# LCLUC\_INTER\_category\_analyses

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This relies on the combined dfs from 1\_data\_import.

#### I. LABOR COMPARISONS—

LABOR\_3A vs. HERDMGMT\_1A-----

How many people undertake migrations? vs. Distance for daily herding, generally

 $Columns:\ labor\_numMigrates/herdMgmt\_dailyDist$ 

$herdDist\_daily$	n
0–5 km	28
NA	16
$0-5~\mathrm{km}$	14
$6-10~\mathrm{km}$	12
NA	11
NA	11
0-5  km	10
0-5  km	9
$16-20~\mathrm{km}$	7
$11-15~\mathrm{km}$	6
$6-10~\mathrm{km}$	6
$6-10~\mathrm{km}$	6
NA	6
0-5  km	4
0-5  km	4
$6-10~\mathrm{km}$	4
NA	4
$6-10~\mathrm{km}$	3
NA	2
$6-10~\mathrm{km}$	2
$6-10~\mathrm{km}$	2
0-5  km	2
0-5  km	2
0-5  km	1
NA	1
$16-20~\mathrm{km}$	1
21+ km	1
$11-15~\mathrm{km}$	1
21+  km	1
	0-5 km NA 0-5 km 6-10 km NA NA 0-5 km 16-20 km 11-15 km 6-10 km NA 0-5 km 6-10 km NA 0-5 km 6-10 km NA 0-5 km 0-5 km 0-5 km 6-10 km NA 6-10 km 10-5 km

labor_numMigrates	herdDist_daily	n
4	11–15 km	1
6	$11-15~\mathrm{km}$	1
7	0-5  km	1
7	$16-20~\mathrm{km}$	1
7	NA	1
8	$6-10~\mathrm{km}$	1
8	NA	1
9	$0-5~\mathrm{km}$	1
9	NA	1
11	$0-5~\mathrm{km}$	1

# LABOR\_3A vs. HERDMGMT\_9A———

How many people undertake migrations? vs. In the past five years, have you changed your herding management practices?

 $Columns:\ labor\_numMigrates/herdMgmt\_past5Yrs\_mgmtChanges$ 

$\overline{\mathrm{labor}}$	_numMigrates	$herdMgmt\_past5Yrs\_mgmtChanges$	n
	2	No	50
	3	No	25
	2	Yes	17
	4	No	16
	4	Yes	12
	1	No	9
	5	No	9
	3	Yes	8
	5	Yes	8
	6	Yes	7
	6	No	6
	7	No	4
	2	NA	3
	0	No	2
	8	No	2
	8	Yes	2
	9	No	2
	10	No	2
	1	Yes	1
	7	Yes	1
	11	Yes	1

# LABOR\_3A vs. HERDMGMT\_10A—————

How many people undertake migrations? vs. Do you have plans to make changes to management practices in the next five years?

 $Columns:\ labor\_numMigrates/herdMgmt\_next5Yrs\_mgmtChanges$ 

labor_numMigrates	herdMgmt_next5Yrs_mgmtChanges	n
2	Yes	38
2	No	31
3	Yes	17
4	Yes	17
3	No	16
5	Yes	12
4	No	11
6	Yes	10
1	Yes	6
5	No	5
1	No	4
7	No	4
8	Yes	4
6	No	3
0	No	2
9	No	2
10	Yes	2
2	NA	1
7	Yes	1
11	Yes	1

## LABOR\_3A vs. LIVESTOCK\_2A----

How many people undertake migrations? vs. Overall  ${\bf SFU}$ 

 $Columns:\ labor\_numMigrates/livestock\_2023\_camel/livestock\_2023\_cow/livestock\_2023\_horse/livestock\_so\ on$ 

