

Tanzania Market Survey A: Descriptive Analysis

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Market Survey A Data: First Look

- Market survey A is the key informant interview
- Key informant interview with the market manager or other key person who is knowledgeable about the market, focusing on the general characteristics of the market. (1 survey per market)
- At each market, the field team will identify and arrange to meet with the market manager/person in-charge to introduce the project and obtain permission to collect data, and then conduct a short interview

1) What fields are contained in the survey data?

x

fid
date
country
district.region.code
ward.code
village
market.name
market.type
name.of.respondent
1.location.brought.from
2.location.taken.to.
3a.no.sheep.sold.per.day
3b.no.goats.sold.per.day
4.seasonal.variation.in.trade
4.if.yes.describe
gps.coordinates.of.the.market
unique.row.identifier.uuid.
ward.name
district.region.name

2) How many observations are there?

- How many surveys were completed (i.e. how many markets were visited?)

[1] 85

3) Is the market name variable unique, does it correspond to market id variable?

- Are there any duplicated market names in the data?

| date | district.code | district.name | ward.code | ward.name | village | market.name | name.of.respondent |
|------------|---------------|---------------|-----------|-----------|------------|-------------|---------------------|
| 2022-05-19 | 62 | SIMIYU | 620117 | DUTWA | Igaganulwa | Dutwa | Philemon togoro |
| 2022-05-21 | 68 | MWANZA | 680101 | NGUDU | Kakola | Dutwa | Deogratius makuliga |
| 2022-05-22 | 61 | KATAVI | 610106 | MAJIMOT | Kitupa | Majimoto | James Mlelwa |
| 2022-05-22 | 61 | KATAVI | 610106 | MAJIMOT | Kitupa | Majimoto | James Mlelwa |

- Most of the 85 markets are unique...
- The market names Dutwa and Majimoto each appear twice.
- The market **Dutwa** appears to be an error in the market.name field. Whilst the market name is the same, village, ward name & code, district code and name of respondent is different for the two entries. Suggest correcting the market name to dutwa."village": dutwa.Kakola and dutwa.Igaganulwa
- The market **Majimoto** appears to be a duplicate (2 surveys conducted at the same market). The market name, village, ward name &is code, district code and name of respondent are the same for both entries. The question answers are different.
- *Add variable "market.name.corrected" with dutwa.kakola and dutwa.igaganulwa as entries*
- See market map below with duplicate locations pinpointed.

4) Is the market name always the same as the village name?

- In most cases - yes - the market name is the village name
- Below is a list of markets which have names distinct to the village name (29 examples)
- In some cases the market & village names appear to be the same except for a typo, in others they appear genuinely distinct

| village | market.name |
|--------------|-------------|
| - - Mwasamba | Mwasamba |
| Bahi Sokoni | Bahi |
| Chalisuka | Madibira |
| Chibwini | Mwena |
| Idandu | Kikurukutu |
| Igaganulwa | Dutwa |
| Igangwe | Shauri moyo |
| Ihang'a | Rujewa |
| Itenka A | Itenka |
| Kakola | Dutwa |
| Kinyonga | Inyonga |
| Kiswago | Salamiti |
| Kitupa | Majimoto |
| Kitupa | Majimoto |
| Kivukoni | Chiwale |
| Majembe | Mkundi |
| Majengo | Mtonya |
| Mamba | Shinyanga |
| Manawa | Misasi |
| Maneme | Nanyumbu |
| Miyomboni | Mofu |
| Mtandi B | Mtandi |
| Mwongozo | Nangoo |
| Nagaga | Namalenga |

| village | market.name |
|-----------|-------------|
| Nakarara | Makong'onda |
| Namhanga | Mbenja |
| Ndagalu | Kabila |
| Ntungwa | Mbao |
| Tupendane | Tulindane |

4) How many markets per ward?

- A ward is the administrative level above a village, how many markets were surveyed in each Ward?
- In most wards only one market was surveyed
- Below is a list of wards which have more than one market: Mtandi, Majimoto, Mnavira
- NB: Majitmoto is the repeat market name entry from above

| district.region.code | ward.code | ward.name | village | market.name |
|----------------------|-----------|-----------|----------|-------------|
| 61 | 610106 | MAJIMOTO | Kitupa | Majimoto |
| 61 | 610106 | MAJIMOTO | Kitupa | Majimoto |
| 64 | 640102 | MNAVIRA | Mnavira | Mnavira |
| 64 | 640102 | MNAVIRA | Muhesi | Muhesi |
| 64 | 640113 | Mtandi | Mtandi B | Mtandi |
| 64 | 640113 | Mtandi | Madeco | Madeco |

5) What is the type of the markets?

