LCLUC Later Stage Analyses

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2025-06-26

This relies on the combined dfs from 1_data_import. There is not currently any commentary in this document because I'm still running through analyses and chunking them in here as I go.

I. LABOR

1. Who does the daily moves for herding?

Column: (labor_whoMovesDaily) (broken up by soum)

labor_whoMovesDaily	Buren	Bayan	Bayantal	Delgerkhaan	Sumber	Deren	Erdenedalai	Bayantsagaan	Total
husband	23	21	19	19	18	15	15	13	143
child, unspecified	5	11	10	1	15	5	6	2	55
wife	13	12	9	10	12	9	10	8	83
son	8	7	1	5	2	7	11	5	46
unspecified	5	0	2	4	4	8	8	9	40
daughter	2	5	1	1	0	2	3	1	15
herder	0	4	0	0	0	0	0	0	4
grandchild, unspecified	2	0	0	0	0	4	0	2	8
neighbor	1	0	0	0	2	4	1	0	8
daughter-in-law	3	0	1	0	1	2	1	3	11
grandparent	0	2	0	1	0	0	0	0	3
assistant herder	1	1	0	0	0	0	0	2	4
friend	0	0	1	0	0	0	0	0	1
sibling, unspecified	0	0	1	0	0	0	0	0	1
grandmother	0	0	0	0	0	0	0	1	1
grandfather	1	0	0	0	0	0	0	0	1
brother	0	0	0	1	0	1	1	0	3
hired help	0	0	0	1	0	0	0	0	1
son-in-law	0	0	0	0	0	1	0	0	1
brother-in-law	0	0	0	0	1	0	1	0	2
father-in-law	0	0	0	0	0	0	1	0	1

2. Who undertakes herding migrations?

Column: labor_whoMigrates

labor_whoMigrates	Bayan	Bayantal	Bayantsagaan	Buren	Delgerkhaan	Deren	Erdenedalai	Sumber	Total
husband	18	18	8	19	17	17	18	19	134
wife	17	14	8	19	13	14	15	18	118

labor_whoMigrates	Bayan	Bayantal	Bayantsagaan	Buren	Delgerkhaan	Deren	Erdenedalai	Sumber	Total
son(s)	8	4	7	8	3	7	7	1	45
daughter(s)	2	1	1	1	0	2	2	1	10
child(ren), unspecified	5	2	1	5	3	5	3	8	32
brother(s)	0	1	0	0	1	0	1	0	3
sibling(s), unspecified	2	3	0	0	1	1	1	0	8
father	1	0	0	0	0	0	0	0	1
mother	3	0	1	0	0	1	0	0	5
grandparent(s), unspecified	1	0	1	1	1	0	0	0	4
grandchild(ren), unspecified	0	0	1	1	0	2	0	0	4
household head	2	0	0	0	0	0	1	1	4
extended family/in-laws	1	0	2	7	1	3	4	4	22
friend/neighbor(s)	2	2	1	0	1	1	1	0	8
person(s), unspecified	1	1	8	5	4	1	4	0	24
hired help	1	0	0	0	1	1	0	0	3
just myself	0	0	0	0	0	0	1	1	2
other	1	1	0	0	0	1	2	0	5

3. How many people undertake migrations?

Column: labor_numMigrates

labor_numMigrates	Bayantsagaan	Buren	Delgerkhaan	Sumber	Bayan	Deren	Erdenedalai	Bayantal	Total
2	12	10	10	10	4	9	8	7	70
4	1	2	6	1	9	4	3	2	28
3	3	8	2	3	4	4	7	2	33
6	2	1	0	0	3	1	2	4	13
5	1	3	2	4	2	3	1	1	17
1	3	1	1	0	0	2	2	1	10
8	0	1	0	1	0	0	0	2	4
7	0	0	0	2	0	1	2	0	5
0	0	0	0	1	0	0	0	1	2
11	1	0	0	0	0	0	0	0	1
9	0	1	0	0	0	0	1	0	2
10	0	0	1	0	0	0	1	0	2

4. Does migration impact labor and/or herding practices?

A. Impact on labor: Column: labor_migImpactLabor

labor_migImpactLabor	Buren	Deren	Erdenedalai	Bayan	Sumber	Bayantal	Bayantsagaan	Delgerkhaan	Total
Yes	15	8	14	8	11	10	10	6	82
No	7	15	12	13	9	9	9	10	84
NA	5	1	1	1	2	1	4	6	21

B. Impact on herding practices: Column: labor_migImpactPract

labor_migImpactPra	Deren	Buren	Erdenedalai	Bayan	Sumber	Bayantsagaan	Bayantal	Delgerkhaan	Total
No	16	8	14	13	13	11	9	10	94
Yes	7	14	12	8	7	8	10	6	72
NA	1	5	1	1	2	4	1	6	21

5. Do you hire labor?

Column: labor_hire

labor_hire	Buren	Erdenedalai	Deren	Sumber	Bayantal	Bayantsagaan	Bayan	Delgerkhaan	Total
No	22	22	20	20	18	17	16	14	149
Yes	5	5	3	2	2	6	6	8	37
NA	0	0	1	0	0	0	0	0	1

6. If you do hire labor, for what?

A. Moving the herds daily: Column: labor_hire_DailyMove

labor_hire_dailyMove	Buren	Erdenedalai	Deren	Sumber	Bayantal	Bayantsagaan	Bayan	Delgerkhaan	Total
NA	22	22	21	20	18	18	16	14	151
Yes	3	4	2	0	0	3	5	7	24
No	2	1	1	2	2	2	1	1	12

B. Moving the herds seasonally: Column: labor_hire_bigMove

labor_hire_bigMove	Buren	Erdenedalai	Deren	Sumber	Bayantal	Bayantsagaan	Bayan	Delgerkhaan	Total
NA	22	22	21	20	18	18	16	14	151
Yes	2	5	3	1	2	5	5	7	30
No	3	0	0	1	0	0	1	1	6

C. Moving the herds for Otor: Column: labor_hire_forOtor

labor_hire_forOtor	Buren	Erdenedalai	Deren	Sumber	Bayantal	Bayantsagaan	Bayan	Delgerkhaan	Total
NA	22	22	21	20	18	18	16	14	151
No	3	2	1	1	1	2	5	3	18
Yes	2	3	2	1	1	3	1	5	18

D. Hiring for other tasks: Column: labor_hire_Other

labor_hire_Other	Buren	Erdenedalai	Sumber	Bayantsagaan	Delgerkhaan	Deren	Bayantal	Bayan	Total
NA	22	20	18	17	15	15	14	11	132
shearing livestock	3	5	2	5	3	6	5	7	36
day laboring	1	0	0	0	1	3	0	2	7
herding	0	0	0	2	1	0	1	1	5

labor_hire_Other	Buren	Erdenedalai	Sumber	Bayantsagaan	Delgerkhaan	Deren	Bayantal	Bayan	Total
household chores	1	0	0	0	2	0	0	0	3
migration	1	2	0	1	1	0	0	0	5
livestock care	0	1	2	0	0	1	0	1	5

