

A Study On The Management Practices And Production Performance Of Cobb 500 Broiler Breeder Parent Stock In M. M. Agha Poultry Farm

ABSTRACT

The study was undertaken on seventeenth thousand six hundred Cobb500 broiler breeder parent stock at M.M.AGHA Limited, Dewan Nagar, Hathazari, Chittagong from 09th August to 31th August, 2016. The objective of the study was to observe the management practice like brooding, feeding, lighting, medication, vaccination, biosecurity etc. & production performance like average feed intake, average live weight gain, feed conversion ratio, health status and mortality of Cobb 500 broiler parent stock in the existing management system of M.M. AGHA Poultry farm. The feeding system was Adlibitum basis. Temperature, humidity and ventilation was controlled automatically within the open house system rearing of broiler breeder parent stock. The production performance parameters showed that average body weight gain of cobb500 male and female was 1120gm and 830gm respectively, mortality rate was 2.31%. From the analysis of data it can be said that Cobb500 has overall good performance that can fulfill the customer's demand. Therefore it may be inferred that Cobb 500 performed well under the existing management system.

Key words: Cobb 500 broiler parent stock, management practice, growth rate, body weight, feed conversion ratio.

CHAPTER-1

INTRODUCTION

Bangladesh is a densely populated third world country where people mostly suffer from malnutrition. About 47%, 38.4% and 4.3% people are suffering from mild, moderate and severe malnutrition respectively in Bangladesh (BBS, 1998). Poultry plays an important role in reducing the gap of protein supply in the country. So with a view to meet the protein scarcity with in shortest possible time, there has been a shift of policy emphasis on intensive poultry farming in recent years. Once upon a time when poultry was reared as a backyard farming system. A few number of poultry was reared in rural people and income level has too small. Now a days, we have been passed the critical moment, because to maintain the protein balance in all over people of Bangladesh. So only the way to developed in poultry farming sectors and thus recovery the scarcity of protein in all over people of Bangladesh.

There are about 206.89 million chickens and 39.08 million ducks estimated in the fiscal year 2006-2007 (BBS, 2008). Poultry and eggs are a significant source of animal protein for humans. According to DLS (2007), meat requirement is 120gm/day/head and 6.26 million metric ton/year. But our achievement is 20gm/day/head and 1.04 million metric ton/year. Poultry meats contributes approximately 37% of the total animal protein supplied in the country (Rahman and Rahman 1998) .So we can say that the production cannot cope at with the high demand by our native chicken. For this the government encourages the people for poultry farming as an industry. In Bangladesh, 50 commercial poultry industry has seen a tremendous development in the recent years. According to number provided by government of Bangladesh livestock department, the total chicken population is steadily increasing from about 143 million birds in 2006 (DLS 2007). Recent data showed that total number of chicken in 2008 is 175.15 million (Krishi dairy 2008).

Broiler breeder production is one of the profitable production activities than broiler and layer production. A broiler breeder could generate Rs. 786 ± 49.8 % as net profit giving Rs 106 ± 7.34 % return over the invested capital (Farooq et al. 2001) as compared to broiler (Rs. 7 per broiler per flock) (Asghar et al 2000) and layer farming (Rs. 38.26 ± 6.66 per layer (Farooq et al, 2003). In

Bangladesh commercial poultry farms are supported by 130 parent stock farms and 8 grand parent farm, which however, not always in production (Saleque, 2007). In 2006 the weekly production of day old chicks was 5542000 broiler chicks (Saleque, 2007). Saleque (2007) , reported that in 2006 five grand parent farms produced 60% of the parent broiler. The parent stock growers are always interested to select a strain that is well adaptable under local condition and is capable of producing quality hatching eggs for the hatcheries in accordance with their inherent potentiality (Hossain at al 2005).

In Bangladesh the existing native breed are Aseel, Sarail, Naked neck, Yasin etc. Their productive performance is not sufficient. So the commercial poultry industry uses some exotic broiler breed such as Cobb 500, Cobb100, Hubbard classic, Hybro-PN, Hybro-PG, Ross (Saleque & Rozen 2007).

