were crops mixed at this location? *(1=Monocrop; 2=Intercrop; 3= Strip crop)*			

Enumerator note – The main crop is (transfer F03a)_____
Main crop yield cuts (These question apply only to the crop in F03a):

	Location A	Location B	Location C
D5i- **If the main crop was/is maize** (*F03a=1, 2 or 3*) how many plants were standing in the **2-ridge X 2-meter** area in this location? *(If F03a>3, skip to E3i)*			
D6ai- What was/is the total **number of cobs** that have been/ will be harvested in this **2-ridge X 2-meter** area in this location?			
D6bi- What is the **weight of all of the unshelled cobs** to be harvested from **Location B**? *(If this cannot be done, use codes above)*			
D8i- Weigh and remove a sample of three **(3) cobs** to measure grain moisture later *(Place label from the back page in a plastic bag inside sample and **record weight here**)*			
D8i_moisture- Record **initial moisture** reading here:			
D8i_dryweight- Record **dry weight** here:			
D8i_drymoisture- Record **moisture** reading **after drying** here:			
E3i- **If the main crop was/is a legume** *(F03a is within 6-12)*, how many plants were standing in the **1-ridge X 2-meter** area in this location? *(If the [6>F03a>12], skip to E10i)*			
E4ai- What was/is the total **number of pods** that have been/will be harvested in a **1-ridge X 2-meter** area? *(If this cannot be done, use codes above)*			
E4bi- What is the **weight of all of the unshelled pods** that were harvested from **Location B**? *(If this cannot be done, use codes above)*			
E6i- Take a sample of nine **(9) pods**, **shelled**, to measure moisture later *(Place **label** from the back page in a plastic bag inside sample and **record weight here**)*			
E6i_moisture- Record **initial moisture** reading here:			
E6i_dryweight- Record **dry weight** here:			
E6i_drymoisture- Record **moisture** reading **after drying** here:			
E10i- If the **main crop** was neither maize nor legume *(F03a is 4,5, or within 13-19, or 99)*, **how many plants** were standing in the **1-ridge X 2-meter** area in this location? *(If the main crop was maize or a legume, skip to the primary intercrop yield cut table)*			

Enumerator note – The primary intercrop is (transfer F03b)_____
Primary intercrop crop yield cuts (These question apply only to the crop in F03b):

	Location A	Location B	Location C
D5ii- If the primary intercrop was/is **maize** (*F03b=1, 2 or 3*) how many plants were standing in the **2-ridge X 2-meter** area in this location? *(If F03b>3, skip to E3ii)*			
D6ai- What was/is the total **number of cobs** that have been/ will be harvested in this **2-ridge X 2-meter** area in this location?			
D6bii- What is the **weight of all of the unshelled cobs** to be harvested from **Location B**? *(If this cannot be done, use codes above)*			
D8ii- Weigh and remove a sample of three **(3) cobs** to measure grain moisture later *(Place a **label** from the back page in a plastic bag inside sample **and record weight here**)*			
D8ii_moisture- Record **initial moisture** reading here:			
D8ii_dryweight- Record **dry weight** here:			
D8ii_drymoisture- Record **moisture** reading **after drying** here:			

Fertility   Low_____   Field _____   Plot _____

Enumerator – Please answer each of the following questions for locations A, B & C

If a question cannot be answered, indicate why with the following codes:
-7=strip cropping (intercrops not present at this location)
-8= crop has been harvested and shelled or harvested and removed from the household
-9=crop is not ready to be harvested

E3ii **If the primary intercrop was/is a legume** *(F03b is within 6-12)*, how many plants were standing in the **1-ridge X 2-meter** area? *(If the [6>F03b>12], skip to E10ii)*			
E4aii- What was/is the total **number of pods** that have been/will be harvested in a **1-ridge X 2-meter** area? *(If this cannot be done, use codes above)*			
E4bii- What is the **weight of all of the unshelled pods** that were harvested from **Location B**? *(If this cannot be done, use codes above)*			
E6ii- Take a sample of nine **(9) pods**, **shelled**, to measure moisture later *(Place **label** from the back page in a plastic bag inside sample and **record weight here**)*			
E6ii_moisture- Record **initial moisture** reading here:			
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E6ii_drymoisture- Record **moisture** reading **after drying** here:			
	Location A	Location B	Location C
E10ii- If the primary intercrop was neither maize nor legume *(F03a is 4,5, or within 13-19, or 99)*, **how many plants** were standing in the **1-ridge X 2-meter** area in this location? *(If the main crop was maize or a legume, skip to the primary intercrop yield cut table)*			