$\underline{labor\_numMigrates}$	$SFU\_group$	n
2	1000 + SFU	18
2	$400600~\mathrm{SFU}$	17
2	$200-400~\mathrm{SFU}$	11
3	1000 + SFU	11
2	$0-200~\mathrm{SFU}$	10
4	1000 + SFU	10
2	$800-1000 \; \mathrm{SFU}$	8
3	$0-200~\mathrm{SFU}$	8
3	$200-400~\mathrm{SFU}$	7
2	600-800  SFU	6
3	$800-1000 \; \mathrm{SFU}$	5
4	$200-400~\mathrm{SFU}$	5
4	$400-600 \; \mathrm{SFU}$	5
5	1000 + SFU	5
6	1000 + SFU	5
4	600-800  SFU	4
5	$0-200~\mathrm{SFU}$	4
6	$200-400~\mathrm{SFU}$	4
1	$0-200~\mathrm{SFU}$	3
1	$200400~\mathrm{SFU}$	3
4	$800-1000 \; \mathrm{SFU}$	3
5	$200400~\mathrm{SFU}$	3

labor_numMigrates	SFU_group	n
1	800–1000 SFU	2
5	400–600 SFU	2
5	600–800 SFU	2
6	$400–600 \; \mathrm{SFU}$	2
8	1000 + SFU	2
0	$0-200~\mathrm{SFU}$	1
0	$400-600 \; \mathrm{SFU}$	1
1	$400-600 \; \mathrm{SFU}$	1
1	1000 + SFU	1
10	$200-400~\mathrm{SFU}$	1
10	$400–600 \; \mathrm{SFU}$	1
11	1000 + SFU	1
3	$400–600 \; \mathrm{SFU}$	1
3	$600-800 \; \mathrm{SFU}$	1
4	0-200  SFU	1
5	800-1000  SFU	1
6	600-800  SFU	1
6	800-1000  SFU	1
7	0-200  SFU	1
7	$200-400 \; \mathrm{SFU}$	1
7	$400–600 \; \mathrm{SFU}$	1
7	$600-800 \; \mathrm{SFU}$	1
7	1000 + SFU	1
8	$0-200~\mathrm{SFU}$	1
8	600-800  SFU	1
9	$200-400~\mathrm{SFU}$	1
9	400–600 SFU	1

## LABOR\_3A vs. LIVESTOCK\_2A-

Simplified version

How many people undertake migrations? vs. Overall SFU

 $Columns:\ labor\_numMigrates/livestock\_2023\_camel/livestock\_2023\_cow/livestock\_2023\_horse/livestock\_so\ on$ 

labor_	_numMigrates	$SFU_{-}$	_comparison	n
2		2023:	greater SFU	43
2		2023:	less SFU	26
3		2023:	greater SFU	18
3		2023:	less SFU	15
4		2023:	greater SFU	14
4		2023:	less SFU	13
5		2023:	greater SFU	10
5		2023:	less SFU	7
6		2023:	greater SFU	7
1		2023:	greater SFU	6
6		2023:	less SFU	6
1		2023:	less SFU	4
7		2023:	less SFU	3

labor_numMigrates	$SFU\_comparison$	n
8	2023: greater SFU	3
7	2023: greater SFU	2
0	2023: greater SFU	1
0	2023: less SFU	1
10	2023: greater SFU	1
10	2023: less SFU	1
11	2023: greater SFU	1
2	2023: same SFU	1
4	2023: same SFU	1
8	2023: less SFU	1
9	2023: greater SFU	1
9	2023: less SFU	1

## LABOR\_4A vs. ALTLIVELIHOODS\_1A—

Does migration impact labor? vs. Is someone in the household doing non-herding work?

 $Columns:\ labor\_migImpactLabor/altLife\_nonHerdWork$ 

labor_migImpactLabor	$altLife\_nonHerdWork$	n
No	No	56
Yes	No	50
Yes	Yes	32
No	Yes	28
NA	No	19
NA	Yes	1
NA	NA	1

# LABOR\_4A vs. ALTLIVELIHOODS\_3A-----

Does migration impact labor? vs. Number of loans taken out per year?