II. TENURE

1. Land tenure arrangements:

A. Cross-tab: Not the best looking, I'll work on making it more legible. Is easier to look at if it's viewed in the markdown or in the script.

```
##                                                                                 sprPasContract No Yes
## wintCamp wintContract wintPas wintPasContract sameCamp sprCamp sprCampContract
## No       No           No      No              No       No      No                              5   0
##                                                                 Yes                             0   0
##                                                           Yes   No                              0   0
##                                                                 Yes                             0   0
##                               Yes             No       No      No                              1   0
##                                                                 Yes                             0   0
##                                                           Yes   No                              0   0
##                                                                 Yes                             0   0
##                      Yes      No              No       No      No                              8   0
##                                                                 Yes                             0   0
##                                                           Yes   No                              4   1
##                                                                 Yes                             0   0
##                               Yes             No       No      No                              0   0
##                                                                 Yes                             0   0
##                                                           Yes   No                              0   0
##                                                                 Yes                             0   0
##          Yes          No      No              No       No      No                              0   0
##                                                                 Yes                             0   0
##                                                           Yes   No                              0   0
##                                                                 Yes                             0   0
##                               Yes             No       No      No                              0   0
##                                                                 Yes                             0   0
##                                                           Yes   No                              0   0
##                                                                 Yes                             0   0
##                      Yes      No              No       No      No                              0   0
##                                                                 Yes                             0   0
##                                                           Yes   No                              0   0
##                                                                 Yes                             2   0
##                               Yes             No       No      No                              0   0
##                                                                 Yes                             0   0
##                                                           Yes   No                              0   0
##                                                                 Yes                             0   0
## Yes      No           No      No              No       No      No                              0   0
##                                                                 Yes                             0   0
##                                                           Yes   No                              0   0
##                                                                 Yes                             0   0
```

```
##                               Yes             No       No      No                              0   0
##                                                                Yes                             0   0
##                                                        Yes     No                              0   0
##                                                                Yes                             0   0
##                       Yes     No              No       No      No                              0   0
##                                                                Yes                             0   0
##                                                        Yes     No                              6   1
##                                                                Yes                             1   0
##                               Yes             No       No      No                              1   0
##                                                                Yes                             0   0
##                                                        Yes     No                              0   0
##                                                                Yes                             0   0
##          Yes          No      No              No       No      No                              1   0
##                                                                Yes                             0   0
##                                                        Yes     No                              1   0
##                                                                Yes                             1   0
##                               Yes             No       No      No                              0   0
##                                                                Yes                             0   0
##                                                        Yes     No                              0   0
##                                                                Yes                             0   0
##                       Yes     No              No       No      No                              7   0
##                                                                Yes                             0   0
##                                                        Yes     No                              8   2
##                                                                Yes                            45   2
##                               Yes             No       No      No                              1   0
##                                                                Yes                             1   0
##                                                        Yes     No                              1   0
##                                                                Yes                             2   3
```

B. Contingency table: This one looks better and is depicting the same information.

wintCamp	wintContract	wintPas	wintPasContract	sameCamp	sprCamp	sprCampContract	sprPasContract	n
Yes	Yes	Yes	No	Yes	No	No	No	50
Yes	Yes	Yes	No	No	Yes	Yes	No	45
No	No	Yes	No	Yes	No	No	No	10
Yes	No	Yes	No	Yes	No	No	No	10
Yes	Yes	Yes	No	No	Yes	No	No	9
No	No	Yes	No	No	No	No	No	8
Yes	Yes	Yes	No	No	No	No	No	7
Yes	No	Yes	No	No	Yes	No	No	6
No	No	No	No	No	No	No	No	5
No	No	Yes	No	No	Yes	No	No	4
No	Yes	Yes	No	No	Yes	Yes	No	3
Yes	Yes	No	No	Yes	No	No	No	3
Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	3
No	No	No	Yes	No	No	No	No	2
Yes	No	Yes	Yes	Yes	No	No	No	2
Yes	Yes	Yes	No	No	Yes	No	Yes	2
Yes	Yes	Yes	No	No	Yes	Yes	Yes	2
Yes	Yes	Yes	Yes	No	Yes	Yes	No	2
No	No	No	No	Yes	No	No	No	1
No	No	Yes	No	No	Yes	No	Yes	1
No	No	Yes	No	No	Yes	Yes	No	1

wintCamp	wintContract	wintPas	wintPasContract	sameCamp	sprCamp	sprCampContract	sprPasContract	n
Yes	No	No	No	Yes	No	No	No	1
Yes	No	Yes	No	No	Yes	No	Yes	1
Yes	No	Yes	No	No	Yes	Yes	No	1
Yes	No	Yes	Yes	No	No	No	No	1
Yes	Yes	No	No	No	No	No	No	1
Yes	Yes	No	No	No	Yes	No	No	1
Yes	Yes	No	No	No	Yes	Yes	No	1
Yes	Yes	Yes	Yes	No	No	No	No	1
Yes	Yes	Yes	Yes	No	No	Yes	No	1
Yes	Yes	Yes	Yes	No	Yes	No	No	1
Yes	Yes	Yes	Yes	Yes	No	No	No	1

2. Contingency Tables on tenure, by Soum:

A. Winter Camp (y/n):

	No	Yes
Bayan	1	21
Bayantal	5	15
Bayantsagaan	1	22
Buren	6	21
Delgerkhaan	3	19
Deren	5	19
Erdenedalai	8	19
Sumber	6	16

B. Winter Camp Contract (y/n):

	No	Yes
Bayan	3	19
Bayantal	9	11
Bayantsagaan	1	22
Buren	8	19
Delgerkhaan	7	15
Deren	9	15
Erdenedalai	9	18
Sumber	8	14

C. Winter Pasture (y/n):

	No	Yes
Bayan	2	20
Bayantal	1	19
Bayantsagaan	0	23
Buren	4	23
Delgerkhaan	2	20
Deren	2	22
Erdenedalai	2	25

	No	Yes
Sumber	2	20

D. Winter Paster Contract (y/n):

	No	Yes
Bayan	21	1
Bayantal	19	1
Bayantsagaan	23	0
Buren	24	3
Delgerkhaan	19	3
Deren	22	2
Erdenedalai	25	2
Sumber	20	2

E. Is your winter camp your spring camp (y/n)?

	No	Yes
Bayan	14	8
Bayantal	12	8
Bayantsagaan	16	7
Buren	22	5
Delgerkhaan	13	9
Deren	13	11
Erdenedalai	10	17
Sumber	9	13