Enumerator note – The second intercrop is (transfer F03c)_____ **Second intercrop crop yield cuts** *(These question apply only to the crop in F03c):*	Location A	Location B	Location C
D5iii- If the second intercrop was/is **maize** *(F03c=1, 2 or 3)* how many plants were standing in the **2-ridge X 2-meter** area in this location? *(If F03c>3, skip to E3iii)*			
D6aiii- What was/is the total **number of cobs** that have been/ will be harvested in this **2-ridge X 2-meter** area in this location?			
D6b10iii- What is the **weight of all of the unshelled cobs** to be harvested from **Location B**? *(If this cannot be done, use codes above)*			
D8iii- Weigh and remove a sample of three **(3) cobs** to measure grain moisture later *(Place a **label** from the back page in a plastic bag inside sample **and record weight here**)*			
D8iii_moisture- Record **initial moisture** reading here:			
D8iii_dryweight- Record **dry weight** here:			
D8iii_drymoisture- Record **moisture** reading **after drying** here:			
E3iii **If the second intercrop was/is a legume** *(F03c is within 6-12)*, how many plants were standing in the **1-ridge X 2-meter** area? *(If the [6>F03c>12], skip to E10iii)*			
E4aiii- What was/is the total **number of pods** that have been/will be harvested in a **1-ridge X 2-meter** area? *(If this cannot be done, use codes above)*			
E4biii- What is the **weight of all of the unshelled pods** that were harvested from **Location B**? *(If this cannot be done, use codes above)*			
E6iii- Take a sample of nine **(9) pods**, **shelled**, to measure moisture later *(Place **label** from the back page in a plastic bag inside sample and **record weight here**)*			
E6iii_moisture- Record **initial moisture** reading here:			
E6iii_dryweight- Record **dry weight** here:			
E6iii_drymoisture- Record **moisture** reading **after drying** here:			
E10iii- If the second intercrop was neither maize nor legume *(F03a is 4,5, or within 13-19, or 99)*, **how many plants** were standing in the **1-ridge X 2-meter** area in this location? *(If the main crop was maize or a legume, skip to the primary intercrop yield cut table)*			

Fertility   Low_____   **Field** _____   **Plot** _____

*Enumerator – The following questions only apply to the period **since the last visit from Africa RISING***

How many complete weedings have been done *since the last Africa RISING survey*?		
When was the **first weeding since our last visit** completed? *(Use month codes)*	**Month**	
(Leave blank if there were 0 weedings) *(Week=1, 2, 3 or 4)*	**Week**	
Type of first weeding? *(1=pulling plants; 2=banking; 3=scraping)*	**Type**	
When was the **second weeding since our last visit** completed? *(Use month codes)*	**Month**	
(Leave blank if there were 0 weedings) *(Week=1, 2, 3 or 4)*	**Week**	
Type of first weeding? *(1=pulling plants; 2=banking; 3=scraping)*	**Type**	

Recent labor on LOW fertility field (represented plot)

	How many hh **members under 16** provide labor for _____? *If LAB01=0 skip to LAB03*	How many **days** did hh **members under 16** provide labor for _____?	**How many** hh **MEN 16 – 70 years** provide labor for _____? *If LAB03=0 skip to LAB05*	How many **days** did hh **MEN 16 – 70 years** provide labor for _____?	**How many** hh **WOMEN 16 – 70 years** provide labor for _____? *If LAB05=0 skip to LAB07*	How many **days** did hh **WOMEN 16 – 70 years** provide labor for _____?	**How many** hh **members over 70** provide labor for _____? *If LAB07=0 skip to LAB09*	How many **days** did hh **members over 70** provide labor for _____?	**How many MEN were hired to** provide labor for _____? *If LAB09=0 skip to LAB11*	How many **days** did **hired MEN** provide labor for _____?	**How many WOMEN were hired to** provide labor for _____? *If LAB11=0 skip LAB12*	How many **days** did **hired WOMEN** provide labor for _____?
LAB_Activity	**LAB01**	**LAB02**	**LAB03**	**LAB04**	**LAB05**	**LAB06**	**LAB07**	**LAB08**	**LAB09**	**LAB10**	**LAB11**	**LAB12**
6=Weeding *(First weeding)*												
6b=Weeding *(Second weeding)*												
7=Harvesting												

Hunger and Food Security

Enumerator – please explain that the following page of questions is aimed at learning more about the hunger and food security of the household.

