				Confidential
International Food Policy Research Institute	Food and Agriculture Organization	Leibniz Institute of Vegetable and Ornamental Crops	Center for Social and Economic Research SOTSECONIC	University of Central Asia, UCA

Panel Survey of Households

LIFE IN KYRGYZSTAN 2016

Agriculture Questionnaire

INFORMATION ABOUT HOUSEHOLD

Name o	f a main respond			Individual respondent	code
Visit Nº	Date of a visit (DD.MM)	Start of interview (HH:MM)	End of interview	Assessment of the quality of information	Notes on survey
			(HH:MM)	1 Reliable; 2 Unreliable	

Module 1: FARM LAND AND USE

1.1. Land Plots

Enumerator: (read out) We would like to know about household farmland and use during the 2015/16 agricultural season. Yes 1 A301 Does your household own/cultivate any plot of land? If No > go to Section 7

A301	Does your nousehold own/cultivate any	plot of faild:	No	2	n No> go to section /
A302	How many plots or parcels of land does	s your household own? (in numbers; include ho	ousehold	garden if used for agricultural purposes)	plots
A303	Please indicate the organizational type of your household	Sole owner of a peasant farm Co-owner of a peasant farm with other households		3. Member of a collective farm (agricultu 4. None of the above: Household farms o	¥

Read out: We will first make a simple sketch of all plots owned/operated by you and then ask questions regarding ALL fields or plots that you cultivated (including rented in / borrowed in), rented-out or borrowed-out and land cultivated during the 2015/16 Winter and Summer agricultural seasons. We will ask you questions on crop management and harvest only for land cultivated, kitchen gardens and orchards (excluding the rented out/borrowed out fields).

After sketching, sequentially number the fields 1, 2, 3 etc.. Label (in words) on the sketch the location of each field with respect to the homestead (HS), the crop(s) cultivated in each field and the season(s) when they were cultivated (follow the instructions in the interviewers manual).

Reference period: 2015/2016 agricultural season (1st October 2015 – 30th September 2016).

2.2 Fields

Enumerator: The sketch shows that this household has cultivated \$)__ fields. Please tell us about each of those fields including fields cultivated or managed on behalf of absentee owners.

If A301=2 → go to SECTION "2.6 Crop Sales" to capture potential sales from previous year's harvest. Ask the respondent to give you the details about all of those fields.

Reference Period: 2015/16 agricultural season

	What is the land-use			How far is	Are you						In which season/s have
	of this field?	of this	field?	the parcel	or is any	How did this	Agro-Forestr	y – trees / shrub	s on fields or ar	ound the	you cultivated this field?
				from the	member	household	boundaries				
	1=own cultivated field		Unit	dwelling?	of the	acquire this field?		How many	In what year	What is the	$I=I^{st}$ cultivation
	2=rented in 3=borrowed in	field	1	(write 0 for	household	1=bought	any trees/	trees / shrubs	, I	main tree /	$2=2^{nd}$ cultivation $3=both$
	4=kitchen garden		1= hectare	kitchen	the legal owner?	2=bartered	shrubs	are there	most of the trees / shrubs	shrub species in	4= not cultivated
Field ID	5=fallow (natural/		2=	gardens)		3=inherited	growing in or around	currently? (incl. border)		this field?	(Enumerator: If answer is
T ICIG ID	improved)		sotka	. ,	(see codes	4=received as gift	this field?	(mei. border)	in this field.	ting nera.	1 - fill in Tables 2.3.1, 2.4.1
	6=rented out 7=borrowed out			in km	below)	5=received from land distribution		1=1-10	(Enter 9 if did	(see codes	and 2.5.1.
	8=orchard					6=rented/	I = Yes	2=11-20 3=20-50	not plant any	for tree	If answer is 2 - fill in Tables 2.3.2, 2.4.2 and 2.5.2.
	9=personal woodlot					borrowed	2=No -> FL02	3=20-30 4=50 or more	trees / shrubs)	species)	If answer is 3 - complete all
	10=hayfield 11=other					7=other	FLU2	99 =Not sure			tables from 2.3.1 to 2.5.1).
	11 -omer										If answer is 4 – go to Section 7.
FIELD	F01	H227	F03	H228	H229	H230	AF01	AF02	AF03	AF04	FL02
1											
2											
3											
4											
5											

Tenure status (H229)	Tree types (AF04)	8= Walnut
1=yes, private ownership (red book)	0=None planted	9= Birch
2=yes, decision of local administrator	1=Poplar	10= Seabuckthorn
3=yes, other document	2=Elm	11= Rosehip
4=no	3=Beech (Fagus)	12= Siren
5=other	4= Willow	13= Acacia
	5= Mulberry (Sucamine)	14=Other
	6= Fruit trees (apple, pear, apricot, etc)	
	7= Oak	

2.3.1. Land Use FIRST CULTIVATION

<u>Enumerator:</u> Please list below only <u>fields cultivated in the First Cultivation</u>. These are use codes F01 = 1, 2, 3, 4 or 10 (cultivated) in Table 2.2 for which FL02=1 or 3. <u>FL02_1:</u> In which month and year have you started planting the first cultivation (October 2015-September 2016)?

