

An Investigation on Calf Welfare, Management and Disease Prevalence at Dairy Farms in Chattogram



A clinical report submitted in partial satisfaction of the requirements for the degree of Doctor of Veterinary Medicine

Presented by

Aslam Hossain

Roll no: 16/06

Reg. No: 01606

Internship ID: 06

Session: 2015-2016

Faculty of Veterinary Medicine

Chattogram Veterinary and Animal Sciences University

Khulshi, Chattogram – 4225

An Investigation on Calf Welfare, Management and Disease Prevalence at Dairy Farms in Chattogram



A clinical report submitted by as per approved style and content

Signature of Student

Aslam Hossain

Roll 16/06

Reg. No: 01606

Faculty of Veterinary Medicine

Signature of Supervisor

Dr. Md. Ridoan Pasha

Lecturer

Department of Physiology,
Biochemistry and Pharmacology

Faculty of Veterinary Medicine
Chattogram Veterinary and Animal Sciences University
Khulshi, Chattogram – 4225

Acknowledgement

I would like to express the deepest sense of gratitude with all sorts of praises to the Almighty Allah, whose blessings enabled me to complete these production reports successfully. I am humbly thankful to my honorable supervisor **Dr. Md Ridoan Pasha**, Lecturer, Department of Physiology Biochemistry and Pharmacology, Faculty of Veterinary Medicine, Chattogram Veterinary and Animal Sciences University (CVASU), Chattogram. His valuable advice, technical support, leadership direction, dedication to provide me the study initiatives and provided all required facilities during this study work. His guidance helped me in all the time of research and writing of this report. Thanks to him for giving me the golden opportunity to do this wonderful work on the topic, which also helped me in doing a lot of research and I came to know about so many new things. I am really thankful to him. I could not have imagined having a better advisor and mentor for my report.

Besides my advisor, I would respectfully acknowledge to the Dean, **Prof. Dr. Mohammad Alamgir Hossain** and the Director (External Affairs), **Prof. Dr. A K M Saifuddin** for their insightful comments and encouragement, but also for the hard question which intended me to widen my research from various perspectives. Last but not the least; I would ever be thankful to all my well-wishers, family members for their inspiration

The Author

Table of Contents

| Chapter | Contents | Page no. |
|----------------|-------------------------|-----------------|
| 1 | Acknowledgement | III |
| 2 | List of tables | V |
| 3 | Abstract | II |
| 4 | Introduction | 1-3 |
| 5 | Methods and materials | 4-5 |
| 6 | Results and Discussions | 6-10 |
| 7 | Conclusion | 11 |
| 8 | References | 12-16 |
| 9 | Biography | 17 |
| 10 | Appendix-1 | 18-20 |

List of tables

| 8 | Name | Page No |
|----------|--|----------------|
| 1 | Targeted area of welfare and management of calf rearing at farms | 5 |
| 2 | Demographical information of the studies farms | 6 |
| 3 | Housing and Grazing management of the studies farms | 7 |
| 4 | Feeding and Weaning practice and Welfare at studies farm | 8 |
| 5 | Diet management of the calves at studies farm | 9 |
| 6 | Pain management after disbudding | 9 |
| 7 | Disease prevalence in the studied farms in last 12 months | 10 |

Abstract

Bangladesh is a densely populated country and to quench the demand of milk, many dairy farms are established. Calves are the off-springs of the dairy cows and a future stock for a farm, hence their management, welfare and diseases should be of great concern for the farmers. A survey of calf management practices that might affect welfare and their health was performed on 15 dairy farms. The results showed that the mean value of years of farming is 7.6 ± 1.26 where the mean value of total number of animals and calves were 29.67 ± 5.85 and 9.27 ± 1.68 , respectively. All the studied farms don't have any grazing area and only 6.67% of farms have dedicated space and open space for dairy calves. All the farmers relied on the dam to provide colostrum 3 or 4 times in a day and allowed calf to drink from udder but none checked colostrum quality or passive transfer of immunity and 6.67% of farms give milk replacer to their calves. About 86.67% of farms weaned their calves at different ages and did not perform disbudding of their calves. Calves from 80% of farms suffered from diarrhea, 40% have naval ill and pneumonia and 33.33% of farms have ectoparasitic infestation in the one-year time. In a nutshell, the welfare, management and the disease prevention status of the studied farms were not optimum which caused calf mortality and may cause plummeting farm profit. Hence, the farmers are needed to be well aware about the calf welfare and proper management.

Keywords: Calf management, calf welfare, risk factor, dairy farms, Chattogram