



सत्यमेव जयते

**Government of Meghalaya**

**REPORT ON INTEGRATED  
SAMPLE SURVEY  
FOR**

**ESTIMATION OF PRODUCTION  
MILK, EGG AND MEAT**

**YEAR : 2009-10.**

**DIRECTORATE OF ANIMAL HUSBANDRY & VETERINARY  
GOVERNMENT OF MEGHALAYA.**

## **PREFACE**

The Sample Survey for estimation of Major Livestock Products is conducted annually throughout the State. The objectives of the Survey are to estimate the production of Milk, Meat and Eggs in the State as well as in the District level. The availability of data on these products including other information on livestock is useful for the Animal Husbandry and Dairy Sector in the State and others.

This report deals with the result of the Survey conducted during the year 2009–2010 showing production estimates for each season, the number of Livestock and Poultry population including the numbers of Livestock brought from outside the State for Meat. Besides, information of Livestock per Sq. Kms and per 100 Villages are shown in this report. This report provides a reliable data-base relating to the progress and achievement of different schemes of the Department that enables us to estimate the contribution to the livestock sector.

However it may be mentioned that due to outbreak of Avian Influenza in the neighboring state of Assam there was a decline of poultry production within the State, hence import of chicken from outside is un-avoidable.

The result of the Survey indicates a growth rate of **0.92** % on Milk, **0.20** % on Egg and **0.67** % on Meat over 2008-09.

I am sure that this publication will be of immense help, useful and instrumental to all concerned who are interested in the field of Animal Husbandry and Dairying Activities.

Sd/-  
**Dr. L.Lyngwa**  
**Director A.H. & Veterinary Department**  
**Meghalaya, Shillong.**

# CONTENTS

Page

## CHAPTER – I GENERAL

|  |   |   |
|--|---|---|
| 1.1 The State .....  | - | 1 |
| 1.2 Climate .....  | - | 1 |
| 1.3 Rainfall .....   | - | 1 |
| 1.4 Population and Area.....   | - | 1 |
| Table 1.1 General Information.....   | - | 2 |
| Table 1.2 Human Population (2001).....   | - | 2 |
| Table 1.3 Land Use Statistics (1996-97 to 2000-2001) .....   | - | 3 |
| Table 1.4 Classification of Households possessing Bovine according to the<br>Size of the Unit during the Year 2006-07..... | - | 3 |
| Table 1.5 Area Sq. Km. With Density of Livestock Population per Sq. Km.s .....   | - | 4 |
| Table 1.6 Density of Livestock Population per 100 Villages .....   | - | 4 |

## CHAPTER – II LIVESTOCK CENSUS DATA 2003

|  |   |   |
|--|---|---|
| Table 2.1 Livestock Population (a) Cattle & Buffaloes.....   | - | 5 |
| Table 2.1 Livestock Population (b) Horses & Ponies.....      | - | 5 |
| Table 2.1 Pig Population, Livestock Population & Rabbit..... | - | 6 |
| Table 2.2 Poultry Population .....                           | - | 6 |

## CHAPTER – III ANALYSIS OF THE INTEGRATED SAMPLE SURVEY

|   |   |    |
|---|---|----|
| 3.1 Integrated Sample Survey – Genesis & Usefulness.....                      | - | 7  |
| 3.2 Coverage of the Survey.....   | - | 7  |
| 3.3 Period of the Survey.....   | - | 7  |
| 3.4 Methodology / Sampling Plan.....  | - | 8  |
| 3.5 Machinery in the Survey along with Staff Position .....                   | - | 8  |
| 3.6 Schedule Prescribed in the Survey .....                                   | - | 9  |
| 3.7 Types of Data collected .....   | - | 9  |
| 3.8 Schedule L.P.S – 1.2 ; Detailed of Milk Production .....                  | - | 9  |
| 3.9 Schedule L.P.S. – 2.1 ; Detailed of Eggs Production .....                 | - | 9  |
| 3.10 Schedule Form III Detail of Meat Production .....                        | - | 9  |
| 3.11 Summary Results .....  | - | 10 |
| 3.12 Annual Report on Sample Survey to estimate production on Milk products   | - | 12 |
| 3.13 District wise Number of Villages Selected for Complete Enumeration ..... | - | 13 |

## CHAPTER –IV DISTRICT WISE AND SEASONWISE ESTIMATES MILK PRODUCTION

|   |   |    |
|---|---|----|
| Table 4.1 a & b Estimated Number of Productive Cows (Indigenous) .....            | - | 14 |
| Table 4.1 c Estimated Number of Productive Cows (Indigenous) .....                | - | 15 |
| Table 4.2 a Estimated Number of Productive Cows (Crossbred) .....                 | - | 15 |
| Table 4.2 b & c Estimated Number of Productive Cows (Crossbred) .....             | - | 16 |
| Table 4.3 a & b Estimated Number of Productive Buffaloes.....                     | - | 17 |
| Table 4.3 c Estimated Number of Productive Buffaloes.....                         | - | 18 |
| Table 4.4 a Estimated Milk Yield per day Per Animal (Indigenous) ...in milk.....  | - | 18 |
| Table 4.4 b Estimated Milk Yield per day Per Animal (Indigenous) ...Milch.....    | - | 19 |
| Table 4.5 a Estimated Milk Yield per day Per Animal (Crossbred) .....in milk..... | - | 19 |
| Table 4.5 b Estimated Milk Yield per day Per Animal (Crossbred) .....milch.....   | - | 20 |

|   | <b>Page</b> |
|---|-------------|
| Table 4.6 a Estimated Milk Yield per day Per Animal (Buffaloes) ..in milk.....            | 20          |
| Table 4.6 b Estimated Milk Yield per day Per Animal (Buffaloes) ..milch.....              | 21          |
| Table 4.7 Milk Production (Indigenous) ...season wise.....                                | 21          |
| Table 4.8 Milk Production (Crossbred) ...season wise.....                                 | 22          |
| Table 4.9 Milk Production (Buffaloes) ...season wise.....                                 | 22          |
| Table 4.10 Total Milk Production in the State .....                                       | 23          |
| Table 4.11 Average Milk Yield Per Animal / Day in Milk & Milch Animals from 1983-84 ..... | 24          |
| Table 4.12 Estimated number in Milk & Milch Animal from 1983-84 .....                     | 25          |
| Table 4.13 Estimated Milk Production from 1983-84.....                                    | 26          |

**CHAPTER –V**  
**DISTRICT WISE AND SEASONWISE ESTIMATES EGG PRODUCTION**

|   |    |
|---|----|
| Table 5.1 a District wise and Season wise Estimated No. of Poultry (Fowls).....           | 27 |
| Table 5.1 b District wise and Season wise Estimated No. of Poultry (Ducks).....           | 28 |
| Table 5.2 a District wise and Season wise Estimated Yield per Layer (Fowls).....          | 28 |
| Table 5.2 b District wise and Season wise Estimated Yield per Layer (Ducks).....          | 29 |
| Table 5.3 a District wise and Season wise Estimated Egg Production (Fowls).....           | 29 |
| Table 5.3 b District wise and Season wise Estimated Egg Production (Ducks).....           | 30 |
| Table 5.4 a Estimated Total Egg Production .....  | 30 |
| Table 5.4 b Estimated Total Egg Production .....  | 31 |
| Table 5.5 Estimated Number of Layers from 1983-84 .....                                   | 32 |
| Table 5.6 Estimated Yield Per Annum Per Layer and Total Egg Production from 1983-84 ..... | 33 |

**CHAPTER – VI**  
**SEASON WISE PERCENTAGE UTILISATION OF MILK**  
**AND EGGS IN SAMPLE HOUSEHOLDS.**

|   |    |
|---|----|
| Table 6.1 Utilisation of Milk. ....   | 34 |
| Table 6.2 Utilisation of Produced Eggs .....  | 34 |
| Table 6.3 Season wise Percentage of Animals which were Grazed, Stallfed or Both .....     | 35 |
| Table 6.4 Season wise Average Quantity Feed / Fodder Feed Per Animal Per Day.....         | 36 |
| Table 6.5 Season wise Utilisation of Dung collected from Bovine at Sample Household ..... | 37 |
| Table 6.6 Per Capita availability of Milk and Eggs .....                                  | 37 |

**CHAPTER - VII**  
**MEAT PRODUCTION**

|   |    |
|---|----|
| Table 7.1 District Wise & Season Wise Number of Animals & Poultry Slaughtered...  | 38 |
| Table 7.2 District Wise Numbers of Animals Slaughtered (Overall).....   | 39 |
| Table 7.3 District Wise & Season Wise Average Yield per Animal.....   | 39 |
| Table 7.4 District Wise Average Yield per Animal (Overall) .....  | 40 |
| Table 7.5 District wise and Season wise Meat production .....   | 40 |
| Table 7.6 District wise Season wise Total Meat Production .....   | 41 |
| Table 7.7 District wise and Category wise Total Meat Production .....   | 41 |
| Table 7.8 Growth Rate, Percentage contribution of each Category to Total<br>Meat production with Per Capita Availability..... | 42 |
| Table 7.9 Per Capita Availability of Meat per Day / grams 2009-10 .....   | 42 |
| Table 7.10 Estimated Number of Animals Slaughtered from 1983-84 .....   | 43 |
| Table 7.11 Average Meat Yield per Animal from 1983-84 .....   | 44 |
| Table 7.12 Total Meat production from 1983-84 .....   | 45 |
| Annexure – I Comparative Analysis showing production estimate with effect<br>from the year 1983-84 to 2009-10.....            | 46 |

\*\*\*\*\*

# CHAPTER - I

## GENERAL

**1.1 The State:** - Meghalaya is located in the North-Eastern part of India lying between the latitude of 25°47" and 26°10'North 89°45"East and 92°47" East longitude. The State is bounded on the North by Assam and on the South by Bangladesh and Assam again on the West. Physiographically, the State is divided into three hills section, (a) Western Meghalaya or Garo Hills (b) Central Meghalaya or Khasi Hills and (c) Eastern Meghalaya or Jaintia Hills. The total area of the State covers about 22,429 Sq. km. The State is divided into seven Districts namely: (i) East Khasi Hills (ii) Ri-Bhoi (iii) West Khasi Hills (iv) Jaintia Hills (v) East Garo Hills (vi) West Garo Hills, and (vii) South Garo Hills.

**1.2. Climate:** - The climate in Meghalaya is salubrious in general. The Northern and the Southern slopes including the Western Border are comparatively warmer in winter, the main reason being the lower altitudes. The four distinct seasons of the year are recognizable through out the State. Springtime is generally associated with the germination of seeds as well as the growth of tender grass, leaves and flowers. Then come Summer times, which is generally identified with rain and autumn with ripened and shedding of leaves from certain species of trees.

**1.3. Rainfall:** - Meghalaya had a distinct position in the world as far as rainfall is concerned. The entire State received rainfall during Summer months only through the Southwest Monsoon. The rain usually falls by the month of May and continues right up to the end of September, and sometimes evens in the middle of October after which it gradually diminishes. Sohra and Mawsynram in the East Khasi Hills are geographically considered as the rainiest places in the World.

**1.4. Population and Area:** - The State has a total area of 22,429 Sq. Kms. and a population of 23.19 Lakhs as per the 2001 Census. Percentage of Urban population is 19.63, and percentage of Literacy is 63.31. Table 1.2 below indicate the District Wise population both Rural and Urban. The Density per Sq. Km. in the State is 103 persons compared to 1991 Census with a density of 79 persons.

**Table 1.1: General Information.**

| Sl. No. | Name of District       | No of Sub-Division | No. of Blocks / Taluks / Tehsils | Villages 1998 Economics Census | Towns 2002 |
|---------|------------------------|--------------------|----------------------------------|--------------------------------|------------|
| 1.      | East Khasi Hills       | 1                  | 8                                | 899                            | 8          |
| 2.      | Ri – Bhoi              | -                  | 3                                | 570                            | 1          |
| 3.      | West Khasi Hills       | 2                  | 6                                | 914                            | 2          |
| 4.      | Jaintia Hills          | 2                  | 5                                | 465                            | 1          |
| 5.      | East Garo Hills        | 1                  | 5                                | 856                            | 2          |
| 6.      | West Garo Hills        | 2                  | 8                                | 1481                           | 1          |
| 7.      | South Garo Hills       | -                  | 4                                | 595                            | 1          |
|         | <b>State (Overall)</b> | 8                  | 39                               | 5780                           | 16         |

Source : Directorate of Economics & Statistics,  
Government of Meghalaya, Shillong.

**Table 1.2: Human Population (2001)**

| Sl. No. | Name of District       | Males          | Females        | Total          | Urban Population | Rural Population | Scheduled Caste | Scheduled Tribe |
|---------|------------------------|----------------|----------------|----------------|------------------|------------------|-----------------|-----------------|
| 1.      | East Khasi Hills       | 333553         | 327370         | 660923         | 277748           | 383175           | 2332            | 512152          |
| 2.      | Ri – Bhoi              | 99319          | 93471          | 192790         | 13180            | 179610           | 300             | 167779          |
| 3.      | West Khasi Hills       | 150419         | 145630         | 296049         | 34598            | 261451           | 42              | 290184          |
| 4.      | Jaintia Hills          | 149891         | 149217         | 299108         | 25057            | 274051           | 456             | 287049          |
| 5.      | East Garo Hills        | 127474         | 123108         | 250582         | 35907            | 214675           | 347             | 241916          |
| 6.      | West Garo Hills        | 263424         | 254966         | 518390         | 58978            | 459412           | 7436            | 397166          |
| 7.      | South Garo Hills       | 52007          | 48973          | 100980         | 8643             | 92337            | 226             | 96616           |
|         | <b>State (Overall)</b> | <b>1176087</b> | <b>1142735</b> | <b>2318822</b> | <b>454111</b>    | <b>1864711</b>   | <b>11139</b>    | <b>1992862</b>  |

Source : Final Population Totals Census of India 2001.  
Office of the Director of Census Operation, Meghalaya.

**Table 1.3: Land Use Statistics (1996-97 to 2000-2001)****Hectares.**

| Sl. No. | Particulars  | 1996-97 | 1997-98 | 1998-99 | 1999-2000 | 2000-2001 |
|---------|--|---------|---------|---------|-----------|-----------|
| 1       | 2  | 3       | 4       | 5       | 6         | 7         |
|         | <b>Reporting Area for Land Utilisation Statistics.</b> | 2240900 | 2240900 | 2240900 | 2240900   | 2240900   |
| 1.      | Forest.  | 935334  | 933998  | 947000  | 941503    | 941823    |
| 2.      | Not Available for Cultivation.                         | 223695  | 226066  | 222495  | 224593    | 215484    |
| 3.      | Other Uncultivated Land excluding Fallow Land.         | 632355  | 631466  | 621420  | 622440    | 630323    |
| 4.      | Fallow Land.   | 284478  | 233782  | 228600  | 230622    | 231440    |
| 5.      | Net Area Sown.   | 216418  | 215588  | 221385  | 221742    | 221830    |
| 6.      | Area Sown more than once.                              | 44066   | 44112   | 44445   | 4557      | 44986     |
|         | Total cropped Area.                                    | 260484  | 259700  | 265830  | 267319    | 266816    |

Source : Directorate of Economics & Statistics, Meghalaya.