- Market type:
 - *Primary market* - located close to the place of production or rearing of small ruminants, usually located within villages or small towns.
 - *Secondary market* - usually found in suburbs, animals are transported some distance from their place of production/rearing to the market.
 - *Tertiary or final consumption market* - generally located in towns or populated areas to supply urban populations, animals are transported quite a long-distance from their place of production/rearing.
- All markets are given as Type 1: Primary Markets (note the buyer-seller questionnaire is not consistent with this)

| market.type | n |
|-------------|----|
| 1 | 85 |

Market Maps:

Map of markets colour coded by region

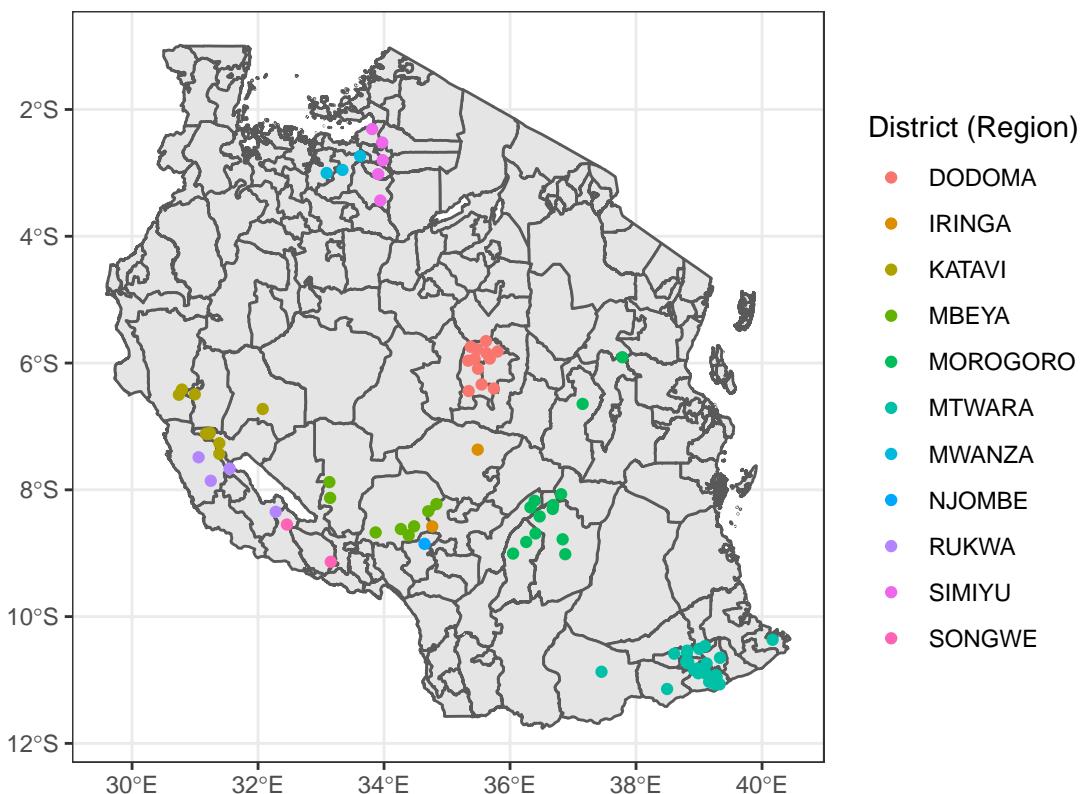
- 6 regions were targeted for surveys
- Regions were targeted purposively as locations where surveys had not previously taken place (not well studied)

Regions Surveyed:

- NB: this table includes regions where market surveys took place which were not stated as target regions
- Target regions are 1-6