Reference period: 2015/2016 Agricultural season

	ce perioa:					T			I			1	I		1	1
Field	What	Was the	_	What typ		On what		How many times		How many	Ask if	Did the HH		How much		How
ID	<u>main</u>	field	crop	tillage m	ethods	percentag		was the field	<i>FL07></i>	times was	FL08>0	apply anim	HH use	did the	HH hire	much did
	crop or	monocr	mixture	were use	d in this	the field d	lid you	sprayed with	0	the field				fertilizers	labour	you pay
(enter	use did		on the	field?		use the til	lage	herbicide?		sprayed		and/or com	to	used for	for this	for hired
appro-	the hh	crop	field	-		methods			How	with	Horri murch	post to the	cultivate	this field	field?	labor to
priate	put this	mixture	How	List up to		indicated	in	(Complete sprays)	much	insecticide?	How much	field?	this field?	cost (in		work on
field	field to	in this		starting w		FL04a and	d	(Enter "0" if field	did it		did it cost			cash)?		this
number	in the	First	many	most impe		FL04b		not sprayed and	cost to	(Complete	to spray	0=None				field?
from 2.2	2015/16	Cultivat	crops .		rst then the	?		skip to FL08)	spray	sprays)	with	1=Yes,				
	First	ion?	were in	second m		Record the	?	Enumerator:	with		insecticide				1 = Yes	
	Cultivati			important		response o		specify that	herbici	(Enter "0" if	s?	manure	1=Yes		2=No >	
	on?		during	only I mo	rator: If	scale of 0 t		herbicides are	des?	field not		2=Yes,	2=No>	(Soms)	skip to	(Soms)
		1=Mono-	the First	record "C	thod used,	If only one		J		sprayed and skip to	(6.)	compost 3=both	skip to	(next field	
	(see	· · · F	Cultivati	2 nd metho	od.)	was used, e		insecticides		sκιρ το FL09)	(Soms)	3-0011	FL10			
	codes	2=Mixtu	on?	(see code		100 in FL0)4 <i>c</i>	(FL08) to kill	(Soms)	I Loo)						
	below)	re		,	,			insects								
FIELD	- '	FL03a	FL03b	FL04a	FL04b	FL04c	FL04d	FL07	FL07b	FL08	FL08b	FL09	H237	H239	FL10	FL10b
FIELD	FLUI	FLUSa	FLUSU	rL04a	FLU40	FL04C	FLU40	FL07	FLU/U	FLU6	FLUOU	FLU9	ПДЭТ	П239	FLIU	FLIUU
	1	1		1	l	1	1	1	l	1	I	1	l	1	I	1

Crop code (FL01)			Main Tillage (FL04)
1 = Winter wheat	11 = Sainfoin (Esparcet)	21= Grape	1 = Hand hoeing
2 = Spring wheat	12= Alfaalfa (Lucerne)	22= Peach	2 = Zero tillage
3 = Burley	13=Tomatoes	23= Kitchen Garden	3 = Ploughing with tractor
4 = Maize	14=Onion	24= Fruit Orchard	4 = Ploughing with horses
5 = Sunflower	15=Carrot	25=Apricots	5 = Ridging (before planting)
6 = Cotton	16= Sugar beet	26=Other	6 = Mounding
7 = Potato	17= Cabbage		7 = Did not till – broadcast seed
8 = Tobacco	18= Apple		8= No other tillage method
9 = Kidney beans	19=Pear		
10 = Rice	20= Cherry		

2.3.2. Land Use SECOND CULTIVATION (Spring/Summer)

Enumerator: Please list below only fields cultivated in the SECOND cultivation. These are use codes F01 = 1, 2, 3, 4 or 10 (cultivated) in Table 2.2 for which FL02=2 or 3.

Reference period: 2015/2016 Agricultural Summer Season

Field	What	Was the		What typ	es of	On what	% of	How many times	Ask if	How many	Ask if	Did the HH	Did the	How much	Did the	How
ID	<u>main</u>	field	crop	tillage me				was the field	FL07>	times was	FL08>0	apply anim	HH use	did the	HH hire	much did
	crop or	monocr	mixture on the	were used	d in this	use the til		sprayed with	0	the field				fertilizers	labour	you pay
(enter	use did	oped or	field	field?		methods		herbicide?	**	sprayed		and/or plant		used for	for this	for hired
appro- priate	the hh	crop	How	Lintum	TWO	indicated		(Complete sprays)	How	with	How much	manure/		this field	field?	labor to
field	put this field to	mixture in this	many	List up to starting w		FL04a and FL04b	a	(Enter "0" if field		insecticide?	did it cost	compost to the field?"	this field?	cash)?		work on this
number	in the	Second	crops	most impo		rL040		not sprayed and	cost to	(Complete	to spray	me neid?		casii)!		field?
from 2.2)	Second	Cultivat	were in	method fir	st then the	Record the	?	skip to FL08)	spray	sprays)	with	0=None				neid.
	Cultivati		tnis field	second mo		response o		Enumerator:	with	Æ	insecticide	1=Yes,	I=Yes		1=Yes	
	on?		during	important (Enumera		scale of 0 t	to 100.	enacify that	herbici	(Enter "0" if field not	s?	animal	2=No->		2=No >	
	(see	1=Mono-	the Second	only 1 met	thod used,	was used,	: meinoa enter	herbicides are	des?	sprayed and		manure 2=Yes,	skip to	(Soms)	skip to next field	(Soms)
	codes	crop 2=Mixtu		record "0	" for the	100 in FL0		used for weeding, insecticides		skip to	(Soms)	compost	FL10		пехі јіеш	
	below)	re	on?	2 nd method (see codes				(FL08) to kill	(Soms)	FL09)		3=both				
				(see codes	(below)			insects	(Soms)							
FIELD	FL01	FL03a	FL03b	FL04a	FL04b	FL04c	FL04d	FL07	FL07b	FL08	FL08b	FL09	H237	H239	FL10	FL10b

