

RULES OF THE DAIRY RECORDING SERVICE OF KENYA

(Draft - revised 2014)

Membership

1. Membership may be taken out by any individual, partnership, company, corporation, farm or estate. Each member is allocated a DRSK number.
2. All milking animals are eligible for milk recording irrespective of breed or grade. Each recorded animal is allocated a DRSK number.
3. It is recommended that all animals in a member's herd be recorded. Herd averages will only be calculated where the entire herd is recorded.
4. If an animal is sold to another milk recording herd, it will still keep its original DRSK number.

Recording procedure

5. All animals must be clearly identifiable by reliable means, such as ear tag, hot freeze, brand, ear notch, ear tattoo or photograph.
6. Animals will be recorded for official purposes from noon of the 5th day after calving, counting the calving day as the 1st day.
7. Animals will be recorded for official purposes once per month on the evening of the 14th and morning of the 15th day of the month concerned. Farmers who milk three times per day will include the midday recording of the 14th. The milk yields will be posted or delivered to the Dairy Recording Service offices no later than the 25th of the same month. To further improve accuracy, the first yield (i.e., the pm of the 5th day and am of the 6th day) and last yield (i.e., yield of last pm and last am before being dried off) shall also be sent to the office.
8. The 305-day yield shall be the sum of the first 305 days. Augmented lactations shall be recorded officially for 365 days only.
9. Abortions after the 150th day of pregnancy are to be treated as a calving and a new lactation will commence.
10. Animals should not be recorded or the milk tested –
 - a) Until noon of the fifth day after calving.
 - b) While the animal is away from home or in transit.
 - c) When the animal is ill.
 - d) When the animal is bulling.
11. Milk yield data must be on official Dairy Recording Service sheets.

12. The weighing sheet must include the cow's name, farm name and DRSK number, yield values for each milking, and the total. Details such as drying off or calving dates, deaths or abortions should be entered under the events column. All cows should be entered on the milk recording sheets, whether dry or milking. A separate sheet will be used for fat and protein test results.

13. No member shall alter or erase any entry on their weighing sheet without clearly stating the reason for such an alteration or amendment.

In the absence of any explanation the milk entry may be disqualified.

14. No member may enter on a weighing sheet any estimated figures.

15. If an animal misses a recording (for whatever reason) then an average of the previous and next reading will be used.

16. No member shall do or omit to do anything which might normally render the milk yield or fat and protein test figures to be misleading as to the average milk, fat or protein yield of any cow.

Publication

17. The Committee may authorize the publication of lactation information without reference to the breeders concerned, and will use criteria laid down by the Committee in conjunction with each Breed Society.

18. Any member publishing figures as "official" must have the necessary official Dairy Recording Service of Kenya lactation certificate for inspection.

Fees

19. An initial joining fee will be payable on a per head basis.

20. Fees for services rendered will be payable on invoice. Unpaid fees shall result in the withdrawal of services and possible legal action. The scale of fees and charges may be altered by the Committee.

Supervision

21. When officials of the Dairy Recording Service visit the farm for the purpose of data checking, milk sampling or milk recording, members are required to provide them with board and lodging, if necessary, for a period commensurate with their duties.

22. In the event that Contract Recorders are once again fielded by the Committee, their visits will take place on the date allocated to the farm.

However, the Committee reserves the right to make unannounced spot checks on farms, and expects full co-operation from members.

Lactation calculations

23. Lactation figures will be calculated electronically by the weighted average method, or by the interpolation method as used by the Mistro programme. See Appendix.
24. In line with internationally accepted practice, figures appearing on the lactation certificate will be the total milk yield, average protein percent and protein yield, average fat percent and fat yield, and the combined protein and fat, expressed in kilos, for 305 days, and separate figures for the same up to and including 365 days.
25. Members have the right to appeal against abnormal lactation certificates.