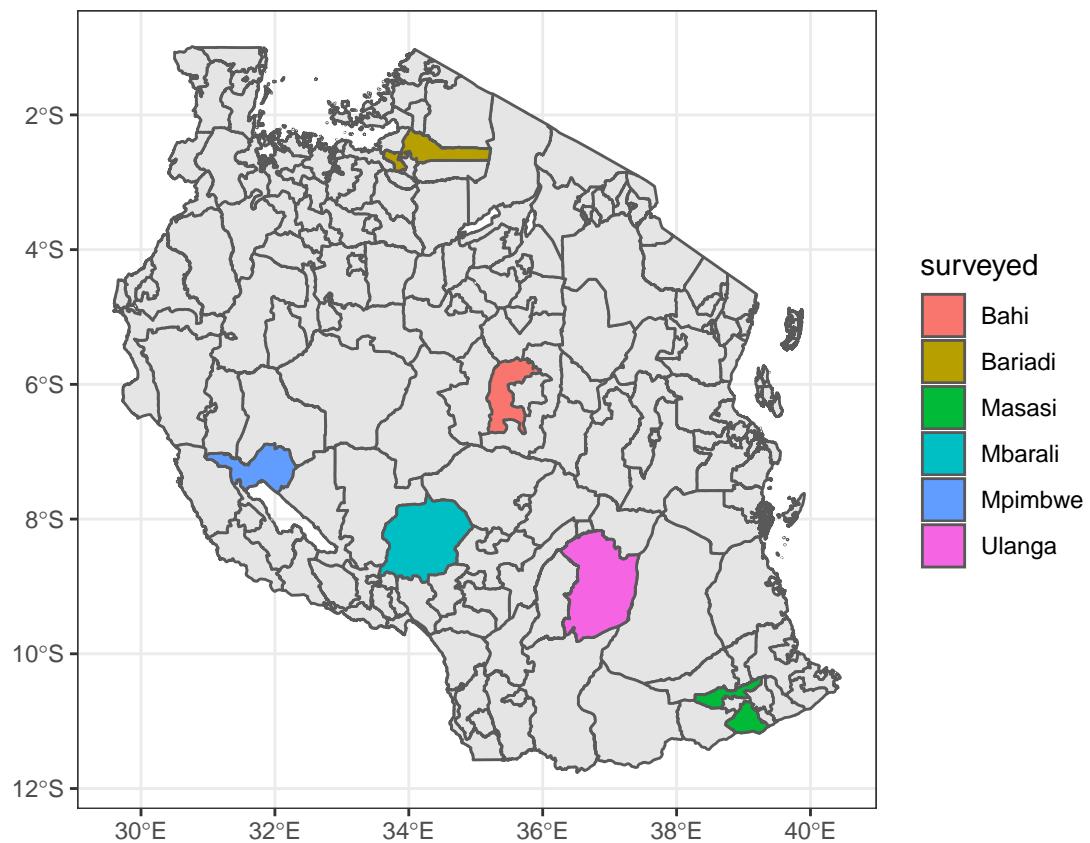
| region | Location..study.site. |
|----------|---|
| KATAVI | West. Mpimbwe district in this region |
| SIMIYU | North. Bariadi is the regional capital. |
| MBEYA | West/South-West. Mbarali District in this region. |
| MTWARA | South (South-East). Masasi district in this region |
| MOROGORO | Centre (Centre-East). Ulanga district in this region. |
| DODOMA | Centre (Centre-East). Bahi district in this region. |
| MWANZA | North |
| NJOMBE | South (South-West). |
| RUKWA | East (South-East). |
| SONGWE | East (South-East). |
| IRINGA | Centre |