**Table 1.4: Classification of Households possessing Bovine according to the size of the Unit during the Year 2009-10.**

| Sl. No. | Name of District       | Percentage of Bovines Keepers (Household) |              |              |              |              |             |              |
|---------|------------------------|---|--------------|--------------|--------------|--------------|-------------|--------------|
|         |                        | 0-1                                       | 2-5          | 6-10         | 11-15        | 16-20        | 21-25       | 26 and above |
| 1       | 2                      | 3   | 4            | 5            | 6            | 7            | 8           | 9            |
| 1       | East Khasi Hills       | 7.79                                      | 19.48        | 27.27        | 31.17        | 10.39        | -           | 3.90         |
| 2       | Ri – Bhoi              | 1.19                                      | 16.67        | 50.00        | 14.29        | 10.71        | 2.38        | 4.76         |
| 3       | West Khasi Hills       | 6.78                                      | 42.38        | 27.11        | 15.25        | 5.08         | 1.70        | 1.70         |
| 4       | Jaintia Hills          | 2.99                                      | 8.96         | 16.42        | 13.43        | 26.87        | 16.42       | 14.92        |
| 5       | East Garo Hills        | -   | -            | 17.08        | 17.08        | 14.63        | 19.51       | 31.71        |
| 6       | West Garo Hills        | -   | 3.23         | 16.12        | 19.35        | 19.35        | 8.07        | 33.88        |
| 7       | South Garo Hills       | 5.00                                      | 15.00        | 30.00        | 17.50        | 5.00         | 10.00       | 17.50        |
|         | <b>State (Overall)</b> | <b>3.49</b>                               | <b>15.81</b> | <b>27.67</b> | <b>18.61</b> | <b>13.49</b> | <b>7.21</b> | <b>13.72</b> |

**Table 1.5 Area Sq.Km. with Density of Livestock Population per Sq.Kms.**

| Sl. No. | Name of District       | Area (Sq. Km) 2001 | Density per Sq. Km |                  |           |           |          |           |            |
|---------|------------------------|--------------------|--------------------|------------------|-----------|-----------|----------|-----------|------------|
|         |                        |                    | Indigenous Cattle  | Crossbred Cattle | Buffaloes | Pig       | Sheep    | Goat      | Poultry    |
| 1       | 2                      | 3                  | 4                  | 5                | 6         | 7         | 8        | 9         | 10         |
| 1.      | East Khasi Hills       | 2748               | 17                 | 3                | -         | 38        | 2        | 19        | 163        |
| 2.      | Ri – Bhoi              | 2448               | 20                 | 4                | 1         | 15        | -        | 5         | 144        |
| 3.      | West Khasi Hills       | 5247               | 20                 | -                | 1         | 12        | 1        | 10        | 71         |
| 4.      | Jaintia Hills          | 3819               | 35                 | -                | 1         | 14        | -        | 6         | 87         |
| 5.      | East Garo Hills        | 2603               | 60                 | -                | -         | 22        | -        | 15        | 168        |
| 6.      | West Garo Hills        | 3677               | 59                 | 1                | 2         | 22        | 2        | 33        | 193        |
| 7.      | South Garo Hills       | 1887               | 21                 | -                | -         | 10        | -        | 12        | 90         |
|         | <b>State (Overall)</b> | <b>22,429</b>      | <b>33</b>          | <b>1</b>         | <b>1</b>  | <b>19</b> | <b>1</b> | <b>15</b> | <b>126</b> |

**Table 1.6 Density of Livestock Population per '100' Villages**

| Sl. No. | Name of District       | Indigenous Cattle | Crossbred Cattle | Buffaloes  | Pig         | Sheep      | Goat        | Poultry      |             |             |              | Over all     |
|---------|------------------------|-------------------|------------------|------------|-------------|------------|-------------|--------------|-------------|-------------|--------------|--------------|
|         |                        |                   |                  |            |             |            |             | Fowls        | Ducks       | Improved    | Desi         |              |
| 1       | 2                      | 3                 | 4                | 5          | 6           | 7          | 8           | 9            | 10          | 11          | 12           | 13           |
| 1.      | East Khasi Hills       | 5084              | 911              | 25         | 11767       | 642        | 5900        | 49241        | 434         | 5172        | 44503        | <b>49675</b> |
| 2.      | Ri – Bhoi              | 8495              | 1587             | 632        | 6612        | 29         | 2352        | 61366        | 553         | 6440        | 55479        | <b>61919</b> |
| 3.      | West Khasi Hills       | 11422             | 78               | 315        | 6853        | 561        | 5994        | 40532        | 159         | 1066        | 39626        | <b>40693</b> |
| 4.      | Jaintia Hills          | 28366             | 290              | 440        | 11649       | 157        | 53          | 70530        | 2812        | 5354        | 66457        | <b>71811</b> |
| 5.      | East Garo Hills        | 18236             | 9                | 114        | 6756        | 5          | 4508        | 51081        | 127         | 1249        | 49958        | <b>51228</b> |
| 6.      | West Garo Hills        | 14689             | 203              | 555        | 5479        | 420        | 8124        | 45219        | 2581        | 754         | 47046        | <b>47801</b> |
| 7.      | South Garo Hills       | 5702              | 19               | 7          | 3307        | 22         | 3792        | 27547        | 921         | 32          | 28436        | <b>28468</b> |
|         | <b>State (Overall)</b> | <b>12871</b>      | <b>399</b>       | <b>311</b> | <b>7248</b> | <b>315</b> | <b>5663</b> | <b>47781</b> | <b>1025</b> | <b>2351</b> | <b>46386</b> | <b>48810</b> |



## Chapter – 2

### Livestock Census Data 2003.

**Table 2.1 Livestock Population (a) Cattle & Buffaloes.**

| Sl. No. | Name of District       | Cattle    |            | Total Cattle | Buffalo | Total Bovine  |
|---------|------------------------|-----------|------------|--------------|---------|---------------|
|         |                        | Crossbred | Indigenous |              |         |               |
| 1.      | East Khasi Hills       | 8729      | 45705      | 54434        | 226     | <b>54660</b>  |
| 2.      | Ri – Bhoi              | 9045      | 48426      | 57471        | 3604    | <b>61075</b>  |
| 3.      | West Khasi Hills       | 717       | 104402     | 105119       | 2884    | <b>108003</b> |
| 4.      | Jaintia Hills          | 1350      | 131905     | 133255       | 2048    | <b>135303</b> |
| 5.      | East Garo Hills        | 81        | 156105     | 156186       | 977     | <b>157163</b> |
| 6.      | West Garo Hills        | 3013      | 217549     | 220562       | 8223    | <b>228785</b> |
| 7.      | South Garo Hills       | 113       | 39875      | 39988        | 41      | <b>40029</b>  |
|         | <b>State (Overall)</b> | 23048     | 743967     | 767015       | 18003   | <b>785018</b> |

**Table 2.1 Livestock Population (b) Horses & Ponies.**

| Sl. No. | Name of District       | Sheep     |            | Total Sheep | Total Goats | Total Horses & Ponies |
|---------|------------------------|-----------|------------|-------------|-------------|-----------------------|
|         |                        | Crossbred | Indigenous |             |             |                       |
| 1.      | East Khasi Hills       | 266       | 5510       | 5776        | 53041       | 216                   |
| 2.      | Ri – Bhoi              | 40        | 126        | 166         | 13407       | 96                    |
| 3.      | West Khasi Hills       | 16        | 5116       | 5132        | 54781       | 1050                  |
| 4.      | Jaintia Hills          | 130       | 602        | 732         | 24642       | 415                   |
| 5.      | East Garo Hills        | -         | 41         | 41          | 38587       | 21                    |
| 6.      | West Garo Hills        | 116       | 6112       | 6228        | 120311      | 18                    |
| 7.      | South Garo Hills       | 63        | 65         | 128         | 22563       | 17                    |
|         | <b>State (Overall)</b> | 631       | 17572      | 18203       | 327332      | 1833                  |

**Table 2.1 (c) Pig Population & Livestock Population and Rabbit.**

| Sl. No. | Name of District       | Pigs      |            | Total Pigs | Total Livestock | Total Rabbits |
|---------|------------------------|-----------|------------|------------|-----------------|---------------|
|         |                        | Crossbred | Indigenous |            |                 |               |
| 1.      | East Khasi Hills       | 16230     | 89566      | 105786     | 219479          | 915           |
| 2.      | Ri – Bhoi              | 4112      | 33576      | 37688      | 112432          | 909           |
| 3.      | West Khasi Hills       | 3817      | 58821      | 62638      | 231604          | 3             |
| 4.      | Jaintia Hills          | 1556      | 52613      | 54169      | 215261          | 1278          |
| 5.      | East Garo Hills        | 350       | 57533      | 57833      | 253695          | 2080          |
| 6.      | West Garo Hills        | 2060      | 79080      | 81140      | 436482          | 3708          |
| 7.      | South Garo Hills       | 166       | 19510      | 19676      | 82413           | 405           |
|         | <b>State (Overall)</b> | 28291     | 390689     | 418980     | 1551366         | 9298          |

**Table 2.2 : Poultry Population.**

| SL No. | Name of Districts      | Fowls          |               |                | Ducks        |             |              | Turkey    | Other Poultry Birds like Guineas , Fowls etc. | Grand Total    |
|--------|------------------------|----------------|---------------|----------------|--------------|-------------|--------------|-----------|---|----------------|
|        |                        | Desi           | Impro-ved     | Total          | Desi         | Impro-ved   | Total        |           |   |                |
| 1.     | East Khasi Hills       | 396247         | 46430         | 442677         | 3834         | 66          | 3900         | -         | -   | <b>446577</b>  |
| 2.     | Ri – Bhoi              | 314533         | 35253         | 349786         | 1698         | 1456        | 3154         | -         | -   | <b>352940</b>  |
| 3.     | West Khasi Hills       | 360727         | 9740          | 370467         | 1451         | -           | 1451         | -         | 14  | <b>371932</b>  |
| 4.     | Jaintia Hills          | 304694         | 23269         | 327963         | 4333         | 1626        | 5959         | -         | -   | <b>333922</b>  |
| 5.     | East Garo Hills        | 426617         | 10633         | 437250         | 1021         | 62          | 1083         | 16        | 168   | <b>438517</b>  |
| 6.     | West Garo Hills        | 658652         | 11044         | 669696         | 38103        | 128         | 38231        | -         | -   | <b>707927</b>  |
| 7.     | South Garo Hills       | 163716         | 190           | 163906         | 5479         | -           | 5479         | -         | -   | <b>169385</b>  |
|        | <b>State (Overall)</b> | <b>2625186</b> | <b>136559</b> | <b>2761745</b> | <b>55919</b> | <b>3338</b> | <b>59257</b> | <b>16</b> | <b>182</b>                                    | <b>2821200</b> |

## Chapter –3

### ANALYSIS OF THE INTEGRATED SAMPLE SURVEY RESULTS FOR THE YEAR

#### **3.1. - Integrated Sample Survey- Genesis and its usefulness.**

Integrated Sample Survey for estimation of Major Livestock Products was first conducted during the year 1983-84. Prior to this period, the basic data for planning and formulation of Schemes for economic developments on scientific lines both in A.H. & Dairying was the census figures only, but the census figures gives the information only the Livestock numbers at five years intervals as no information was collected therein on Livestock Production and other aspects of Livestock economy. The census is inadequate to provide timely and available data on the Livestock numbers and products. The importance of availability of Livestock production data which is badly needed for formulating Livestock Development Programmes at all levels has activate the State Animal Husbandry & Veterinary Department to take initiative steps in conducting Sample Survey on the basis of the Methodology evolved by the Indian Agricultural Statistics Research Institute as per the recommendation of the Government of India, Ministry of Agriculture, Department of Animal Husbandry & Dairying.

For establishing & Strengthening of Statistical Cell in the Directorate of Animal Husbandry in various States in Union Territories for the purpose of conducting Sample Survey for Estimation of Major Livestock Products and carrying out other Statistical activities, the Government of India initiated a Centrally Sponsored Schemes for our State during the Fifth Five Year Plan 50:50 sharing basis between the States and the Center.

With the financial help and technical advice and guidance through training programmes based as per prescribed Methodology formulated by the Ministry of Agriculture, Department of Animal Husbandry & Dairying an actual production estimate of Milk, Meat & Egg, etc could be arrived at. The result of the Survey data could be published every year, which provides basic information on the actual production level. The availability of current level estimates has become a source of data base information in the State Animal Husbandry Sector for planning and formulating development programmes.

**3.2. Coverage of the Survey:** - The Survey covered all the Districts of the State.

**3.3. Period of Survey:** - **The year is divided into three season for Field Work as detailed below.**

- |                   |   |                      |
|-------------------|---|----------------------|
| 1. Summer Season  | : | March – June.        |
| 2. Monsoon Season | : | July – October.      |
| 3. Winter Season  | : | November – February. |

### **3.4. Methodology / Sampling Plan. :-**

The Sampling Plan approved by the Technical Committee of Direction (TCD) was as follows:-

The Animal Husbandry Districts in the State would be the strata, Primary Stage unit of Sampling would be villages and the household possessing Livestock / Poultry form the second stage unit. The ultimate units for recording Milk / Wool Yield would be animal in Milk / Sheep where as no Sub-Sampling in a household would be done for recording the production of eggs and meat.

For estimating the numbers of Livestock and Poultry, complete enumeration of household's alongwith Bovines, Sheep and Poultry is taken would be done in a Sample of 15% Villages in the State. The allocation of the Sample of Villages to strata would be done in proportion to the Livestock and Poultry population in them as per latest Livestock Census. Each District / Stratum would be further Sub-divided into two or three Sub-strata according to the intensity of Livestock and Poultry population and the Sample of villages in the stratum as per allocation mentioned above further allocated to them sub-strata proportionally.

For recording data on yield of Milk, Wool, Eggs and Meat and attendant Livestock Practices, a sub-sample of 5 villages out of that has been enumerated would be selected with equal probability and without replacement. These villages would again be suitable allocated to the different sub-strata form as mentioned above, from each of the selected villages, the numbers of second stage units to be selected for studying different products would be as follows :-

Milk: - 2 Clusters of 2 households each, eggs- 2 clusters of 5 households each and meat 2 clusters of 10 households in the first round and double of this numbers in the subsequent rounds. The data on Wool Yield will be collected from 5 flocks in the shearing season only. For estimating the numbers of animals slaughtered all the butchers in the selected villages will be covered. The data from the households and butchers will be supplemented by similar data from registered slaughterhouses, for which complete record are available.

The ultimate units of Sampling for recording detailed information will be 2 animals in milk (Cows, buffaloes or both) for estimation of Milk production and 2 rams (or 1 ram and 1 weather) 2 ewes and 2 lambs for recording Wool production where as no Sub-Sampling within a household would be done in the cases of eggs and meat. Information for estimating Meat production per animal would be recorded from a Sample of 3 animals of each species Viz. Sheep, Goat, Pigs and Buffaloes.

### **3.5. Machinery in the Survey along with staff position.**

The complete enumerations of Livestock and Poultry in the 15 % villages are carried out by the departmental staff of Animal Husbandry and Veterinary located close to the selected villages. The information are collected in prescribed schedules I and II and passed out to the Statistical section in the State Directorate of Animal Husbandry thereof in respective District & Sub-Divisional A.H. & Veterinary

Officers.

The collection of data on Yield and other related items are taken up by the Field staff of Statistical Wing of the Directorate and the information are collected and recorded in relevant Schedules.

**Regarding Staff Position:-**

The Statistical Wing consists of The Deputy Director (Stats.) who is the implementing Officer of the Sample Survey Scheme the Research Officer, The Statistical Officer, The Inspector Statistics, The Statistical Assistants, The Senior Veterinary Field Assistants and some ministerial staff.

**3.6. Schedule Prescribed in the Survey.**

1. Village Schedule –I – General Information about the Village.
2. Village Schedule – II – Complete enumeration regarding the numbers of Household in the Selected Villages, the numbers of Cattle, both Cross Bred and Indigenous, Buffaloes, Sheep, Goat, Pigs, Poultry and Numbers of Animals slaughtered.

**3.7. Types of Data collected.**

The details of data collected as mentioned above in each schedules include recording of Milk, Yield of the selected animals, Feed consumption of Bovines, particulars such as breed, number of lactation's completed, production and disposal of milk and milk products, production and disposal of Dung and study of bovines practices, production purchased and disposal of eggs during last twenty four hours feed supplied to poultry birds, diseases, death and disposal during the last one month and breed composition etc. and study of poultry practices. Numbers of animals slaughtered according to species, breed and age on the day of visit, live weight and carcass weight after slaughter in the case of meat production.

**3.8. Schedule L.P.S. – 1.2: Detailed of Milk Production.**

The information in the Schedule is (i) identification of selected household in the Sub-Sample of the villages (ii) Details of feed consumption on the day of visit (iii) Milk Yield of individual animals on the day of visit and details of utilization of milk ( total production) on the previous day.

**3.9. Schedule L.P.S. 2.1:-**

Details of egg production and attendant practices in selected household, i.e. production purchased and disposal of egg, feed supply etc.

**3.10. Schedule Form III:-**

Detail of Meat production.

