

Definitions and elaborations

Terminology and abreviations from the data sheet are also valid in this document

| Data set header | Clarification of terminology or meaning of question | Explanation/specification of answers |
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| Intervention | An intervention village is a village where research are ongoing or has been performed before. | - |
| Gender | - | - |
| Age | Interviewers estimation of age of interviewee | - |
| Rams | Male ovine, >6 months of age | - |
| Ewes | Female ovine, >6 months of age | - |
| Lambs | Ovine of both genders <6 months of age | - |
| MainCaretaker | - | - |
| HowLong | - | - |
| Learn | - | DA: Local advisory board in the woreda/district Research institute: Multiple research organisations are working in the area, which one the farmer has learned from was not specified |
| SpecifyOther | - | Bank: when banks have given loans to farmers to start with sheep keeping, they also provide information and training |
| InfoAuth | - | - |
| ApplyToHerd | - | - |
| ApplyWhyNot | - | - |
| Education | - | - |
| LevelEducation | Division according to Ethiopian school system | 5: Can either be: |

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| | | <ul style="list-style-type: none"> - the old school model from the old regime where people were taught basic reading and writing, or - school arranged by church, for people working within the church |
| RestrictContact | - | - |
| ComRestrContact | Interviewees' spontaneous comment on restrictions (regardless if restrictions are performed or not) | Communal (grazing) area: common grazing area available for use by nearby sheep owners Isolation: separate newly bought and/or diseased sheep from own herd to prevent disease spread. |
| HealthIssues | - | - |
| HealthIssuesWhat | - | <p>The symptoms included in each category:</p> <p>1: Coughing, strenuous breathing, nasal discharge, "swinging"*, sneezing, increased breathing rate</p> <p>2: Diarrhoea, bloating, colic signs, tenesmus</p> <p>3: Papules, sheep pox, blisters, itching</p> <p>4: Circling</p> <p>5: Foot rot</p> <p>6: Death without any previous symptoms</p> <p>7: Ascites, bottle jaw, liver fluke</p> <p>8: Inappetence, lagging behind, depression, shivering, weakness, weight loss, rough coat, grunting, "dropped head"</p> <p>9: Black leg, foam around mouth, hematuria, "big head"</p> <p>*Swinging is a description of the swinging motion when a sheep is suffering from heavily laboured breathing</p> <p>Note: age of affected sheep is not taken into account in this question</p> |
| IfDisease | - | - |
| SpecifyOther2 | Comments or specification of other actions performed or people/organisations turning to when animals are sick | - |

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| Profession | Animal health worker: a person trained in animal health, hired by authorities for farmers to turn to when animals become sick. Education level for the animal health workers varies. | - |
| TreatRegularly | - | - |
| Vaccination | - | - |
| Deworming | - | - |
| What | Farmer's perception of what the vaccination and/or deworming is treating and/or preventing | - |
| OftenV | - | Times/year If an interval was stated by the farmer, a mean value was calculated (eg 2-3 times/year --> 2.5 times/year) |
| OftenDW | - | Times/year If an interval was stated by the farmer, a mean value was calculated (eg 2-3 times/year --> 2.5 times/year) |
| TreatGest | - | <i>Note: when farmer states he gives "no treatment": this is most likely DW since it is only conventional medicine farmers are allowed to administer themselves</i> |
| SpecifyTreatGest | Farmers' spontaneous comment on or further explanation of treatment during gestation period | - |
| AholdMed | - | <i>Note: illegal to acquire medication from vendors without license to sell medication. The only medication available for farmers to administer by themselves is anthelmintics</i> 7: "Institutions", "village", animal health organisation, |
| FeedShortage | - | - |
| FeedShortageWhen | - | - |
| Lamb/gest | - | - |
| LambsPastYear | - | - |
| LambDeaths | - | - |
| LambDeathAge | - | Presented in number of days of age at death "after weaning" - non-specific number of days |
| LambDeathTwins | - | - |
| LambDeathTriplets | - | - |

