**CONTENTS**

|  |  |  |
| --- | --- | --- |
| **CHAPTER** | **LIST OF CONTENTS** | **PAGE NO.** |
| **1** | **INTRODUCTION** | **1-2** |
| **2** | **REVIEW THE LITERATURE** | **3-11** |
| 2.1 | Concept of Animal Husbandry | 3 |
| 2.2 | Site selection of Dairy farm | 3-4 |
| 2.3 | Housing system of Dairy farm | 4-7 |
| 2.4 | Feeding of Dairy Cattle | 7-9 |
| 2.5 | Bedding of Dairy Cattle | 10 |
| 2.6 | Ventilation of a Dairy Farm | 10 |
| 2.7 | Social environment of Dairy Farm | 10-11 |
| 2.8 | Milking Machine and Udder Sanitation | 11 |
| 2.9 | Night grazing | 11 |
| **3** | **RESEARCH METHODOLOGY** | **12-13** |
| 3.1 | Study area | 12 |
| 3.2 | Study period | 13 |
| 3.3 | Collection of Data | 13 |
| 3.4 | Sampling Procedure | 13 |
| 3.5 | Pictorial presentation of Data collection | 16-17 |
| **4** | **RESULTS & DISCUSSION** | **18-31** |
| 4.1 | General information of small dairy farm owners | 18-22 |
| 4.2 | Overall management system | 22-23 |
| 4.3 | Productive and reproductive parameters | 23-24 |
| 4.4 | Calf related management practices | 24-26 |
| 4.5 | Feeding management of dairy animals | 27 |
| 4.6 | Milking management | 27 |

**CONTENTS (CONTD.)**

|  |  |  |
| --- | --- | --- |
| **CHAPTER** | **LIST OF CONTENTS** | **PAGE NO.** |
| 4.7 | Health management | 27 |
| 4.8 | Costs of rearing dairy cows in the study area | 28-29 |
| 4.9 | Returns from rearing crossbred dairy cows | 29-30 |
| 4.10 | Some Profile of Husbandry Practice in Dairy farm | 31 |
| **5** | **RECOMMENDATIONS** | **32** |
| **6** | **LIMITATION OF MY STUDY** | **33** |
| **7** | **CONCLUSION** | **34** |
|  | **REFERENCES** | **35-42** |
|  | **ANNEX** | **43-49** |

**LIST OF TABLES**

|  |  |  |
| --- | --- | --- |
| **TABLES** |  **TITLE OF THE TABLES** | **PAGE NO.** |
| Table 1 | Space requirement for calf according to age | 6 |
| Table 2 | Daily nutrient requirements for maintenance of mature lactating cows | 9 |
| Table 3 | General information of farm owners | 18-19 |
| Table 4 | Different categories of dairy cattle in the farms | 20 |
| Table 5 | Housing system, feeding system, fodder cultivation, breeding system and overall management system | 21 |
| Table 6 | Productive and reproductive performances of dairy cows | 23 |
| Table 7 | Adoption trend of feeding, milking and health management related practices at farmer's level | 26 |
| Table 8 | Costs of rearing crossbred dairy cows per days per cow in the study area | 28 |
| Table 9 | Returns from rearing per dairy cow per day in the study area | 29 |
| Table 10 | Economics study | 30 |

**LIST OF FIGURES**

|  |  |  |
| --- | --- | --- |
| **FIGURES** |  **TITLE** | **PAGE NO.** |
|  Fig. 1 | Cross-section of an enclosed free stall barn system | 5 |
|  Fig. 2 | Cross-section of an open air corral system | 5 |
|  Fig. 3 | Mist and fan system for cooling dairy cattle | 7 |
|  Fig. 4 | Effect of air temperature on milk production. | 11 |

**LIST OF GRAPHS**

|  |  |  |
| --- | --- | --- |
| **GRAPHS** | **TITLE** | **PAGE NO.** |
| Graph. 1 | Effect of air temperature on milk production. | 11 |
| Graph. 2 | Comparison among Different category of Dairy Cattle. ( Percentage basis) | 20 |
| Graph. 3 | Comparison among Different category of Dairy Cattle. ( Number basis) | 20 |

**LIST OF ABBREVIATIONS**

**AI**  Artificial Insemination

**BBS** Bangladesh Bureau of Statistics

**BCR** Benefit Cost Ratio

**Ca.** Calcium

**DLS** Department of Livestock Services

**DM** Dry Matter

**DMI**  Dry Matter Intake

**ET** Effective Temperature

**FAO** Food and Agricultural Organization

**GDP** Gross Domestic Product

**IU** International Unit

**Lit.** Liter

**min /d** Minute/day

**NDF** Neutral Detergent Fiber

**NEL** Net Energy for Lactation

**NMC** National Mastitis Council

**Phos.** Phosphorus

**TDN** Total Digestible Nutrient

**TMR** Total Mixed Ration

**UNDP**  United Nations Development Programme.