 $Columns:\ labor\_migImpactLabor/altLife\_loansPerYr$ 

labor_migImpactLabor	$altLife\_loansPerYr$	n
Yes	1.0	59
No	1.0	50
NA	1.0	19
No	0.0	16
No	2.0	12
Yes	2.0	12
Yes	0.0	7
No	NA	4
Yes	0.5	2
NA	2.0	2
No	0.5	1
No	3.0	1
Yes	3.0	1
Yes	NA	1

# LABOR\_4B vs. HERDMGMT\_12—————

Does migration impact herding practices? vs. Condition and degree of pastoral change

Columns: labor\_migImpactPract/herdMgmt\_pastureCon\_chg\_yn/herdMgmt\_pastureCon\_chg\_deg

labor_migImpactPract	$condition\_comparison$	n
No	Moderately Degraded	33
Yes	Moderately Degraded	26
No	Substantially Degraded	23
No	No change	22
Yes	Substantially Degraded	21
Yes	No change	13
No	Slightly Degraded	9
NA	No change	9
Yes	Slightly Degraded	6
No	Moderately Improved	5
Yes	Moderately Improved	5
NA	Moderately Degraded	4
NA	Substantially Degraded	4
NA	Slightly Degraded	3
No	Slightly Improved	1
No	NA	1
Yes	NA	1
NA	Moderately Improved	1

# 

Does migration impact labor? vs. Did you purchase supplemental fodder last year?

 $Columns:\ labor\_migImpactLabor/lastYr\_fodder$ 

labor_migImpactLabor	lastYr_fodder	n
Yes	Yes	77
No	Yes	73
NA	Yes	19
No	No	9
Yes	No	5
No	NA	2
NA	No	2

#### LABOR 4A vs. LIVESTOCK 4A—

Does migration impact labor? vs. Do you plan to purchase supplemental fodder this year?

 $Columns:\ labor\_migImpactLabor/thisYr\_fodder$ 

labor_migImpactLabor	thisYr_fodder	n
Yes	Yes	80
No	Yes	77

labor_migImpactLabor	thisYr_fodder	n
NA	Yes	19
No	No	6
Yes	No	2
NA	No	2
No	NA	1

# LABOR\_4A vs. LIVESTOCK\_6A—————

Does migration impact labor? vs. Has your herd size changed over the last five years?

 $Columns:\ labor\_migImpactLabor/past5yrs\_herdsize$ 

labor_migImpactLabor	$past5yrs\_herdsize$	n
Yes	Increase	39
No	Increase	36
No	Decrease	31
Yes	Decrease	27
No	The same	16
Yes	The same	16
NA	Increase	10
NA	The same	6
NA	Decrease	4
No	NA	1
NA	NA	1

# LABOR\_4A vs. LIVESTOCK\_9A—————

Does migration impact labor? vs. Do you have plans to substantially change the size of your herd?

Columns: labor\_migImpactLabor/nextYr\_herdChg

labor_migImpactLabor	plans_comparison	n
Yes	No change	42
No	No change	36
No	Yes: increase herd size	26
Yes	Yes: increase herd size	19
Yes	Yes: decrease herd size	14
No	Yes: decrease herd size	12
NA	No change	10
No	Yes: maintain herd size	8
Yes	Yes: maintain herd size	4
NA	Yes: decrease herd size	4
NA	Yes: increase herd size	4
NA	Yes: maintain herd size	3
No	NA	2
Yes	NA	2
Yes	Yes: unsure of change	1

#### LABOR 4B vs. LIVESTOCK 9A-

Does migration impact herding practices? vs. Do you have plans to substantially change the size of your herd?

Columns: labor\_migImpactPract/nextYr\_herdChg

labor_migImpactPract	plans_comparison	n
No	No change	43
Yes	No change	35
No	Yes: increase herd size	27
Yes	Yes: increase herd size	18
No	Yes: decrease herd size	13
Yes	Yes: decrease herd size	13
NA	No change	10
No	Yes: maintain herd size	9
NA	Yes: decrease herd size	4
NA	Yes: increase herd size	4
Yes	Yes: maintain herd size	3
NA	Yes: maintain herd size	3
No	NA	2
Yes	NA	$^{2}$
Yes	Yes: unsure of change	1

#### LABOR\_5A vs. ALTLIVELIHOODS\_1A—

Do you hire labor? vs. Is someone in the household doing non-herding work?