**Table 3.11: Summary results.**

| Sl. No. | Items                  | Unit       | Estimates<br>Previous<br>Year<br>2008-09 | Estimate<br>Current<br>Year<br>2009-10 | % of Increase or<br>Decrease over<br>previous Year |
|---------|------------------------|------------|--|--|--|
| I       | <b>Milk</b>            |            |  |  |  |
|         | <b>Indigenous Cows</b> |            |  |  |  |
|         | <b>Population</b>      |            |  |  |  |
| A       | In Milk                | 00 No.     | 1039                                     | 1050                                   | (+) 1.06%  |
| B       | Milch                  | 00 No.     | 2321                                     | 2341                                   | (+) 0.86%  |
|         | <b>Yield per Day</b>   |            |  |  |  |
| C       | In Milk                | Kgs.       | 0.751                                    | 0.751                                  | =  |
| D       | Milch                  | Kgs.       | 0.336                                    | 0.337                                  | (+) 0.30%  |
| E       | Production             | 000 tonnes | 28.463                                   | 28.758                                 | (+) 1.04%  |
|         |                        |            |  |  |  |
|         | <b>Crossbred Cows</b>  |            |  |  |  |
|         | <b>Population</b>      |            |  |  |  |
| F       | In Milk                | 00 Nos.    | 144                                      | 145                                    | (+) 0.69%  |
| G       | Milch                  | 00 Nos.    | 176                                      | 178                                    | (+) 1.14%  |
|         | <b>Yield per day</b>   |            |  |  |  |
| H       | In Milk                | Kgs.       | 8.954                                    | 8.962                                  | (+) 0.09%  |
| I       | Milch                  | Kgs.       | 7.311                                    | 7.310                                  | (+) 0.14%  |
| J       | Production             | 000 tonnes | 47.05                                    | 47.44                                  | (+) 0.83%  |

**Table 3.11 – contd.**

| Sl No. | Items                           | Unit       | Estimates Previous Year 2008-09 | Estimate Current Year 2009-10 | % of Increase or Decrease over previous Year |
|--------|---------------------------------|------------|---------------------------------|-------------------------------|--|
|        | <b>Buffalo Population</b>       |            |                                 |                               |  |
| K      | In Milk                         | 00 No.     | 29                              | 30                            | (+) 3.45%                                    |
| L      | Milch                           | 00 No.     | 57                              | 57                            | =  |
|        | <b>Yield per Day</b>            |            |                                 |                               |  |
| M      | In Milk                         | Kgs.       | 1.856                           | 1.855                         | (-) 0.05%                                    |
| n      | Milch                           | Kgs.       | 0.952                           | 0.960                         | (+) 0.84%                                    |
| o      | Production                      | 000 tonnes | 1.856                           | 2.014                         | (+) 8.51%                                    |
|        | <b>Goat Production</b>          |            |                                 |                               |  |
| p      | In Milk                         | 00 No.     |                                 |                               |  |
| q      | Milch                           | 00 No.     |                                 |                               |  |
|        | <b>Yield per Day</b>            |            |                                 |                               |  |
| r      | In Milk                         | Kgs.       |                                 |                               |  |
| s      | Milch                           | Kgs.       |                                 |                               |  |
| t      | Production                      | 000 tonnes |                                 |                               |  |
|        | <b>Total Milk Production</b>    | 000 tonnes | 77.50                           | 78.21                         | (+) 0.92%                                    |
| II     | <b>Egg Production</b>           |            |                                 |                               |  |
|        | <b>Layers</b>                   |            |                                 |                               |  |
| u      | Desi                            | 00 No.     | 8334                            | 8370                          | (+) 0.45%                                    |
| v      | Improved                        | 00 No.     | 669                             | 675                           | (+) 0.92%                                    |
| w      | <b>Total</b>                    | 00 No.     | 9003                            | 9028                          | (+) 0.48%                                    |
|        | <b>Yield per layer per year</b> |            |                                 |                               |  |
| x      | Desi                            | No.        | 102                             | 102                           | =  |
| y      | Improved                        | No.        | 216                             | 216                           | =  |
|        | <b>Production</b>               |            |                                 |                               |  |
| z      | Desi                            | Lakhs Nos. | 853.41                          | 854.12                        | (+) 0.08%                                    |
| aa     | Improved                        | “          | 144.32                          | 145.58                        | (+) 0.87%                                    |
| ab     | <b>Total</b>                    | “          | 997.73                          | 999.7                         | (+) 0.20%                                    |

**Table 3.12 Annual Report on Sample Surveys to estimate production of Livestock products.  
State: - Meghalaya.**

| Sl. No. | Items   | Summer | Monsoon | Winter | Annual (Over-all) |
|---------|---|--------|---------|--------|-------------------|
| 1. (a)  | Total No. of District in the State.                                   | 7      | 7       | 7      | 7                 |
| 1. (b)  | Strata formed for District levels Estimates.                          |        |         |        |                   |
| 2. (a)  | Total No. of Villages in the State (inhabited)                        | 5780   | 5780    | 5780   | 5780              |
| 2. (b)  | No. of villages covered for detailed study.                           | 35     | 35      | 35     | 105               |
| 2. (c)  | No. of villages covered for detailed study.                           |        |         |        |                   |
|         | i) for Milk   | 35     | 35      | 35     | 105               |
|         | ii) for Egg   | 35     | 35      | 35     | 105               |
| 3.(a)   | Total No. of households in the State. (2001 Census) Lakhs Nos.        | 4.20   | 4.20    | 4.20   | 4.20              |
| 3. (b)  | Percentage of Households keeping :-                                   |        |         |        |                   |
|         | i) Bovine   | 46.17% | 41.76%  | 44.97% | 44.44%            |
|         | ii) Poultry   | 79.54% | 80.52%  | 80.78% | 80.24%            |
|         | iii) Sheep  | 1.02%  | 1.40%   | 0.65%  | 1.02%             |
|         | iv) Goat  | 27.54% | 22.70%  | 20.50% | 23.81%            |
|         | v) Pig  | 56.04% | 61.88%  | 66.35% | 61.12%            |
| 4. (a)  | No. of households covered for Milk production (Cow, Buffalo and Goat) | 851    | 595     | 700    | 2146              |
| 4. (b)  | No. of animals observed for milk production                           |        |         |        |                   |
|         | i) Cow in Milk.   | 760    | 641     | 654    | 2055              |
|         | ii) Buffalo in Milk.  | 50     | 62      | 91     | 203               |
|         | iii) Goat in Milk.  |        |         |        |                   |
| 5. (a)  | No. of Households observed for egg production.                        | 719    | 779     | 719    | 2217              |
| 5. (b)  | No. of Layers observed.   |        |         |        |                   |
|         | i) Desi & Improved  | 3364   | 3126    | 2666   | 9156              |
|         | .   |        |         |        |                   |



**Table 3.12 – Contd.**

| Sl. No. | Items   | Summer  | Monsoon | Winter  | Annual (Overall) |
|---------|---|---------|---------|---------|------------------|
| 6. (a)  | Estimated No. of Animals Slaughtered.'000' Nos. |         |         |         |                  |
|         | i) Cattle                                       | 81.68   | 81.12   | 82.58   | 245.37           |
|         | ii) Buffalo                                     | 1.18    | 1.75    | 1.42    | 4.35             |
|         | iii) Sheep & Goat                               | 38.25   | 41.33   | 37.46   | 117.05           |
|         | iv) Pig   | 79.42   | 71.41   | 81.96   | 232.79           |
|         | v) Poultry                                      | 1222.90 | 1258.79 | 1276.19 | 3757.87          |

**Table 3.13: District-wise Number of Villages selected for complete enumeration during the year 2009-10.**

| Sl. No. | Name of District       | Summer | Monsoon | Winter | Overall |
|---------|------------------------|--------|---------|--------|---------|
| 1.      | East Khasi Hills       | 42     | 46      | 43     | 131     |
| 2.      | Ri – Bhoi              | 34     | 37      | 35     | 106     |
| 3.      | West Khasi Hills       | 35     | 33      | 34     | 102     |
| 4.      | Jaintia Hills          | 33     | 33      | 32     | 98      |
| 5.      | East Garo Hills        | 34     | 36      | 29     | 99      |
| 6.      | West Garo Hills        | 68     | 74      | 69     | 211     |
| 7.      | South Garo Hills       | 28     | 21      | 21     | 70      |
|         | <b>State (Overall)</b> | 274    | 280     | 263    | 817     |

## Chapter – 4

### District-wise & Season-wise Estimates.

#### Milk Production.

**Table 4.1(a): Estimated Number of Productive Cows. (Indigenous)**

| Sl. No. | Name of Districts      | Cows In Milk  |               |               |               |
|---------|------------------------|---------------|---------------|---------------|---------------|
|         |                        | Summer        | Monsoon       | Winter        | Overall       |
| 1.      | East Khasi Hills       | 4109          | 4194          | 4152          | 4152          |
| 2.      | Ri – Bhoi              | 7361          | 7429          | 7293          | 7361          |
| 3.      | West Khasi Hills       | 15880         | 16272         | 16076         | 16076         |
| 4.      | Jaintia Hills          | 15288         | 15444         | 15132         | 15288         |
| 5.      | East Garo Hills        | 23444         | 24105         | 23774         | 23774         |
| 6.      | West Garo Hills        | 33222         | 33677         | 32767         | 33222         |
| 7.      | South Garo Hills       | 5009          | 5152          | 5081          | 5081          |
|         | <b>State (Overall)</b> | <b>104313</b> | <b>106273</b> | <b>104275</b> | <b>104954</b> |

**Table 4.1 (b): Estimated Number of Productive Cows. (Indigenous)**

| Sl. No. | Name of Districts      | Dry Cows      |               |               |               |
|---------|------------------------|---------------|---------------|---------------|---------------|
|         |                        | Summer        | Monsoon       | Winter        | Overall       |
| 1.      | East Khasi Hills       | 4897          | 4892          | 4934          | 4907          |
| 2.      | Ri – Bhoi              | 11376         | 11448         | 10745         | 11190         |
| 3.      | West Khasi Hills       | 22982         | 24857         | 22138         | 23326         |
| 4.      | Jaintia Hills          | 26488         | 27679         | 25296         | 26488         |
| 5.      | East Garo Hills        | 26198         | 25078         | 22191         | 24489         |
| 6.      | West Garo Hills        | 34727         | 33572         | 33781         | 34027         |
| 7.      | South Garo Hills       | 4887          | 4638          | 4496          | 4673          |
|         | <b>State (Overall)</b> | <b>131555</b> | <b>132164</b> | <b>123581</b> | <b>129100</b> |

**Table 4.1 (c): Estimated Number of Productive Cows. (Indigenous)**

| Sl. No. | Name of Districts      | Milch Cows    |               |               |               |
|---------|------------------------|---------------|---------------|---------------|---------------|
|         |                        | Summer        | Monsoon       | Winter        | Overall       |
| 1.      | East Khasi Hills       | 9006          | 9086          | 9086          | 9059          |
| 2.      | Ri – Bhoi              | 18737         | 18877         | 18038         | 18551         |
| 3.      | West Khasi Hills       | 38862         | 41129         | 38214         | 39402         |
| 4.      | Jaintia Hills          | 41776         | 43123         | 40428         | 41776         |
| 5.      | East Garo Hills        | 49642         | 49183         | 45965         | 48263         |
| 6.      | West Garo Hills        | 67949         | 67249         | 66548         | 67249         |
| 7.      | South Garo Hills       | 9896          | 9790          | 9577          | 9754          |
|         | <b>State (Overall)</b> | <b>235868</b> | <b>238437</b> | <b>227856</b> | <b>234054</b> |

**Table 4.2 (a): Estimated Number of Productive Cows.(Crossbred)**

| Sl. No. | Name of Districts      | Cows In Milk |              |              |              |
|---------|------------------------|--------------|--------------|--------------|--------------|
|         |                        | Summer       | Monsoon      | Winter       | Overall      |
| 1.      | East Khasi Hills       | 6026         | 6075         | 5978         | 6026         |
| 2.      | Ri – Bhoi              | 6017         | 6104         | 6060         | 6060         |
| 3.      | West Khasi Hills       | 325          | 331          | 328          | 328          |
| 4.      | Jaintia Hills          | 805          | 812          | 799          | 805          |
| 5.      | East Garo Hills        | 36           | 37           | 37           | 37           |
| 6.      | West Garo Hills        | 1206         | 1214         | 1199         | 1206         |
| 7.      | South Garo Hills       | 39           | 40           | 40           | 40           |
|         | <b>State (Overall)</b> | <b>14454</b> | <b>14613</b> | <b>14441</b> | <b>14502</b> |

**Table 4.2 (b): Estimated Number of Productive Cows (Crossbred)**

| Sl. No. | Name of Districts      | Dry Cows    |             |             |             |
|---------|------------------------|-------------|-------------|-------------|-------------|
|         |                        | Summer      | Monsoon     | Winter      | Overall     |
| 1.      | East Khasi Hills       | 834         | 918         | 948         | 900         |
| 2.      | Ri – Bhoi              | 1246        | 1267        | 1257        | 1257        |
| 3.      | West Khasi Hills       | 61          | 62          | 62          | 62          |
| 4.      | Jaintia Hills          | 108         | 108         | 106         | 108         |
| 5.      | East Garo Hills        | 10          | 9           | 8           | 9           |
| 6.      | West Garo Hills        | 921         | 927         | 915         | 921         |
| 7.      | South Garo Hills       | 20          | 20          | 20          | 20          |
|         | <b>State (Overall)</b> | <b>3200</b> | <b>3311</b> | <b>3316</b> | <b>3277</b> |

**Table 4.2 (c): Estimated Number of Productive Cows (Crossbred)**

| Sl. No. | Name of Districts      | Milch Cows   |              |              |              |
|---------|------------------------|--------------|--------------|--------------|--------------|
|         |                        | Summer       | Monsoon      | Winter       | Overall      |
| 1.      | East Khasi Hills       | 6860         | 6993         | 6926         | 6926         |
| 2.      | Ri – Bhoi              | 7263         | 7371         | 7317         | 7317         |
| 3.      | West Khasi Hills       | 386          | 393          | 390          | 390          |
| 4.      | Jaintia Hills          | 913          | 920          | 905          | 913          |
| 5.      | East Garo Hills        | 46           | 46           | 45           | 46           |
| 6.      | West Garo Hills        | 2127         | 2121         | 2114         | 2127         |
| 7.      | South Garo Hills       | 59           | 60           | 60           | 60           |
|         | <b>State (Overall)</b> | <b>17654</b> | <b>17924</b> | <b>17757</b> | <b>17779</b> |

**Table 4.3 (a): Estimated Number of Productive Buffaloes.**

| Sl. No. | Name of Districts      | In Milk     |             |             |             |
|---------|------------------------|-------------|-------------|-------------|-------------|
|         |                        | Summer      | Monsoon     | Winter      | Overall     |
| 1.      | East Khasi Hills       | -           | -           | -           | -           |
| 2.      | Ri – Bhoi              | 694         | 704         | 699         | 699         |
| 3.      | West Khasi Hills       | 395         | 398         | 391         | 395         |
| 4.      | Jaintia Hills          | 293         | 295         | 290         | 293         |
| 5.      | East Garo Hills        | 293         | 298         | 295         | 295         |
| 6.      | West Garo Hills        | 1273        | 1286        | 1260        | 1273        |
| 7.      | South Garo Hills       | 19          | 19          | 19          | 19          |
|         | <b>State (Overall)</b> | <b>2967</b> | <b>3000</b> | <b>2954</b> | <b>2974</b> |

**Table 4.3 (b): Estimated Number of Productive Buffaloes.**

| Sl. No. | Name of Districts      | Dry         |             |             |             |
|---------|------------------------|-------------|-------------|-------------|-------------|
|         |                        | Summer      | Monsoon     | Winter      | Overall     |
| 1.      | East Khasi Hills       | -           | -           | -           | -           |
| 2.      | Ri – Bhoi              | 624         | 633         | 629         | 629         |
| 3.      | West Khasi Hills       | 422         | 429         | 431         | 427         |
| 4.      | Jaintia Hills          | 209         | 215         | 216         | 213         |
| 5.      | East Garo Hills        | 187         | 189         | 188         | 188         |
| 6.      | West Garo Hills        | 1289        | 1323        | 1325        | 1312        |
| 7.      | South Garo Hills       | 30          | 3           | 3           | 3           |
|         | <b>State (Overall)</b> | <b>2734</b> | <b>2792</b> | <b>2792</b> | <b>2772</b> |

**Table 4.3 (c): Estimated Number of Productive Buffaloes.**

| Sl. No. | Name of Districts      | Milch       |             |             |             |
|---------|------------------------|-------------|-------------|-------------|-------------|
|         |                        | Summer      | Monsoon     | Winter      | Overall     |
| 1.      | East Khasi Hills       | -           | -           | -           | -           |
| 2.      | Ri – Bhoi              | 1318        | 1337        | 1328        | 1328        |
| 3.      | West Khasi Hills       | 817         | 827         | 822         | 822         |
| 4.      | Jaintia Hills          | 502         | 510         | 506         | 506         |
| 5.      | East Garo Hills        | 480         | 487         | 483         | 483         |
| 6.      | West Garo Hills        | 2562        | 2609        | 2585        | 2585        |
| 7.      | South Garo Hills       | 22          | 22          | 22          | 22          |
|         | <b>State (Overall)</b> | <b>5701</b> | <b>5792</b> | <b>5746</b> | <b>5746</b> |

**Table 4.4 (a): Estimated Milk Yield per day per animal (Kg.) Indigenous Cows.**

| Sl. No. | Name of Districts      | In Milk      |              |              |              |
|---------|------------------------|--------------|--------------|--------------|--------------|
|         |                        | Summer       | Monsoon      | Winter       | Overall      |
| 1.      | East Khasi Hills       | 0.835        | 0.850        | 0.825        | 0.837        |
| 2.      | Ri – Bhoi              | 1.090        | 1.130        | 1.030        | 1.084        |
| 3.      | West Khasi Hills       | 0.820        | 0.840        | 0.790        | 0.817        |
| 4.      | Jaintia Hills          | 0.720        | 0.770        | 0.700        | 0.731        |
| 5.      | East Garo Hills        | 0.650        | 0.690        | 0.630        | 0.657        |
| 6.      | West Garo Hills        | 0.720        | 0.750        | 0.710        | 0.727        |
| 7.      | South Garo Hills       | 0.630        | 0.670        | 0.620        | 0.640        |
|         | <b>State (Overall)</b> | <b>0.746</b> | <b>0.780</b> | <b>0.725</b> | <b>0.751</b> |

**Table 4.4 (b): Estimated Milk Yield per day per animal (Kg.) Indigenous Cows.**

| Sl. No. | Name of Districts      | Milch Cows   |              |              |              |
|---------|------------------------|--------------|--------------|--------------|--------------|
|         |                        | Summer       | Monsoon      | Winter       | Overall      |
| 1.      | East Khasi Hills       | 0.381        | 0.392        | 0.377        | 0.384        |
| 2.      | Ri – Bhoi              | 0.428        | 0.445        | 0.416        | 0.430        |
| 3.      | West Khasi Hills       | 0.335        | 0.332        | 0.332        | 0.333        |
| 4.      | Jaintia Hills          | 0.263        | 0.276        | 0.262        | 0.267        |
| 5.      | East Garo Hills        | 0.307        | 0.338        | 0.326        | 0.324        |
| 6.      | West Garo Hills        | 0.352        | 0.376        | 0.350        | 0.359        |
| 7.      | South Garo Hills       | 0.319        | 0.353        | 0.329        | 0.334        |
|         | <b>State (Overall)</b> | <b>0.330</b> | <b>0.348</b> | <b>0.332</b> | <b>0.337</b> |