F. Spring Camp? (y/n):

	No	Yes
Bayan	8	14
Bayantal	10	10
Bayantsagaan	9	14
Buren	12	15
Delgerkhaan	15	7
Deren	12	12
Erdenedalai	22	5
Sumber	16	6

G. Spring Camp Contract (y/n):

	No	Yes
Bayan	9	13
Bayantal	14	6
Bayantsagaan	11	12
Buren	20	7
Delgerkhaan	16	6

	No	Yes
Deren	17	7
Erdenedalai	23	4
Sumber	18	4

H. Spring Pasture Contract (y/n):

	No	Yes
Bayan	21	1
Bayantal	18	2
Bayantsagaan	22	1
Buren	24	3
Delgerkhaan	22	0
Deren	23	1
Erdenedalai	26	1
Sumber	22	0

III. ALTERNATIVE LIVELIHOODS

1. Is someone in the household doing non-herding work?

Column: altLife_nonHerdWork

```
##
##                No Yes
##   Bayan        13   9
##   Bayantal     13   7
##   Bayantsagaan 16   7
##   Buren        21   6
##   Delgerkhaan  17   5
##   Deren        16   8
##   Erdenedalai  14  13
##   Sumber       15   6
```

A. If so, who is doing the non-herding work? Column: labor_hire

altLife_whoNoHerdwork	Erdenedalai	Deren	Bayan	Bayantal	BayantsagaanBuren	Delgerkhaan	Sumber	Total
not specified	8	7	5	5	5	3	2	1	36
daughter	0	0	1	1	1	3	1	1	8
wife	1	2	1	1	0	0	2	1	8
household head	1	0	1	0	1	0	0	0	3
son	1	0	1	1	1	0	0	1	5
father	1	0	0	0	0	0	0	0	1
husband	1	0	0	0	0	0	0	1	2
extended family members	0	0	0	0	0	0	0	1	1

B. Is so, what is the non-herding work? Column: labor_hire

altLife_noHerdWhatWork	Buren	Deren	Erdenedalai	Bayantal	Bayantsagaan	Sumber	Bayan	Delgerkhaan	Total
employment unspecified	5	1	2	0	1	0	0	0	9
commerce-related and restaurants	1	4	4	3	2	0	2	0	16
mining and construction	0	0	0	2	3	2	2	0	9
education	0	0	1	1	0	3	1	2	8
government employment	1	2	1	1	2	1	2	2	12
agriculture and pastoralist-adjacent	0	1	2	0	1	1	0	0	5
government leadership	0	0	2	0	0	0	0	0	2
arts, crafts, and handwork	0	0	1	1	0	0	1	1	4
medical/veterinary	0	1	0	1	0	0	1	0	3
mischellaneous	0	0	1	0	1	1	0	0	3

2. Additional sources of income for the household? Broken up by Soum

Column: altLife_otherInc

altLife_otherInc	Erdenedalai	Deren	Bayan	Buren	Delgerkhaan	Bayantal	Bayantsagaan	Sumber	Total
government allowances	14	11	12	12	12	11	10	9	91
pension	13	13	8	9	7	4	10	10	74
salary	8	7	11	6	5	7	7	4	55
other	3	1	1	4	0	2	1	1	13
saving in bank	3	2	2	3	1	0	0	1	12
crafts	3	1	0	1	1	1	0	0	7
remits	0	1	0	2	1	2	0	1	7
pension saving in bank	0	0	0	0	0	0	1	0	1
hourly wage	1	0	0	0	0	0	0	1	2
herding lsk from other household	0	0	0	0	0	0	0	1	1

3. Loans:

A. Number of loans taken out per year? Column: altLife_loansPerYr

	0	0.5	1	2	3
Bayan	4	1	16	0	0
Bayantal	6	0	11	1	0
Bayantsagaan	2	0	17	4	0
Buren	3	1	19	3	1
Delgerkhaan	1	0	17	4	0
Deren	2	0	12	8	1
Erdenedalai	1	1	20	4	0
Sumber	4	0	16	2	0

B. Loan Sizes (min, max, mean, median, range) Column: altLife_loansMin/altLife_loansMax

Soum	min_minLn	max_minLn	mean_minLn	median_minLn	min_maxLn	max_maxLn	mean_maxLn	median_maxLn
Bayan	3.0	30	9.882353	10.0	3.0	30	15.294118	14.0
Bayantal	2.0	25	10.000000	9.0	10.0	30	19.250000	20.0
Bayantsagaan	0.3	10	4.752381	5.0	1.0	30	10.466667	6.0
Buren	1.0	20	5.104167	4.0	3.0	20	9.187500	8.5
Delgerkhaan	1.0	40	8.619048	5.0	2.0	50	12.047619	7.0
Deren	0.3	50	6.823810	5.0	0.5	50	10.119048	5.0
Erdenedalai	0.5	20	4.286000	3.0	2.0	50	8.240000	5.0
Sumber	1.0	30	6.222222	3.5	1.0	30	8.472222	6.5

C. When do you typically need loans? Column: altLife_loansWhenNeed

altLife_loansWhenNeed	Buren	Delgerkhaan	Bayan	Bayantsagaan	Deren	Bayantal	Sumber	Erdenedalai	Total
winter	18	16	14	14	14	13	13	10	112
spring	9	4	4	3	2	3	0	6	31
autumn	7	8	6	4	8	7	8	8	56
lunar new year	6	3	5	5	6	2	5	2	34
summer	0	2	1	0	2	1	1	3	10
year round	0	0	0	0	1	1	1	2	5
depends on needs	0	0	0	1	0	1	0	1	3
never	1	1	0	1	1	1	0	0	5
during medical treatment	0	1	0	0	0	0	0	0	1
during migration	0	0	0	0	0	0	0	1	1

IV. HERD MANAGEMENT

1. Distance for daily herding, generally:

Column: altLife_nonHerdWork #### A. All together:

herdMgmt_dailyDist	n
5	33
4	21
6	15
10	14
3	13
20	9
2	7
8	4
15	4
7	3
12	3
1	2
35	2
0	1
11	1
13	1

B. Broken up by Soum:

herdMgmt_dailyDist	Erdenedalai	Bayantsagaan	Bayan	Buren	Deren	Delgerkhaan	Sumber	Bayantal
5	8	7	5	5	2	3	1	2
3	3	4	0	0	4	1	1	0
6	2	0	2	2	4	3	1	1
4	4	3	2	2	3	3	3	1
10	3	1	3	3	2	1	0	1
2	2	0	0	1	1	0	3	0
20	1	0	0	2	2	2	1	1
15	1	0	1	0	0	0	1	1
35	0	0	1	0	0	1	0	0
1	0	0	0	1	0	0	0	1
8	0	0	0	1	0	1	1	1
7	0	1	0	0	0	1	1	0
11	0	1	0	0	0	0	0	0
12	1	1	0	0	0	1	0	0
13	0	1	0	0	0	0	0	0
0	1	0	0	0	0	0	0	0