Cobb 500 is an English strain which shows an excellent production & reproduction performance in standard condition. It has a worldwide reputation for the lowest cost of producing chicken meat. Cobb geneticists have developed this breed by the research of more than 30 years progress using a combination of both traditional pedigree selection and new technology. They have developed a very high breeder performance of Cobb 500 .Such as Cobb 500 starts laying at 18 weeks of age .Age at 5% egg production is 24 weeks of age .At 65 weeks of age - total eggs/hen housed is 175, hatching eggs/hen housed is170 , peak hatchability 91 % ,broiler chicks/hen housed 144 (Cobb breeder management guide 2009). For such high breeder performance M.M AGHA Poultry Limited choose Cobb 500 as a broiler parent stock for rearing.

Therefore the present study was undertaken at M.M. AGHA Limited, Hathazari, Chittagong to observe the parent stock management practices with the following objectives.

1. To learn the management practice of cobb 500 broiler breeder.
2. To know production performance of cobb 500 of this farm.

CHAPTER-2

MATERIALS AND METHODS

2.1. The study area:

The study was performed at a renowned poultry farm of Bangladesh named M.M. AGHA Limited at Dewan Nagar, Hathazari, Chittagong where popular broiler parent stock Cobb 500 was reared in Environmentally Controlled House.

2.2. Study Period:

The study was conducted from 09th August to 31th August, 2016 during my internship placement.

2.3. Study Population:

Research was conducted on 17600 number Cobb 500 broiler breeder. The data was collected with the help of workers, shed supervisor and the farm manager.

2.4. Description About Cobb 500 Broiler Breeder Parent Stock:

Cobb is the world's oldest poultry breeding company. Beginning in 1916 in Massachusetts, USA, and Cobb has developed into the global leader in broiler breeding. The world's most efficient broiler has the lowest feed conversion, best growth rate and an ability to thrive on low density, less costly nutrition. These attributes combine to give the Cobb 500 the competitive advantage of the lowest cost per kilogram or pound of live-weight produced for the growing customer base worldwide.

The Cobb 500 has some characteristics. These are-

- Lowest cost of live weight produced
- Superior performance on lower cost feed rations
- Most feed efficient.

- Excellent growth rate
- Good egg production.
- Maximum hatchability
- Best broiler uniformity for processing
- Competitive breeder

2.5. Preparing For Chick Arrival:

The activity to successful rearing of poultry broiler breeder depends on mainly effective management practices which were starting well before the chicks arrived on site.

- When importing day -old poultry breeding stock from another country it is advised that was trained personnel because transportation time and stress to be maintained properly otherwise poultry mortality increased.
- When Chick transportation from the airport it is carried by in clean, sanitized, properly ventilated temperature controlled vehicles.
- Brooding of chicks start on a single age farm. Ensure brooding farms were well isolated from older birds. Brood chicks on an all-in, all-out program with a good house security program. It is important that day old chicks need to maintain correct body temperature for proper growth.
- The rearing facilities were clean and pathogen free before the chicks arrive. Detailed Cleaning and hygiene procedures must be required for day old chick growth.
- Parent farms was secured. Any vehicles entering into the farm was maintained proper cleaning procedures. Only authorized visitors and personnel should enter the premises and they should be required to follow the correct biosecurity procedure.
- Biosecurity were maintained at all times that biosecurity regulations apply 365days of the year, including periods when the farm is empty. When every person enter in

to the farm need to Showering and wearing the protective cloth. The poultry house doors should be kept closed when not in use.

