# LCLUC Later Stage Analyses

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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_migImpactPrac | 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 |

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# 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      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      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      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       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 |

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# 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 | Bayantsagaan | Buren | 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_minL | max_minL | mean_minL | median_minL | min_maxL | max_maxL | mean_maxL | median_maxL |
|---|---|---|---|---|---|---|---|---|
| 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_dailyDistErdenedalai | 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 |

| herdMgmt_wintDailyDist | n |
|---:|---:|
| 5 | 35 |
| 4 | 27 |
| 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 |

| herdMgmt_wintDailyDist | Deren | Erdenedalai | Bayantsagaan | Buren | Bayan | Delgerkhaan | Sumber | Bayantal |
|---:|---:|---:|---:|---:|---:|---:|---:|---:|
| 5 | 4 | 4 | 7 | 6 | 5 | 5 | 1 | 3 |
| 2 | 2 | 5 | 2 | 3 | 2 | 2 | 5 | 1 |
| 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 |
| 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_lastYr | 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 |

| move_description | n |
|---|---|

**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 |

| move_description | n |
| --- | --- |
| 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 |

| move_description | n |
| --- | --- |
| 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 |
| 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 |

| move_description | n |
|---|---|
| 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 |
| 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 |