2. Distances for daily herding, summer & winter:

Column: herdMgmt_sumDailyDist/herdMgmt_wintDailyDist #### A. Basic distances, summer:

herdMgmt_sumDailyDist	n
10	36
6	32
5	31
4	14
8	12
7	11
20	11
3	10
2	9
15	5
1	4
0	2
11	2
12	2
18	2
9	1
25	1
30	1

B. Basic distances, winter:

herdMgmt_wintDailyDist	n
3	35
5	35
4	27

herdMgmt_wintDailyDist	n
2	22
6	17
10	17
7	8
1	5
8	4
20	3
15	2
0	1
9	1
11	1
12	1
14	1
18	1
25	1
30	1
40	1
100	1
150	1

C. Basic distances, summer, by soum:

herdMgmt_sumDailyDist	Buren	Erdenedalai	Bayantal	Delgerkhaan	Bayantsagaan	Deren	Bayan	Sumber
10	8	4	6	4	4	3	4	3
5	4	7	0	6	4	3	3	4
6	4	4	6	3	3	5	3	4
7	0	0	0	2	5	0	2	2
4	3	5	0	2	1	3	0	0
8	2	1	1	0	2	4	1	1
3	0	1	0	1	2	2	3	1
20	1	0	2	2	0	1	3	2
2	2	1	1	0	0	2	0	3
15	0	0	2	1	0	0	1	1
1	2	1	0	0	0	1	0	0
9	0	0	0	0	0	0	1	0
18	0	0	0	1	0	0	1	0
0	0	1	1	0	0	0	0	0
30	0	0	1	0	0	0	0	0
11	0	1	0	0	1	0	0	0
12	1	0	0	0	0	0	0	1
25	0	1	0	0	0	0	0	0

D. Basic distances, winter, by soum:

herdMgmt_wintDailyDist	Deren	Erdenedalai	Bayantsagaan	Buren	Bayan	Delgerkhaan	Sumber	Bayantal
4	8	4	5	2	1	2	2	3
3	2	8	3	6	5	4	4	3
5	4	4	7	6	5	5	1	3
2	2	5	2	3	2	2	5	1

herdMgmt_wintDailyDist	Deren	Erdenedalai	Bayantsagaan	Buren	Bayan	Delgerkhaan	Sumber	Bayantal
10	3	1	0	4	4	2	2	1
6	1	2	2	3	3	1	2	3
7	3	1	0	1	0	2	1	0
15	0	0	0	0	0	0	0	2
8	0	1	0	1	0	0	2	0
9	0	0	0	0	1	0	0	0
30	0	0	0	0	1	0	0	0
0	0	0	0	0	0	0	0	1
1	1	0	1	1	0	0	1	1
20	0	1	0	0	0	0	1	1
150	0	0	0	0	0	0	0	1
11	0	0	1	0	0	0	0	0
18	0	0	1	0	0	0	0	0
12	0	0	0	0	0	1	0	0
14	0	0	0	0	0	1	0	0
25	0	0	0	0	0	1	0	0
40	0	0	0	0	0	1	0	0
100	0	0	0	0	0	0	1	0

3. Do people travel greater distances for summer vs. winter?

Column: herdMgmt_sumDailyDist/herdMgmt_wintDailyDist #### A. All together:

dist_comparison	n
Equal	34
greater dist in summer	130
greater dist in winter	22
NA	1

B. Broken up by Soum:

dist_comparison	Bayan	Bayantal	Bayantsagaan	Buren	Delgerkhaan	Deren	Erdenedalai	Sumber
Equal	4	5	6	5	3	3	4	4
greater dist in summer	16	14	15	18	16	16	19	16
greater dist in winter	2	1	1	4	3	5	4	2
NA	0	0	1	0	0	0	0	0

4. Distance moved this year vs. last year:

Column: herdMgmt_timesMoved_thisYr/herdMgmt_timesMoved_lastYr #### A. Times moved this year, broken up by Soum:

herdMgmt_timesMoved_thisYr	Deren	Sumber	Erdenedalai	Bayan	Bayantal	Buren	Delgerkhaan	Bayantsagaan
3	11	2	5	5	7	7	7	5
2	5	10	9	3	8	5	7	6
4	4	2	2	8	1	6	3	4
0	0	2	6	2	2	0	0	2

herdMgmt_timesMoved_this_yr	Deren	Sumber	Erdenedalai	Bayan	Bayantal	Buren	Delgerkhaan	Bayantsagaan
5	0	1	1	1	0	5	2	1
1	3	4	3	2	1	0	1	1
6	1	1	1	1	0	3	1	3
10	0	0	0	0	1	1	0	0

B. Times moved last year, broken up by Soum:

herdMgmt_timesMoved_last_yr	Erdenedalai	Bayantsagaan	Buren	Delgerkhaan	Deren	Bayan	Sumber	Bayantal
2	13	9	5	8	7	5	6	5
4	2	4	8	4	6	6	0	1
3	3	1	6	6	8	7	5	4
1	1	1	0	1	2	0	6	4
5	2	2	4	1	1	2	2	3
0	4	2	0	0	0	1	2	2
6	1	2	2	2	0	0	1	0
8	0	1	2	0	0	0	0	0
7	0	0	0	0	0	1	0	0
10	1	0	0	0	0	0	0	0

C. Times moved, this yr vs. last year, difference for everyone:

dist_comparison	Bayan	Bayantal	Bayantsagaan	Buren	Delgerkhaan	Deren	Erdenedalai	Sumber
Equal	12	9	13	18	11	17	12	14
moved more last year	8	5	4	5	5	5	12	4
moved more this year	2	5	5	4	5	2	3	4
NA	0	1	1	0	1	0	0	0

D. One table showing the difference, coalesced together:

move_description	n
moved 1 times fewer this year than last year	32
moved 1 times more this year than last year	17
moved 2 times fewer this year than last year	11
moved 2 times more this year than last year	9
moved 3 times fewer this year than last year	3
moved 3 times more this year than last year	2
moved 4 times fewer this year than last year	1
moved 5 times fewer this year than last year	1
moved 5 times more this year than last year	1
moved 6 times more this year than last year	1
moved an equal number of times	106
NA	3

E. The differences in times moved, broken up by Soum:

1. Bayan

move_description	n
moved 1 times fewer this year than last year	7
moved 1 times more this year than last year	1
moved 2 times fewer this year than last year	1
moved 2 times more this year than last year	1
moved an equal number of times	12

2. Bayantal

move_description	n
moved 1 times fewer this year than last year	4
moved 1 times more this year than last year	3
moved 3 times fewer this year than last year	1
moved 3 times more this year than last year	1
moved 5 times more this year than last year	1
moved an equal number of times	9
NA	1