Location of markets, colour by region



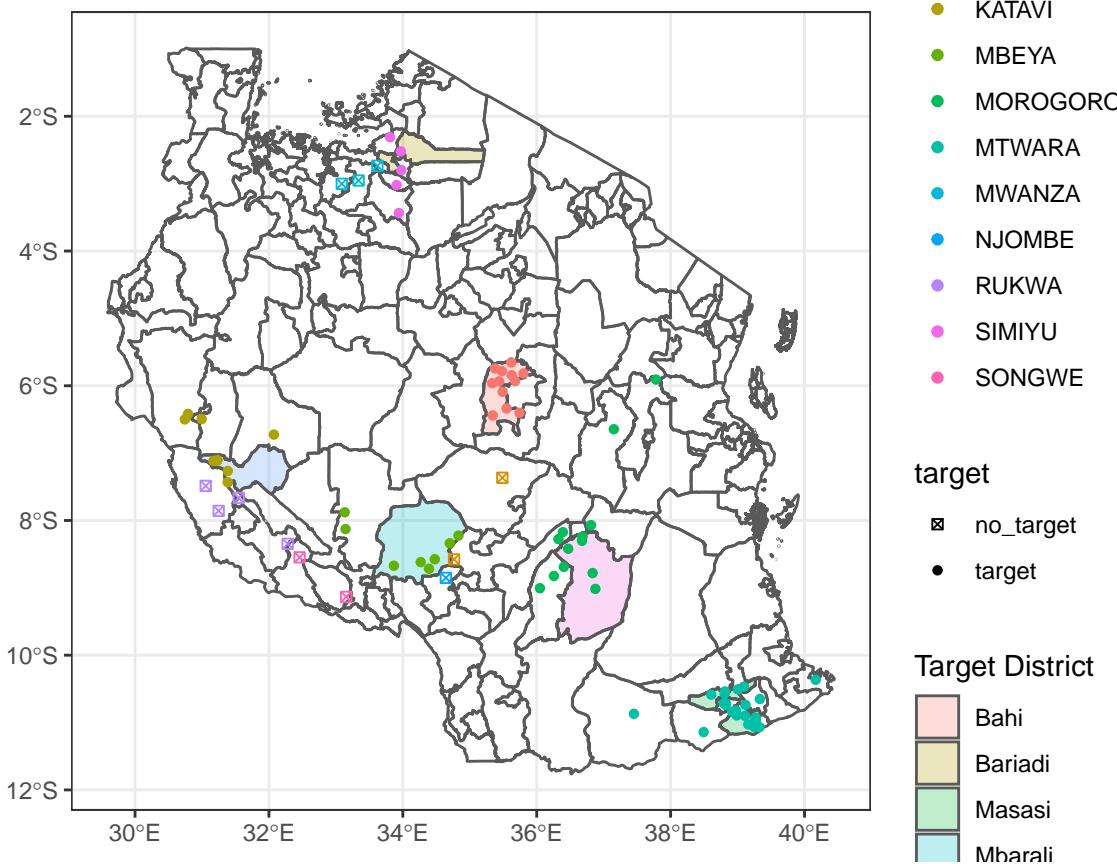
Tanzania Map with *targeted* regions highlighted

- Map of tanzania highlighting regions which were targeted for surveys



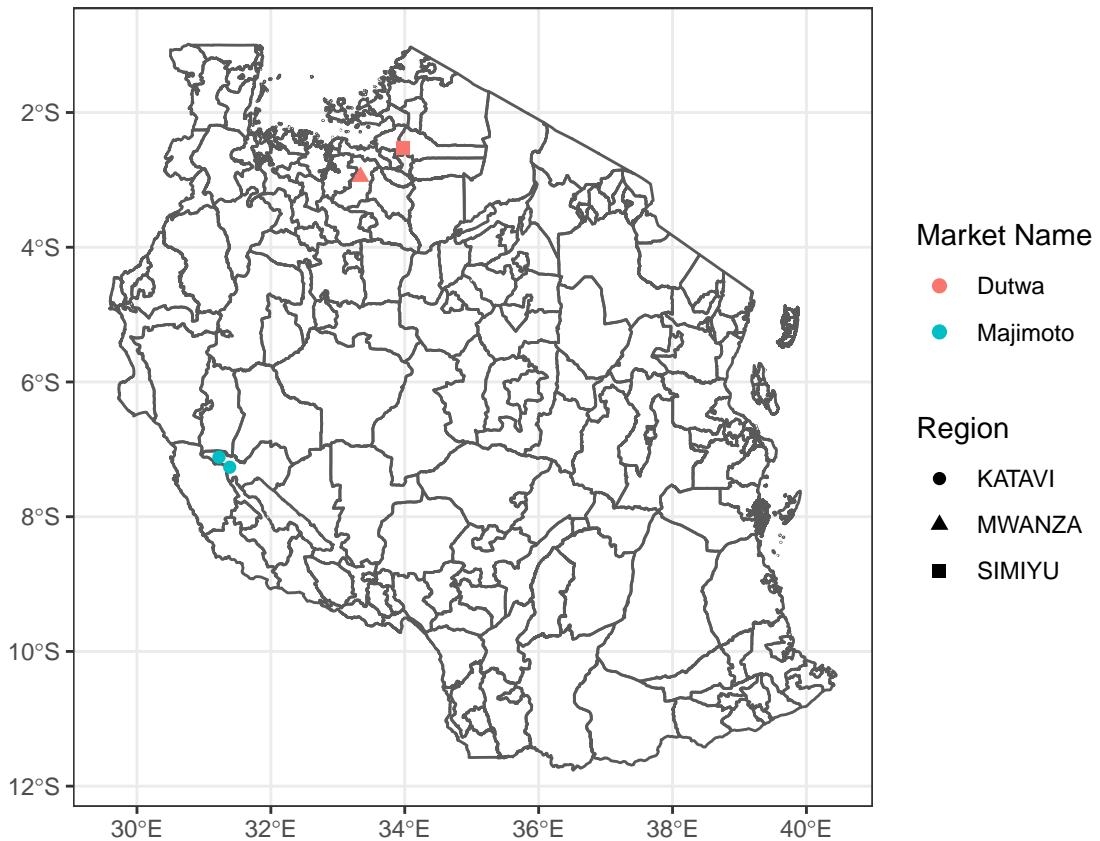
Regions targeted for market survey + market locations