Milk Sampling Procedure

26. Official recording and sampling will be by persons approved by the Committee. Recorders will check all scales and buckets against standard kilogram weights and will see that the normal dairy equipment for measuring and weighing is accurate.
27. When visiting a farm, Recorders will attend all milkings.
28. The Recorder will personally see that every cow is milked and the milk weighed. Buckets will be weighed by the Recorder, whilst milking machine jars will be viewed by the recorder and only emptied on his/her instruction.
29. Large discrepancies between Recorder weighing and those sent in by members will be investigated and the necessary action taken to maintain accuracy and accountability.
30. Each cow should have milk samples analyzed for fat and protein a minimum of three times in its lactation, with at least one test in each 100 days. Normally tests will be performed every 2 months, but in order to achieve greater accuracy they may be performed more often.
31. No milk samples shall be taken from a cow except by the person appointed by the Committee. In some cases, a farmer may be authorized to sample his own milk.
32. Samples shall be taken immediately after milking and must be either a composite of all milking's in one container, or samples of each milking in separate containers. The laboratories can supply sample bottles, plungers and 7.5 - 10ml dippers.
33. The milk must be thoroughly mixed before it is sampled. Where a plunger is used for mixing, it will be plunged from top to bottom of the milk ten times before sampling. If there is no plunger, then the milk should be poured from one bucket to another four times.
34. Whereas the volume of milk produced throughout a 24-hour period

remains fairly constant the composition, particularly of fat, varies. It is important in the case of composite sampling that the volume of milk taken is proportionate to the number of hours between milking's. Where milking's are 12 hours apart the samples should be of equal volume. Where there is 3 times milking, the volume should be adjusted accordingly. For example, 6am to noon milking one dipper, noon to 6pm one dipper and 6pm to 6am 2 dippers. Avoid froth. A total of 30-40ml of milk is required for testing

35. The milk test book will contain the farm name and DRSK number, the yield of milk from which the sample was taken, and the sample number of each animal from each milking, or the word composite test.

36. The responsibility of delivering sample boxes to the test laboratories is the farmers. The Committee shall have the right to check the laboratories.

37. The Committee have the right to cancel any abnormal fat or protein figures. Members may appeal to the Committee to have abnormal tests ignored. Members may have the option where test results appear abnormal to re-test the animal(s) within 2 weeks. The final decision rests with the Committee.

38. Samples which are found by the electronic Milk Analyzer to contain even a trace of water shall be rejected. The presence of water in the milk indicates incorrect sampling, either accidental or deliberate, or an udder compromised by injury or mastitis. The animal may have a sample re-tested within 2 weeks.

39. All members shall be bound by these rules and any alterations or additions made by the Committee.

40. Members are asked to request lactation certificates for the purpose of show exhibition at least three weeks before the date of the show.

Appendix

Calculation of Milk, Fat and Protein figures

Example

Milk yield

| | <u>calving</u> | <u>W1</u> | <u>W2</u> | <u>W3</u> | | <u>W9</u> | <u>W10</u> | <u>W11</u> | <u>dry</u> | |
|-------------------------------|----------------|-----------|-----------|-----------|--|-----------|------------|------------|------------|----|
| days between day 5 recordings | | 18 | 30 | 30 | | | 168 | 30 | 31 | 11 |
| yield kg | 12 | 21 | 28 | 26 | | | 13 | 10 | 8 | 7 |

Total yield @ W1 up to day 18 = $(12 + 21) / 2 \times 18 = 197$

Total yield @ W2 up to day 48 = $(21 + 28) / 2 \times 30 + 197 = 1032$

Total yield @ W3 up to day 80 = $(28 + 26) / 2 \times 32 + 1032 = 1896$

Say total yield reaches 5315 kg at 9th recording (W9) then –

Total yield @ W10 up to day 279 = $(13 + 10) / 2 \times 30 + 5315 = 5631$

Total yield @ W11 up to day 310 = $(10 + 8) / 2 \times 31 + 5631 = 5910$

Total yield @ dry up to day 321 = $(8 + 7) / 2 \times 11 + 5910 = 5993$

Therefore, total yield = 5993 kg

Adjusted 305-day yield = $5993 \text{ kg} - \text{av } 18.6 \text{ kg/day} \times 305 = 5694 \text{ kg}$

Both these yields will be shown on certificates

Fat yield

The day's fat yield is calculated as –

$$\frac{\text{day's milk kg} \times \text{fat}\%}{100} \quad \text{e.g.} \quad \frac{23 \text{ kg} \times 3.8\%}{100} = 0.798 \text{ kg}$$

The total lactation's yield of fat is then calculated in the same way as the milk yield, using day's kg yield of fat in place of milk yield.

The average percentage of fat over the whole lactation is calculated as –

$$\frac{\text{total lactation fat yield} \times 100}{\text{total lactation milk yield}} \quad \text{e.g.} \quad \frac{195 \text{ kg fat} \times 100}{5993 \text{ kg milk}} = 3.25\%$$

i.e., this is a weighted average, not each test result added up, then divided by the number of tests.

Protein yield

The protein yield is calculated in the same way as the fat yield.