3. Bayansagaan

move_description	n
moved 1 times fewer this year than last year	2
moved 1 times more this year than last year	3
moved 2 times fewer this year than last year	1
moved 2 times more this year than last year	2
moved 4 times fewer this year than last year	1
moved an equal number of times	13
NA	1

4. Buren

move_description	n
moved 1 times fewer this year than last year	4
moved 1 times more this year than last year	2
moved 2 times fewer this year than last year	1
moved 2 times more this year than last year	2
moved an equal number of times	18

5. Delgerkhaan

move_description	n
moved 1 times fewer this year than last year	4
moved 1 times more this year than last year	4
moved 2 times more this year than last year	1
moved 3 times fewer this year than last year	1
moved an equal number of times	11
NA	1

6. Deren

move_description	n
moved 1 times fewer this year than last year	4
moved 2 times fewer this year than last year	1
moved 2 times more this year than last year	1
moved 3 times more this year than last year	1
moved an equal number of times	17

7. Erdenedalai

move_description	n
moved 1 times fewer this year than last year	4
moved 1 times more this year than last year	1
moved 2 times fewer this year than last year	6
moved 2 times more this year than last year	1
moved 3 times fewer this year than last year	1
moved 5 times fewer this year than last year	1
moved 6 times more this year than last year	1
moved an equal number of times	12

8. Sumber

move_description	n
moved 1 times fewer this year than last year	3
moved 1 times more this year than last year	3
moved 2 times fewer this year than last year	1
moved 2 times more this year than last year	1
moved an equal number of times	14

5. What is the average distance of moves, now vs. 10yrs ago?

Column: herdMgmt_avgDistMoves/herdMgmt_10yrs_avgMoveDist #### A. Unsimplified:

move_description	n
moved an equal amount of distance	45
NA	15
moved 10 kilometers more 10yrs ago than last year	8
moved 20 kilometers more 10yrs ago than last year	4
moved 1 kilometers more 10yrs ago than last year	3
moved 15 kilometers more 10yrs ago than last year	3
moved 2 kilometers less 10yrs ago than last year	3
moved 25 kilometers more 10yrs ago than last year	3
moved 27 kilometers more 10yrs ago than last year	3
moved 3 kilometers more 10yrs ago than last year	3
moved 40 kilometers more 10yrs ago than last year	3
moved 5 kilometers less 10yrs ago than last year	3
moved 5 kilometers more 10yrs ago than last year	3
moved 50 kilometers more 10yrs ago than last year	3
moved 7 kilometers more 10yrs ago than last year	3
moved 10 kilometers less 10yrs ago than last year	2
moved 2 kilometers more 10yrs ago than last year	2

move_description	n
moved 20 kilometers less 10yrs ago than last year	2
moved 22 kilometers more 10yrs ago than last year	2
moved 25 kilometers less 10yrs ago than last year	2
moved 275 kilometers more 10yrs ago than last year	2
moved 3 kilometers less 10yrs ago than last year	2
moved 30 kilometers less 10yrs ago than last year	2
moved 30 kilometers more 10yrs ago than last year	2
moved 4 kilometers more 10yrs ago than last year	2
moved 43 kilometers more 10yrs ago than last year	2
moved 60 kilometers more 10yrs ago than last year	2
moved 70 kilometers more 10yrs ago than last year	2
moved 8 kilometers more 10yrs ago than last year	2
moved 84 kilometers more 10yrs ago than last year	2
moved 95 kilometers more 10yrs ago than last year	2
moved 0.5 kilometers less 10yrs ago than last year	1
moved 1 kilometers less 10yrs ago than last year	1
moved 101 kilometers less 10yrs ago than last year	1
moved 105 kilometers more 10yrs ago than last year	1
moved 108 kilometers more 10yrs ago than last year	1
moved 115 kilometers more 10yrs ago than last year	1
moved 120 kilometers more 10yrs ago than last year	1
moved 127 kilometers less 10yrs ago than last year	1
moved 130 kilometers less 10yrs ago than last year	1
moved 130 kilometers more 10yrs ago than last year	1
moved 16 kilometers less 10yrs ago than last year	1
moved 162 kilometers more 10yrs ago than last year	1
moved 170 kilometers more 10yrs ago than last year	1
moved 19.25 kilometers more 10yrs ago than last year	1
moved 195 kilometers more 10yrs ago than last year	1
moved 2.1 kilometers less 10yrs ago than last year	1
moved 2.5 kilometers less 10yrs ago than last year	1
moved 2.6 kilometers more 10yrs ago than last year	1
moved 200 kilometers more 10yrs ago than last year	1
moved 21 kilometers more 10yrs ago than last year	1
moved 225 kilometers more 10yrs ago than last year	1
moved 23 kilometers more 10yrs ago than last year	1
moved 270 kilometers more 10yrs ago than last year	1
moved 28 kilometers more 10yrs ago than last year	1
moved 280 kilometers more 10yrs ago than last year	1
moved 290 kilometers more 10yrs ago than last year	1
moved 294 kilometers more 10yrs ago than last year	1
moved 350 kilometers more 10yrs ago than last year	1
moved 36 kilometers more 10yrs ago than last year	1
moved 37 kilometers more 10yrs ago than last year	1
moved 38 kilometers less 10yrs ago than last year	1
moved 38 kilometers more 10yrs ago than last year	1
moved 39 kilometers more 10yrs ago than last year	1
moved 45 kilometers more 10yrs ago than last year	1
moved 490 kilometers more 10yrs ago than last year	1
moved 50 kilometers less 10yrs ago than last year	1
moved 51 kilometers more 10yrs ago than last year	1
moved 53 kilometers more 10yrs ago than last year	1

move_description	n
moved 57 kilometers more 10yrs ago than last year	1
moved 6 kilometers less 10yrs ago than last year	1
moved 6 kilometers more 10yrs ago than last year	1
moved 63 kilometers more 10yrs ago than last year	1
moved 66 kilometers more 10yrs ago than last year	1
moved 68 kilometers more 10yrs ago than last year	1
moved 77 kilometers more 10yrs ago than last year	1
moved 79 kilometers more 10yrs ago than last year	1
moved 80 kilometers more 10yrs ago than last year	1
moved 85 kilometers more 10yrs ago than last year	1
moved 90 kilometers less 10yrs ago than last year	1
moved 90 kilometers more 10yrs ago than last year	1

B. Simplified:

move_description	n
moved more 10yrs ago than last year	99
moved an equal amount of distance	45
moved less 10yrs ago than last year	28
NA	15