Crop code (FL01)	10 = Rice	20= Cherry	Main Tillage (FL04)
1 = Winter wheat	11 = Sainfoin (Esparcet)	21= Grape	1 = Hand hoeing
2 = Spring wheat	12= Alfaalfa (Lucerne)	22= Peach	2 = Zero tillage
3 = Burley	13=Tomatoes	23= Kitchen Garden	3 = Ploughing with tractor
4 = Maize	14=Onion	24= Fruit Orchard	4 = Ploughing with horses
5 = Sunflower	15=Carrot	25=Apricots	5 = Ridging (before planting)
6 = Cotton	16= Sugar beet	26=Other	6 = Mounding
7 = Potato	17= Cabbage		7 = Did not till – broadcast seed
8 = Tobacco	18= Apple		8= No other tillage method
9 = Haricot beans	19=Pear		

2.4.1 Irrigation and Crop Rotation in FIRST CULTIVATION *Reference Period: 2015/16 Agricultural season, FIRST CULTIVATION*

Field ID		l plots									
	Did the	What was the	How	How	Soil ero	osion	Soil s	alinity	What main crop		What main crop
	HH	main type of	much	much	Is this field prone	What, if	Is this field	What, if	or use did the		
	irrigate	irrigation used	water did	did you	to soil erosion	anything, did	prone to	anything,	HH put this field		HH put this field
	this field	in the First Cultivation?	you use to	pay for	and/or flash	the hh do to	salinity?	have you	to in the 2014 First	from the 2014 First Cultivation	to in the 20/14 First
	during the First	Cultivation?	irrigate this field?	irrigatio n in	flooding /	prevent soil	1 17	done to	Cultivation?	mainly used or	Cultivation?
	Cultivatio	I=piped public	uns neig.	total?	landslides?	erosion and/or flash	1=Yes 2=No	deal with salinity?	Cuttivation:	disposed of?	Cuttivation:
	n?	drinking water	m3		I = Yes	flooding/land	9=don't	sammy:	(see crop/use		
		2=irrigation canal			2=No	slide in this	know	(see codes	codes below)	(see codes below)	(see crop/use
	1=Yes	3=well/river/stre		(Soms)	9=don't know	field?		below)			codes below)
	2=No	am& bucket			If No, skip to F11a	(see codes below)	If No, skip				
		4=other 5= artesian well				below)	to F13				
FIELD	H235	H235b	H235c	H235d	F10a	F10b	F11a	F11b	F13	F14	F15
1											
2											
3											
4											
5											

Soil Man. codes (F10b, F11b)		Crop code or Use Codes	s (F13, F15)	Crop residue use (F14)
0=None 1=Stone bunds	1 = Winter wheat 2 = Spring wheat	12= Alfalfa (Lucerne) 13=Tomatoes	23= Kitchen Garden 24= Fruit Orchard	1=Left in field then plowed/incorporated into field 2=Left in the field and grazed by animals
2=Earthen bunds 3=Terraces	3 = Burley 4 = Maize	14=Onion 15=Carrot	25=Apricots 26=Other Specify	3=Burned on field 4=Cut & removed from field & fed to animals
4=Drainage ditches 5=Grass barriers 6=Contour farming/ plowing	5 = Sunflower 6 = Cotton 7 = Potato 8 = Tobacco	16= Sugar beet 17= Cabbage 18= Apple 19=Pear	28= New field 66= Not cultivated 99=Don't know/Not available	5=New field, cleared later 6=Left in field or did nothing
7=Other (Specify)	9 = Haricot beans 10 = Rice 11 = Sainfoin (Esparcet)	20= Cherry 21= Grape 22= Peach		

2.4.2. Irrigation and Crop Rotation SECOND CULTIVATION Reference Period: 2015/16 Agricultural season

Field ID		15/10 Agriculur	ar scuson			Ask for all	plots				
	Did the	What was the	How	How	Soil ero		•	alinity	What main crop		What main crop
	HH	main type of	much	much did	Is this field	What, if	Is this field	What, if		1	or use did the hh
	irrigate this field	irrigation used in the Second	water did you use to	you pay for	prone to soil	anything, did	prone to	anything,	put this field to in the 2014?	from this field from the 2014	put this field to in <i>the 2014</i> ?
	during the	Cultivation?	irrigate	irrigation	erosion and/or flash flooding /	the hh do to prevent soil	salinity?	have you done to	III IIIC 2017.	mainly used or	III 1110 2017.
	Second	1 ' 1 11'	this field?	in total?	landslides?	erosion	1=Yes	deal with	(see crop/use	disposed of?	
	Cultivatio n? 1=Yes 2=No	1=piped public drinking water 2=irrigation canal 3=well/river/stre am& bucket 4=other	m3	(Soms)	I=Yes 2=No 9=don't know If No, skip to F11a	and/or flash flooding/land slide in this field? (see codes below)	2=No 9=don't know If No, skip to F13	salinity? (see codes below)	codes below)	(see codes below)	(see crop/use codes below)
		5= artesian well									
FIELD	H235	H235b	H235c	H235d	F10a	F10b	F11a	F11b	F13	F14	F15
1											
2											
3											
4											
5											