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| LambDeathCause | - | The symptoms included in each category: 0: Unknown 1: Respiratory problems, swinging * 2: Diarrhoea, bloating, colic signs, 3: Weakness, small, lying down a lot, inappetence, depression, lagging behind flock, grunting, dropped head, 4: Circling, head pressed backwards, 5: Attacked by dog, hurt by cattle, roof fell down, 6: Unexpected/sudden death 7: Agalactia, unable to suckle, mother died 8: Blindness, abnormality, genetic defects 9: Liver fluke, pox *Swinging is a description of the swinging motion when a sheep is suffering from heavily laboured breathing |
| LambDeathSeason | - | 1: Jul-Aug 2: Sep-Dec 3: Jan-Jun Division made upon local information at research area (Ethiopian highlands, Amhara) |
| Abortions | - | - |
| LambDeathPerception | - | <i>Note: a number of farmers mention that it is not a big problem before weaning, but after (just after 6 months of age)</i> |
| LambDeathPrevent | - | - |
| LambDeathsPreventHow | Farmers' spontaneous answers on how they prevent lamb mortality in the flock | - |
| PlanMating | If farmer perceives they perform routines that aims to control and/or improve mating | - |
| Flushing | A sudden addition of food for ewes will increase the number of oocytes that are released from the ewe's ovaries and likely increase the number of lambs born | - |
| Synchronize | The use of hormones or ram to synchronize ewes coming into heat simultaneously, with an aim to have lambs born concurrently | - |

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| SynchronizeWhy | - | - |
| MateTime | - | - |
| MateTimeWhen | Time of year when ram is allowed with ewes and mating may occur | - |
| CommentOnPlannedMating | Interviewer observations and interviewees' spontaneous comments on questions regarding planned mating (including: flushing, synchronization, mating time) | - |
| AvoidMating | - | - |
| AvoidMatingWhy | - | <i>Note: all farmers interviewed implies that "avoid mating" means the ewe will be sold or slaughtered</i> 3: e.g. did not give milk, or pushed away the new born lamb |
| SpecifyOther3 | Comments or specification of other reasons to avoid mating | Unwanted phenotype: some farmers declared they avoided mating due to black coat Infertility: The answer "infertility" as a cause of avoidance was classified into "impaired health"; however, a note was made by the interviewer that the farmer referred to infertility. |
| BCS | "Check body condition" is examination of prevalence of body fat and meat on live animals, to determine if the animal is thin, fat or normal. | - |
| BCSDescribe | - | 3: Weighing, lifting, coat quality |
| WhatRam | - | 0: A breeding ram selected by experts from research institutes, in close dialogue with village expertise. This ram is shared within the village 1: A breeding ram, similar to the community ram in terms of selection and use, however funded by the government 2: Farmer's own ram, never the use of other people's rams 3: Someone else's ram, never the farmer's own ram 4: Any ram used for mating |
| Infertility | - | - |
| ControlPregnancy | - | - |
| ControlPregnantHow | - | - |

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| SpecifySigns | - | 6: Farmer draws conclusion that if mating has occurred, the ewe is pregnant 8: Vulva gets swollen, teats become enlarged |
| HowManyLambs | - | - |
| HowManyLambsHow | - | - |
| PregnantManagement | - | - |
| MinimizeStress | - | - |
| SpecifyWhatMinimizeStress | - | - |
| SpecifyWhenMinimizeStress | At what time of the pregnancy these changes are implemented | - |
| RestrictContactPreg | - | - |
| SpecifyWhenRestrictContact | At what time of the pregnancy these changes are implemented | - |
| ReGroup | - | - |
| SpecifyWhatReGroup | - | - |
| SpecifyWhenReGroup | At what time of the pregnancy these changes are implemented | - |
| FeedingRoutines | - | - |
| SpecifyWhatFeedingRoutines | - | - |
| SpecifyWhenFeedingRoutines | At what time of the pregnancy these changes are implemented | - |
| Supplements | - | - |
| SpecifyWhatSupplements | - | - |
| SpecifyWhenSupplements | At what time of the pregnancy these changes are implemented | - |
| Other | - | - |
| SpecifyWhatOther | - | - |
| SpecifyWhenOther | At what time of the pregnancy these changes are implemented | - |
| BCSPregnancy | "Check body condition" is examination of prevalence of body fat and meat on live animals, to determine if the animal is thin, fat or normal. Here referred to this action specifically for pregnant ewes | - |
| WhenExpected | - | - |
| SpecifyWhenExpected | - | - |