6. Contingency tables for having reserved various types of pasture

Columns: herdMgmt_lastYr_Otor, herdMgmt_thisYr_Otor, herdMgmt_lastYr_wintPast, herdMgmt_thisYr_wintPast, herdMgmt_lastYr_springPast, herdMgmt_thisYr_springPast, herdMgmt_lastYr_DzudPast, herdMgmt_thisYr_DzudPast #### A. Big, ugly contingency table to start:

lastYr_Otor	thisYr_Otor	lastYr_Winter	thisYr_Winter	lastYr_Spring	thisYr_Spring	lastYr_Dzud	thisYr_Dzud	n
No	No	No	No	No	No	No	No	63
No	No	Yes	Yes	Yes	Yes	Yes	Yes	12
No	No	Yes	Yes	Yes	Yes	No	No	11
Yes	No	No	No	No	No	No	No	10
No	No	Yes	Yes	No	No	No	No	9
Yes	Yes	No	No	No	No	No	No	9
No	Yes	No	No	No	No	No	No	7
No	No	No	No	Yes	Yes	No	No	4
No	No	Yes	Yes	No	No	Yes	Yes	4
Yes	No	Yes	Yes	Yes	Yes	No	No	4
No	No	Yes	Yes	No	Yes	No	No	3
Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	3
No	No	No	No	No	Yes	No	No	2
No	No	No	Yes	No	No	No	No	2
No	No	Yes	No	No	No	No	No	2
No	No	Yes	Yes	Yes	Yes	No	Yes	2
No	Yes	No	No	No	Yes	No	No	2
No	Yes	No	Yes	No	Yes	No	No	2
No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	2
Yes	No	No	No	No	Yes	No	No	2
Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	2

lastYr_Otor	thisYr_Otor	lastYr_Winter	thisYr_Winter	lastYr_Spring	thisYr_Spring	lastYr_Dzud	thisYr_Dzud	n
No	No	No	No	No	No	No	Yes	1
No	No	No	No	No	No	Yes	Yes	1
No	No	No	No	No	Yes	No	Yes	1
No	No	No	No	Yes	No	No	No	1
No	No	No	No	Yes	Yes	No	Yes	1
No	No	No	Yes	No	No	No	Yes	1
No	No	No	Yes	No	No	Yes	No	1
No	No	No	Yes	No	Yes	No	No	1
No	No	Yes	No	No	Yes	No	No	1
No	No	Yes	Yes	No	No	No	Yes	1
No	No	Yes	Yes	Yes	No	Yes	Yes	1
No	No	Yes	Yes	Yes	Yes	Yes	No	1
No	No	Yes	NA	No	No	Yes	Yes	1
No	Yes	No	Yes	Yes	Yes	No	No	1
No	Yes	Yes	No	Yes	No	No	No	1
No	Yes	Yes	Yes	No	No	No	No	1
No	Yes	Yes	Yes	Yes	Yes	No	No	1
No	Yes	Yes	NA	No	No	No	No	1
Yes	No	No	No	No	No	No	Yes	1
Yes	No	No	No	No	No	Yes	No	1
Yes	No	No	No	No	No	Yes	Yes	1
Yes	No	No	Yes	No	No	No	No	1
Yes	No	Yes	Yes	No	No	No	No	1
Yes	No	Yes	Yes	No	No	No	Yes	1
Yes	Yes	Yes	No	Yes	Yes	Yes	No	1
Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	1
Yes	Yes	Yes	Yes	No	No	Yes	No	1
Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	1
Yes	Yes	Yes	Yes	Yes	Yes	No	No	1
NA	NA	NA	NA	NA	NA	NA	NA	1

B. Did you undertake a fall/winter otor last year?

herdMgmt_lastYr_Otor	Buren	Deren	Bayantsagaan	Delgerkhaan	Sumber	Erdenedalai	Bayantal	Bayan	Total
No	24	23	18	18	18	17	16	11	145
Yes	3	1	4	4	4	10	4	11	41
NA	0	0	1	0	0	0	0	0	1

C. Are you likely to go on fall/winter otor this year?

herdMgmt_thisYr_Otor	Erdenedalai	Buren	Deren	Delgerkhaan	Bayan	Bayantal	Sumber	Bayantsagaan	Total
No	24	23	23	21	16	16	15	14	152
Yes	3	4	1	1	6	4	7	8	34
NA	0	0	0	0	0	0	0	1	1

D. Going on fall/winter otor last year vs. this year:

dist_comparison	Bayan	Bayantal	Bayantsagaan	Buren	Delgerkhaan	Deren	Erdenedalai	Sumber
Did not take Otor either year	10	14	14	21	17	22	16	13
Too Otor this yr but not last yr	1	2	4	3	1	1	1	5
Took Otor both years	5	2	4	1	0	0	2	2
Took Otor last yr but not this yr	6	2	0	2	4	1	8	2
NA	0	0	1	0	0	0	0	0

E. Did you reserve winter pasture area this year?

herdMgmt_thisYr_winterPast	Erdenedalai	Sumber	Deren	Bayan	Buren	Delgerkhaan	Bayantsagaan	Bayantal	Total
No	20	16	15	13	13	13	12	11	113
Yes	7	6	9	9	12	9	10	9	71
NA	0	0	0	0	2	0	1	0	3

F. Did you reserve winter pasture area last year?

herdMgmt_lastYr_winterPast	Erdenedalai	Sumber	Deren	Bayantal	Buren	Delgerkhaan	Bayantsagaan	Bayan	Total
No	20	16	15	14	14	14	12	11	116
Yes	7	6	9	6	13	8	10	11	70
NA	0	0	0	0	0	0	1	0	1

G. Reserving winter pasture last year vs. this year:

dist_comparison	Bayan	Bayantal	Bayantsagaan	Buren	Delgerkhaan	Deren	Erdenedalai	Sumber
Did not reserve Winter Pasture either year	11	11	10	12	13	15	19	16
Reserved Winter Pasture both yrs	9	6	8	10	8	9	6	6
Reserved Winter paster last yr but not this yr	2	0	2	1	0	0	1	0
Reserved Winter Pasture this yr but not last yr	0	3	2	2	1	0	1	0
NA	0	0	1	2	0	0	0	0

H. Did you reserve spring pasture area this year?

herdMgmt_thisYr_springPast	Erdenedalai	Bayantal	Buren	Deren	Bayantsagaan	Sumber	Delgerkhaan	Bayan	Total
No	19	18	18	17	14	14	13	11	124
Yes	8	2	9	7	8	8	9	11	62
NA	0	0	0	0	1	0	0	0	1

I. Did you reserve spring pasture area last year?

herdMgmt_lastYr_springPast	Bayan	Erdenedalai	Bayantal	Sumber	Deren	Bayantsagaan	Delgerkhaan	Bayan	Total
No	22	20	18	17	16	15	15	13	136
Yes	5	7	2	5	8	7	7	9	50
NA	0	0	0	0	0	1	0	0	1