2.6. Brooder and chick guard:

The brooder house was located separately from other house because it reduce the chance of disease transmission. In my study area cage brooding was performed. The brooder house should keep clean at that time .All in and all out system is the best method for this reason. The brooder house was prepared by using 3” litter on floor of brooder house . The brooder house was fumigated and disinfected before 24 hours of arrival of chicks .In this farm the brooder house was controlled house Male chicks brooding separately . The hover was set approximately 3 feet above from the chick level. Only gas brooder was used for brooding of chicks. Hard Board was used for prevention of spreading of bird. Paper was used for bedding material. For brooding one gas brooder was used for 500 birds and the floor space at first week was 0.4 sq ft. which gradually increased day by day . The temperature was 34 c and then decreased @ 3-4 c in every week which was standard as per as direction of the manual. For chick guard was made of plain metal sheet because it conserve more heat than partex board .The height of the chick guard was 18 inches and the distance between the brooder and the litter was 69”

2.7. Brooding temperature

Brooders and space heaters were checked regularly to ensure they working correctly

Table: Comparative study on brooding recommended and actual / kept brooding temperature existing management system of M.M. AGHA poultry farm.

Day	Temp. for brooding (°C)	
	Recommended	Kept
1	35-33	35-33
2	33-32	33-32
3-7	32-29	32-29
7-14	29-26	29-26
14-21	26-23	26-23

21-28	23-21	23-21
28-35	21-20	21-20
35 and later	20	20

From the above data it can be said that special care was taken during brooding of chicks. For regular monitoring three worker always remain in the brooder house alternatively. The Standard & kept brooding temperature were recorded from the Cobb 500 breeder management guide and the record book of the farm respectively. From the analysis of data it is seen that the farm strictly maintain the brooding temperature.

2.8. Litter management

Rice husk was used as litter material. Before using the rice husk it was made disinfected by spraying with proper disinfectant like formalin (2/3 litre formalin + 10 water) at the rate of 300 ml solution /m² with concentration of 7 ml /litre. After making the litter materials properly disinfected it was used on the floor. In the brooder house the height of the litter was 4 inches. But other then brooding period it was 6-8 inch height. It was tried always to maintain the litter dry. For that the litter was scratched and rolled ups and down by scratches at least once a week and cake was removed. A part from this, regular spraying was done over the litter with proper disinfectant. The culled litter was sold at the rate of 25 taka per bag.

2.9. Floor space requirement:

Stocking density taken into consideration environmental or local climatic conditions. Males were significantly heavier than the females and was given extra floor space to help ensure they achieve target body weight. The whole floor covered with litter to prevent heat loss. Level shavings by raking and compressing firmly. Uneven litter creates uneven floor temperatures, causing groups of chicks to huddle in pockets or under equipment. This could restrict access to feed and water at this critical time of development

2.10. Floor space requirement:

Table . Comparative study floor space requirement of chicken.

		Floor space requirement	
		Standard (sq ft/bird)	Given (sq ft/bird)
Female	Brooding (0-5 days)	0.36	0.36
	Growing (6day-16 weeks)	1.75	1.75
	Laying (15wks-65wks)	2.75	2.75
Male	Brooding (0-5 days)	0.36	0.36
	Growing (6day-16 weeks)	3.00	3.00
	Production (16wks-65wks) cage rearing	1.5	1.5

2.10. Lighting Management:

Lighting is an important thing for the breeders at the period of layering specially. During this time light should never be reduced in time or in intensity. Broiler breeder hens come into lay in response to increases in the day length when male at the appropriate time. The response of the hens to light stimulation is based on their condition, body weight and age. Cobb 500 Parents should be reared in light proof housing. The light intensity in such house must be less than 0.5 lux when the lights are switched Dark out houses should provide total light control. Start chicks on 24 hours of light reducing to 8 hour by 23 weeks of age. The age at which 8 hours day length is reached will depend on feed consumption time. Generally the 8 hour day length can be started when the birds consume their every day restricted amount of feed in 5 hours or less

Table : Lighting schedule in M.M.Agha poultry farm

Age (weeks)	Age (days)	Light (hours)	Light intensity (lux)
1 to 3	Day-old to 21	Decreasing from 24 hours at day 1 to 8 hours by 14-21 days	Days 0-2 maximum light (>20 lux) reducing to 20 lux by day 7

3-20	21-140	8	5-10
20-21	140-147	11	40-65
21-22	147-154	13	40-65
22-23	154-161	14	40-65
23-60	161-420	16	40-65

The farm followed recommended lighting schedule.