**Table 4.5 (a): Estimated Milk Yield per day per animal (Kg.) Crossbred Cows.**

| Sl. No. | Name of Districts      | Cows In Milk |              |              |              |
|---------|------------------------|--------------|--------------|--------------|--------------|
|         |                        | Summer       | Monsoon      | Winter       | Overall      |
| 1.      | East Khasi Hills       | 9.100        | 9.280        | 8.780        | 9.058        |
| 2.      | Ri – Bhoi              | 9.070        | 9.290        | 8.790        | 9.053        |
| 3.      | West Khasi Hills       | 8.230        | 8.600        | 8.180        | 8.340        |
| 4.      | Jaintia Hills          | 8.900        | 9.100        | 8.820        | 8.946        |
| 5.      | East Garo Hills        | 8.750        | 8.850        | 8.100        | 8.491        |
| 6.      | West Garo Hills        | 8.420        | 8.500        | 7.880        | 8.273        |
| 7.      | South Garo Hills       | 7.390        | 7.820        | 7.300        | 7.444        |
|         | <b>State (Overall)</b> | <b>8.995</b> | <b>9.189</b> | <b>8.692</b> | <b>8.962</b> |

**Table 4.5 (b): Estimated Milk Yield per day per animal (Kg.) Crossbred Cows.**

| Sl. No. | Name of Districts      | Milch Cows   |              |              |              |
|---------|------------------------|--------------|--------------|--------------|--------------|
|         |                        | Summer       | Monsoon      | Winter       | Overall      |
| 1.      | East Khasi Hills       | 7.994        | 8.062        | 7.578        | 7.881        |
| 2.      | Ri – Bhoi              | 7.514        | 7.693        | 7.280        | 7.498        |
| 3.      | West Khasi Hills       | 6.929        | 7.243        | 6.880        | 7.014        |
| 4.      | Jaintia Hills          | 7.847        | 8.032        | 7.787        | 7.888        |
| 5.      | East Garo Hills        | 6.848        | 7.118        | 6.660        | 6.830        |
| 6.      | West Garo Hills        | 4.778        | 4.820        | 4.469        | 4.691        |
| 7.      | South Garo Hills       | 4.885        | 5.213        | 4.867        | 4.962        |
|         | <b>State (Overall)</b> | <b>7.364</b> | <b>7.491</b> | <b>7.069</b> | <b>7.310</b> |

**Table 4.6 (a): Estimated Milk Yield per day per animal (Kg.) Buffaloes.**

| Sl. No. | Name of Districts      | In Milk      |              |              |              |
|---------|------------------------|--------------|--------------|--------------|--------------|
|         |                        | Summer       | Monsoon      | Winter       | Overall      |
| 1.      | East Khasi Hills       | 0            | 0            | 0            | 0            |
| 2.      | Ri – Bhoi              | 1.890        | 1.920        | 1.790        | 1.867        |
| 3.      | West Khasi Hills       | 1.890        | 1.950        | 1.850        | 1.896        |
| 4.      | Jaintia Hills          | 1.830        | 1.850        | 1.800        | 1.825        |
| 5.      | East Garo Hills        | 1.720        | 1.770        | 1.680        | 1.726        |
| 6.      | West Garo Hills        | 1.850        | 1.910        | 1.870        | 1.877        |
| 7.      | South Garo Hills       | 1.590        | 1.620        | 1.530        | 1.580        |
|         | <b>State (Overall)</b> | <b>1.848</b> | <b>1.896</b> | <b>1.820</b> | <b>1.855</b> |



**Table 4.6 (b): Estimated Milk Yield per day per animal (Kg.) Buffaloes.**

| Sl. No. | Name of Districts      | Milch        |              |              |              |
|---------|------------------------|--------------|--------------|--------------|--------------|
|         |                        | Summer       | Monsoon      | Winter       | Overall      |
| 1.      | East Khasi Hills       | 0            | 0            | 0            | 0            |
| 2.      | Ri – Bhoi              | 0.995        | 1.011        | 0.942        | 0.983        |
| 3.      | West Khasi Hills       | 0.914        | 0.938        | 0.880        | 0.911        |
| 4.      | Jaintia Hills          | 1.068        | 1.070        | 1.032        | 1.057        |
| 5.      | East Garo Hills        | 1.050        | 1.083        | 1.026        | 1.054        |
| 6.      | West Garo Hills        | 0.919        | 0.941        | 0.911        | 0.924        |
| 7.      | South Garo Hills       | 1.373        | 1.399        | 1.321        | 1.365        |
|         | <b>State (Overall)</b> | <b>0.962</b> | <b>0.982</b> | <b>0.936</b> | <b>0.960</b> |

**Table 4.7 : Milk Production- Indigenous Cows. (Tonnes)**

| Sl. No. | Name of Districts      | Summer      | Monsoon      | Winter      | Overall      |
|---------|------------------------|-------------|--------------|-------------|--------------|
| 1.      | East Khasi Hills       | 419         | 438          | 411         | 1268         |
| 2.      | Ri – Bhoi              | 979         | 1033         | 901         | 2913         |
| 3.      | West Khasi Hills       | 1589        | 1681         | 1524        | 4794         |
| 4.      | Jaintia Hills          | 1343        | 1463         | 1271        | 4077         |
| 5.      | East Garo Hills        | 1859        | 2046         | 1797        | 5702         |
| 6.      | West Garo Hills        | 2918        | 3107         | 2792        | 8817         |
| 7.      | South Garo Hills       | 385         | 424          | 378         | 1187         |
|         | <b>State (Overall)</b> | <b>9492</b> | <b>10192</b> | <b>9074</b> | <b>28758</b> |

**Table 4.8: Milk Production- Crossbred Cows (Tonnes).**

| Sl. No. | Name of Districts      | Summer       | Monsoon      | Winter       | Overall      |
|---------|------------------------|--------------|--------------|--------------|--------------|
| 1.      | East Khasi Hills       | 6690         | 6934         | 6298         | 19922        |
| 2.      | Ri – Bhoi              | 6658         | 6975         | 6392         | 20025        |
| 3.      | West Khasi Hills       | 326          | 350          | 322          | 998          |
| 4.      | Jaintia Hills          | 874          | 909          | 846          | 2629         |
| 5.      | East Garo Hills        | 39           | 40           | 36           | 115          |
| 6.      | West Garo Hills        | 1239         | 1269         | 1134         | 3642         |
| 7.      | South Garo Hills       | 35           | 39           | 35           | 109          |
|         | <b>State (Overall)</b> | <b>15861</b> | <b>16516</b> | <b>15063</b> | <b>47440</b> |

**Table 4.9: Milk Production- Buffaloes (Tonnes).**

| Sl. No. | Name of Districts      | Summer     | Monsoon    | Winter     | Overall     |
|---------|------------------------|------------|------------|------------|-------------|
| 1.      | East Khasi Hills       | 0          | 0          | 0          | 0           |
| 2.      | Ri – Bhoi              | 160        | 166        | 150        | 476         |
| 3.      | West Khasi Hills       | 91         | 96         | 87         | 274         |
| 4.      | Jaintia Hills          | 65         | 67         | 63         | 195         |
|         | East Garo Hills        | 62         | 65         | 59         | 186         |
| 6.      | West Garo Hills        | 287        | 302        | 283        | 872         |
| 7.      | South Garo Hills       | 4          | 4          | 3          | 11          |
|         | <b>State (Overall)</b> | <b>669</b> | <b>700</b> | <b>645</b> | <b>2014</b> |

**Table 4.10: Total Milk Production in the State. ('000' Tonnes).**

| Sl. No. | Name of Districts      | Cows Milk     |               |               | Buffalo      | Total Milk Production | Previous Years Production 2008-2009 | % Increase or Decrease over 2008-09 |
|---------|------------------------|---------------|---------------|---------------|--------------|-----------------------|-------------------------------------|-------------------------------------|
|         |                        | Indigenous    | Crossbred     | Total         |              |                       |                                     |                                     |
| 1.      | East Khasi Hills       | 1.268         | 19.922        | 21.190        | -            | 21.19                 | 20.99                               | (+) 0.95%                           |
| 2.      | Ri – Bhoi              | 2.913         | 20.025        | 22.938        | 0.476        | 23.414                | 23.26                               | (+) 0.64%                           |
| 3.      | West Khasi Hills       | 4.794         | 0.998         | 5.792         | 0.274        | 6.068                 | 5.98                                | (+) 1.51%                           |
| 4.      | Jaintia Hills          | 4.077         | 2.629         | 6.706         | 0.195        | 6.901                 | 6.90                                | (+) 0.01%                           |
| 5.      | East Garo Hills        | 5.702         | 0.115         | 5.817         | 0.186        | 6.003                 | 5.91                                | (+) 1.52%                           |
| 6.      | West Garo Hills        | 8.817         | 3.642         | 12.459        | 0.872        | 13.331                | 13.18                               | (+) 1.14%                           |
| 7.      | South Garo Hills       | 1.187         | 0.109         | 1.296         | 0.011        | 1.307                 | 1.28                                | (+) 2.34%                           |
|         | <b>State (Overall)</b> | <b>28.758</b> | <b>47.440</b> | <b>76.198</b> | <b>2.014</b> | <b>78.212</b>         | <b>77.50</b>                        | <b>(+) 0.92%</b>                    |

**Table 4.11: Average Milk Yield per Animal / Day in Milk and Milch Animals in Meghalaya from 1983-84. In Kgs.**

| Year      | In Milk   |            | Buffalo | Milch     |            | Buffalo |
|-----------|-----------|------------|---------|-----------|------------|---------|
|           | Cows      |            |         | Cows      |            |         |
|           | Crossbred | Indigenous |         | Crossbred | Indigenous |         |
| 1983-84   | 8.37      | 0.63       | 2.05    | 5.08      | 0.36       | 1.04    |
| 1984-85   | 8.38      | 0.64       | 2.07    | 4.56      | 0.34       | 1.07    |
| 1985-86   | 8.38      | 0.64       | 2.07    | 4.56      | 0.34       | 1.07    |
| 1986-87   | 8.56      | 0.64       | 2.07    | 5.78      | 0.36       | 1.12    |
| 1987-88   | 7.28      | 0.57       | 2.07    | 4.99      | 0.28       | 1.12    |
| 1988-89   | 8.46      | 0.68       | 2.07    | 5.99      | 0.37       | 1.12    |
| 1989-90   | 8.69      | 0.69       | 2.07    | 6.21      | 0.38       | 1.12    |
| 1990-91   | 8.38      | 0.70       | 2.14    | 5.92      | 0.38       | 1.05    |
| 1991-92   | 8.41      | 0.72       | 1.96    | 6.29      | 0.38       | 1.01    |
| 1992-93   | 8.56      | 0.72       | 1.78    | 6.55      | 0.37       | 0.93    |
| 1993-94   | 8.36      | 0.73       | 1.91    | 6.51      | 0.41       | 0.97    |
| 1994-95   | 8.83      | 0.75       | 1.66    | 6.52      | 0.40       | 0.85    |
| 1995-96   | 8.83      | 0.75       | 1.66    | 6.70      | 0.38       | 0.79    |
| 1996-97   | 8.74      | 0.71       | 1.70    | 6.50      | 0.34       | 0.80    |
| 1997-98   | 8.80      | 0.73       | 1.80    | 6.65      | 0.34       | 0.85    |
| 1998-99   | 8.81      | 0.75       | 1.80    | 6.85      | 0.35       | 0.83    |
| 1999-2000 | 8.89      | 0.75       | 1.69    | 7.31      | 0.36       | 0.85    |
| 2000-01   | 8.94      | 0.72       | 1.76    | 7.02      | 0.33       | 0.88    |
| 2001-02   | 8.90      | 0.75       | 1.75    | 6.88      | 0.33       | 1.17    |
| 2002-03   | 8.93      | 0.76       | 1.76    | 7.21      | 0.33       | 0.90    |
| 2003-04   | 8.96      | 0.74       | 1.76    | 7.09      | 0.32       | 0.92    |
| 2004-05   | 8.99      | 0.76       | 1.79    | 7.11      | 0.33       | 0.93    |
| 2005-06   | 8.93      | 0.74       | 1.83    | 7.28      | 0.32       | 0.96    |
| 2006-07   | 8.93      | 0.75       | 1.85    | 7.30      | 0.33       | 0.95    |
| 2007-08   | 8.97      | 0.77       | 1.84    | 7.36      | 0.33       | 0.95    |
| 2008-09   | 8.95      | 0.75       | 1.86    | 7.31      | 0.34       | 0.95    |
| 2009-10   | 8.962     | 0.751      | 1.855   | 7.310     | 0.337      | 0.960   |

**Table 4.12: Estimated Number in Milk and Milch Animals in Meghalaya from 1983-84.**  
**'000' Numbers**

| Year      | Animals In Milk |            | Buffaloes | Milch Animals |            | Buffaloes |
|-----------|-----------------|------------|-----------|---------------|------------|-----------|
|           | Cows            |            |           | Cows          |            |           |
|           | Crossbred       | Indigenous |           | Crossbred     | Indigenous |           |
| 1983-84   | 5.1             | 90.8       | 5.2       | 8.4           | 158.2      | 10.1      |
| 1984-85   | 5.6             | 97.2       | 5.6       | 9.1           | 168.6      | 10.6      |
| 1985-86   | 6.2             | 98.5       | 5.3       | 9.2           | 174.6      | 10.9      |
| 1986-87   | 6.1             | 100.0      | 6.0       | 9.0           | 174.7      | 11.1      |
| 1987-88   | 6.0             | 100.1      | 5.4       | 8.8           | 175.8      | 10.9      |
| 1988-89   | 6.1             | 96.9       | 4.7       | 8.7           | 178.9      | 9.7       |
| 1989-90   | 6.3             | 95.5       | 4.0       | 8.8           | 175.0      | 8.3       |
| 1990-91   | 6.9             | 94.2       | 4.1       | 9.8           | 175.6      | 8.3       |
| 1991-92   | 7.5             | 92.9       | 4.1       | 10.0          | 172.1      | 7.8       |
| 1992-93   | 7.7             | 93.9       | 4.4       | 10.1          | 180.6      | 8.4       |
| 1993-94   | 7.9             | 96.5       | 4.3       | 10.2          | 173.7      | 8.4       |
| 1994-95   | 7.8             | 95.9       | 4.4       | 10.4          | 178.7      | 8.7       |
| 1995-96   | 8.6             | 91.5       | 4.6       | 11.3          | 178.6      | 9.6       |
| 1996-97   | 10.0            | 85.4       | 5.6       | 13.4          | 184.6      | 11.8      |
| 1997-98   | 10.1            | 86.1       | 5.6       | 13.4          | 185.6      | 11.8      |
| 1998-99   | 10.4            | 86.5       | 5.4       | 13.4          | 182.9      | 11.8      |
| 1999-2000 | 10.7            | 90.6       | 3.4       | 13.0          | 189.4      | 6.8       |
| 2000-01   | 11.2            | 96.6       | 3.6       | 14.2          | 211.6      | 7.2       |
| 2001-02   | 11.9            | 92.7       | 2.7       | 15.4          | 209.7      | 4.0       |
| 2002-03   | 12.3            | 93.2       | 2.7       | 15.2          | 212.0      | 5.3       |
| 2003-04   | 12.6            | 93.2       | 2.7       | 16.0          | 210.1      | 5.2       |
| 2004-05   | 13.2            | 95.1       | 2.8       | 16.7          | 220.8      | 5.3       |
| 2005-06   | 13.8            | 98.8       | 2.8       | 16.9          | 226.8      | 5.3       |
| 2006-07   | 13.9            | 99.9       | 2.8       | 17.0          | 229.0      | 5.5       |
| 2007-08   | 14.1            | 101.2      | 2.9       | 17.2          | 231.8      | 5.6       |
| 2008-09   | 14.40           | 103.9      | 2.9       | 17.6          | 232.1      | 5.7       |
| 2009-10   | 14.50           | 104.95     | 2.97      | 17.78         | 234.05     | 5.75      |