J. Reserving spring pasture last year vs. this year:

dist_comparison	Bayan	Bayantal	Bayantsagaan	Buren	Delgerkhaan	Deren	Erdenedalai	Sumber
Did not reserve Spring Pasture either year	11	18	14	18	13	15	18	14
Reserved Spring Pasture both yrs	9	2	7	5	7	6	6	5
Reserved Spring Pasture this yr but not last yr	2	0	1	4	2	1	2	3
NA	0	0	1	0	0	0	0	0
Reserved Spring paster last yr but not this yr	0	0	0	0	0	2	1	0

K. Did you reserve dzud pasture this year?

herdMgmt_thisYr_DzudPast	Bayan	Erdenedalai	Bayan	Bayantal	Sumber	Bayantsagaan	Delgerkhaan	Deren	Total
No	23	20	18	18	18	17	17	17	148
Yes	4	7	4	2	4	5	5	7	38
NA	0	0	0	0	0	1	0	0	1

L. Did you reserve dzud pasture last year?

herdMgmt_lastYr_DzudPast	Bayan	Erdenedalai	Bayan	Bayantal	Delgerkhaan	Deren	Bayantsagaan	Sumber	Total
No	22	22	20	18	18	18	17	17	152
Yes	5	5	2	2	4	6	5	5	34
NA	0	0	0	0	0	0	1	0	1

M. Reserving spring pasture last year vs. this year:

dist_comparison	Bayan	Bayantal	Bayantsagaan	Buren	Delgerkhaan	Deren	Erdenedalai	Sumber
Did not reserve Dzud Pasture either year	18	17	16	21	17	17	20	17
Reserved Dzud Pasture both yrs	2	1	4	3	4	6	5	4
Reserved Dzud Pasture this yr but not last yr	2	1	1	1	1	1	2	0
Reserved Dzud Pasture last yr but not this yr	0	1	1	2	0	0	0	1
NA	0	0	1	0	0	0	0	0

7. Means of travel 10, 5, and 1 year ago:

Columns: herdMgmt_10yrsAgo_herdTravel/herdMgmt_5yrsAgo_herdTravel/herdMgmt_lastYr_herdTravel

transport	Bayan	Bayantal	Bayantsagaan	Buren	Delgerkhaan	Deren	Erdenedalai	Sumber	Total
camel	21-15-9	9-7-5	16-9-8	24-18-13	20-17-13	18-13-10	15-11-7	12-9-9	135-99-74
car	1-4-11	0-2-7	1-5-13	2-1-2	3-4-6	0-1-5	1-3-3	2-4-8	10-24-55
horse	21-15-9	9-7-5	16-9-8	24-18-13	20-17-13	18-13-10	15-11-7	12-9-9	135-99-74
motorbike	12-19-20	13-18-20	15-19-17	14-24-27	13-20-22	12-18-18	19-23-22	12-17-19	110-158-165
NA	1-0-0	2-1-0	1-1-1	2-0-0	1-0-0	1-0-0	1-1-0	3-1-0	12-4-1
walk	0-0-0	0-0-2	2-2-2	3-5-5	4-3-2	5-5-3	1-2-4	0-1-3	15-18-21

8. Daily distance traveled, 10, 5, and 1 year ago:

Columns: herdMgmt_10yrsAgo_dailyDist/herdMgmt_5yrsAgo_dailyDist/herdMgmt_lastYr_dailyDist

distance	Bayan	Bayantal	Bayantsagaan	Buren	Delgerkhaan	Deren	Erdenedalai	Sumber	Total
2.0	1-0-0	0-0-0	0-0-0	0-0-0	0-0-0	0-0-0	4-2-3	1-1-3	6-3-6
3.0	0-0-1	0-0-0	1-0-0	1-1-2	0-2-3	1-0-3	4-3-3	1-1-1	8-7-13
4.0	1-0-0	0-0-0	0-0-0	3-4-4	0-0-0	4-4-0	1-2-2	1-1-2	10-11-8
5.0	3-4-4	0-2-2	5-4-5	7-5-2	4-6-4	4-5-3	2-2-3	3-3-2	28-31-25
6.0	1-0-0	1-0-0	0-0-0	1-1-2	4-0-2	3-1-1	2-2-1	0-1-1	12-5-7
7.0	1-0-1	2-0-1	0-1-0	1-0-0	0-0-1	0-0-0	1-0-0	1-0-0	6-1-3
8.0	1-0-2	0-1-2	1-1-1	1-1-0	0-0-2	0-0-1	0-0-1	0-0-0	3-3-9
9.0	0-0-1	0-0-0	0-0-0	0-0-0	0-1-0	0-0-0	0-0-0	0-0-0	0-1-1
10.0	4-5-5	0-2-1	4-3-4	2-2-3	3-1-4	1-2-3	6-4-4	3-3-3	23-22-27
15.0	1-3-0	2-2-3	1-1-1	1-0-0	2-1-0	0-0-0	0-0-0	1-1-0	8-8-4
20.0	0-1-1	3-1-1	0-2-1	1-1-2	1-2-3	0-0-0	0-0-0	0-1-1	5-8-9
25.0	1-0-0	0-0-0	1-0-0	0-0-0	0-0-0	0-0-0	1-0-0	0-0-0	3-0-0
30.0	1-1-0	0-0-0	0-0-1	1-0-0	0-0-0	0-0-1	0-1-0	0-0-0	2-2-2
60.0	1-1-1	0-0-0	0-0-0	0-0-0	0-0-0	0-0-0	0-0-0	0-0-0	1-1-1
0.0	0-0-0	2-2-0	1-1-0	1-0-0	2-2-1	1-2-2	0-0-1	2-1-0	9-8-4
12.0	0-0-0	1-1-0	0-1-0	1-1-1	1-2-0	2-1-1	1-2-2	0-0-0	6-8-4
50.0	0-0-0	1-0-0	1-0-0	0-0-0	0-0-0	0-0-0	0-0-0	0-0-0	2-0-0
13.0	0-0-0	0-0-0	0-1-0	0-0-0	0-0-0	0-0-0	0-0-0	1-0-0	1-1-0
19.0	0-0-0	0-0-0	1-0-0	0-0-0	0-0-0	0-0-0	0-0-0	0-0-0	1-0-0
35.0	0-0-0	0-0-0	1-1-0	0-0-1	0-0-0	0-0-0	0-0-0	0-0-0	1-1-1
55.0	0-0-0	0-0-0	0-0-1	0-0-0	0-0-0	0-0-0	0-0-0	0-0-0	0-0-1
7.5	0-0-0	0-0-0	0-0-0	0-0-1	0-0-0	0-0-0	0-0-0	0-0-0	0-0-1
17.0	0-0-0	0-0-0	0-0-0	0-1-1	0-0-0	0-0-0	0-0-0	0-0-0	0-1-1
80.0	0-0-0	0-0-0	0-0-0	0-1-0	0-0-0	0-0-0	0-0-0	0-0-0	0-1-0
14.0	0-0-0	0-0-0	0-0-0	0-0-0	0-1-0	0-0-0	0-0-0	0-0-0	0-1-0
18.0	0-0-0	0-0-0	0-0-0	0-0-0	0-1-0	0-0-0	0-0-0	0-0-0	0-1-0
23.0	0-0-0	0-0-0	0-0-0	0-0-0	1-0-0	0-0-0	0-1-0	0-0-0	1-1-0
28.0	0-0-0	0-0-0	0-0-0	0-0-0	0-0-0	1-1-0	0-0-0	0-0-0	1-1-0
3.5	0-0-0	0-0-0	0-0-0	0-0-0	0-0-0	0-0-0	0-0-1	0-0-0	0-0-1
100.0	0-0-0	0-0-0	0-0-0	0-0-0	0-0-0	0-0-0	0-1-0	0-0-0	0-1-0