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| Supervision | "Around the time of lambing" is referring to the days just before (<5 days) before lambing | 2: <i>Note: this time interval was sometimes difficult for the farmer to differentiate from "re-grouping earlier during pregnancy"</i> |
| SpecifyOther4 | Specifications or spontaneous answers of other actions performed by the farmer around the time of lambing | - |
| Monitor | - | - |
| AssistLambing | - | - |
| AssistLambingHow | - | 2: Most often they called a veterinarian or other trained animal health worker, but also sometimes friends or family members with more experience |
| WashHands | - | 0: A few farmers mentioned that they wash hands both before and after if they have access to water - these answers were classified as "0" |
| PPE | - | 2: The plastic bag is used protect hands from coming in direct contact with the lamb/placental membranes 3: Other: use of different appliances made from textiles, with aim to protect hands from direct contact with the lamb/placental membranes |
| Birthplace | - | - |
| SpecifyBirthplace | - | - |
| TimeDay | - | - |
| Precaution | - | 6: If this has not been done earlier |
| SpecifyPrecaution | - | - |
| CommentPrecautions | Farmers' spontaneous comment on or further explanation of precautions taken after lambing | The answer "remove placental membranes/mucus from lamb's airways" was registered in category 3, but a note was also made by the interviewer about this specification |
| Colostrum | - | - |
| ColostrumWhyNot | - | - |
| TimeFirstSuckle | - | - |
| SufficientColostrum | - | - |
| SufficientColostrumHow | - | 6: Happy, move around, no bleating |

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| | | 7: Udder gets less filled, "enough milk if suckling at all", urinates, |
| Assist | - | - |
| AssistWhat | - | 5: Water |
| AssistHowOften | - | Times/day X: as many times/day as the lambs need |
| ExamineUdder | - | - |
| MisMothering | - | - |
| SpecifyMisMothering | - | 2: Restrain ewe forcefully will make it easier for lamb to suckle 3, 7: To initiate the ewe to lick the back of the lamb and thus form a bond between ewe and lamb 6: Hit/hurt/punish ewe, support lamb with extra feed, scare ewe with a dog |
| ExtraCareLamb | - | - |
| SpecifyExtraCareLamb | - | 4: Monitor defecation, avoid heat stress, give chili, kept close to home, separate at night from rest of herd |
| ExtraCareEwe | - | - |
| SpecifyExtraCareEwe | - | 5: Check her health, avoid heat stress |
| Weaning | - | 0: Ewe rejects lamb herself 1: Manual separation of ewe and lamb until lamb is weaned |
| WeaningAge | - | Age presented in months If an interval was stated by the farmer, a mean value was calculated (eg 4-6 months --> 5 months). |
| Graze | - | Age presented in days If an interval was stated by the farmer, a mean value was calculated (eg 4-6 days --> 5 days). |
| LambSuppl | - | - |
| SpecifyLambSuppl | <i>Excluded at data input due to lack of compliance</i> | <i>Excluded at data input due to lack of compliance</i> |
| LambWeight | - | - |
| LambWeightHow | - | 4: Compare between individuals in flock, see performance of lamb |

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| LambsDeworm | - | <i>Note: some farmers spontaneously acknowledge they don't give a full dose of DW to lambs</i> |
| LambsDewormAge | <i>Excluded at data input due to lack of compliance</i> | <i>Excluded at data input due to lack of compliance</i> |
| LambsVaccinate | - | - |
| LambsVaccinateComment | <i>Excluded at data input due to lack of compliance</i> | <i>Excluded at data input due to lack of compliance</i> |
| LambsMedication | - | <i>According to translator, moreover veterinarian, no medication is lawfully allowed to be given by sheep owners, except for deworming</i> |
| LambsMedicationWhat | - | |
| ExtraInfo | | |