**Table 4.13: Estimated Milk Production in Meghalaya from 1983-84.**

| Year      | Production in '000' tones. |            |           |       | Percentage of increase (+) or decrease (-) over previous year |
|-----------|----------------------------|------------|-----------|-------|---|
|           | Cows                       |            | Buffaloes | Total |   |
|           | Crossbred                  | Indigenous |           |       |   |
| 1983-84   | 15.6                       | 20.7       | 3.9       | 40.2  |   |
| 1984-85   | 17.0                       | 22.5       | 4.1       | 43.6  | (+) 8.46  |
| 1985-86   | 19.0                       | 23.2       | 4.0       | 46.2  | (+) 5.96  |
| 1986-87   | 19.1                       | 23.5       | 4.6       | 47.2  | (+) 2.16  |
| 1987-88   | 16.0                       | 20.8       | 4.1       | 40.9  | (-) 13.33   |
| 1988-89   | 18.9                       | 24.2       | 3.6       | 46.7  | (+) 14.18   |
| 1989-90   | 20.1                       | 24.3       | 3.0       | 47.4  | (+) 1.50  |
| 1990-91   | 21.2                       | 24.1       | 3.1       | 48.4  | (+) 2.11  |
| 1991-92   | 23.1                       | 24.5       | 2.9       | 50.4  | (+) 4.13  |
| 1992-93   | 24.1                       | 24.7       | 2.8       | 51.6  | (+) 2.38  |
| 1993-94   | 24.2                       | 25.7       | 3.0       | 52.9  | (+) 2.52  |
| 1994-95   | 25.1                       | 26.2       | 2.7       | 54.0  | (+) 2.08  |
| 1995-96   | 27.6                       | 25.0       | 2.8       | 55.4  | (+) 2.59  |
| 1996-97   | 31.8                       | 22.1       | 3.5       | 57.4  | (+) 3.61  |
| 1997-98   | 32.4                       | 23.0       | 3.7       | 59.1  | (+) 2.96  |
| 1998-99   | 33.5                       | 23.7       | 3.5       | 60.7  | (+) 2.71  |
| 1999-2000 | 34.7                       | 24.8       | 2.1       | 61.6  | (+) 1.48  |
| 2000-01   | 36.5                       | 25.3       | 2.3       | 64.1  | (+) 4.06  |
| 2001-02   | 38.8                       | 25.3       | 1.7       | 65.8  | (+) 2.65  |
| 2002-03   | 40.1                       | 25.8       | 1.7       | 67.7  | (+) 2.83  |
| 2003-04   | 41.42                      | 25.09      | 1.74      | 68.25 | (+) 0.84 %  |
| 2004-05   | 43.23                      | 26.27      | 1.79      | 71.29 | (+) 4.45 %  |
| 2005-06   | 44.88                      | 26.69      | 1.86      | 73.43 | (+) 3.00 %  |
| 2006-07   | 45.38                      | 27.33      | 1.91      | 74.62 | (+) 1.62 %  |
| 2007-08   | 46.30                      | 28.26      | 1.94      | 76.50 | (+) 2.52%   |
| 2008-09   | 47.05                      | 28.46      | 1.99      | 77.50 | (+) 1.31%   |
| 2009-10   | 47.44                      | 28.76      | 2.014     | 78.21 | (+) 0.92%   |

## Chapter – 5

### District-wise & Season-wise Estimates.

#### Egg Production

**Table 5.1 (a): District-wise and Season-Wise Estimated No. of Poultry (Fowls), 2009-10  
Layers – ‘00 Numbers.**

| Particulars            | East Khasi Hills | Ri Bhoi    | West Khasi Hills | Jaintia Hills | East Garo Hills | West Garo Hills | South Garo Hills | State       |
|------------------------|------------------|------------|------------------|---------------|-----------------|-----------------|------------------|-------------|
| <b><u>Desi</u></b>     |                  |            |                  |               |                 |                 |                  |             |
| Summer                 | 1050             | 813        | 1161             | 1035          | 1071            | 2378            | 560              | 8068        |
| Monsoon                | 1071             | 821        | 1180             | 1045          | 1090            | 2397            | 570              | 8174        |
| Winter                 | 1061             | 805        | 1162             | 1025          | 1080            | 2417            | 566              | 8115        |
| <b>Overall</b>         | <b>1061</b>      | <b>813</b> | <b>1168</b>      | <b>1035</b>   | <b>1080</b>     | <b>2397</b>     | <b>565</b>       | <b>8119</b> |
| <b><u>Improved</u></b> |                  |            |                  |               |                 |                 |                  |             |
| Summer                 | 200              | 145        | 28               | 193           | 34              | 50              | 2                | 652         |
| Monsoon                | 207              | 148        | 28               | 196           | 34              | 50              | 2                | 665         |
| Winter                 | 205              | 146        | 28               | 194           | 34              | 49              | 2                | 658         |
| <b>Overall</b>         | <b>204</b>       | <b>146</b> | <b>28</b>        | <b>194</b>    | <b>34</b>       | <b>50</b>       | <b>2</b>         | <b>658</b>  |
| <b><u>Total</u></b>    |                  |            |                  |               |                 |                 |                  |             |
| Summer                 | 1250             | 958        | 1189             | 1228          | 1105            | 2428            | 562              | 8720        |
| Monsoon                | 1278             | 968        | 1208             | 1241          | 1124            | 2447            | 572              | 8838        |
| Winter                 | 1266             | 951        | 1190             | 1219          | 1114            | 2466            | 567              | 8773        |
| <b>Overall</b>         | <b>1265</b>      | <b>959</b> | <b>1196</b>      | <b>1229</b>   | <b>1114</b>     | <b>2447</b>     | <b>567</b>       | <b>8777</b> |

**Table 5.1(b): District-wise and Season-wise Estimated No. of Poultry (Ducks) 2009-10.  
Layers – ‘00 Numbers.**

| Particulars            | East Khasi Hills | Ri Bhoi   | West Khasi Hills | Jaintia Hills | East Garo Hills | West Garo Hills | South Garo Hills | State      |
|------------------------|------------------|-----------|------------------|---------------|-----------------|-----------------|------------------|------------|
| <b><u>Desi</u></b>     |                  |           |                  |               |                 |                 |                  |            |
| Summer                 | 20               | 10        | 10               | 19            | 7               | 169             | 16               | 251        |
| Monsoon                | 21               | 10        | 10               | 19            | 7               | 170             | 16               | 253        |
| Winter                 | 20               | 10        | 10               | 19            | 7               | 167             | 16               | 249        |
| <b>Overall</b>         | <b>20</b>        | <b>10</b> | <b>10</b>        | <b>19</b>     | <b>7</b>        | <b>169</b>      | <b>16</b>        | <b>251</b> |
| <b><u>Improved</u></b> |                  |           |                  |               |                 |                 |                  |            |
| Summer                 | 1                | 6         | -                | 9             | -               | 1               | -                | 17         |
| Monsoon                | 1                | 6         | -                | 9             | -               | 1               | -                | 17         |
| Winter                 | 1                | 6         | -                | 8             | -               | 1               | -                | 16         |
| <b>Overall</b>         | <b>1</b>         | <b>6</b>  | <b>-</b>         | <b>9</b>      | <b>-</b>        | <b>1</b>        | <b>-</b>         | <b>17</b>  |
| <b><u>Total</u></b>    |                  |           |                  |               |                 |                 |                  |            |
| Summer                 | 21               | 16        | 10               | 28            | 7               | 170             | 16               | 268        |
| Monsoon                | 22               | 16        | 10               | 28            | 7               | 171             | 16               | 270        |
| Winter                 | 21               | 16        | 10               | 27            | 7               | 168             | 16               | 265        |
| <b>Overall</b>         | <b>21</b>        | <b>16</b> | <b>10</b>        | <b>28</b>     | <b>7</b>        | <b>170</b>      | <b>16</b>        | <b>268</b> |

**Table 5.2 (a): District-wise and Season-Wise Estimated Yield per Layer (Fowls) 2009-10**

| Particulars            | East Khasi Hills | Ri Bhoi    | West Khasi Hills | Jaintia Hills | East Garo Hills | West Garo Hills | South Garo Hills | State      |
|------------------------|------------------|------------|------------------|---------------|-----------------|-----------------|------------------|------------|
| <b><u>Desi</u></b>     |                  |            |                  |               |                 |                 |                  |            |
| Summer                 | 33               | 34         | 34               | 35            | 33              | 34              | 32               | 34         |
| Monsoon                | 34               | 36         | 34               | 36            | 34              | 36              | 34               | 35         |
| Winter                 | 33               | 34         | 32               | 33            | 33              | 34              | 33               | 33         |
| <b>Overall</b>         | <b>100</b>       | <b>104</b> | <b>100</b>       | <b>104</b>    | <b>100</b>      | <b>104</b>      | <b>99</b>        | <b>102</b> |
| <b><u>Improved</u></b> |                  |            |                  |               |                 |                 |                  |            |
| Summer                 | 74               | 74         | 66               | 71            | 63              | 67              | 61               | 72         |
| Monsoon                | 75               | 76         | 68               | 73            | 64              | 68              | 61               | 73         |
| Winter                 | 73               | 74         | 67               | 70            | 62              | 66              | 60               | 71         |
| <b>Overall</b>         | <b>222</b>       | <b>224</b> | <b>201</b>       | <b>214</b>    | <b>189</b>      | <b>201</b>      | <b>182</b>       | <b>216</b> |
| <b><u>Total</u></b>    |                  |            |                  |               |                 |                 |                  |            |
| Summer                 | 40               | 40         | 35               | 41            | 34              | 35              | 32               | 37         |
| Monsoon                | 41               | 42         | 35               | 42            | 35              | 37              | 34               | 38         |
| Winter                 | 39               | 40         | 33               | 39            | 34              | 35              | 33               | 36         |
| <b>Overall</b>         | <b>120</b>       | <b>122</b> | <b>102</b>       | <b>121</b>    | <b>103</b>      | <b>106</b>      | <b>99</b>        | <b>111</b> |



**Table 5.2(b): District-wise and Season-wise Estimated Yield per Layer (Ducks) 2009-10.**

| Particulars            | East Khasi Hills | Ri Bhoi    | West Khasi Hills | Jaintia Hills | East Garo Hills | West Garo Hills | South Garo Hills | State      |
|------------------------|------------------|------------|------------------|---------------|-----------------|-----------------|------------------|------------|
| <b><u>Desi</u></b>     |                  |            |                  |               |                 |                 |                  |            |
| Summer                 | 34               | 35         | 34               | 35            | 33              | 34              | 32               | 34         |
| Monsoon                | 34               | 34         | 33               | 34            | 34              | 36              | 34               | 35         |
| Winter                 | 34               | 34         | 32               | 34            | 33              | 33              | 32               | 33         |
| <b>Overall</b>         | <b>102</b>       | <b>103</b> | <b>99</b>        | <b>103</b>    | <b>100</b>      | <b>103</b>      | <b>98</b>        | <b>102</b> |
| <b><u>Improved</u></b> |                  |            |                  |               |                 |                 |                  |            |
| Summer                 | 74               | 74         | -                | 71            | -               | 67              | -                | 72         |
| Monsoon                | 75               | 76         | -                | 73            | -               | 68              | -                | 74         |
| Winter                 | 73               | 74         | -                | 70            | -               | 66              | -                | 71         |
| <b>Overall</b>         | <b>221</b>       | <b>224</b> | <b>-</b>         | <b>214</b>    | <b>-</b>        | <b>201</b>      | <b>-</b>         | <b>217</b> |
| <b><u>Total</u></b>    |                  |            |                  |               |                 |                 |                  |            |
| Summer                 | 36               | 49         | 34               | 46            | 33              | 34              | 32               | 36         |
| Monsoon                | 36               | 50         | 33               | 46            | 34              | 36              | 34               | 38         |
| Winter                 | 36               | 49         | 32               | 45            | 33              | 33              | 32               | 35         |
| <b>Overall</b>         | <b>108</b>       | <b>148</b> | <b>99</b>        | <b>137</b>    | <b>100</b>      | <b>103</b>      | <b>98</b>        | <b>109</b> |

**Table 5.3(a): District-wise and Season-Wise Estimated Egg Production (Fowls) 2009-10. (In Lakhs).**

| Particulars            | East Khasi Hills | Ri Bhoi       | West Khasi Hills | Jaintia Hills | East Garo Hills | West Garo Hills | South Garo Hills | State         |
|------------------------|------------------|---------------|------------------|---------------|-----------------|-----------------|------------------|---------------|
| <b><u>Desi</u></b>     |                  |               |                  |               |                 |                 |                  |               |
| Summer                 | 34.66            | 27.64         | 39.49            | 36.23         | 35.33           | 80.84           | 17.93            | 272.12        |
| Monsoon                | 36.42            | 29.55         | 40.11            | 37.61         | 37.05           | 86.30           | 19.39            | 286.43        |
| Winter                 | 35.00            | 27.38         | 37.17            | 33.83         | 35.65           | 82.18           | 18.66            | 269.87        |
| <b>Overall</b>         | <b>106.08</b>    | <b>84.57</b>  | <b>116.77</b>    | <b>107.67</b> | <b>108.03</b>   | <b>249.32</b>   | <b>55.98</b>     | <b>828.42</b> |
| <b><u>Improved</u></b> |                  |               |                  |               |                 |                 |                  |               |
| Summer                 | 14.84            | 10.69         | 1.83             | 13.68         | 2.13            | 3.34            | 0.11             | 46.62         |
| Monsoon                | 15.51            | 11.20         | 1.92             | 14.33         | 2.18            | 3.46            | 0.12             | 48.68         |
| Winter                 | 14.94            | 10.81         | 1.87             | 13.61         | 2.10            | 3.46            | 0.11             | 46.70         |
| <b>Overall</b>         | <b>45.29</b>     | <b>32.70</b>  | <b>5.62</b>      | <b>41.62</b>  | <b>6.41</b>     | <b>10.02</b>    | <b>0.34</b>      | <b>142.00</b> |
| <b><u>Total</u></b>    |                  |               |                  |               |                 |                 |                  |               |
| Summer                 | 49.50            | 38.33         | 41.32            | 49.91         | 37.46           | 84.18           | 18.04            | 318.74        |
| Monsoon                | 51.93            | 40.75         | 42.03            | 51.94         | 39.23           | 89.72           | 19.51            | 335.11        |
| Winter                 | 49.94            | 38.19         | 39.04            | 47.44         | 37.75           | 85.44           | 18.77            | 316.57        |
| <b>Overall</b>         | <b>151.37</b>    | <b>117.27</b> | <b>122.39</b>    | <b>149.29</b> | <b>114.44</b>   | <b>259.34</b>   | <b>56.32</b>     | <b>970.42</b> |

**Table 5.3(b): District-wise and Season-wise Estimated Egg production (Ducks) 2009-10.  
(In Lakhs).**

| Particulars            | East Khasi Hills | Ri Bhoi     | West Khasi Hills | Jaintia Hills | East Garo Hills | West Garo Hills | South Garo Hills | State        |
|------------------------|------------------|-------------|------------------|---------------|-----------------|-----------------|------------------|--------------|
| <b><u>Desi</u></b>     |                  |             |                  |               |                 |                 |                  |              |
| Summer                 | 0.69             | 0.34        | 0.35             | 0.68          | 0.22            | 5.74            | 0.51             | 8.53         |
| Monsoon                | 0.70             | 0.33        | 0.34             | 0.65          | 0.24            | 6.13            | 0.55             | 8.94         |
| Winter                 | 0.70             | 0.32        | 0.32             | 0.64          | 0.22            | 5.52            | 0.51             | 8.23         |
| <b>Overall</b>         | <b>2.09</b>      | <b>0.99</b> | <b>1.01</b>      | <b>1.97</b>   | <b>0.68</b>     | <b>17.39</b>    | <b>1.57</b>      | <b>25.70</b> |
| <b><u>Improved</u></b> |                  |             |                  |               |                 |                 |                  |              |
| Summer                 | 0.09             | 0.42        | -                | 0.60          | -               | 0.08            | -                | 1.19         |
| Monsoon                | 0.09             | 0.43        | -                | 0.63          | -               | 0.08            | -                | 1.23         |
| Winter                 | 0.08             | 0.41        | -                | 0.59          | -               | 0.07            | -                | 1.15         |
| <b>Overall</b>         | <b>0.26</b>      | <b>1.26</b> | <b>-</b>         | <b>1.82</b>   | <b>-</b>        | <b>0.23</b>     | <b>-</b>         | <b>3.57</b>  |
| <b><u>Total</u></b>    |                  |             |                  |               |                 |                 |                  |              |
| Summer                 | 0.78             | 0.76        | 0.35             | 1.28          | 0.22            | 5.82            | 0.51             | 9.72         |
| Monsoon                | 0.79             | 0.76        | 0.34             | 1.28          | 0.24            | 6.21            | 0.55             | 10.17        |
| Winter                 | 0.78             | 0.73        | 0.32             | 1.23          | 0.22            | 5.59            | 0.51             | 9.39         |
| <b>Overall</b>         | <b>2.35</b>      | <b>2.25</b> | <b>1.01</b>      | <b>3.79</b>   | <b>0.68</b>     | <b>17.62</b>    | <b>1.57</b>      | <b>29.27</b> |

**Table 5.4 (a) : Estimated Total Egg production. (Lakhs Numbers) 2009-10.**

| Sl No. | Name of Districts      | Summer        |             | Monsoon       |              | Winter        |             |
|--------|------------------------|---------------|-------------|---------------|--------------|---------------|-------------|
|        |                        | Fowls         | Duck        | Fowls         | Duck         | Fowls         | Duck        |
| 1.     | East Khasi Hills       | 49.50         | 0.78        | 51.93         | 0.79         | 49.94         | 0.78        |
| 2.     | Ri – Bhoi              | 38.33         | 0.76        | 40.75         | 0.76         | 38.19         | 0.73        |
| 3.     | West Khasi Hills       | 41.32         | 0.35        | 42.03         | 0.34         | 39.04         | 0.32        |
| 4.     | Jaintia Hills          | 49.91         | 1.28        | 51.94         | 1.28         | 47.44         | 1.23        |
| 5.     | East Garo Hills        | 37.46         | 0.22        | 39.23         | 0.24         | 37.75         | 0.22        |
| 6.     | West Garo Hills        | 84.18         | 5.82        | 89.72         | 6.21         | 85.44         | 5.59        |
| 7.     | South Garo Hills       | 18.04         | 0.51        | 19.51         | 0.55         | 18.77         | 0.51        |
|        | <b>State (Overall)</b> | <b>318.74</b> | <b>9.72</b> | <b>335.11</b> | <b>10.17</b> | <b>316.57</b> | <b>9.39</b> |