Columns: labor\_hire/altLife\_nonHerdWork

labor_hire	$altLife\_nonHerdWork$	n
No	No	98
No	Yes	51
Yes	No	26
Yes	Yes	10
Yes	NA	1
NA	No	1

#### LABOR\_5A vs. ALTLIVELIHOODS\_3A—

Do you hire labor? vs. Number of loans taken out per year?

Columns: labor\_hire/altLife\_loansPerYr

labor_hire	$altLife\_loansPerYr$	n
No	1.0	99
Yes	1.0	28
No	2.0	21
No	0.0	19
No	NA	5
Yes	2.0	5

labor_hire	$altLife\_loansPerYr$	n
Yes	0.0	4
No	0.5	3
No	3.0	2
NA	1.0	1

#### LABOR 5A vs. HERDMGMT 9A———

Do you hire labor? vs. In the past five years, have you changed your herding management practices?

Columns: labor\_hire/herdMgmt\_past5Yrs\_mgmtChanges

labor_hire	$herdMgmt\_past5Yrs\_mgmtChanges$	n
No	No	105
No	Yes	42
Yes	No	22
Yes	Yes	14
No	NA	2
Yes	NA	1
NA	Yes	1

#### LABOR\_5A vs. HERDMGMT\_10A----

Do you hire labor? vs. Do you have plans to make changes to management practices in the next 5years?

Columns: labor\_hire/herdMgmt\_next5Yrs\_mgmtChanges

labor_hire	$herdMgmt\_next5Yrs\_mgmtChanges$	n
No	Yes	82
No	No	66
Yes	Yes	25
Yes	No	12
No	NA	1
NA	Yes	1

# LABOR\_5A vs. LIVESTOCK\_5A—————

Do you hire labor? vs. Have you noticed any long term shifts in vegetation/forage?

Columns: labor\_hire/vegShifts\_yn/vegShifts\_quanQual

labor_hire	$condition\_comparison$	n
No	Yes: Both	108
Yes	Yes: Both	33
No	Yes: Quantity	20
No	No change	14
No	Yes: Quality	6

-		
$labor\_hire$	$condition\_comparison$	n
Yes	Yes: Quantity	3
No	Unclear	1
Yes	Yes: Quality	1
NA	Yes: Both	1

#### LABOR\_5A vs. LIVESTOCK\_6A———

Do you hire labor? vs. Has your herd size changed over the last five years?

Columns: labor\_hire/past5yrs\_herdsize

labor_hire	$past5yrs\_herdsize$	n
No	Increase	68
No	Decrease	51
No	The same	28
Yes	Increase	17
Yes	Decrease	11
Yes	The same	9
No	NA	2
NA	The same	1

#### LABOR\_5A vs. LIVESTOCK\_9A-----

Do you hire labor? vs. Do you have plans to substantially change the size of your herd?

Columns: labor\_hire/nextYr\_herdChg

labor_hire	plans_comparison	n
No	No change	72
No	Yes: increase herd size	45
No	Yes: decrease herd size	19
Yes	No change	15
Yes	Yes: decrease herd size	11
No	Yes: maintain herd size	9
Yes	Yes: maintain herd size	6
Yes	Yes: increase herd size	4
No	NA	3
No	Yes: unsure of change	1
Yes	NA	1
NA	No change	1

#### II. ALTERNATIVE LIVELIHOOD COMPARISONS

# ALTLIVELIHOODS\_1A vs. LIVESTOCK\_2A----

Is someone in the household doing non-herding work? vs. OVERALL SFU.