Soil Man. codes (F10b, F11b)		Crop code or Use Cod	es (F13, F15)	Crop residue use (F14)
0=None 1=Stone bunds 2=Earthen bunds 3=Terraces 4=Drainage ditches 5=Grass barriers 6=Contour farming/ plowing	1 = Winter wheat 2 = Spring wheat 3 = Burley 4 = Maize 5 = Sunflower 6 = Cotton 7 = Potato 8 = Tobacco	12= Alfalfa (Lucerne) 13=Tomatoes 14=Onion 15=Carrot 16= Sugar beet 17= Cabbage 18= Apple 19=Pear	23= Kitchen Garden 24= Fruit Orchard 25=Apricots 26=Other Specify 28= New field 66= not cultivated 99=Don't know/Not available	1=Left in field then plowed/ incorporated into field 2=Left in the field and grazed by animals 3=Burned on field 4=Cut & removed from field & fed to animals 5=New field, cleared later 8=Left in field or did nothing
7=Other (Specify)	9 = Haricot beans 10 = Rice 11 = Sainfoin (Esparcet)	20= Cherry 21= Grape 22= Peach		

2.5.1. Crop Management – Planting and Harvest in FIRST CULTIVATION

Enumerator: Transfer field numbers from Table 2.3.1. Ask the following questions for all fields planted in the 2015/16 agricultural First Cultivation. For grain harvest, make sure you capture the CM15b to calculate real grain harvest.

Reference Period: 2015/2016 Agricultural First Cultivation

Field ID	Crop Code	What wa		What % of the area planted was harvested in this First Cultivati	(Ask if area harvested < area planted) What is the main reason for not harvesting the whole area planted? (see codes	main seed variety did the hh use? I= purcha sed	spend for seeds/tuber s/vines for this crop in this season on this field? (estimate cash value if	specify the type of seed supplier 1=specialize d dealer 2=bazaar 3=neighbors	What quar seed, tuber vines did t plant of th First Culti this field?	rs, or he hh is crop in vation on	How much of th did the hh harve this season from field?	st during this	GRAINS only Is the harvest	How much did machinery for this season on Please fill for below	this cro this plo	p during t?
		Area planted	Unit $1 = Ha$ $2 = Sotka$	% harvested	below)		(Soms)	6=I do not know	Quantity planted	Unit (see codes below)	Quantity harvested (if $0 \rightarrow go \ to \ next \ crop$)	Unit (see codes below)	1=cleaned 2=uncleane d	Land preparation and seeding (Soms)	Weedin g (Soms)	Harvesting and threshing (Soms)
FIELD	CROP	CM01	CM02	CM03	CM06	CM07	H245	H246	CM09	CM10	CM14	CM15	CM15b	CM16a	CM16b	CM16c

Crop code (CROP)			Reason for not harvesting total planted are	ea (CM06)	Unit Code (CM10, CM15)
1 = Winter wheat	12= Lucerne	23= Plums	1 = wilting due to drought	10=lack of fertiliser	1=50 kg bag
2 = Spring wheat	13=Tomatoes	24=Apricots	2 = pests and diseases	11= failed germination due to drought	2=25 kg bag
3 = Burley	14=Onion	25=Raspberry	3 = floods, heavy rain	12= failed germination due to bad seed	3=10 kg bag
4 = Maize	15=Carrot	26= Strawberry	4 = field not weeded / weeded late due to	13= low productivity after germination	4=kilogram
5 = Sunflower	16= Sugar beet	27=Currant	bad seed	14= planted late	5=gram
6 = Cotton	17= Cabbage	28= Garlic	5 = animal / bird destruction	15= eaten fresh	6=units
7 = Potato	18= Apple	29= Pepper	6 = fire	16= don't know	
8 = Tobacco	19=Pear	30= Peas	7 = theft	17 = other, specify	
9 = Haricot beans	20= Cherry	31= Other	8 = weeds overtook the field		
10 = Rice	21= Grape	(specify)	9 = not enough labour		
11 = Sainfoin	22= Peach	**			

2.5.2. Crop Management – Planting And Harvesting in the Second Cultivation (Spring/Summer)

<u>Enumerator:</u> Transfer field numbers from Table 2.3.2. Ask the following questions for all the fields the household planted in the 2015/16 agricultural SUMMER season. For grain harvest, make sure you capture the CM15b to calculate real grain harvest.