**Table 5.4 (b) : Estimated Total Egg production. (Lakhs Numbers) 2009-10.**

| Sl No. | Name of Districts      | Total egg     |              | Annual Production Current Year 2009-10 | Annual Production Previous Year 2008-09 | Percentage Increase or Decrease over the Previous year |
|--------|------------------------|---------------|--------------|--|---|--|
|        |                        | Fowls         | Duck         |  |   |  |
| 1.     | East Khasi Hills       | 151.37        | 2.35         | 153.72                                 | 157.18                                  | (-) 2.20%  |
| 2.     | Ri – Bhoi              | 117.27        | 2.25         | 119.52                                 | 120.00                                  | (-) 0.40%  |
| 3.     | West Khasi Hills       | 122.39        | 1.01         | 123.40                                 | 122.00                                  | (+) 1.15%  |
| 4.     | Jaintia Hills          | 149.29        | 3.79         | 153.08                                 | 153.71                                  | (-) 0.41%  |
| 5.     | East Garo Hills        | 114.44        | 0.68         | 115.12                                 | 114.14                                  | (+) 0.86%  |
| 6.     | West Garo Hills        | 259.34        | 17.62        | 276.96                                 | 272.71                                  | (+) 1.56%  |
| 7.     | South Garo Hills       | 56.32         | 1.57         | 57.89                                  | 57.79                                   | (+) 0.17%  |
|        | <b>State (Overall)</b> | <b>970.42</b> | <b>29.27</b> | <b>999.69</b>                          | <b>997.73</b>                           | <b>(+) 0.20%</b>                                       |

**Table 5.5: Estimated Numbers of Layers in Meghalaya from 1983-84.  
Lakhs Nos.**

| Year      | Fowls |          |       | Duck |          |       | Both Fowls & Ducks |          |       |
|-----------|-------|----------|-------|------|----------|-------|--------------------|----------|-------|
|           | Desi  | Improved | Total | Desi | Improved | Total | Desi               | Improved | Total |
| 1983-84   | 4.72  | 0.19     | 4.91  | -    | -        | -     | 4.72               | 0.19     | 4.91  |
| 1984-85   | 5.21  | 0.19     | 5.40  | -    | -        | -     | 5.21               | 0.19     | 5.40  |
| 1985-86   | 5.35  | 0.20     | 5.55  | -    | -        | -     | 5.35               | 0.20     | 5.55  |
| 1986-87   | 5.08  | 0.20     | 5.28  | -    | -        | -     | 5.08               | 0.20     | 5.28  |
| 1987-88   | 5.21  | 0.20     | 5.41  | -    | -        | -     | 5.21               | 0.20     | 5.41  |
| 1988-89   | 5.38  | 0.22     | 5.60  | -    | -        | -     | 5.38               | 0.22     | 5.60  |
| 1989-90   | 5.17  | 0.34     | 5.72  | -    | -        | -     | 5.17               | 0.34     | 5.51  |
| 1990-91   | 5.38  | 0.34     | 5.72  | -    | -        | -     | 5.38               | 0.34     | 5.72  |
| 1991-92   | 5.37  | 0.31     | 5.68  | 0.24 | 0.03     | 0.27  | 5.61               | 0.34     | 5.95  |
| 1992-93   | 5.59  | 0.35     | 5.94  | 0.24 | 0.03     | 0.27  | 5.83               | 0.38     | 6.21  |
| 1993-94   | 5.81  | 0.40     | 6.21  | 0.29 | 0.03     | 0.32  | 6.10               | 0.43     | 6.53  |
| 1994-95   | 5.93  | 0.40     | 6.33  | 0.29 | 0.03     | 0.32  | 6.22               | 0.43     | 6.65  |
| 1995-96   | 6.02  | 0.43     | 6.45  | 0.36 | 0.03     | 0.29  | 6.38               | 0.45     | 6.83  |
| 1996-97   | 6.33  | 0.47     | 6.80  | 0.37 | 0.03     | 0.40  | 6.70               | 0.50     | 7.20  |
| 1997-98   | 6.53  | 0.48     | 7.01  | 0.35 | 0.03     | 0.38  | 6.88               | 0.51     | 7.39  |
| 1998-99   | 6.61  | 0.46     | 7.07  | 0.34 | 0.03     | 0.37  | 6.95               | 0.49     | 7.44  |
| 1999-2000 | 6.86  | 0.51     | 7.37  | 0.35 | 0.03     | 0.38  | 7.21               | 0.54     | 7.75  |
| 2000-01   | 7.15  | 0.57     | 7.72  | 0.22 | 0.01     | 0.23  | 7.31               | 0.58     | 7.89  |
| 2001-02   | 7.33  | 0.58     | 7.91  | 0.23 | 0.01     | 0.24  | 7.56               | 0.59     | 8.15  |
| 2002—03   | 7.47  | 0.59     | 8.06  | 0.24 | 0.02     | 0.26  | 7.71               | 0.60     | 8.31  |
| 2003-04   | 7.63  | 0.60     | 8.23  | 0.24 | 0.01     | 0.25  | 7.87               | 0.61     | 8.48  |
| 2004-05   | 7.70  | 0.61     | 8.31  | 0.24 | 0.01     | 0.25  | 7.94               | 0.62     | 8.56  |
| 2005-06   | 7.79  | 0.62     | 8.41  | 0.24 | 0.02     | 0.26  | 8.03               | 0.64     | 8.67  |
| 2006-07   | 7.88  | 0.63     | 8.51  | 0.24 | 0.02     | 0.26  | 8.12               | 0.65     | 8.77  |
| 2007-08   | 7.97  | 0.64     | 8.61  | 0.25 | 0.02     | 0.26  | 8.22               | 0.66     | 8.88  |
| 2008-09   | 8.08  | 0.65     | 8.73  | 0.25 | 0.02     | 0.27  | 8.33               | 0.67     | 9.00  |
| 2009-10   | 8.12  | 0.66     | 8.78  | 0.25 | 0.02     | 0.27  | 8.37               | 0.68     | 9.05  |

**Note :-** Estimation on Duck Population was taken up from 1991-92 onwards.

**Table 5.6 : Estimated Yield per annum per layer in Meghalaya and Total Egg production from 1983-84.**

| Year      | Estimated Yield |          | Overall | Total Eggs Production (Lakhs Nos.) |          |        | Percentage increase (+) or decrease (-) over previous year |
|-----------|-----------------|----------|---------|------------------------------------|----------|--------|--|
|           | Desi            | Improved |         | Desi                               | Improved | Total  |  |
| 1983-84   | 100             | 213      | 104     | 474.11                             | 39.86    | 513.97 | (+) 6.89   |
| 1984-85   | 98              | 206      | 102     | 510.77                             | 38.62    | 549.39 | (+) 5.30   |
| 1985-86   | 98              | 209      | 104     | 537.12                             | 41.33    | 578.50 | (+) 3.78   |
| 1986-87   | 109             | 217      | 114     | 556.06                             | 44.30    | 600.36 | (+) 3.78   |
| 1987-88   | 110             | 217      | 114     | 573.95                             | 42.76    | 616.71 | (+) 2.72   |
| 1988-89   | 109             | 219      | 113     | 586.88                             | 48.36    | 635.24 | (+) 3.00   |
| 1989-90   | 108             | 219      | 115     | 562.49                             | 73.45    | 636.28 | (+) 0.16   |
| 1990-91   | 110             | 219      | 116     | 591.36                             | 73.79    | 665.15 | (+) 4.54   |
| 1991-92   | 105             | 219      | 112     | 593.38                             | 74.51    | 667.89 | (+) 0.41   |
| 1992-93   | 106             | 219      | 113     | 617.97                             | 82.46    | 700.43 | (+) 4.87   |
| 1993-94   | 105             | 201      | 111     | 641.89                             | 85.71    | 726.60 | (+) 3.74   |
| 1994-95   | 107             | 201      | 113     | 665.44                             | 85.71    | 751.14 | (+) 3.38   |
| 1995-96   | 105             | 219      | 113     | 669.92                             | 99.34    | 769.26 | (+) 2.41   |
| 1996-97   | 103             | 204      | 110     | 690.70                             | 101.27   | 791.97 | (+) 2.95   |
| 1997-98   | 103             | 207      | 110     | 709.06                             | 105.19   | 814.25 | (+) 2.81   |
| 1998-99   | 104             | 208      | 111     | 722.70                             | 101.91   | 824.61 | (+) 1.27   |
| 1999-2000 | 102             | 207      | 109     | 735.19                             | 112.11   | 847.25 | (+) 2.75   |
| 2000-01   | 102             | 209      | 110     | 752.37                             | 121.63   | 874    | (+) 3.16   |
| 2001-02   | 102             | 221      | 107     | 770.76                             | 131.12   | 901.88 | (+) 3.19   |
| 2002-03   | 102             | 216      | 110     | 786.13                             | 129.94   | 916.07 | (+) 1.57   |
| 2003-04   | 102             | 217      | 110     | 803.00                             | 133.00   | 936.00 | (+) 2.18   |
| 2004-05   | 102             | 217      | 110     | 810.08                             | 135.62   | 945.70 | (+) 1.04   |
| 2005-06   | 104             | 216      | 113     | 835                                | 138      | 973    | (+) 2.85   |
| 2006-07   | 103             | 218      | 112     | 836.79                             | 141.20   | 977.99 | (+) 0.51   |
| 2007-08   | 103             | 218      | 112     | 846.07                             | 142.58   | 988.65 | (+) 1.09   |
| 2008-09   | 102             | 217      | 109     | 853.41                             | 144.32   | 997.73 | (+) 2.04   |
| 2009-10   | 102             | 216      | 111     | 854.12                             | 145.58   | 999.7  | (+) 0.20%  |

## Chapter – 6

### SEASON WISE PERCENTAGE UTILISATION OF MILK AND EGGS IN SAMPLE HOUSEHOLD.

**Table 6.1 : Utilisation of Milk.**

| Season         | Sold as fluid Milk | Converted into Milk products | Consumed as Fluid Milk in the Household | Total       |
|----------------|--------------------|------------------------------|---|-------------|
| Summer         | 94.69              | 1.12                         | 4.19                                    | 100%        |
| Monsoon        | 95.30              | 2.50                         | 2.20                                    | 100%        |
| Winter         | 93.99              | 2.02                         | 3.99                                    | 100%        |
| <b>Overall</b> | <b>94.79</b>       | <b>1.86</b>                  | <b>3.35</b>                             | <b>100%</b> |

**Table 6.2: Percentage Utilization of Produced Eggs.**

| Season         | Utilisation for Home consumption | Set for Hatching | Egg Sold     | Damaged or Spoiled | Total      |
|----------------|----------------------------------|------------------|--------------|--------------------|------------|
| Summer         | 36.98                            | 14.47            | 46.78        | 1.77               | 100        |
| Monsoon        | 35.08                            | 14.92            | 48.10        | 1.90               | 100        |
| Winter         | 39.60                            | 17.82            | 40.40        | 2.18               | 100        |
| <b>Overall</b> | <b>37.05</b>                     | <b>15.59</b>     | <b>45.42</b> | <b>1.94</b>        | <b>100</b> |

**Table 6.3: Season wise Percentage of Animals which were Grazed, Stallfed or Both.**

| Sl No.                  | Category of Animals                       | SUMMER          |                   |              | MONSOON         |                   |              | WINTER          |                   |              |
|-------------------------|---|-----------------|-------------------|--------------|-----------------|-------------------|--------------|-----------------|-------------------|--------------|
|                         |   | Only Grazed (%) | Only Stallfed (%) | Both         | Only Grazed (%) | Only Stallfed (%) | Both         | Only Grazed (%) | Only Stallfed (%) | Both         |
| 1                       | 2   | 3               | 4                 | 5            | 6               | 7                 | 8            | 9               | 10                | 11           |
| <b>1.</b><br><b>1.1</b> | <b><u>CATTLE</u></b><br><b>INDIGENOUS</b> |                 |                   |              |                 |                   |              |                 |                   |              |
|                         | (a) In Milk                               | 78.24           | 10.32             | 11.42        | 75.58           | 13.17             | 11.24        | 70.19           | 17.46             | 12.33        |
|                         | (b) Dry & not Calved even once            | 83.36           | 10.66             | 5.97         | 84.02           | 8.78              | 7.19         | 77.64           | 9.58              | 12.76        |
|                         | (c) Adult Male                            | 82.61           | -                 | 17.38        | 89.70           | -                 | 10.29        | 81.42           | -                 | 18.57        |
|                         | (d) Young Stock upto 3 Years old.         | 83.01           | 73.39             | 9.79         | 88.16           | 5.48              | 6.35         | 77.14           | 9.54              | 13.31        |
|                         | <b>Overall :-</b>                         | <b>82.51</b>    | <b>8.10</b>       | <b>9.38</b>  | <b>85.10</b>    | <b>6.95</b>       | <b>7.93</b>  | <b>76.95</b>    | <b>9.30</b>       | <b>13.73</b> |
| <b>1.2</b>              | <b>CROSS BRED</b>                         |                 |                   |              |                 |                   |              |                 |                   |              |
|                         | (a) In Milk                               | 10.93           | 74.18             | 14.88        | 13.04           | 76.08             | 10.86        | 9.94            | 74.59             | 15.96        |
|                         | (b) Dry & not Calved even once            | 29.15           | 45.42             | 25.42        | 23.80           | 20.23             | 55.95        | 55.58           | 17.02             | 27.39        |
|                         | (c) Adult Male                            | 46.22           | 19.81             | 33.96        | 32.07           | 27.35             | 40.56        | 29.46           | 40.17             | 30.35        |
|                         | (d) Young Stock upto 3 Years old.         | 26.43           | 54.40             | 19.15        | 23.61           | 49.30             | 27.08        | 39.91           | 31.83             | 28.25        |
|                         | <b>Overall :-</b>                         | <b>22.98</b>    | <b>20.60</b>      | <b>20.60</b> | <b>20.27</b>    | <b>51.21</b>      | <b>28.51</b> | <b>29.35</b>    | <b>48.15</b>      | <b>22.49</b> |
| <b>2</b>                | <b>BUFFALOES</b>                          |                 |                   |              |                 |                   |              |                 |                   |              |
|                         | (a) In Milk                               | 67.76           | 12.80             | 19.42        | 77.70           | 6.08              | 16.21        | 69.48           | 11.76             | 18.75        |
|                         | (b) Dry & not Calved even once            | 69.49           | 11.86             | 18.64        | 63.05           | 17.73             | 19.21        | 66.25           | 13.99             | 19.75        |
|                         | (c) Adult Male                            | 70.46           | 4.69              | 24.83        | 72.68           | 6.01              | 21.29        | 64.45           | 15.66             | 19.87        |
|                         | (d) Young Stock upto 3 Years old.         | 65.73           | 11.18             | 23.07        | 50.00           | 21.62             | 28.37        | 58.68           | 18.77             | 22.53        |
|                         | <b>Overall :-</b>                         | <b>68.35</b>    | <b>10.54</b>      | <b>21.09</b> | <b>68.25</b>    | <b>11.47</b>      | <b>20.27</b> | <b>65.10</b>    | <b>14.76</b>      | <b>20.13</b> |

**ANNEXURE - X**

**Distributions of Animals as per the feeding practices observed in the selected households**

Name of State : **Meghalaya**

Year : **2009-2010**

| Sl. No | Category of Animals                    | Average Feed Consumption (in Kg.per animals/ per day) |         |         |        |            |         |         |        |             |         |         |         |
|--------|--|---|---------|---------|--------|------------|---------|---------|--------|-------------|---------|---------|---------|
|        |  | Green Fodder  |         |         |        | Dry Fodder |         |         |        | Concentrate |         |         |         |
|        |  | Summer  | Rainy   | Winter  | Annual | Summer     | Rainy   | Winter  | Annual | Summer      | Rainy   | Winter  | Annual  |
| 1      | <b>Cattle Indigenous/Non Discript)</b> |   |         |         |        |            |         |         |        |             |         |         |         |
|        | (a) In Milk                            | 2.36  | 2.68    | 1.10    | 6.14   | 1.35       | 1.55    | 0.56    | 3.46   | 1.05        | 1.10    | 1.25    | 3.40    |
|        | b) Dry & not Calveed even once         | 2.00  | 2.25    | 0.90    | 5.15   | 0.00       | 0.00    | 0.45    | 0.45   | -           | -       | -       | -       |
|        | c) Adult Male                          | 2.10  | 2.40    | 0.95    | 5.45   | 0.80       | 0.00    | 1.00    | 1.80   | -           | -       | -       | -       |
|        | d) Young Stock upto 3 years            | 0.95  | 1.10    | 0.38    | 2.43   | 0.00       | 0.00    | 0.30    | 0.30   | -           | -       | -       | -       |
|        | e) Overall (%)                         | 38.65 %   | 43.97 % | 17.38 % | 19.17  | 35.78 %    | 25.79 % | 38.43 % | 6.01   | 30.88 %     | 32.35 % | 36.77 % | 3.40    |
| 2      | <b>Cattle (Exotic/ Cross-bred)</b>     |   |         |         |        |            |         |         |        |             |         |         |         |
|        | a) In Milk                             | 17.32   | 18.00   | 3.60    | 38.92  | 7.10       | 8.80    | 11.60   | 27.50  | 3.75        | 3.90    | 3.93    | 11.58   |
|        | b) Dry & not Calveed even once         | 16.00   | 16.20   | 2.10    | 34.30  | 5.00       | 4.10    | 5.50    | 14.60  | 1.00        | 1.50    | 1.40    | 3.90    |
|        | c) Adult Male                          | 17.00   | 17.10   | 2.25    | 36.35  | 6.00       | 5.20    | 7.00    | 18.20  | 8.00        | 0.00    | 0.00    | 8.00    |
|        | d) Young Stock upto 2 & 1/2 years      | 3.50  | 4.80    | 1.90    | 10.20  | 1.15       | 0.00    | 1.85    | 3.00   | 0.00        | 0.00    | 0.00    | -       |
|        | e) Overall (%)                         | 44.94 %   | 46.84 % | 8.22 %  | 119.77 | 30.41 %    | 28.59 % | 41.00 % | 63.30  | 54.30 %     | 23.00 % | 22.70 % | 23.48 % |
| 3      | <b>Buffalo</b>                         |   |         |         |        |            |         |         |        |             |         |         |         |
|        | (a) In Milk                            | 3.80  | 4.90    | 1.10    | 9.80   | 0.80       | 1.00    | 1.48    | 3.28   | 0.55        | 0.60    | 0.65    | 1.80    |
|        | b) Dry & not Calved even once          | 3.10  | 3.45    | 0.90    | 7.45   | 0.00       | 0.00    | 0.00    | -      | -           | -       | -       | -       |
|        | c) Adult Male                          | 3.60  | 4.10    | 1.00    | 8.70   | 0.00       | 0.00    | 0.00    | -      | -           | -       | -       | -       |
|        | d) Young Stock upto 3 years            | 1.10  | 1.25    | 0.40    | 2.75   | 0.00       | 0.00    | 0.00    | -      | -           | -       | -       | -       |
|        | e) Overall (%)                         | 40.42 %   | 47.74 % | 11.84 % | 28.70  | 24.39 %    | 30.49 % | 45.12 % | 3.28   | 30.56 %     | 33.33 % | 36.11 % | 1.80    |