The first question (HFS01) is in regards to the previous harvest (not the crops currently/recently harvested).

HFS01 *In what month did your stored supplies of last year's (**2016-2017**) maize crop run out?* *(1=January; 2=February…12=December)*	

The second set of questions is in regards to the past 12 months

*Did any household members go a **full day without food** during___? (1=Yes (hungry); 2=No)*	
Month	**HFS02**
11= April 2017	
12= May 2017	
1= June 2017	
2= July 2017	
3= August 2017	
4= September 2017	
5= October 2017	
6= November 2017	
7= December 2017	
8= January 2018	
9= February 2018	
10 = March 2018	

Household Hunger Scale

*Enumerator, This set of questions (HHS) is specific to the **past month (4 weeks/30 days)**.*

HHS01. In the past 4-weeks/30 days, **was there ever no food** to eat of any kind in the house because of lack of resources to get food?	1=Yes 2=No **IF NO, skip to HHS02**	
HHS01a. How often did this happen in the past 4-weeks/30 days?	1=Rarely (1-2 times) 2=Sometimes (3-10 times) 3=Often (More than 10 times)	
HHS02. In the past 4-weeks/30 days, did you or any household member **go to sleep at night hungry** because there was not enough food?	1=Yes 2=No **IF NO, skip to HHS03**	
HHS02a. How often did this happen in the past 4-weeks/30 days?	1=Rarely (1-2 times) 2=Sometimes (3-10 times) 3=Often (More than 10 times)	
HHS03. In the past 4-weeks/30 days, did you or any household member **go a whole day and night without eating** anything at all because there was not enough food?	1=Yes 2=No **IF NO, skip to HH19**	
HHS03a. How often did this happen in the past 4-weeks/30 days?	1=Rarely (1-2 times) 2=Sometimes (3-10 times) 3=Often (More than 10 times)	

Maize Storage

HH19 *Where was your **primary storage for maize** from the 2018 harvest? **See codes***			
HH20 *What methods do you plan use to control pests in stored grain? (See codes below)*			
HH19 Codes:			**HH20 Codes:**
1=Granary	*6=Raised covered platforms*	*11=Commercial*	*0=None*
2= Pit in ground	*7=Open ground, covered*	***88=Did not store***	*1=Pesticide*
3=Cribs	*8=Open ground, uncovered*	*99=Other*	*2=Ash*
4=Sacks	*9=Roof*	*(specify)_____*	*3=Tephrosia*
5=Raised open platforms			*99=Other (Specify)*

NV4 Did you or anyone in the household sell/plan to sell any field crops from the 2018 harvest? 1=Yes; 2= No **If No Skip to NEXT PAGE**	

Crop sales – **Enumerator**, list **each crop** the household has sold, or plans to sell from the 2018 harvest (NOTE – Field crops only - do not include fruits & vegetables

Crop	What is the **total** quantity **sold** (or planned to sell) from the 2018 harvest		**Enumerator** – Ask the remaining questions about the **LARGEST COMPLETED TRANSACTION** in terms of quantity sold. **If more than one sale is the same size as the largest sale, ask about the earliest sale.**									
			What **quantity** was or will be **sold** during the **largest transaction**?		What **price** did you (or do you expect to) receive during the **largest transaction**? (MWK)		To **whom** did you (or do you expect to) sell for the **largest sale**? See codes	**Where** was the **crop exchange** made for **largest sale** (or where do you expect it to be)? See codes	How far from the house **to** the point of the **crop exchange** for largest sale? (km)	How much did you (or do you expect to pay **in total** to **transport** the crop to the point of exchange (MWK)	**When** was (or will be) the timing for the largest transaction? (Code **1-12** for month) (Code **1-4** for week)	
Crop	Qty CS01	Unit CS02	Qty CS03	Unit CS04	Price CS05	Unit CS06	CS07	CS08	CS09	CS10	CS11 Month	CS12 Week

