



MoARD

TECHNICAL BULLETIN No.30

Records and record keeping on sheep and goat farms



ESGPIP

ETHIOPIA SHEEP AND GOAT PRODUCTIVITY IMPROVEMENT PROGRAM

Further information:

Ethiopia Sheep and Goat Productivity Improvement Program (ESGPIP)

Tel. +251 011 416 6962/3

Fax: +251 011 416 6965

E-mail: pvamrf.ethiopia@ethionet.et

Website: <http://www.esgPIP.org>

FOREWORD

This technical bulletin titled “*Records and record keeping on sheep and goat farms*” is the 30th in a series produced by the Ethiopia Sheep and Goat Productivity Improvement Program (ESGPIP). The ESGPIP is a USAID funded Project with the objective of improving the productivity of Ethiopian sheep and goats in Ethiopia.

Record keeping is an important tool in sheep and goat managements. Records help the producer to follow up the performance of a sheep and goat enterprise and assists in making decisions based on concrete facts. It is a tool that enables the producer to take timely corrective measures based on monitoring of progress. Breeding of sheep and goats can be planned to optimize efficiency.

Keeping records and suggested recording formats for different situations is the focus of this technical bulletin. The information presented is useful for development agents to train farmers/pastoralists to keep simple records and also for other users engaged in business ventures based on sheep and goat rearing.

Desta Hamito (Prof.),
Chief of Party,
ESGPIP
August, 2009

TABLE OF CONTENTS

FOREWORD	i
Introduction	1
Importance of farm records	1
Requirements of a Record Keeping System	2
Types of records	2
General Principles of record keeping	3
WHAT CAN THE KEBELE DEVELOPMENT AGENT (KDA) DO?	4
Appendix A: Examples of different types of records for the sheep and goat producer	5
appendix B: Examples of records to be kept by KDAs/ health technicians	9

Records and record keeping on sheep and goat farms

Prepared by: Alemu Yami

Edited by: R.C. Merkel

INTRODUCTION

A producer may well know a lot about the animals he keeps. However, keeping the information in ones memory is not reliable enough; anybody can easily forget something. Keeping written records helps to avoid loss of useful information. Record keeping is an essential part of good animal farm business management. A combination of high production and efficient production is the key to a profitable sheep and goat operation. On-farm records are essential in evaluating and improving the performance of sheep and goats within a farm operation. A good record keeping system can assist a farmer to make informed business and management decisions. Producers should have a record book in which all records are kept. This should be stored in a place where it will not become soiled or wet, making the records useless. The format should be simple and readily understood. Simple record keeping need not take too much time and the advantages are numerous. Recording is made easy if animals have some form of identification. Thus, animal recording and identification are inseparable.

IMPORTANCE OF FARM RECORDS

The importance of record keeping on the farm may be grouped as follows:

- ✚ Give a history of what has happened on the farm for the period during which it has been kept. Comparison of one year's records with the next, a farmer can see what progress he is making and trace weaknesses that need to be improved;
- ✚ Serve as an aid to managerial control during production. A producer can keep track of events like:
 - whether activities are going according to plan,
 - check on feed utilization,
 - whether yields and profits are improving or going down,
 - when animals were vaccinated, dipped, given any medicine or castrated; etc.;
- ✚ Trace origin of animals and serve as a tool for selection of breeding animals. If records are used for selection purposes, comparisons should be made between animals in the same flock to avoid confusion arising from differences in farm conditions or other environmental effects.
- ✚ Provide figures for farm planning and budgeting. Accurate financial and production data help a producer make necessary adjustments to operate more efficiently, plan for the future and pinpoint the weaknesses of a farm and allow the producer to act accordingly;

- ✚ Tell how much the producer is earning by maintaining financial records that have the appropriate level of detail depending upon the complexity of the operation. A more complex farm operation requires a more detailed system.
- ✚ Keep track of assets: Progress in the farm operation cannot be determined from year to year without keeping an inventory. Almost everything should be included in the inventory such as money (receivables, and payables), livestock, crops, supplies and property.

REQUIREMENTS OF A RECORD KEEPING SYSTEM

A record-keeping system should depend on the expected use of the records. There is no “best” record keeping system for all situations. A farm record should, however, fulfill the following:

- ✚ Provide accurate and relevant information;
- ✚ Fit into the farm organization or framework;
- ✚ Be available to make informed decisions;
- ✚ Be efficient in terms of time and cost;
- ✚ Be simple. Records should not be complex and be limited to necessary information. Complex records will probably increase chances of making mistakes or they may not be regularly kept because too much time will be required to properly fill out the records.