9. In the past five years, have you changed your herding management practices?

Columns: herdMgmt_past5Yrs_mgmtChanges/herdMgmt_mgmtChanges_what #### A. Changed management practices (yes/no):

herdMgmt_past5Yrs_mgmtChanges	Erdenedalai	Buren	Bayantal	Bayantsagaan	Bayan	Delgerkhaan	Deren	Sumber	Total
No	21	19	18	17	13	13	13	13	127
Yes	6	7	2	5	9	8	11	9	57
NA	0	1	0	1	0	1	0	0	3

B. Changes to management that have been made:

herdMgmt_mgmtChanges_what	Bayan	Buren	Deren	Sumber	Bayantsagaan	Delgerkhaan	Erdenedalai	Bayantal	Total
reserved/moved to improved pasture	1	4	3	3	2	0	2	0	15
improved the quality of the livestock	4	0	2	0	0	2	1	1	10
rotational grazing	0	0	2	2	2	1	1	0	8
fencing the pasture	1	1	2	2	1	1	0	0	8
provided more fodder	2	1	0	2	0	2	0	0	7
reduced the overall herd size	1	0	1	1	0	0	0	1	4
maintain the overall herd size	3	0	0	0	0	0	0	0	3
negotiating with others to protect pasture from stray livestock	0	0	0	0	0	1	1	0	2
Engaged less in dairy farming	0	1	0	0	0	0	0	0	1
improved approach and practice	0	0	0	0	0	1	0	0	1
Improved water supply	0	0	1	0	0	0	0	0	1
no place to graze	0	0	1	0	0	0	0	0	1

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

Columns: herdMgmt_next5Yrs_mgmtChanges/herdMgmt_futureChg_what #### A. Planning to change management practices (yes/no):

herdMgmt_next5Yrs_mgmtChanges	Deren	Erdenedalai	Bayantsagaan	Buren	Bayantal	Delgerkhaan	Sumber	Bayan	Total
Yes	17	10	15	15	13	13	13	12	108
No	7	17	7	12	7	9	9	10	78
NA	0	0	1	0	0	0	0	0	1

B. Planned changes to management practices:

herdMgmt_futureChg_what	Delgerkhaan	Erdenedalai	Deren	Sumber	Bayan	Bayantal	Bayantsagaan	Buren	Total
fence the pasture	8	8	7	7	6	5	5	3	49
plant pasture grass	3	2	2	1	2	6	1	3	20
improve the quality of the livestock	0	1	4	2	2	0	4	4	17
reduce the overall herd size	1	0	1	4	3	1	3	2	15
reserve/move to improved pasture	1	0	1	2	0	1	1	2	8
improve water supply	1	0	1	1	0	0	2	0	5

herdMgmt_futureChg_what	Delgerkhaan	Erdenedalai	Deren	Sumber	Bayan	Bayantal	Bayantsagaan	Buren	Total
maintain the overall herd size	0	1	1	1	1	0	0	0	4
rotational grazing	1	0	2	0	0	0	0	0	3
Engage more in dairy farming	1	0	0	0	0	1	1	0	3
increase the overall herd size	0	0	0	0	0	1	1	0	2
forage/fodder related	0	1	0	0	0	0	1	0	2
build shelter to keep animals warm	0	0	1	0	0	0	0	1	2
contribute to the saving	0	0	0	0	0	0	1	0	1
placing the animals in a same area	0	0	0	0	0	0	1	0	1
community-based pasture management	0	0	0	0	0	0	0	1	1
allocate the animals to children	0	0	1	0	0	0	0	0	1
move to town	0	0	0	1	0	0	0	0	1

11. Are there changes you want to make to your management practices but can't?

Columns: herdMgmt_whatChanges_cantMake/herdMgmt_chg_limitingFactor #### A. (yes/no):

herdMgmt_whatChanges_cantMake	Buren	Deren	Bayantsagaan	Erdenedalai	Bayan	Bayantal	Delgerkhaan	Sumber	Total
Yes	21	17	15	15	14	14	14	13	123
No	6	7	7	12	8	6	8	9	63
NA	0	0	1	0	0	0	0	0	1

B. Barrier to making changes to management practices:

herdMgmt_chg_limitingFactor	Erdenedalai	Bayan	Buren	Sumber	Bayantsagaan	Delgerkhaan	Deren	Bayantal	Total
NA	12	9	6	9	8	8	7	6	65
financial difficulty	6	6	9	5	3	7	6	5	47
fencing related	2	3	4	4	4	1	4	4	26
lack of human capacity/skills	1	1	4	3	3	3	4	0	19
insufficient land, equipment, or materials	3	1	1	3	2	2	1	1	14
insufficient water resources	1	0	4	2	1	2	1	1	12
lack of time	0	2	4	1	2	1	0	2	12
difficulties in selling/breeding livestock	2	0	0	1	2	1	0	4	10
degraded pastureland	2	1	1	0	0	0	3	1	8
legal issues/conflict with other herders	1	1	0	0	2	2	2	0	8
little attention/resources for herders	0	0	0	0	0	1	1	0	2
more interested in herding	0	0	0	0	1	0	0	0	1

herdMgmt_chg_limitingFactor	Erdenedalai	Bayan	Buren	Sumber	Bayantsagaan	Delgerkhaan	Deren	Bayantal	Total
difficulties in selling/breeding/managing livestock	0	0	0	1	0	0	0	0	1

12. Condition and degree of pastoral change:

Columns: herdMgmt_pastureCon_chg_yn/herdMgmt_pastureCon_chg_deg

condition_comparison	Bayan	Bayantal	Bayantsagaan	Buren	Delgerkhaan	Deren	Erdenedalai	Sumber	Total
Moderately Degraded	3	5	8	9	8	10	11	9	63
Moderately Improved	3	2	0	1	1	3	1	0	11
No change	5	3	8	9	8	4	4	3	44
Slightly Degraded	4	3	1	1	3	1	3	2	18
Substantially Degraded	7	6	5	6	2	6	8	8	48
Slightly Improved	0	1	0	0	0	0	0	0	1
NA	0	0	1	1	0	0	0	0	2