 $Columns: \ alt Life\_non Herd Work/livestock\_2023\_camel/livestock\_2023\_cow/livestock\_2023\_horse/livestock\_2023\_cow/livestock\_2023\_horse/livestock\_2023\_cow/livestock\_2023\_horse/$ 

altLife_nonHerdWork	$SFU\_group$	n
no	1000+ SFU	41
no	$200-400 \; \mathrm{SFU}$	22
no	$400–600 \; \mathrm{SFU}$	20
no	$0-200~\mathrm{SFU}$	19
yes	$200-400~\mathrm{SFU}$	14
yes	1000 + SFU	13
no	$800-1000 \; \mathrm{SFU}$	12
yes	$400-600 \; \mathrm{SFU}$	12
no	$600-800 \; \mathrm{SFU}$	11
yes	$0-200~\mathrm{SFU}$	9
yes	$800-1000 \; \mathrm{SFU}$	8
yes	$600-800 \; \mathrm{SFU}$	5
NA	$0-200~\mathrm{SFU}$	1

#### ALTLIVELIHOODS 1A vs. LIVESTOCK 6A-

Is someone in the household doing non-herding work? vs. Has your herd size changed over the last five years?

 $Columns: \ altLife\_nonHerdWork/past5yrs\_herdsize$ 

altLife_nonHerdWork	past5yrs_herdsize	n
No	Increase	55
No	Decrease	44
Yes	Increase	30
No	The same	24
Yes	Decrease	17
Yes	The same	14
No	NA	2
NA	Decrease	1

#### ALTLIVELIHOODS 1A vs. LIVESTOCK 9A-

Is someone in the household doing non-herding work? vs. Do you have plans to substantially change the size of your herd?

Columns: altLife\_nonHerdWork/nextYr\_herdChg

altLife_nonHerdWork	plans_comparison	n
No	No change	65
No	Yes: decrease herd size	25
No	Yes: increase herd size	25
Yes	Yes: increase herd size	24
Yes	No change	23
No	Yes: maintain herd size	9
Yes	Yes: decrease herd size	5

altLife_nonHerdWork	plans_comparison	n
Yes	Yes: maintain herd size	5
Yes	NA	3
No	NA	1
Yes	Yes: unsure of change	1
NA	Yes: maintain herd size	1

#### ALTLIVELIHOODS\_3A vs. HERDMGMT\_9A-

Number of loans taken out per year? vs. In the past five years, have you changed your herding management practices?

 $Columns: \ altLife\_loansPerYr/herdMgmt\_past5Yrs\_mgmtChanges$ 

herdMgmt_past5Yrs_mgmtChanges	$altLife\_loansPerYr$	n
No	1.0	87
Yes	1.0	40
No	2.0	17
No	0.0	16
Yes	2.0	9
Yes	0.0	5
No	NA	4
No	3.0	2
Yes	0.5	2
NA	0.0	2
No	0.5	1
Yes	NA	1
NA	1.0	1

## ALTLIVELIHOODS\_3A vs. LIVESTOCK\_3A—

Number of loans taken out per year? vs. Did you purchase supplemental fodder last year?

 $Columns: \ altLife\_loansPerYr/lastYr\_fodder$ 

lastYr_fodder	$alt Life\_loans Per Yr$	n
Yes	1.0	121
Yes	2.0	23
Yes	0.0	18
No	0.0	5
No	1.0	5
No	2.0	3
Yes	0.5	3
Yes	NA	3
No	NA	2
NA	1.0	2
No	3.0	1
Yes	3.0	1

#### ALTLIVELIHOODS 3A vs. LIVESTOCK 4A-

Number of loans taken out per year? vs. Do you plan to purchase supplemental fodder this year?

Columns: altLife\_loansPerYr/thisYr\_fodder

$\overline{ ext{thisYr\_fodder}}$	$altLife\_loansPerYr$	n
Yes	1.0	122
Yes	2.0	25
Yes	0.0	20
No	1.0	5
Yes	NA	4
No	0.0	3
Yes	0.5	3
Yes	3.0	2
No	2.0	1
No	NA	1
NA	1.0	1

#### ALTLIVELIHOODS 3A vs. LIVESTOCK 6A———

Number of loans taken out per year? vs. Has your herd size changed over the last five years?