- Map of Tanzania highlighting regions targeted for survey, and market survey locations (colour coded by region)



Map of location of duplicate markets

- For markets identified as duplicates verify whether they are the same or different locations
- Majimoto market surveys spatially close together (consistent with being 1 market)
- Dutwa market surveys spaced further apart (consistent with being 2 distinct markets)

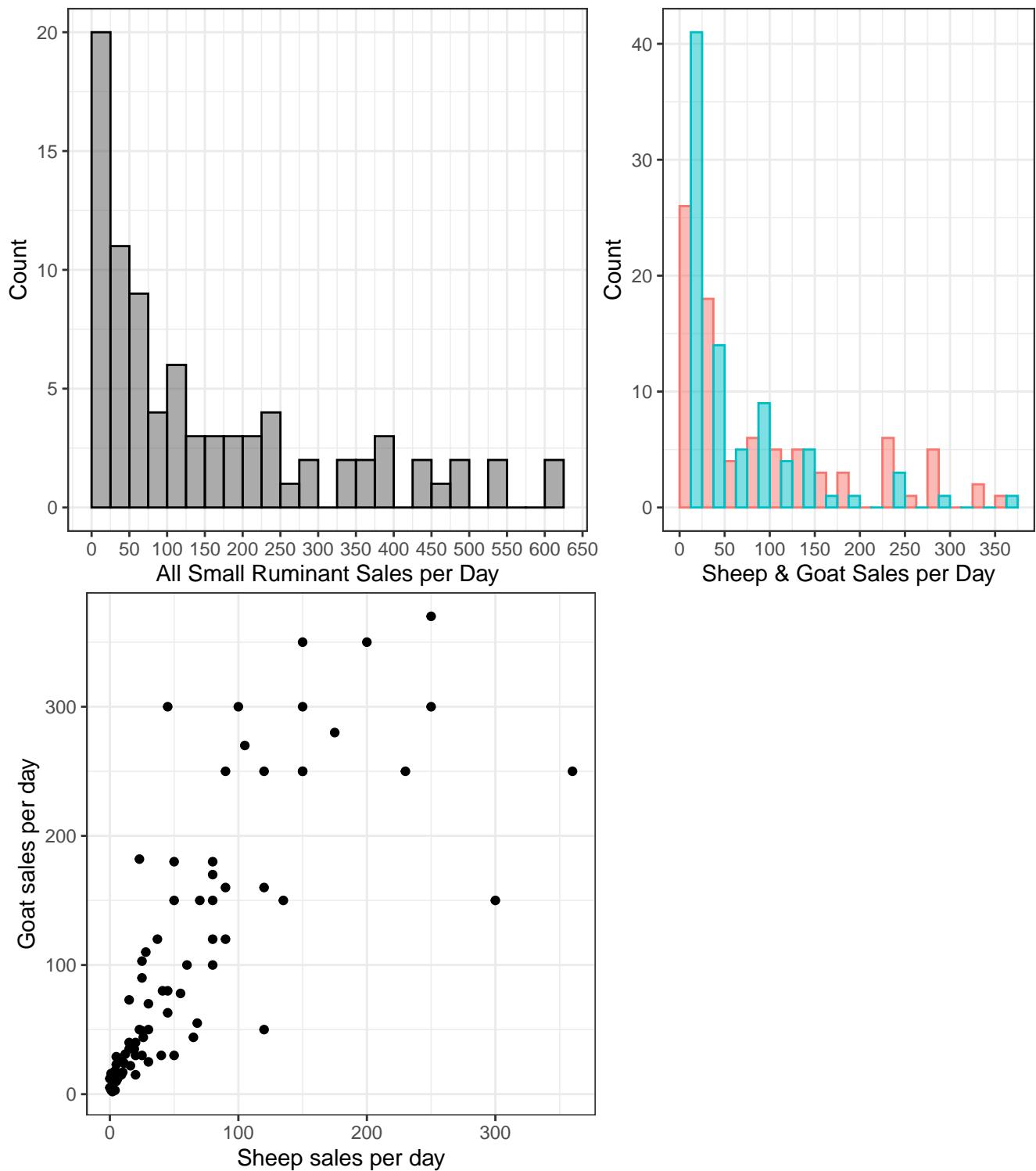


Sheep and Goat sales per day

- The total number of sheep and goats sold across all markets
- More goats sold:

| Species | Total_Sales |
|---------|-------------|
| All | 13456 |
| Goat | 8453 |
| Sheep | 5003 |

Reported total sales of sheep and goats per day at surveyed markets



Small Ruminant Sales interpretation -

Is there seasonal variation in trade?

| 4.seasonal.variation.in.trade | YN | n | proportion |
|-------------------------------|----|----|------------|
| 0 | N | 7 | 0.0823529 |
| 1 | Y | 78 | 0.9176471 |

```
## # A tibble: 6 x 2
##   `4.seasonal.variation.in.trade` `4.if.yes.describe`
##   <dbl> <chr>
## 1 1 Utofauti unasababishwa na hali ya soko na hal-
## 2 1 Wakati wa njaa na wakati ambapo wafuagi wan-
## 3 1 Wakati wafugaji wanapokuwa na shida ya chakul-
## 4 1 Mavuno wachache, mauzo pamba wengi.
## 5 1 Mifugo huwa Michache mnadani wakati wafugaji-
## 6 1 Baada ya mavuno mauzo yanaongezeka
```

What does the market A data look like for locations brought from and to?

```