Reference Period: The 2015/2016 Agricultural Summer Season

Code Copy the main crop from Table 2.3.1 (FL01) and ask other crops if	under each crop in this Second Cultivation? Cultivation? Area Unit		of the area	harvested < area planted) What is the main reason for not harvesting the whole area	main seed variety did the hh use? I=purch ased	seed, tul vines did plant of in Second on this f	pers, or d the hh this crop Cultivation field?	spend for seeds/tubers/ vines for this crop in this season on this field? (estimate cash value if bartered)	specify the type of seed supplier 1=specialize d dealer 2=bazaar 3=neighbors 4=state seed	crop did the harvest duri season from	arvest during this eason from this eld?	Ask for GRAINS only Is the harvest reported from cleaned or uncleaned grains?	spend on a crop durin this plot? Please fill	machiner ng this se for all cr low	ry for this ason on ropping
(mixture)		Unit $I = Ha$ $2 = Sotka$	% harvested	planted? (see codes below)		Quantity planted	Unit (see codes below)	Soms)	scheme 5=others 6=I do not know	(if 0 → go	below)	1=cleaned 2=uncleaned	ration and	g	Harvestin g and threshing (Soms)
CROP	CM01	CM02	CM03	CM06	CM07	CM09	CM10	H245	H246	CM14	CM15	CM15b	CM16a	CM16b	CM16c
	Code Copy the main crop from Table 2.3.1 (FL01) and ask other crops if FL03=2 (mixture)	Code under ea this Secc Copy the main crop from Table 2.3.1 (FL01) and ask other crops if FL03=2 (mixture) Area planted	Code under each crop in this Second Cultivation? Copy the main crop from Table 2.3.1 (FL01) and ask other crops if $FL03=2$ (mixture) Area planted $I = Ha$ $2 = Sotka$	Code under each crop in this Second Cultivation? Untivation? Untivation? Untivation? Untivation? Untivation? Untivation? Untivation? Unit Second Cultivation? Unit S Second Cultivation? Unit S Area planted S Planted	Code under each crop in this Second Cultivation? Untivation? Untivation? Unit second Cultivation? Unit second Cultivation? Unit second Cultivation? Unit second Cultivation? What is the main reason for not harvesting the whole area planted? (see codes below) Area planted $I = Ha$ and $I = Ha$ harvested in this second Cultivation? Unit second Cultivation? What is the main reason for not harvesting the whole area planted? (see codes below)	Code under each crop in this Second Cultivation? Untivation? Untivation? Unit Second Cultivation? Unit Second Cultivation Unit Second Cultivation Unit Second Cultivation Unit Second Cultivation? Unit Second Cultivation Unit	Code under each crop in this Second Cultivation? Unit variety from Table 2.3.1 (FL01) and ask other crops if FL03=2 (mixture) Area planted $I = Ha$ planted I	Code under each crop in this Second Cultivation? Unit seed planted was harvested in this Second Cultivation and ask other crops if FL03=2 (mixture)	Code this Second cultivation? Unit seed was planted was planted was harvested in this Second Cultivation? What is the main reason for not harvesting the whole area planted? (see codes below)	Code this Second Cultivation? Copy the main crop from Table 2.3.1 (FL01) and ask other crops if FL03=2 (mixture) Area planted planted withis Second Cultivation? Area planted planted variety on? Area planted planted variety on? Area planted variety on this seed, tubers, or vines did the hh spend for seeds/tubers/ vines for this season on this field? Area planted variety on this seed variety on this field? Area planted variety on this seed variety on this field? Area planted variety on this seed variety on this field? Area planted variety on this seed variety on this field? Area planted variety on this field? Area planted variety on this seed, tubers, or vines did the hh spend for seeds/tubers/ vines for this season on this field? Area planted variety on this seed variety on this seed variety on this field? Area planted variety on this seed variety on this field? Area planted variety on this seed variety on this field? Area planted variety on this seed variety on this field? Area planted variety on this fi	Code under each crop in this Second Copy the main crop from Table 2.3.1 (FL01) and ask other crops if FL03=2 (mixture) Area planted $1 = Ha$	Code under each crop in this Second Copy the main crop from Table 2.3.1 (FLO1) and ask other crops if $FLO3=2$ (mixture) Area planted $I=Ha$ a planted $I=Ha$ planted $I=$	Code this Second this Second Cultivation? Unit spend for seed, tubers, or this Second Cultivation? Unit spend for seed ylanted was harvested of the was other crops if FLO3 = 2 (mixture) Area planted $I = Ha$ and add $I = Ha$ and $I = Ha$	Code this Second this Second Cultivation? What is the main crop from Table 2.3.1 (FLO1) and ask other crops if FLO3=2 (mixture) Related $area = a = blanted = blanted = area planted area = a = blanted = blanted = blanted = area planted was harvested in this Second Cultivation on? Area planted area = blanted = bla$	Code this Second Cultivation? Unit seed planted was other crops if FLO3=2 (mixture) $I = I = I = I = I = I = I = I = I = I $

Crop code (CROP))		Reason for not harvesting total plant	ed area (CM06)	Unit Code (CM10, CM15)
1 = Winter wheat	11 = Sainfoin	22= Peach	1 = wilting due to drought	9 = not enough labour	1=50 kg bag
2 = Spring wheat	12= Lucerne	23= Plums	2 = pests and diseases	10=lack of fertiliser	2=25 kg bag
3 = Burley	13=Tomatoes	24=Apricots	3 = floods, heavy rain	11= failed germination due to drought	3=10 kg bag
4 = Maize	14=Onion	25=Raspberry	4 = field not weeded / weeded late due to	12= failed germination due to bad seed	4=kilogram
5 = Sunflower	15=Carrot	26= Strawberry	bad seed	13= low productivity after germination	5=gram
6 = Cotton	16= Sugar beet	27= Currant	5 = animal / bird destruction	14= planted late	6=units
7 = Potato	17= Cabbage	28= Garlic	6 = fire	15= eaten fresh	
8 = Tobacco	18= Apple	29= Pepper	7 = theft	16= don't know	
9 = Haricot beans	19=Pear	30= Peas	8 = weeds overtook the field	17 = other, specify	
10 = Rice	20= Cherry	31= Other (specify)			
	21= Grape				

2.6. All Crops Sales

Enumerator: Ask the following questions about crop sales for all crops the household <u>harvested in the last 12 months</u> (2015/2016 agricultural season). Make sure that crop sales include payments made with crops in exchange for labour and other services. Ask if the household did NOT harvest any crops in the last 12 months:

S00: Did the household sell crops from previous harvests in the past 12 months? _____ 1=yes > fill in table 2.6 2=no > skip to livestock module

Reference Period: Last 12 months

Field number	Crop	Did the HH sell	What is TOTAL		Enumer in the la			sk some	questions	s on the details of	the largest sale/bo	arter transacti	on you did for	this crop	All other transactions
number	Transfe	fe any of this crop in the last 12 months? I=Yes 2=No-> next field	y of crop that the HH sold for cash and/or bartered for goods and/or labour in the last 12 months? Yes TOTAL Unit		What que did the househo sell/barte the large	quantity What % of total household harvest was the great largest		Who was the buyer? (see codes below) write 0 if farm (if $0 \rightarrow to S08A$)	your home/field to the point of sale/barter? If you used your own transport how much would you have paid someone		unit for the largest cash transaction? (enter -9 if the		From all other transactions of this crop from this field, how much total income was obtained in the		
	2.5.1 and 2.5.2	2=No->	quantity	(see codes	bartered		%	2=2016	Month (see codes below)	0 7 to 508A)	Transport cost (Soms)	Unit 1=per trip 2=per unit in S03B	Price (Soms)	Unit (see codes below)	last 12 months? (Soms)
FIELD	CROP	S01	S02A	S02B	S03A	S03B	S04	S05A	S05B	S06	S07A	S07B	S08A	S08B	S09

Crop code (CROP)		Buyer codes (S06)		Unit Code (S02B, S03B, S08B)	Month (C05B)
1 = Winter wheat 13=Tomatoes 2 = Spring wheat 14=Onion 3 = Burley 15=Carrot 4 = Maize 16= Sugar beet 5 = Sunflower 17= Cabbage 6 = Cotton 18= Apple 7 = Potato 19=Pear 8 = Tobacco 20= Cherry 9 = Haricot beans 21= Grape 10 = Rice 11 = Sainfoin 12= Lucerne 12= Grape	22= Peach 23= Plums 24=Apricots 25=Raspberry 26= Strawberry 27= Currant 28= Garlic 29= Pepper 30= Peas 31= Other (specify)	1 = Small-scale trader 2 = Large-scale trader/wholesaler 3 = Retailer/marketeer 4 = Other households (for consumption) 5 = State Reserve Fund (SRF) 6 = Directly to miller/processor (delivered to mill/processor gate)	7 = To miller/processor through agent or designated buying point 8 = out-grower – local name?? 9 = direct export 10=exporter or other intermediate exporter 11=Other (specify)	1=50 kg bag 2=25 kg bag 3=10 kg bag 4=kilogram 5= gram 6= units 7=center 8=ton	1=January 2=February 3=March 4=April 5= May 6= June 7= July 8= August 9=September 10=October 11=November 12=December

SECTION 7. LIVESTOCK & POULTRY FARMING

LS00	Did this household raise or own any livestock or poultry between in the last 12 months?	1=Yes	l
LSUU	Did this household raise or own any livestock or poultry between in the last 12 months?	$2=No \rightarrow go to next SECTION$	l

7.1.A. Herd dynamics and sales: Please answer the following questions about the livestock and poultry that this household raised or owned in the last 12 months.

/.1.A.	Hera ayna	amics and	sales: Ple	<u>ease ansv</u>	ver tne joi	towing que	<u>stions abou</u>	t tne tive s	stock ana j	pouury th	at this no	usehola <u>rais</u> e	<u>ea</u> or <u>owned</u>	<u>i</u> in the tast	12 months.
	Livestock	How	How	How	How	How	How	How	How	How	How	How many	How	How	How
		many	many	many	much	many	much	many	many	many of	many	animals did	many	many	much
		heads of	heads of	out of	money	heads of	money on	animals	animals	those	animals	your HH	animals	heads of	could you
		livestoc	livestock	this	on	livestock	average	were	were lost	that died	were	slaughtered	did your	livestock	receive
		k did	were sold	was for	average	were	did your	born	due to	were	lost due	for home	HH give	does your	from sale
		your	live or	export?	did you	purchased	HH pay to	during	death	new-	to theft	consumptio	away for	HH have	of ONE
		HH	slaughter	(Nr.)	receive	during the	purchase	the last	during	born (<3	during	n during the	free (gift)	at present?	animal of
		have 12	ed		from the	last 12	ONE	12	the last	months)	the last	last 12	during the	(AT.)	this type
		months	during		sale of	months?	animal?	months	12	?	12	months?	last 12	(Nr)	at current
		ago?	the last		ONE live	(NI)	(Soms)	? (Nr.)	months? (Nr.)	(Nr.)	months? (Nr.)	(Nr.)	months? (Nr.)		prices?
		(Nr.)	months?		animal?	(Nr.)	(Soms)	(INI.)	(INI.)		(INI.)		(INI.)		(Soms)
		(111.)	(Nr.)		(Soms)										(Soms)
Code		LS01	LS02	LS02x	LS03	LS04	LS05	LS05b	LS06	LS06b	LS07	LS08	LS10	LS11	LS12
1	Cows														
2	Heifers >														
	1 year														
_	Bulls and														
3	oxen > 1														
	year														<u> </u>
4	Calves < 1 year														
5	Pigs														
6	Sheep > 1														
6	year														
7	Lambs< 1														
,	year														
8	Goats > 1														
	year														
9	Goatlings														
	< 1 year														<u> </u>
10	Horses														
11	Horses <1yr														
12	Donkeys														
13	•														
13	Poultry														<u> </u>