**Source : LPS- 1.2. Block-II**



**Table 6.5: Season wise Utilisation of Dung collected From Bovine at Sample Household 2008-09.**

| Sl No. | Particulars  | Unit       | Summer | Monsoon | Winter | Over all |
|--------|--|------------|--------|---------|--------|----------|
| 1.     | Total No. of Sample animals observed for Dung Utilisation. | No         | 4220   | 5016    | 4442   | 13678    |
| 2.     | Average quantity of Dung collected per animal per day.     | Kg         | 3.40   | 3.50    | 3.35   | 10.25    |
| 3.     | Dung utilised for manure.                                  | Percentage | 96.29  | 97.28   | 95.88  | 96.49    |
| 4.     | Dung utilised for Dung cake.                               | Percentage | 2.38   | 2.01    | 2.07   | 2.15     |
| 5.     | Dung utilised for other purpose.                           | Percentage | 1.33   | 0.71    | 2.05   | 1.36     |

**Table 6.6: Per Capita availability of Milk and Egg.**

| Items | Unit        | Per Capita Availability |
|-------|-------------|-------------------------|
| Milk  | Grams / day | 75                      |
| Eggs  | Nos. / year | 35                      |

## Meat Production – 2009-10

**Table 7.1: District wise & Season wise number of Animals & Poultry Slaughtered.**

| Sl No. | Particulars  | East Khasi Hills | Ri-Bhoi | West Khasi Hills | Jaintia Hills | East Garo Hills | West Garo Hills | South Garo Hills | State          | Source           |                                |
|--------|--|------------------|---------|------------------|---------------|-----------------|-----------------|------------------|----------------|------------------|--------------------------------|
|        |  |                  |         |                  |               |                 |                 |                  |                | Within the State | Brought from outside the State |
| 1      | 2  | 3                | 4       | 5                | 6             | 7               | 8               | 9                | 10             | 11               | 12                             |
|        | <b><u>Category of Animals Slaughter.</u></b><br><b><u>SUMMER</u></b> |                  |         |                  |               |                 |                 |                  |                |                  |                                |
| (a)    | Cattle.  | 43204            | 6600    | 9671             | 5304          | 4192            | 9997            | 2710             | <b>81678</b>   | <b>50947</b>     | <b>30731</b>                   |
| (b)    | Buffaloes.   | 123              | 103     | -                | 455           | 55              | 448             | -                | <b>1184</b>    | <b>1184</b>      | <b>-</b>                       |
| (c)    | Pig  | 40512            | 5994    | 8943             | 7799          | 5993            | 6898            | 3278             | <b>79417</b>   | <b>71325</b>     | <b>8092</b>                    |
| (d)    | Sheep & Goat.  | 19608            | 2698    | 965              | 5552          | 3277            | 4578            | 1578             | <b>38253</b>   | <b>37152</b>     | <b>1101</b>                    |
| (e)    | Poultry.   | 758963           | 70916   | 94572            | 11136         | 65287           | 105250          | 16778            | <b>1222902</b> | <b>1120921</b>   | <b>101981</b>                  |
|        | <b><u>MONSOON</u></b>  |                  |         |                  |               |                 |                 |                  |                |                  |                                |
| (a)    | Cattle.  | 44907            | 5303    | 9244             | 5863          | 4061            | 9284            | 2453             | <b>81115</b>   | <b>53412</b>     | <b>27703</b>                   |
| (b)    | Buffaloes.   | 149              | 97      | -                | 794           | 72              | 636             | -                | <b>1748</b>    | <b>1748</b>      | <b>-</b>                       |
| (c)    | Pig.   | 32487            | 5362    | 8462             | 7049          | 4862            | 10276           | 2913             | <b>71411</b>   | <b>64171</b>     | <b>7240</b>                    |
| (d)    | Sheep & Goat.  | 19786            | 2724    | 1151             | 5528          | 3178            | 7082            | 1885             | <b>41334</b>   | <b>35926</b>     | <b>5408</b>                    |
| (e)    | Poultry.   | 740072           | 94272   | 104979           | 140612        | 52629           | 109186          | 17036            | <b>1258786</b> | <b>1154333</b>   | <b>104453</b>                  |
|        | <b><u>WINTER</u></b>   |                  |         |                  |               |                 |                 |                  |                |                  |                                |
| (a)    | Cattle.  | 45156            | 5277    | 9585             | 5771          | 4188            | 9572            | 3032             | <b>82581</b>   | <b>51112</b>     | <b>31469</b>                   |
| (b)    | Buffaloes.   | 124              | 77      | -                | 651           | 52              | 516             | -                | <b>1420</b>    | <b>1420</b>      | <b>-</b>                       |
| (c)    | Pig.   | 39614            | 6237    | 9780             | 8270          | 4980            | 9662            | 3420             | <b>81963</b>   | <b>74135</b>     | <b>7828</b>                    |
| (d)    | Sheep & Goat.  | 19257            | 1992    | 1104             | 4667          | 2787            | 6095            | 1559             | <b>37461</b>   | <b>30522</b>     | <b>6939</b>                    |
| (e)    | Poultry.   | 758330           | 75485   | 99532            | 129338        | 67344           | 129833          | 16323            | <b>1276185</b> | <b>1172025</b>   | <b>104160</b>                  |

**Table 7.2: District wise Numbers of Animals Slaughtered (Over-all)**

**'000' Numbers**

| Sl No | Category of Animals Slaughtered | East Khasi Hills | Ri-Bhoi | West Khasi Hills | Jaintia Hills | East Garo Hills | West Garo Hills | South Garo Hills | Total          | Source           |                                |
|-------|---------------------------------|------------------|---------|------------------|---------------|-----------------|-----------------|------------------|----------------|------------------|--------------------------------|
|       |                                 |                  |         |                  |               |                 |                 |                  |                | Within the State | Brought from outside the State |
| 1     | 2                               | 3                | 4       | 5                | 6             | 7               | 8               | 9                | 10             | 11               | 12                             |
| 1.    | Cattle                          | 133.267          | 17.180  | 28.500           | 16.938        | 12.441          | 28.853          | 8.195            | <b>245.374</b> | 155.471          | 89.903                         |
| 2.    | Buffaloes                       | 0.396            | 0.277   | -                | 1.900         | 0.179           | 1.600           | -                | <b>4.352</b>   | 4.352            | -                              |
| 3.    | Pig                             | 112.613          | 17.593  | 27.185           | 23.118        | 15.835          | 26.836          | 9.611            | <b>232.791</b> | 209.631          | 23.160                         |
| 4.    | Sheep & Goat                    | 58.651           | 7.414   | 3.220            | 15.747        | 9.242           | 17.755          | 5.022            | <b>117.051</b> | 103.603          | 13.448                         |
| 5.    | Poultry                         | 2257.36          | 240.67  | 299.08           | 381.09        | 185.26          | 344.27          | 50.137           | <b>3757.87</b> | 3447.276         | 310.594                        |

**Table 7.3: District wise & Season wise Average Yield per Animals (In Kg.).**

| Sl No. | Particulars   | East Khasi Hills | Ri-Bhoi | West Khasi Hills | Jaintia Hills | East Garo Hills | West Garo Hills | South Garo Hills | State         |
|--------|---|------------------|---------|------------------|---------------|-----------------|-----------------|------------------|---------------|
| 1      | 2   | 3                | 4       | 5                | 6             | 7               | 8               | 9                | 10            |
|        | <b><u>Category of Animals Slaughter. SUMMER</u></b> |                  |         |                  |               |                 |                 |                  |               |
| (a)    | Cattle.   | 89.88            | 89.1    | 89.57            | 90.63         | 89.54           | 89.27           | 88.24            | <b>89.68</b>  |
| (b)    | Buffaloes.  | 120.0            | 119.0   | -                | 118.0         | 120.0           | 117.0           | -                | <b>118.01</b> |
| (c)    | Pig.  | 43.42            | 42.28   | 42.06            | 41.62         | 41.57           | 41.84           | 40.16            | <b>42.59</b>  |
| (d)    | Sheep & Goat.                                       | 8.88             | 8.86    | 8.98             | 8.9           | 9.0             | 8.91            | 9.2              | <b>8.91</b>   |
| (e)    | Poultry.  | 1.10             | 1.12    | 0.95             | 0.94          | 0.92            | 0.94            | 0.95             | <b>1.05</b>   |
|        | <b><u>MONSOON</u></b>                               |                  |         |                  |               |                 |                 |                  |               |
| (a)    | Cattle.   | 89.66            | 86.78   | 86.29            | 88.02         | 87.6            | 84.28           | 88.40            | <b>88.21</b>  |
| (b)    | Buffaloes.  | 119.05           | 117.00  | -                | 118.46        | 118.21          | 119.            | -                | <b>118.61</b> |
| (c)    | Pig.  | 42.42            | 41.82   | 42.38            | 40.94         | 41.64           | 40.48           | 40.38            | <b>41.81</b>  |
| (d)    | Sheep & Goat.                                       | 9.10             | 9.11    | 9.04             | 9.15          | 9.01            | 8.82            | 9.04             | <b>9.05</b>   |
| (e)    | Poultry.  | 1.15             | 1.12    | 1.09             | 1.06          | 1.11            | 1.10            | 1.03             | <b>1.13</b>   |
|        | <b><u>WINTER</u></b>                                |                  |         |                  |               |                 |                 |                  |               |
| (a)    | Cattle.   | 89.92            | 86.80   | 85.89            | 86.69         | 87.36           | 89.56           | 87.97            | <b>88.78</b>  |
| (b)    | Buffaloes.  | 119.0            | 117.0   | -                | 115.02        | 116.0           | 114.87          | -                | <b>115.46</b> |
| (c)    | Pig.  | 44.28            | 42.62   | 42.07            | 41.2          | 41.82           | 41.68           | 40.37            | <b>42.96</b>  |
| (d)    | Sheep & Goat.                                       | 9.06             | 9.12    | 9.08             | 8.92          | 8.79            | 8.94            | 8.82             | <b>9.00</b>   |
| (e)    | Poultry.  | 1.12             | 1.04    | 1.01             | 1.02          | 0.94            | 0.96            | 0.95             | <b>1.07</b>   |

**Table 7.4: District wise Average Yield per Animal (In Kg.) Over-all.**

| Sl No. | Name of Districts      | Cattle       | Buffaloes     | Pigs         | Sheep & Goat | Poultry     |
|--------|------------------------|--------------|---------------|--------------|--------------|-------------|
| 1      | 2                      | 3            | 4             | 5            | 6            | 7           |
| 1.     | East Khasi Hills       | 89.82        | 121.21        | 43.43        | 9.00         | 1.12        |
| 2.     | Ri – Bhoi              | 87.66        | 115.52        | 42.23        | 9.04         | 1.09        |
| 3.     | West Khasi Hills       | 87.26        | -             | 42.16        | 9.01         | 1.02        |
| 4.     | Jaintia Hills          | 88.36        | 117.37        | 41.31        | 9.02         | 1.01        |
| 5.     | East Garo Hills        | 88.18        | 117.32        | 41.62        | 8.98         | 0.98        |
| 6.     | West Garo Hills        | 87.76        | 116.88        | 41.29        | 8.84         | 1.00        |
| 7.     | South Garo Hills       | 88.22        | -             | 40.27        | 9.16         | 1.00        |
|        | <b>State (Overall)</b> | <b>88.89</b> | <b>117.47</b> | <b>42.48</b> | <b>8.99</b>  | <b>1.08</b> |

**Table 7.5: District wise Total Meat Production (In Tonnes).**

| Sl No. | Particulars           | East Khasi Hills | Ri-Bhoi     | West Khasi Hills | Jaintia Hills | East Garo Hills | West Garo Hills | South Garo Hills | State        | Source           |                                |
|--------|-----------------------|------------------|-------------|------------------|---------------|-----------------|-----------------|------------------|--------------|------------------|--------------------------------|
|        |                       |                  |             |                  |               |                 |                 |                  |              | Within the State | Brought from outside the State |
| 1      | 2                     | 3                | 4           | 5                | 6             | 7               | 8               | 9                | 10           | 11               | 12                             |
|        | <b><u>SUMMER</u></b>  |                  |             |                  |               |                 |                 |                  |              |                  |                                |
| 1.     | Cattle.               | 3883             | 588         | 866              | 481           | 375             | 893             | 239              | <b>7325</b>  | 4569             | 2756                           |
| 2.     | Buffaloes             | 15               | 12          | -                | 54            | 7               | 52              | -                | <b>140</b>   | 140              | -                              |
| 3.     | Pigs                  | 1759             | 253         | 376              | 325           | 249             | 289             | 131              | <b>3382</b>  | 3037             | 345                            |
| 4.     | Sheep & Goat.         | 174              | 24          | 9                | 49            | 29              | 41              | 15               | <b>341</b>   | 331              | 10                             |
| 5.     | Poultry.              | 835              | 79          | 90               | 105           | 60              | 99              | 16               | <b>1284</b>  | 1177             | 107                            |
|        | <b>TOTAL</b>          | <b>6666</b>      | <b>956</b>  | <b>1341</b>      | <b>1014</b>   | <b>720</b>      | <b>1374</b>     | <b>401</b>       | <b>12472</b> | 9254             | 3218                           |
|        | <b><u>MONSOON</u></b> |                  |             |                  |               |                 |                 |                  |              |                  |                                |
| 1.     | Cattle.               | 4026             | 460         | 798              | 516           | 356             | 782             | 217              | <b>7155</b>  | 4711             | 2444                           |
| 2.     | Buffaloes             | 18               | 11          | -                | 94            | 8               | 76              | -                | <b>207</b>   | 207              | -                              |
| 3.     | Pigs                  | 1378             | 224         | 359              | 289           | 202             | 416             | 118              | <b>2986</b>  | 2683             | 303                            |
| 4.     | Sheep & Goat.         | 180              | 25          | 10               | 51            | 29              | 62              | 17               | <b>374</b>   | 325              | 49                             |
| 5.     | Poultry.              | 851              | 106         | 114              | 149           | 58              | 120             | 18               | <b>1416</b>  | 1298             | 118                            |
|        | <b>TOTAL</b>          | <b>6453</b>      | <b>826</b>  | <b>1281</b>      | <b>1099</b>   | <b>653</b>      | <b>1456</b>     | <b>370</b>       | <b>12138</b> | 9224             | 2914                           |
|        | <b><u>WINTER</u></b>  |                  |             |                  |               |                 |                 |                  |              |                  |                                |
| 1.     | Cattle.               | 4061             | 458         | 823              | 500           | 366             | 857             | 267              | <b>7332</b>  | 4538             | 2794                           |
| 2.     | Buffaloes             | 15               | 9           | -                | 75            | 6               | 59              | -                | <b>164</b>   | 164              | -                              |
| 3.     | Pigs                  | 1754             | 266         | 411              | 341           | 208             | 403             | 138              | <b>3521</b>  | 3185             | 336                            |
| 4.     | Sheep & Goat.         | 174              | 18          | 10               | 42            | 25              | 54              | 14               | <b>337</b>   | 275              | 62                             |
| 5.     | Poultry.              | 849              | 78          | 101              | 132           | 63              | 125             | 16               | <b>1364</b>  | 1253             | 111                            |
|        | <b>TOTAL</b>          | <b>6853</b>      | <b>829</b>  | <b>1345</b>      | <b>1090</b>   | <b>668</b>      | <b>1498</b>     | <b>435</b>       | <b>12718</b> | 9415             | 3303                           |
|        | <b>OVERALL</b>        | <b>19972</b>     | <b>2611</b> | <b>3967</b>      | <b>3203</b>   | <b>2041</b>     | <b>4328</b>     | <b>1206</b>      | <b>37328</b> | 27893            | 9435                           |