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

Units:
1=kg
2=25 kg sacks
3=50 kg sacks
4=20L Bucket
5=5L pail
6=Ndiwo plate (about half a kg)
7=Nsima plate (about a kg)
8=18L Bucket
9=15L Bucket
10=10L pail
11=Ox cart
12=Bunches
13=Heads/In total
99=Other (specify)

Buyer codes (CS07)
1=Other household
2=Small trader
3=Large trader
4=Admarc
5=Other (Specify)_____

Exchange location codes (CS08)
1=On the farm
2=From the house
3=Trading center/local market
4=Within the village (not on the farm or at market)
5=Boma
6=Admarc
99=Other (Specify)_____

| HH18 *Did anyone in this household produce fruits or vegetables during the 2017/18 season? 1=Yes; 2=No **If No, Skip to NEXT PAGE*** | |

Horticulture and other agricultural products not grown exclusively during the rainy season – Enumerator, first list all products grown, then ask question HP01 – HP18 row-by-row (that is, ask all questions for each product before moving on to the next product)

Product *(See codes)*	*Where is _____ grown? (See codes)*	*When you are **producing**, how much _____ do you **harvest** in an **average production** month?*		*When you are **producing**, how much _____ do you **harvest** in a **high production** month?*		*When you are **producing**, how much _____ do you **harvest** in a **low production** month?*		*When you are **selling**, how much _____ do you **sell** in an **average sales** month?*		*When you are **selling**, how much _____ do you **sell** in a **high sales** month?*		*When you are **selling**, how much _____ do you **sell** in a **low sales** month?*		*What price do you normally receive on **average** when selling _____? (MWK)*		*How many **months** of the year are "**average**" production / sales*	*How many **months** of the year are "**high**" production/ sales*	*How many **months** of the year are "**low**" production/ sales*
								Enumerator – If the household does not sell, enter "0" for HP08 and skip to HP16										
		Qty	Unit	Qty	Unit	Qty	Unit	Qty	Unit	Qty	Unit	Qty	Unit	Price	Unit			
HP01	HP01	HP02	HP03	HP04	HP05	HP06	HP07	HP08	HP09	HP10	HP11	HP12	HP13	HP14	HP15	HP16	HP17	HP18

Product codes:
21=Cashew nut
22=Oranges
23=Banana
24=Pineapple
25=Guava
26=Avacado
27=Watermelon
28=Mangoes

29=Lemons
30=Grapefruit
31=Other fruit (Specify

_____)

40=Cabbage
41=Rape
42=Spinach
43=Chinese Cabbage
44=Tomato
45=Onion
46=Okra
47=Eggplant
48=Local eggplant
49=Pumpkin

50=Pumpkin leaves
51=Chilis
52=Cauliflower
53=Carrots
54=Lettuce
55=Green beans
56=Green maize
57=Mustard (seed)
58 Other vegetable (Specify

_____)

HP01 codes:
1=Dimba/Dambo/Natural wetland
2=Irrigated field/Not a natural wetland
3=Irrigated garden plot at home
4=Irrigated garden away from home
5=Fruit trees at home
6=Fruit trees away from home (orchard)
7=Other
   (Specify_____)

Unit codes
1=kg
2=25 kg sacks
3=50 kg sacks
4=20L Bucket
5=5L pail
6=Ndiwo plate (about half a kg)
7=Nsima plate (about a kg)

8=18L Bucket
9=15L Bucket
10=10L pail
11=Ox cart
12=Bunches
13=Heads/In total
99=Other (specify)

Machinga Harvest Survey – April 2018 **HHID**_____ **Fertility** *(H/L/N)*_____ **Crop code**_____ **Tick one and circle:** Main crop……………………._____ Primary intercrop…………_____ Second intercrop………….._____	**Machinga Harvest Survey – April 2018** **HHID**_____ **Fertility** *(H/L/N)*_____ **Crop code**_____ **Tick one and circle:** Main crop……………………._____ Primary intercrop…………_____ Second intercrop………….._____
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