 $Columns: \ altLife\_loansPerYr/past5yrs\_herdsize$ 

past5yrs_herdsize	altLife_loansPerYr	n
Increase	1.0	58
Decrease	1.0	41
The same	1.0	27
Decrease	2.0	11
Increase	2.0	11
Increase	0.0	10
Decrease	0.0	9
Increase	NA	4
The same	0.0	4
The same	2.0	4
The same	0.5	2
NA	1.0	2
Decrease	3.0	1
Increase	0.5	1
Increase	3.0	1
The same	NA	1

## III. HERD MANAGEMENT COMPARISONS

#### HERDMGMT\_1A vs. LIVESTOCK\_5A----

Distance for daily herding, generally vs. Have you noticed any long term shifts in vegetation/forage?

 $Columns: \ herdMgmt\_dailyDist/vegShifts\_yn/vegShifts\_quanQual$ 

condition_comparison	herdDist_daily	n
Yes: Both	0–5 km	61
Yes: Both	NA	36
Yes: Both	$6-10~\mathrm{km}$	28
Yes: Quantity	0-5  km	10
No change	NA	8
Yes: Both	$1115~\mathrm{km}$	8
Yes: Both	$16-20~\mathrm{km}$	7
Yes: Quantity	NA	7
Yes: Quantity	$6-10~\mathrm{km}$	5
No change	$0-5~\mathrm{km}$	3
Yes: Quality	0-5  km	3
Yes: Both	21+  km	2
Yes: Quality	$6-10~\mathrm{km}$	2
Yes: Quality	NA	2
No change	$6-10~\mathrm{km}$	1
No change	$1115~\mathrm{km}$	1
No change	$16-20~\mathrm{km}$	1
Unclear	NA	1
Yes: Quantity	$1620~\mathrm{km}$	1

#### HERDMGMT\_9A vs. LIVESTOCK\_2A—

In the past five years, have you changed your herding management practices? vs.  $\ensuremath{\mathrm{OVERALL}}$   $\ensuremath{\mathrm{SFU}}$ 

 $Columns: \ herd Mgmt\_past 5 Yrs\_mgmt Changes/livestock\_2023\_camel/livestock\_2023\_cow/livestock\_2023\_so\ on$ 

herdMgmt_past5Yrs_mgmtChanges	SFU_group	n
no	1000+ SFU	31
no	$200-400 \; \mathrm{SFU}$	29
no	$0-200~\mathrm{SFU}$	23
no	$400600~\mathrm{SFU}$	22
yes	1000 + SFU	22
no	$800-1000 \; \mathrm{SFU}$	14
yes	$400600~\mathrm{SFU}$	10
no	600-800  SFU	8
yes	600-800  SFU	8
yes	200-400  SFU	7
yes	$0-200~\mathrm{SFU}$	5
yes	$800-1000 \; \mathrm{SFU}$	5
NA	$0-200~\mathrm{SFU}$	1
NA	$800-1000 \; \mathrm{SFU}$	1
NA	1000 + SFU	1

#### HERDMGMT\_9A vs. LIVESTOCK\_2D——

In the past five years, have you changed your herding management practices? vs. SFU delta change

 $Columns: \ herdMgmt\_past5Yrs\_mgmtChanges/livestock\_2023\_camel/livestock\_2023\_cow/livestock\_2023\_so\ on$ 