2.11. Feeding Management:

When the chicks were arrived, immediately to supply crumble feed. During brooding period feed was given by spreading on the paper at an early age .Than with the age increase linear feeder was used there. Provide linear feeder at the rate of one for 45 chicks. It was placed between the main feed and drinker lines and adjacent to the brooder. Supplemental feeders were provided for the first 7-10 days.

2.12.Nutrient Recommendation:

Table : Composition of nutrient requirement of Cobb 500 broiler breeder parent stock

Nutrient	Cobb500	
	Pre-starter feed (0-2weeks)	Starter feed (3-6 weeks)
Metabolizable Energy (kcal/kg)	2868	2780
Protein (%)	20.5	18.5
Fat (%)	6	6
Fibre (%)	5	5
Ash (%)	8	8
Moisture (%)	13	13
Lysine (%)	1.12	0.9
Methionine (%)	0.45	0.4
Cystine (%)	0.5	0.45
Tryptophan (%)	0.28	0.28
Threonine (%)	0.78	0.80

2.13. Water Management :

Fresh water supply is very important for proper intake of feed. The main drinking systems were used in Bell drinkers, and nipple drinkers . At first bell drinker was used for drinking of water. With the age increase nipple drinker was used. Bell drinkers installed at the rate of one per 75 birds. And Nipple drinker given at the rate of 10-12 birds per nipple. Generally the height of the nipple line should be at eye level for the first 48-72 hours post placement. Begin raising nipple lines on the 4th day so birds are drinking at a 45⁰ angle.generally ad libitum water was given . It was 1.8 times more than feed consumption .

2.14. Ventilation:

Actually temperature and ventilation was maintained there according to the condition of the birds. During brooding when the chicks gathered in the periphery then the hover was placed somewhat above from the previous height. But when the chicks gathered under the hover, then the hover placed down .During summer water is sprinkled over the roof in brooder house. And in case of layer birds as they kept in environmentally controlled house so the ventilation is maintain automatically. The ventilation was maintain by switching of the fan.

2.15. Beak Trimming Of Chick:

Beak trimming is very important for proper feeding of every chicks .It also helps to decrease cannibalism of the flock .Before beak trimming their was supplied Vit-k in drinking water at the 24-48 hours in the period of time . well trained group people. They were done accurately and uniformly throughout the large number of flock. Both males and females were done debeaking at the age 4-7 days of age. In case of male beak trimming was performed 5 mm in front of the nostril .And also female 3mm was performed in front of the nostril. Again beak trimming should be done at 16-18 weeks of age.

2.16. Grading:

Body weight grading is play an essential role to maintained flock uniformity. If it was done properly, the flock size growth increased and found optimum weight after a period of time.By weighing, during the time birds were graded into three categories and placed in to

three separated pens. These were 1.Over weight 2.standered weight 3.under weight. When I was remaining in here, females were graded at 3-4 weeks of age .But males were graded after 5 weeks of age. Body weight mainly depends on according to consumptions of feed in per bird.

2.17. Biosecurity Maintenance in the Study Farm (M.M. AGHA poultry Farm):

- i. This farm chosen an isolated area for developing new parent farm.
- ii. This farm hade a perimeter fence to prevent unauthorized people, vehicles and animals.
- iii. All the sheds of the farm houses were environmentally controlled. So. It help to minimize the contamination.
- iv. All the workers took shower wore clean, color coded and calendared clothes before entering into the farm.
- v. Foot water bath was used before entering into each shed.
- vi. There were different worker for working i9ntoo different shed.
- vii. Regular disinfection procedures are followed both outside the shed and inside the shed. Liming outside the shed and disenkap^(R) spray were regularly used inside the farm.
- viii. Feed delivery vehicles entered into the farm after disinfectant spray .
- ix. That farm contained four environmentally controlled shed for female bird zone open sided shed for male birds against each age group of female birds. For this there was a chance of pathogen transfer through semen, caretaker or insurant of AI during semen collection from the open sided houses and artificial insemination in the environmentally controlled house.
- x. This farm contain different age group flock at different shed. The distance from one shed to another shed was apx 800 ft only. So there was a chance of contamination from one flock to another flock.
- xi. There was no isolation shed for sick birds. Sick birds are kept within a net in corner of the same flock. So, there was a chance of transmission of microbes easily from sick bird to healthy bird.
- xii. There was no pest mortem room. Post mortem was done outside the shed at a distance of apx 50ft from the main shed. So, there was a chance of contamination.

