

AGRIBUSINESS /2011

INTRODUCTION

Animal Science : branch of agricultural science which deals with breeding, feeding, care-management of animals and processing, marketing, distribution of their products and by-products.

Animal Husbandry : branch of animal science which talks about those domesticated animals and birds, which are reared mostly for economic or for recreation purposes. Husbandry practice includes proper feeding, breeding, housing, health-care and many other activities.

Livestock : means stock of money into live animal for future return. Domesticated farm animals or birds are reared as livestock mostly for economic or for recreation purposes, such as cattle, buffalo, sheep, goat, camel, pig, horse, dog, poultry etc.

Table-2- Livestock & Poultry population in Bangladesh

Number (in million)								
Livestock/ Poultry	1993-94	2000-01	01-02	02-03	03-04	04-05	05-06	06-07
Cattle	21.88	22.39	22.46	22.58	22.60	22.67	22.80	22.87
Buffalo	0.68	0.92	0.97	1.01	1.06	1.11	1.16	1.21
Goat	12.45	16.27	16.96	17.69	18.41	19.16	19.94	20.75
Sheep	1.51	2.11	2.20	2.29	2.38	2.47	2.57	2.68
Total Livestock	35.52	40.69	41.59	42.52	43.45	44.41	46.47	47.51
Chicken	97.04	142.68	152.24	162.44	172.63	183.45	194.82	206.89
Duck	25.76	33.83	34.67	35.54	36.40	37.28	38.17	39.08
Total Poultry	122.80	176.51	186.91	197.98	209.03	220.73	232.99	245.97

Sources: DLS, 2008.

Importance of livestock production

1. **Food:** meat, milk, egg and its products & by products

	Need per capita	Supply	Deficit	% Deficit
Meat (g/d)	120	13	107	89
Milk (ml/d)	250	20	230	92
Egg/week	3.0	0.5	2.5	83

2. **Power:** ploughing, crop thrashing, transportation etc
3. **Manure:** cow dung urine, litter, bedding, compost and bone meal.
4. **Fuel:** dry cow dung and biogas.
5. **Clothing:** wool (sheep), mohair & pashmina (goat), leather jacket, shoes etc.
6. **Income generation:** household, small and large farming.
7. **Source of foreign currency:** hides, skin, zoo animal etc.
8. **Socio-cultural purposes:** entertainment, festival, dowry, animal lending, economic security etc.
9. **Security:** watching, guide etc. especially dog.
10. **Processing activities:** slaughtering, meat processing, milk processing, egg processing, shearing, wool processing, and hair processing plant, tanning of hide and skin.
11. **Employment generation** : Industry: Animal feed Industry, Dairy and Poultry equipment industry, Pharmaceuticals industry.
12. **Industrial uses:** animal glands, animal fats (soap and glue industry), bone (fertilizer industry) and egg(shampoo).
13. **Use in research work:** livestock and poultry are used in research purpose.
14. **Ecological balance:** weed and insects naturally control by livestock and poultry

Terminology or glossary of livestock

Tabular form of glossary of livestock

	<i>New born</i>	<i>Adult male</i>	<i>Adult female</i>	<i>Castrated male</i>	<i>Castrated female</i>	<i>Act of parturition</i>
Cattle	Calf	Bull	Cow	Bullock/Steer	Spayed	Calving
Goat	Kid	Buck/Billy	Doe/Nanny	Wether/wedded	Spayed	Kidding
Sheep	Lamb	Ram/Tup	Ewe/Dam	Wether/wedder	Spayed	Lambing
Horse	Foal	Stallion	Mare	Gelding	-	Foaling

Groups of different farm animals

A group of cattle - Herd/Drove; A group of buffalo - Herd ; A group of goat - Flock/Trip/Band
 A group of sheep- Flock/Hurtle ;A group of poultry - Flock ;A group of pig - Stock

<i>Species</i>	<i>Name of meat</i>
Calf	Veal
Cattle	Beef
Buffalo	Bafen/ Carabeef
Goat	Chevon
Sheep	Mutton
Chicken	Chicken meat
Pig	Pork/Bacon
Deer	Venison

<i>Name of the animals</i>	<i>Scientific Name</i>
Cattle	<i>Bos taurus</i> (hump less) <i>Bos indicus</i> (humped)
Buffalo	<i>Bubalus bubalis</i>
Goat	<i>Capra hircus</i>
Sheep	<i>Ovis aries</i>
Horse	<i>Eqauus caballus</i>
Pig	<i>Sus domesticus</i>
Chicken	<i>Gallus domesticus</i>
Deer	<i>Axis axis</i>

Others glossary: Cattle

Cattle: includes both sexes and age under the species *Bos taurus* & *Bos indicus* . **Heifer:** female cattle over one year, which has not yet caved.

Cow: After calving the heifer becomes a cow. **Abattoir:** A slaughter house.

Free Martin: when twin calves of different sexes are born, the bull calf is usually sexually normal, but in most cases female calf is sterile and the external genital organs are abnormal in structure- this abnormal calf is called free martin. **Docking:** Removal of tail, mainly in lamb.

Pregnancy or gestation period: Time between concept and birth. **Lactation:** Length of milking period in each parturition. **Ad libitum:** Intake feed or water on a free choice basis as desire. .

Parturition: Act of delivery.

Hide: outer body covering of large animal. eg, cattle, buffalo. **Skin:** outer body covering of small animal. eg, goat, sheep. **Culling:** Elimination of nonproductive or undesirable animals.

Dry cow: A cow that is not producing milk. **Dry period:** Non lactating days between lactations.

In vitro: Within artificial environment. **In vivo:** Within the living body. **Puberty:** The period of life at which the reproductive organs first become functional. **Zero grazing:** A system of feeding in which animals are kept in building or yard and fodder is taken to them.

N.B: Glossary of buffalo- same as cattle

Wallowing: act of rolling or floundering in mud or in water by a buffalo to regulate body temperature.

Goat and sheep

Buckling: a male goat over one year but not exceeding two years; **Goatling:** a female goat over one year but not exceeding two years; **Shearing:** it is the process of harvesting natural fiber of sheep; **Grimmer:** a female sheep between first and second shearing; **Seggy:** a ram castrated after service.

Horse

Stud: A stallion is used for breeding

Mule: breeding of male donkey with female horse, they produce offspring, this offspring is called mule. Mule has no reproductive ability.

Male donkey x Mare----->Mule

Jennet or Hinny: breeding of female donkey with male horse, they produce offspring, this offspring is called jennet or hinny. It has no reproductive ability.

Female donkey x Stallion----->Jennet or hinny