Table 7.1.B. Herd management

No.		At what age do you put the females to reproduction? Months (Nr.)	How many animals were born per adult female ?	How many milking animals do you have on average? (Nr)	What was the average age of slaughtered animals of this category? (Months)	What was the average weight of slaughtered animals of this category? (kg)
Code	Livestock	LS13	LS14	LS15	LS16	LS17
1	Cows					
2	Pigs					
3	Sheep					
4	Goats					
5	Horses					
6	Donkeys					
7	Poultry					

7.2. Household labor for livestock and grazing (jailoo) activities

LS18: Which members of you ID code 1				codes of those who helped the most:
LS19a: Have any of the hous mentioned above; if less than			ns? (please enter number of com	pleted months for each member
LS19b. Code of HH men	nber			
LS19c. No. of months in	jailoo			

7.3. Animal Products

LS15: Did your HH produce any animal products (e.g. meat, skins, etc)? **1=Yes 2=No (if No ->** skip to the next section) Please answer the following questions if the answer is **Yes**.

1 icusc	answer the follow	U 1	v		3371	TT1	XX7144**	3371 4	3371	TT1	TT
		What	What is the	How many	What	How much	What quantity	What	What	How much	How much
		quantity of	unit of	months did	quantity of	would it have	of the product	quantity of	quantity of	money did	money did
		the product	production?	your HH	the product	costed if you	was given	the product	the product	your HH	your HH
		were	7	consume	was	had purchased	away for free	did your	did your HH	receive from	spend on
		produced	1=gram	the	consumed /	the consumed	(as a present)	HH store?	sell in the	the sale of	producing the
		by your	2 = kg	product?	used by your	/ used product	by your HH in		past 12	product?	product?
		HH in the	3= liter	0.5 (1.)	HH in the	in the market?	the past 12	(21.)	months?	(G)	(G)
		past 12	4= item	(Months)	past 12	(G)	months?	(Nr.)	(NT.)	(Soms)	(Soms)
		months?	(:4)		months?	(Soms)	(Nr.)		(Nr.)		
		(Nr.)	(unit)		(Nr.)						
Code	LSPROD	LS20	LS21	LS22	LS23	LS23a	LS24	LS25	LS26	LS27	LS28
1	Mutton, lamb										
2	Beef										
3	Pork										
4	Poultry meat										
5	Eggs										
6	Cow's Milk										
7	Goat's milk										
8	Mares's milk										
8	& kymyz										
9	Kurut										
10	Sary mai										
11	Airan										
12	Cashmere										
	fibre										
13	Wool, fur										
14	Skins										
15	Other products										
10	o mor products										

7.4. Livestock Expenses

Reference period: last 12 months

	Herding expenses				Veterinary costs Fo		Fodder expenses					
		How many	Cost per 1	How	Cost per 1	How	How many	How much	Have you used	What type of	How many	How much
		heads were grazed in village / remote	head per month in village pasture	many months in village pasture?	head per month in remote pastures	many months in remote pastures?	heads were treated by veterinary?	was the cost per head for veterinary?	any other fodder in addition to grazing/household scraps?	feed did you give to the animals in the last 12	kg per day of this feed did you give per	money did you spend on supplemen
		pastures?	pasture	pasture:	pastures	pastures:	(Nr.)	vetermary:	scraps:	months?	category?	tal feed?
		(Nr.)	(Soms)	(Nr)	(soms)	(Nr)		(Soms)	1=yes 2=no > skip to next line	(see codes below this table)	(kg)	(Soms)
		LS29	LS30a	LS30b	LS31a	LS31b	LS32	LS33	LS34	LS35	LS35b	LS36
Code	LSTOCK _GROUP											
1	Sheep											
2	Cattle											
3	Horses											
4	Pigs											
5	Poultry											

Code for LS35: 1=Hay, 2=Grain, 3=Crop residues, 4=By-products (brans, molasses, oil seed cakes...), 5=Salt/minerals, 6=Other

LS37: Do you collect manure from animals to use on fields/for other household uses? 1=yes, 2=no (skip to LS38)

LS37b: What percentage of the collected manure do you apply to the fields? (report in %) _______%

LS37c: In what form do you apply manure? 1=solid, 2=liquid

LS38: Please provide any other expenses for all livestock in the past 12 months (approximately): _____ soms

10: AGRICULTURAL INFORMATION AND ADOPTION OF SOIL/LAND MANAGEMENT PRACTICES

Please tell us about the advice/information the household received from organizations, private agents or individual farmers.

10.1 Advice/Information Provision

D.	£	D: - 1.	ODEN
пе	jerence	<i>Period:</i>	OFEN

Type of Advice/Information		Has any member of the	Who was the most important	How did you receive this	When did
Has any member of your household ever received any advice on	1	HH ever received?	supplier or organizer of this	advice/information?	you first
			advice / information?	I=Informal conversation	receive this
		I = Yes	I=Local administration officers	2=Radio program	information?
		$2 = No \rightarrow go \text{ to next type of}$	2=Local authorities (Aiyl Aimaks)	3=Pamphlet/newspaper	inioination:
		activity/advice	3= Water Users Association	4=Workshop	
			4= Pasture Committee	5=Field Day	
			5=Private output traders	6 =Demonstration plot	
			6=Other outgrowers	7=Visit	
			7=Commercial banks	8=Meeting	
			8=Private input suppliers/stockists/	9=Training programme	
			agro-dealers/agents	10 = Other (specify)	Year
			9=Fellow farmers		
			10=Cooperative/farmer group		
			11= Other, specify		
	SRCODE	SR01	SR02	SR03	SR04
Zero tillage or minimum tillage	1				
Seed selection (drought or salt-tolerant seeds)	2				
Rotating cereals with legumes/nitrogen-fixing crops?	3				
Intercropping cereals with legumes/nitrogen-fixing crops?	4				
Leaving crop residues in the field (as mulch)	5				
Agroforestry (use of trees to protect/improve your crops/yield)	6				
Applying animal manure?	7				
Applying compost?	8				
Applying herbicides/pesticides?	9				
Leaving land fallow to rest the soil?					
Improving storage techniques (e.g. with chemicals/structures) to protect your grains in storage from weevils/other insects	11				