xiii. All the house was not rodent prof & wild bird proof. Rat mongoose & snake sometimes attach the flock.

2.18. Vaccination Schedule :

Same schedule was practiced for all the birds reared in M . M .AGHA Poultry Farm

Table : Vaccination schedule for Cobb 500 Broiler Breeder.

Age (day)	Age (Week)	Name of Vaccine	Route
4 th	-	IBD Live (INTER)	Eye
5 th	-	Cocci Vaccine	Water
6 th	-	Debeaking	-
7 th	1	MA5 Clone 30+ ½ dose IBD Killed	Eye & S/C
9 th	2	Reo live	S/C
12 th	2	IBD live + ½ dose ND killed	Eye & S/C
13 th	2	IB 4/91	I/O
16 th	2	ND Lasota	Eye
26 th	3	IBD live	Eye
35 th	5	Reo Live	S/C
42 th	6	ND+IB Killed	S/C
45 th	7	Fowl Pox	Wing Web
56 th	8	Fowl Cholera (killed)	I/M or S/C
63 th	9	Salmonella (killed)	S/C
70 th	10	4/91 IB	I/O
80 th	12	Coryza (Optional)	I/M or S/C
84 th	12	Fowel cholera (killed)	I/M or S/C
91 th	13	Salmonella (killed)	S/C
98 th	14	AE + Pox	Wing Web
105 th	15	Coryza(Optional)	I/M or S/C
112 th	16	ND+IB killed MA5+(IB live)	S/C & Eye
126 th	18	EDS Killed	S/C
147 th	21	ND+IB+IBD+Reo killed	S/C

CHAPTER-3

RESULTS AND DISCUSSION

In M.M.Agha Poultry Farm, I observed feeding program regularly. During brooding period, they were supplied mash feed in Cobb 500 broiler breeder chicks .Sometimes at the age up to 16 weeks they were supplied pellet feed in both male and female birds.

3.1. Weekly performance:

Cobb 500 broiler breed were fast growing broiler breeder birds. Performance of growth rate increases per week at Cobb 500. The Cobb 500 broiler chick rearing is more profitable in open side rearing system .

3.2. Feed Intake:

The study period feed was given into the birds in different times of the day. Normally in grower stage nutrient requirement were very close to Cobb 500 (male and female) birds. Approximately they were supplied rational feed at the age of 1st,2nd and 3rd weeks(table 1).Body weight of 5% birds was taken from each flock once weekly usually at the weekend in empty stomach. Then the amount of feed offered in the next week depends upon the body weight achieved in comparison with the recommended body weight, in the growing stage. In the production stage the amount of feed offered according to the production performance.

Table 1: Weekly performance of Cobb 500 broiler breeder

Age in week	Initial average body weight in gm/bird/ week.		Amount of Feed intake in gm /bird/week.		Average Body weight gain in gm /bird/week.		Average growth rate/bird/week.	
	Male	Female	Male	Female	Male	Female	Male	Female
01	39	40	126	112	139.5	127.5	100.5	87.5
02	139.5	127.5	218	202	329	288	189.5	160.5
03	329	288	305	280	507.5	447	178.5	159
04	507.5	447	416	342	762	582	254.5	140
05	762	582	452	355	947	720	185	138
06	947	720	483	378	1120	830	264	110

3.3. Body Weight Gain:

I observed and recorded weekly average body weight gain (gm/day) of Cobb 500 broiler up to 6th week of age. Their body weight gain gradually increased and average body weight approximately near about to standard. It depends on mainly feed intake of per bird. 1st week and 2nd week they were intake less feed .As a result body weight gain less in first two weeks of bird .According to the graph 1, body weight gain (gm/bird) at 1st,2nd ,3rd,4th,5th and 6th week were male,139.5, 329, 507.5, 762, 947, 1120 and female 127.5, 288, 447, 582, 720, 830.