$\overline{\mathrm{herdMgmt}_{\_}}$	_past5Yrs_	_mgmtChanges	SFU_delta	n
no			0-200 SFU	33
no			-200-0  SFU	22
no			$-400-200 \; \mathrm{SFU}$	18
no			200–400 SFU	17
yes			$0-200~\mathrm{SFU}$	14
no			$400–600 \; \mathrm{SFU}$	13
yes			-200-0 SFU	8
yes			$200-400~\mathrm{SFU}$	8
yes			-400-200 SFU	6
yes			$400-600 \; \mathrm{SFU}$	6
no			-600-400 SFU	5
no			1000 + SFU	5
no			-2000-1000 SFU	4
no			-1000-800 SFU	3
no			$800-1000 \; \mathrm{SFU}$	3
yes			-600-400 SFU	3
yes			$800-1000 \; \mathrm{SFU}$	3
yes			-2000-1000 SFU	2
yes			-1000-800 SFU	2
yes			600-800  SFU	2
yes			1000 + SFU	2
NA			0-200  SFU	2
no			-4000-3000 SFU	1
no			-800-600  SFU	1
no			600-800  SFU	1
no			NA	1
yes			-800-600 SFU	1
NA			-800-600 SFU	1

## HERDMGMT\_9A vs. LIVESTOCK\_2E-

In the past five years, have you changed your herding management practices? vs. SFU delta change, simplified

 $Columns: \ herd Mgmt\_past 5 Yrs\_mgmt Changes/livestock\_2023\_camel/livestock\_2023\_cow/livestock\_2023\_so\ on$ 

herdMgmt_past5Yrs_mgmtChanges	SFU_comparison	n
no	2023: greater SFU	71
no	2023: less SFU	55
yes	2023: greater SFU	35
yes	2023: less SFU	22
no	2023: same SFU	1
NA	2023: greater SFU	1
NA	2023: less SFU	1
NA	2023: same SFU	1

#### HERDMGMT 9A vs. LIVESTOCK 5A—

In the past five years, have you changed your herding management practices? vs. Have you noticed any long term shifts in vegetation/forage?

 $Columns: \ herdMgmt\_past5Yrs\_mgmtChanges/vegShifts\_yn/vegShifts\_quanQual$ 

condition_comparison	$herdMgmt\_past5Yrs\_mgmtChanges$	n
Yes: Both	No	92
Yes: Both	Yes	49
Yes: Quantity	No	18
No change	No	13
Yes: Quantity	Yes	5
Yes: Quality	No	4
Yes: Quality	Yes	3
No change	NA	1
Unclear	NA	1
Yes: Both	NA	1

#### HERDMGMT\_9A vs. LIVESTOCK\_6A———

In the past five years, have you changed your herding management practices? vs. Has your herd size changed over the last five years?

 $Columns: \ herdMgmt\_past5Yrs\_mgmtChanges/past5yrs\_herdsize$ 

$herdMgmt\_past5Yrs\_mgmtChange$	es past5yrs_herdsize	n
No	Increase 5	<del>5</del> 9
No	Decrease 4	10
No	The same 2	27
Yes	Increase 2	24
Yes	Decrease 2	22
Yes	The same 1	11
NA	Increase	2
No	NA	1
NA	NA	1

#### HERDMGMT\_11A vs. LIVESTOCK\_6A—————

Are there changes you want to make to your management practices but can't? vs. Has your herd size changed over the last five years?

Columns: herdMgmt\_whatChanges\_cantMake/past5yrs\_herdsize

herdMgmt_whatChanges_cantMake	past5yrs_herdsize	n
Yes	Increase	61
Yes	Decrease	38
No	Decrease	24
No	Increase	24
Yes	The same	24
No	The same	14

$\overline{\text{herdMgmt\_whatChanges\_cantMake}}$	past5yrs_herdsize	n
No	NA	1
NA	NA	1

## HERDMGMT\_11A vs. LIVESTOCK\_9A-----

Are there changes you want to make to your management practices but can't? vs. Do you have plans to substantially change the size of your herd?

 $Columns: \ herdMgmt\_whatChanges\_cantMake/nextYr\_herdChg$ 

$\frac{1}{herdMgmt\_whatChanges\_cantMake}$	$nextYr\_herdChg$	n
Yes	Yes	70
Yes	No	53
No	No	35
No	Yes	28
NA	NA	1

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