HH44. Does the household get access to information about weather (rainfall, temperature, droughtetc.)? $I = Yes \ 2 = No \rightarrow go \ to \ next \ Section$						
HH45. (Ask if HH44 = 1) What is the household's main source of weather information?	 1 = Radio 2 = Television 3 = Government agricultural extension or veterinary officers 4 = NGO project officers 5 = Friends, relatives or neighbors 6 = Meteorological offices 	7 = Newspaper 8 = Traditional forecaster / Indigenous knowledge 9 = Your own observations 10 = Local groups / gatherings / meetings 11 = Internet 12 = Other (specify) i.e. sms				

10.3: Soil and Land Management Practices (SLM): Adoption vs. dis-adoption

10.5. Son and Land Wanagement	Tractices (SZIVI)		es applied in 2015/16 Agricultura	1 Season			
Soil and Land Management Practice Code	Did this HH implement during the 2015/16 agricultural season? <i>I=Yes</i> 2=No-> skip to SLM03	In which year gdid this HH begin	Did this HH ever practice in the past (before the 2015/16 agricultural season)? $I=Yes-> skip \ to \ SLM05$ $2=No$	What is the main reason why this HH never used? (See codes below) Fill and then go to next practice	To which cr HH apply (before the 2 agricultural (record 2 mai (See codes be	in the past 2015/16 season)?	What is the main reason why this HH abandoned? (See codes below)
SLM00	SLM11	SLM02	SLM03	SLM04	SL	M05	SLM06
1=Minimum / Zero tillage							
2=Seed selection (drought or salt-tolerant seeds)							
3=Crop rotation of cereals with legumes/nitrogen-fixing crops							
4=Intercropping of cereals with legumes/nitrogen-fixing crops							
5= Leaving crop residues in field and incorporating into the soil as mulch 6= Agroforestry (use of trees to protect/improve crops/yields)							
7=Innovative irrigation methods 8=Crop rotation with non-legumes							
9=Stone/earthen bunds							
10=Terraces							
12=Drainage ditches							
13=Grass barriers							
14=Contour farming							

Crop code (SLM05)			Reasons of dis-adoption (SLM04/SLM06)			
1 = Winter wheat	12= Lucerne	22= Peach	1= Takes too much land out of crop production	8=Lacked information about the practice		
2 = Spring wheat	13=Tomatoes	23= Plums	2= Too expensive	9=Stopped receiving or didn't receive inputs or other		
3 = Burley	14=Onion	24=Apricots	3= Too difficult to obtain seedlings	incentives to use the practice		
4 = Maize	15=Carrot	25=Raspberry	4=Too difficult to protect seedlings	10=Other (specify)		
5 = Sunflower	16= Sugar beet	26= Strawberry	5=Too risky/uncertain due to land tenure insecurity	• • • • • • • • • • • • • • • • • • • •		
6 = Cotton	17= Cabbage	27= Currant	6=Too risky/uncertain for other reasons			
7 = Potato	18= Apple	28= Garlic	7=Too labor intensive/time-consuming			
8 = Tobacco	19=Pear	29= Pepper	· ·			
9 = Haricot beans	20= Cherry	30= Peas				
10 = Rice	21= Grape	31= Other (specify)				
11 = Sainfoin	1	\ 1 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \				

11. REQUIREMENTS FOR PRODUCTS QUALITY

I would like to ask about the requirements for product quality in the production of agricultural products.

product	0.						
	Does your household meet the requirem	ents on product quality (for example, by the use o	Yes 1				
H316	fertilizers / pesticides, storage, transport		No>> Finish the interview				
				Do not know>> Finish the interview			
			To all products manufactured b	y the household	1		
H317	Which products do these quality require	ments apply?	To exported products		2		
	Transfer production as another quality requires	none apply.	To products sold within the KR		3		
			To products for own consumption	on	4		
			Main buyer		1		
H318	Who informs your household on complia	nce with the requirements on product quality?	Cooperative Government of local authorities				
			Other				
			0.000	Crops	Livestock		
	What quality requirements must your household comply with? Specify separately for the crop and livestock (You can specify multiple responses)	1 Fertilizers (the kind used, frequency, bans)				
		2 Pesticides / chemicals (type, use the frequ	ency)				
		3 The requirements to raw materials (types of	of seed,)				
		4 Storage requirements					
H319		5 Carriage Requirements					
		6 Requirements for harvesting (method, time	9,)				
		7 Hygiene requirements					
		8 Equipment requirements					
		9 The requirements for animal welfare					
		10 Other requirements					
H320		y certification (eg, HACCP - Hazard Analysis and	Yes		1		
. 1020	Critical Control Points)?		No 2				