**Table 7.6: District wise Season wise Total Meat Production (In Tonnes).**

| Sl No | Particulars  | East Khasi Hills | Ri-Bhoi     | West Khasi Hills | Jaintia Hills | East Garo Hills | West Garo Hills | South Garo Hills | Total        | Source           |                                |
|-------|--------------|------------------|-------------|------------------|---------------|-----------------|-----------------|------------------|--------------|------------------|--------------------------------|
|       |              |                  |             |                  |               |                 |                 |                  |              | Within the State | Brought from outside the State |
| 1     | 2            | 3                | 4           | 5                | 6             | 7               | 8               | 9                | 10           | 11               | 12                             |
| 1.    | Cattle       | 11970            | 1506        | 2487             | 1497          | 1097            | 2532            | 723              | <b>21812</b> | 13818            | 7994                           |
| 2.    | Buffaloes    | 48               | 32          | -                | 223           | 21              | 187             | -                | <b>511</b>   | 511              | -                              |
| 3.    | Pig          | 4891             | 743         | 1146             | 955           | 659             | 1108            | 387              | <b>9889</b>  | 8905             | 984                            |
| 4.    | Sheep & Goat | 528              | 67          | 29               | 142           | 83              | 157             | 46               | <b>1052</b>  | 931              | 121                            |
| 5.    | Poultry      | 2535             | 263         | 305              | 386           | 181             | 344             | 50               | <b>4064</b>  | 3728             | 336                            |
|       | <b>TOTAL</b> | <b>19972</b>     | <b>2611</b> | <b>3967</b>      | <b>3203</b>   | <b>2041</b>     | <b>4328</b>     | <b>1206</b>      | <b>37328</b> | <b>27893</b>     | <b>9435</b>                    |

**Table 7.7: District wise and Category wise Total Meat Production.**

| Sl No. | Name of Districts   | Meat Production Category Wise (Tonnes) |            |              |             |             |             | Annual Production 2009-10<br>(Col 5 – 8) | Percentage Contribution to Total Meat Production |
|--------|---|--|------------|--------------|-------------|-------------|-------------|--|--|
|        |   | Cattle                                 | Buffalo    | Total Beef   | Pork        | Mutton      | Chicken     |  |  |
| 1      | 2   | 3                                      | 4          | 5            | 6           | 7           | 8           | 9  | 10   |
| 1.     | East Khasi Hills  | 11970                                  | 48         | 12018        | 4891        | 528         | 2535        | 19972                                    | 53.50%   |
| 2.     | Ri – Bhoi   | 1506                                   | 32         | 1538         | 743         | 67          | 263         | 2611                                     | 7.00%  |
| 3.     | West Khasi Hills  | 2487                                   | -          | 2487         | 1146        | 29          | 305         | 3967                                     | 10.63%   |
| 4.     | Jaintia Hills   | 1497                                   | 223        | 1720         | 955         | 142         | 386         | 3203                                     | 8.58%  |
| 5.     | East Garo Hills   | 1097                                   | 21         | 1118         | 659         | 83          | 181         | 2041                                     | 5.47%  |
| 6.     | West Garo Hills   | 2532                                   | 187        | 2719         | 1108        | 157         | 344         | 4328                                     | 11.59%   |
| 7.     | South Garo Hills  | 723                                    | -          | 723          | 387         | 46          | 50          | 1206                                     | 3.23%  |
|        | <b>State (Overall)</b>                                      | <b>21812</b>                           | <b>511</b> | <b>22323</b> | <b>9889</b> | <b>1052</b> | <b>4064</b> | <b>37328</b>                             | <b>100%</b>                                      |
|        | Percentage Contribution of each species to total production | 58.43%                                 | 1.37%      | 59.80%       | 26.49%      | 2.82%       | 10.89%      | 100%                                     |  |

**Table 7.8: Growth Rate, Percentage Contribution of each Category to Total Meat production with Per Capita Availability.**

| Sl No | Items                     | Annual Meat Production (in tones) |                                |       |                           |                                |       | Percentage Increase (+) or Decrease (-) over 2008-09 |
|-------|---------------------------|-----------------------------------|--------------------------------|-------|---------------------------|--------------------------------|-------|--|
|       |                           | 2009-10                           |                                |       | 2008-09                   |                                |       |  |
|       |                           | Produced within the State         | Brought from outside the State | Total | Produced within the State | Brought from outside the State | Total |  |
| 1     | 2                         | 3                                 | 4                              | 5     | 6                         | 7                              |       |  |
| 1     | Beef (Cattle & Buffaloes) | 14329                             | 7994                           | 22323 | 15781                     | 6111                           | 21982 | (+)1.97%   |
| 2     | Pork                      | 8905                              | 984                            | 9889  | 9116                      | 1042                           | 10158 | (-) 2.65%  |
| 3     | Mutton                    | 931                               | 121                            | 1052  | 992                       | 48                             | 1040  | (+) 1.15%  |
| 4     | Chicken                   | 3728                              | 336                            | 4064  | 3989                      | -                              | 3989  | (+) 1.88%  |
| 5     | <b>Total</b>              | 27893                             | 9435                           | 37328 | 29878                     | 7201                           | 37079 | (+) 0.67%  |

**7.9: Per Capita Availability of Meat per Day / Grams 2009-10**

| Items        | Per Capita Availability |
|--------------|-------------------------|
| Beef         | 21.40                   |
| Pork         | 9.48                    |
| Mutton       | 1.00                    |
| Chicken      | 3.90                    |
| <b>Total</b> | <b>35.78</b>            |

**Table 7.10: Estimated Number of Animals Slaughtered from 1983-84.**

| Year      | Number of Animals Slaughtered<br>'000' Nos. |           |        |              |         |
|-----------|---|-----------|--------|--------------|---------|
|           | Cattle                                      | Buffaloes | Pig    | Sheep & Goat | Poultry |
| 1983-84   | 104.5                                       | 0.1       | 88.9   | 56.7         | N.S     |
| 1984-85   | 108.7                                       | 0.5       | 96.7   | 55.9         | N.S     |
| 1985-86   | 116.0                                       | 0.6       | 125.7  | 68.9         | N.S     |
| 1986-87   | 125.7                                       | 0.6       | 143.6  | 76.5         | N.S     |
| 1987-88   | 132.3                                       | 0.5       | 146.9  | 77.8         | N.S     |
| 1988-89   | 141.4                                       | 0.6       | 155.0  | 85.7         | 645.7   |
| 1989-90   | 146.8                                       | 0.6       | 159.8  | 94.9         | 684.9   |
| 1990-91   | 157.5                                       | 1.0       | 159.1  | 103.1        | 739.7   |
| 1991-92   | 171.6                                       | 1.2       | 169.5  | 117.6        | 792.7   |
| 1992-93   | 172.4                                       | 0.9       | 161.7  | 114.5        | 905.5   |
| 1993-94   | 174.7                                       | 0.6       | 166.9  | 107.8        | 1096    |
| 1994-95   | 179.1                                       | 1.4       | 170.4  | 108.8        | 1175    |
| 1995-96   | 193.4                                       | 0.9       | 190.1  | 116.4        | 1688    |
| 1996-97   | 183.4                                       | 2.9       | 176.5  | 131.3        | 1603    |
| 1997-98   | 185.1                                       | 1.7       | 170.6  | 138.3        | 17860   |
| 1998-99   | 191.9                                       | 1.9       | 184.7  | 122.4        | 1870    |
| 1999-2000 | 196.9                                       | 0.5       | 191.5  | 114.4        | 3102    |
| 2000-01   | 217.0                                       | 3.5       | 184.3  | 140.1        | 3243    |
| 2001-02   | 212.0                                       | 0.5       | 194.6  | 136.1        | 3566    |
| 2002-03   | 217.54                                      | 0.70      | 209.24 | 155.47       | 3739    |
| 2003-04   | 214.32                                      | 3.60      | 228.47 | 108.70       | 3209    |
| 2004-05   | 238.63                                      | 3.72      | 249.45 | 119.12       | 3101    |
| 2005-06   | 231.4                                       | 4.0       | 243.2  | 114.30       | 3395    |
| 2006-07   | 236.04                                      | 4.14      | 236.35 | 113.91       | 3679    |
| 2007-08   | 237.49                                      | 4.21      | 237.3  | 114.77       | 3696    |
| 2008-09   | 241.13                                      | 4.24      | 239.51 | 115.51       | 3650.37 |
| 2009-10   | 245.37                                      | 4.35      | 232.79 | 117.05       | 3757.87 |

**Table 7.11: Average Meat Yield per Animal. (Kgs) from 1983-84.**

| Year      | Average Meat Yield Per Animal<br>Kgs. |           |       |              |         |
|-----------|---------------------------------------|-----------|-------|--------------|---------|
|           | Cattle                                | Buffaloes | Pig   | Sheep & Goat | Poultry |
| 1983-84   | 81.26                                 | 133.70    | 36.15 | 11.84        | -       |
| 1984-85   | 79.03                                 | 134.50    | 36.50 | 11.73        | -       |
| 1985-86   | 73.12                                 | 132.80    | 34.53 | 10.38        | -       |
| 1986-87   | 71.77                                 | 132.83    | 36.23 | 11.69        | -       |
| 1987-88   | 74.77                                 | 138.38    | 41.02 | 11.50        | -       |
| 1988-89   | 76.92                                 | 137.21    | 40.73 | 10.86        | 0.84    |
| 1989-90   | 76.30                                 | 137.21    | 41.22 | 10.19        | 0.84    |
| 1990-91   | 78.90                                 | 123.90    | 38.90 | 9.22         | 0.84    |
| 1991-92   | 78.94                                 | 130.36    | 38.84 | 9.10         | 0.84    |
| 1992-93   | 79.57                                 | 130.36    | 41.10 | 9.13         | 1.0     |
| 1993-94   | 82.23                                 | 127.70    | 41.54 | 9.56         | 0.98    |
| 1994-95   | 84.18                                 | 129.90    | 41.52 | 10.04        | 1.05    |
| 1995-96   | 81.62                                 | 129.36    | 42.35 | 9.66         | 0.83    |
| 1996-97   | 93.60                                 | 117.36    | 43.02 | 9.58         | 0.86    |
| 1997-98   | 95.36                                 | 122.01    | 46.08 | 9.78         | 0.97    |
| 1998-99   | 95.00                                 | 130.32    | 44.59 | 9.84         | 0.92    |
| 1999-2000 | 94.35                                 | 122.26    | 46.07 | 9.17         | 1.00    |
| 2000-01   | 93.49                                 | 127.69    | 45.49 | 9.35         | 0.99    |
| 2001-02   | 96.21                                 | 122.62    | 43.73 | 9.06         | 1.00    |
| 2002-03   | 97.34                                 | 120.63    | 42.77 | 9.02         | 1.04    |
| 2003-04   | 97.47                                 | 109.38    | 43.36 | 9.03         | 1.08    |
| 2004-05   | 88.98                                 | 106.00    | 42.15 | 9.09         | 1.07    |
| 2005-06   | 90.51                                 | 113.95    | 43.01 | 8.94         | 1.08    |
| 2006-07   | 88.60                                 | 117.63    | 42.29 | 9.04         | 1.08    |
| 2007-08   | 88.71                                 | 117.57    | 42.46 | 9.02         | 1.09    |
| 2008-09   | 88.73                                 | 117.46    | 42.41 | 8.99         | 1.09    |
| 2009-10   | 88.89                                 | 117.47    | 42.48 | 8.99         | 1.08    |



**Table 7.12: Total Meat production from 1983-84.**

| Year      | Total Meat Production<br>'000' Tonnes. |       |              |         |       |
|-----------|--|-------|--------------|---------|-------|
|           | Cattle<br>&<br>Buffaloes               | Pig   | Sheep & Goat | Poultry | Total |
| 1983-84   | 8.5                                    | 3.2   | 0.7          | -       | 12.4  |
| 1984-85   | 8.7                                    | 3.5   | 0.6          | -       | 12.8  |
| 1985-86   | 8.6                                    | 4.3   | 0.7          | -       | 13.6  |
| 1986-87   | 9.1                                    | 5.2   | 0.9          | -       | 15.2  |
| 1987-88   | 10.0                                   | 6.0   | 0.9          | -       | 16.9  |
| 1988-89   | 11.0                                   | 6.3   | 0.9          | 0.5     | 18.7  |
| 1989-90   | 11.3                                   | 6.6   | 1.0          | 0.5     | 19.4  |
| 1990-91   | 12.6                                   | 6.2   | 0.9          | 0.6     | 20.3  |
| 1991-92   | 13.7                                   | 6.6   | 1.1          | 0.6     | 22.0  |
| 1992-93   | 13.8                                   | 6.7   | 1.0          | 0.9     | 22.4  |
| 1993-94   | 14.5                                   | 6.9   | 1.0          | 1.1     | 23.5  |
| 1994-95   | 15.3                                   | 7.1   | 1.1          | 1.2     | 24.7  |
| 1995-96   | 15.9                                   | 8.0   | 1.1          | 1.4     | 26.5  |
| 1996-97   | 17.5                                   | 7.6   | 1.2          | 1.4     | 27.7  |
| 1997-98   | 17.9                                   | 7.9   | 1.3          | 1.7     | 28.8  |
| 1998-99   | 18.5                                   | 8.2   | 1.2          | 1.7     | 29.6  |
| 1999-2000 | 18.6                                   | 8.8   | 1.1          | 3.1     | 31.6  |
| 2000-01   | 20.7                                   | 8.4   | 1.3          | 3.2     | 33.6  |
| 2001-02   | 20.5                                   | 8.5   | 1.2          | 3.6     | 33.8  |
| 2002-03   | 21.3                                   | 8.9   | 1.4          | 3.9     | 35.5  |
| 2003-04   | 21.3                                   | 9.9   | 1.0          | 3.4     | 35.6  |
| 2004-05   | 21.6                                   | 10.5  | 1.1          | 3.2     | 36.4  |
| 2005-06   | 21.43                                  | 10.46 | 1.02         | 3.65    | 36.56 |
| 2006-07   | 21.40                                  | 10.00 | 1.03         | 3.98    | 36.41 |
| 2007-08   | 21.56                                  | 10.07 | 1.04         | 4.02    | 36.69 |
| 2008-09   | 21.89                                  | 10.16 | 1.04         | 3.99    | 37.08 |
| 2009-10   | 22.32                                  | 9.89  | 1.05         | 4.06    | 37.33 |

**ANNEXURE – I**  
**Comparative Analysis showing production estimate with effect from the year 1983-84 to 2009-10**  
**and Target for the Year 2010-11.**

| Year      | Milk Production<br>(‘000’ tonnes) | Meat Production<br>(‘000’ tonnes) | Egg Production<br>(Million Nos.) |
|-----------|-----------------------------------|-----------------------------------|----------------------------------|
| 1         | 2                                 | 3                                 | 4                                |
| 1983-84   | 40.2                              | 12.4                              | 51.4                             |
| 1984-85   | 43.6                              | 12.8                              | 54.9                             |
| 1985-86   | 46.2                              | 13.6                              | 57.8                             |
| 1986-87   | 47.2                              | 15.2                              | 60.0                             |
| 1987-88   | 40.9                              | 16.9                              | 61.6                             |
| 1988-89   | 46.7                              | 18.7                              | 63.5                             |
| 1989-90   | 47.4                              | 19.4                              | 63.7                             |
| 1990-91   | 48.4                              | 20.3                              | 66.5                             |
| 1991-92   | 50.4                              | 22.0                              | 66.8                             |
| 1992-93   | 51.6                              | 22.4                              | 70.0                             |
| 1993-94   | 52.9                              | 23.5                              | 73.0                             |
| 1994-95   | 54.0                              | 24.7                              | 75.0                             |
| 1995-96   | 55.4                              | 26.5                              | 77.0                             |
| 1996-97   | 57.4                              | 27.7                              | 79.2                             |
| 1997-98   | 59.1                              | 28.8                              | 81.4                             |
| 1998-99   | 60.7                              | 29.6                              | 82.6                             |
| 1999-2000 | 61.6                              | 31.6                              | 84.7                             |
| 2000-2001 | 64.0                              | 33.0                              | 87.0                             |
| 2001-2002 | 65.8                              | 34.0                              | 90.2                             |
| 2002-03   | 67.7                              | 35.5                              | 91.6                             |
| 2003-04   | 68.25                             | 35.6                              | 93.6                             |
| 2004-05   | 71.3                              | 36.4                              | 94.6                             |
| 2005-06   | 73.43                             | 36.55                             | 96.25                            |
| 2006-07   | 74.62                             | 36.41                             | 97.8                             |
| 2007-08   | 76.50                             | 36.69                             | 98.90                            |
| 2008-09   | 77.50                             | 37.08                             | 99.77                            |
| 2009-10   | 78.21                             | 37.33                             | 99.97                            |

Published and Computerized by the Directorate of Animal Husbandry & Veterinary Department, Meghalaya; Shillong.  
Printed at the Directorate of Printing & Stationery, (Press Wing) ; Meghalaya; Shillong.  
E-mail-ID: [ahvtmegh@yahoo.com](mailto:ahvtmegh@yahoo.com)  
[ahvtmegh@rediffmail.com](mailto:ahvtmegh@rediffmail.com)