## [1] "fid"                               "date"
## [3] "country"                           "district.region.code"
## [5] "ward.code"                          "village"
## [7] "market.name"                        "market.type"
## [9] "name.of.respondent"                 "1.location.brought.from"
## [11] "2.location.taken.to."              "3a.no.sheep.sold.per.day"
## [13] "3b.no.goats.sold.per.day"          "4.seasonal.variation.in.trade"
## [15] "4.if.yes.describe"                  "gps.coordinates.of.the.market"
## [17] "unique.row.identifier.uuid."        "ward.name"
## [19] "district.region.name"              "market.name.corrected"
```

| market1.location.brought.from | 2.location.taken.to. |
|---|---|
| KongoKongogo, Babayu ya Bahi, Lukali, Tinai, wilaya ya Chemba, | Kongogo, Babayu ya Bahi, Wilaya ya Chemba, Dodoma mjini, Kizota, Pugu, Kibaha |
| MnkolaMnkola, Mpamantwa, Ilindi, Mindola, Mkakatika, Ibihwa, Bahi | Mnkola, Mpamantwa, Ilindi, Mindola, Mkakatika, Ibihwa, Bahi, Dodoma, Kibaha, Pugu |
| KigweKigwe, Mapinduzi, Nghulugano, Chikola, Chigongwe, Chimendeli, Bahi Makulu, Chali, Manyoni, Nala, Mpinga, Ibihwa, Mzogole, Mpamantwa, Chipanga, Msembeta, Ilindi, Mindola | Kigwe, Mapinduzi, Nghulugano, Chikola, Chigongwe, Chimendeli, Bahi Makulu, Chali, Manyoni, Nala, Mpinga, Ibihwa, Mzogole, Mpamantwa, Chipanga, Msembeta, Ilindi, Mindola, Pugu, Kibaha, Dodoma |
| LalagoLalago ,gula,mwakidiga, mwandete,mwamashindike,mbalagane | Mwanza (igoma), kirumi, namanga, kibaha, kishapu |
| NkhomNkhome, Mpalanga, Ibugule, Mapanga, Chidilo, Nholi, Chipanga, Chiguluka, Zejele, Mbabala, Isangha | Nkhome, Mpalanga, Ibugule, Mapanga, Chidilo, Nholi, Chipanga, Chiguluka, Zejele, Mbabala, Isangha, Dodoma, Zuzu, Pugu, Kibaha |
| KidindMuhunze, la- gangabiriri,sagata,nanga,luguru,nobola,bumela,mhangano,nyakabidi,bumhala,sakwe,nguliati | Mwanza,kenya,bariadi, itilima |