TYPES OF RECORDS

There are numerous different types of records that can be kept. However, the producer should keep records of information relevant to the type of enterprise he/she is operating and limited to information that can be utilized. There are two general categories of sheep/goat farm records namely:

- **Production records:** Production records for a sheep and goat enterprise should, for example, consist of information on herd health, performance of the herd as well as the performance of the individuals within the herd over successive years. These records should also include information on fertility, prolificacy, rearing or mothering ability and milk production directly or indirectly estimated through lamb/kid growth rate to a given age.
- **Financial records:** relate primarily to money or economic interactions on the farm. There are some lending institutions that will require detailed business and personal information on all farm assets as well as the status of unpaid financial obligations. Financial records justify or prove farm income or expense transactions. Examples of financial records are product sales, operating expenses (feed cost, veterinary expenses, forage seeds etc.), equipment purchases, accounts payable, inventories, depreciation records, loan balances and price information.

GENERAL PRINCIPLES OF RECORD KEEPING

All records, to be of value, must be accurate, neat and complete. One way of making sure that records are accurate is by filling them in as soon as possible after the operation or transaction and by checking them regularly. If possible records should be kept every day.

The other important rule in keeping accurate records is to actually measure quantities. It is no use for example guessing the area of land or yields. Land should be measured using measuring instruments and yield of products should be weighed.

The whole purpose of keeping records and accounts is to make improvements. There is absolutely no value in spending time on records and calculations of profit, and production in individual enterprises, if no use is made of them.

All the results should be compared with some standards. The standards for comparison might be the results for previous years or the results for other farms. Development agents may collect standards for comparison. Alternatively a group of farmers may decide to meet from time to time to compare the results of their farming business. One farmer may find his management is better than that of his friends in one enterprise and worse in another. By comparing results and discussing problems, farmers can help each other to improve their management.

Below is a list of records that may need to be kept under Ethiopian conditions. The value and relevance of the different types of records will vary with differing sheep and goat production systems.

- ✚ **Health records:** including morbidity, mortality, signs and symptoms, diagnosis, treatments and vaccinations, etc.
- ✚ **Feed consumption:** This is difficult to estimate on farms where animals graze, but for capital-intensive farm businesses, such as finishing or fattening operations, the amount of concentrate fed should be recorded to calculate profitability.
- ✚ **Mating records:** Sire, dam and progeny identification is important in breeding, sale, and culling decisions.
- ✚ **Lambing/kidding records,** which include identity, dam ID, birth weight, date of birth, type of birth and sex.
- ✚ **Milk production records:** recording once weekly may suffice as this gives an indication of total milk production. Therefore, in dual-purpose sheep and goats, or even in meat types, a random sample of lactating females may be selected for recording their once-a-week milk production.
- ✚ **Growth/ weight records:** kept periodically (possibly on a monthly basis) by recording the body weight of animals.
- ✚ **Inventory:** Inventory of available animals on the farm and other assets.

✚ **Carcass yield or dressing percentage:** is a factor that has tremendous economic value, particularly in a community-based breeding program. This information could be obtained from slaughterhouses/abattoirs if the animals are slaughtered in slaughter houses.

As noted above, there are different types of records that may be kept in a sheep- and goat-record book. Examples of different types of records are presented in Appendix a and b.

WHAT CAN THE KEBELE DEVELOPMENT AGENT (KDA) DO?

The KDA can do the following in the community he/she is serving:

- ✚ Train sheep/goat producers on the importance and how to keep simple records. A member of the farming family that can read and write can be trained if the head of the household is illiterate;
- ✚ Train producers to identify their animals to make record keeping easy;
- ✚ Check the records kept and make necessary corrections;
- ✚ Train producers on the use of records for making decisions;
- ✚ Use the records kept to identify training/other support needs of the producer;
- ✚ Keep track of your activities in the community by making use of the records suggested for the purpose in appendix B.

Appendix A: Examples of different types of records for the sheep and goat producer

The Development agent should encourage sheep and goat producers to keep a record of their animals. Encourage them to use numbers, names or ear tags to identify their animals

1. An example of a breeding record

Owner's name:
Region:
Woreda:
Kebele:

Dam ID	Dam breed	Dam birth date	Sire ID	Sire breed	Mating date	Lambing/kidding date	Remarks

2. Examples of Animal health records

Table 2.1. An example of animal health record

Owner's name:
Region:
Woreda:
Kebele:

No.	ID/ Name	Date of observation	Major signs observed	Suspected disease	Treatment given			Response	Remarks
					Medicament	Duration	Dosage		

Table 2.2. An example of a vaccination record

Owner's name:
Peasant Association:
Woreda:
Kebele:

No.	ID/ Name	Date of vaccination	Type of vaccine used	Remarks

Table 2.3. An example of mortality record

Owner's name:
Region:
Woreda:
Kebele:

No.	ID/ Name.	Breed	Age (months)	Sex	Date animal died	Value of animal	Remarks

Table 3. An example of lamb/kid performance record

Owner's name:
 Region:
 Woreda:
 Kebele:

Pre-weaning									At weaning							Remarks
Lamb/ kid ID	Birth date	Sex	Birth type (S/T/TR)*	Dam ID	Dam breed	Sire ID	Sire breed	Birth wt. (kg)	Weaning date	Weaning wt(kg)	Type of rearing	Weaning group	Wt. at marketing	Body condition score (1-5)	Lamb/kid price (Birr)	

*S =Single; T = Twin; TR = Triplet

Table 4. An example of post-weaning performance of lambs/kids

Owner's name:
 Region:
 Woreda:
 Kebele:

lamb/ kid ID	Birth date	Sex	Birth type	Birth wt. (kg)	Weaning date	Weaning wt. (kg)	Type of rearing	Weight No. ____		Weight No. ____		Weight No. ____		Remarks
								Date	Wt. (kg)	Date	Wt. (kg)	Date	Wt. (kg)	

Table 5. An example of record of milk production by milking or lamb/kid suckling method

Owner's name:
Region:
Woreda:
Kebele:

Identification number	Date of birth	Date of lambing/kidding	Date of milk recording	Method of milking*	Milk produced (ml)	Body weight of lamb before suckling	Body weight of lamb after suckling	Weight difference	Remark
				M	0.15				
				S		5.5	5.6	0.1	

*M = Milking; S = suckling method

Table 6. An example of individual ewe/doe record

Owner's name:
Region:
Woreda:
Kebele:

ID No.	Age	Date lambed/kidded	Weight of lamb/kid	Type of birth(S/T/TR)*	Parity	Mothering ability**	Date brought into the farm	Date removed/culled	Reason for removal

*S = Single; T = twins; TR = triplets

** **Excellent** = nurses without assistance; **Good** = nurses with some assistance; **Poor** = rejects one or more lambs/kids

Table 7. An example of individual Ram/buck record

Owner's name:
Region:
Woreda:
Kebele:

ID No.	Age	Dam ID	Sire ID	Total offspring	Sex		Remarks
					Male	Female	

Table 8. An example of feed consumption / cost record

Owner's name:
 Region:
 Woreda
 Kebele

No.	Date	Type of feed	Consumption (kg)	Cost/kg	Total cost	Remarks

Table 9. An example of flock/herd inventory record

Owner's name:
 Region:
 Woreda
 Kebele

No.	Date	Tag No.	Breed	Age	Sex	Value of animal	Remarks

Table 10. An example of income/expense record of a sheep/goat farm

Owner's name:
 Region:
 Woreda
 Kebele

No.	Income		Expenses		Difference (Income-expenses)	Remarks
	Description of income	Amount	Description of expenses	Amount		

APPENDIX B: EXAMPLES OF RECORDS TO BE KEPT BY KDAS/ HEALTH TECHNICIANS

The following tables show examples of the types of records useful for a Kebele Development Agent (KDA) to keep to track his/her activities

1. Record of work in the community: It is important that a KDA keep a register (note book) to write a record of activities performed.

Date	Name of owner	Age & Type of animal observed	Problem	Action taken

2. Vaccination record: You can keep this as a separate register or as a separate record in your notebook.

Date	Type of Vaccination given	Type of animal	Number of animals	Name of owner

3. Records for the veterinary officer: You may have to give your veterinary officer records of what you have been doing in your work.

Kebele..... Name of Animal Health Technician (AHT) Work done by AHT from to..... 1. Number of sick animals seen..... Details 2. Drugs used..... 3. Number of animals vaccinated and vaccines used..... 4. Number and type of animals dying..... 5. Other problems seen by AHT..... 6. Other activities and comments..... Signature of AHT.....
--