In cobb 500 broiler strain at the beginning week 8 ‘full fed’ birds weight 2.4 kg (laboga et al 2002).

Table2: Performance of Cobb 500 (Male) broiler breeder parent stock

Age in week	Feed intake in gm/bird/week.	Average body weight gain in gm /bird/week.	Feed conversion ratio
01	126	139.5	0.9
02	218	329	0.66
03	305	507.5	0.6
04	416	762	0.54
05	452	947	0.48
06	483	1120	0.43

Table 3: Performance of Cobb 500 (Female) broiler breeder parent stock

Age in week	Feed in take in gm/bird/week.	Average body weight gain in gm /bird/week.	Feed conversion ratio (FCR)
01	112	127.5	0.88
02	202	288	0.7
03	280	447	0.62
04	342	582	0.58
05	355	720	0.49
06	378	830	0.45

Body weight gain by graphical representation in Cobb 500 (male & female) broiler breeder parent stock:

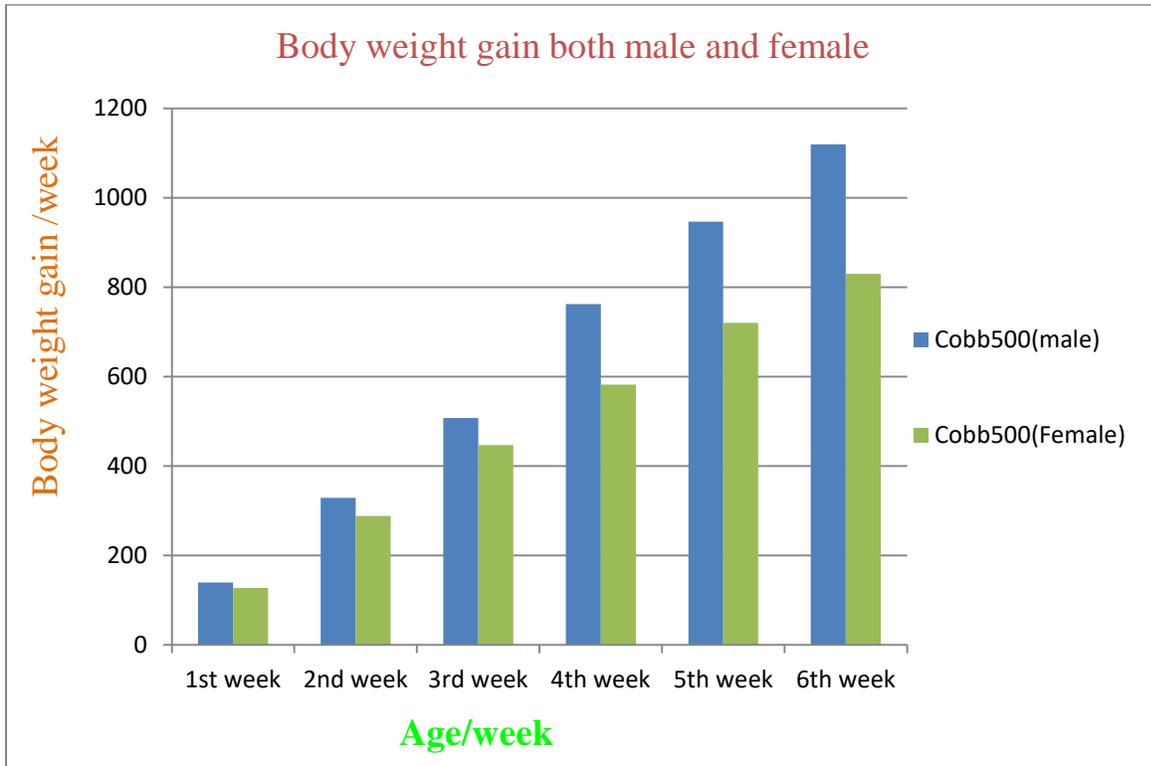


Fig1: Overall weekly body weight gain with Cobb 500 both male & female

Male body weight gain by graphical representation:

The graph 2 shows that ,the Cobb 500 bird body weight gain at 1st, 2nd ,3rd,4th,5th and 6th weeks were 139.5, 329, 507.5, 762, 947, 1120 (gm/bird) and the standard bodyweight gain 1st to 6th weeks were recorded at160, 330, 520, 690, 850, 1000(gm/bird) respectively.1st and 3rd weeks the body weight gain was not sufficient to the standard weight of cob 500 broiler birds. But at 2nd ,4th ,5th , 6th weeks body weight was increased over the standard weight.

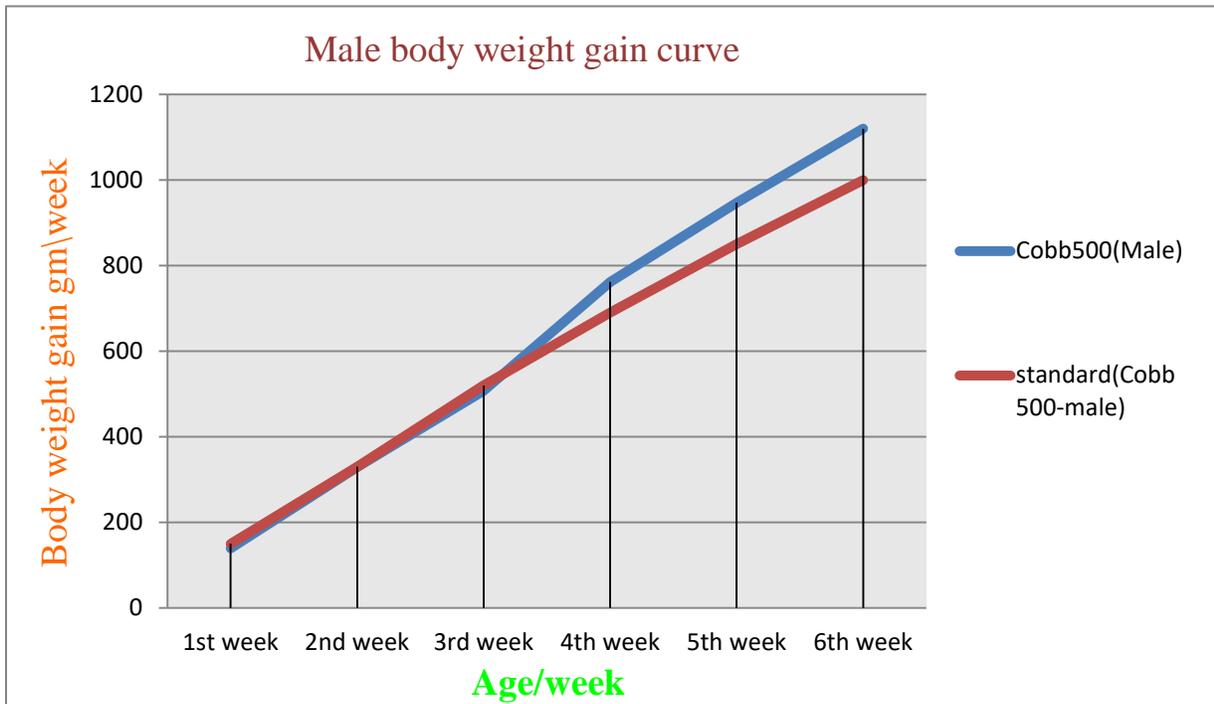


Fig 2: Body weight gain of cobb 500 male broiler breeder parent stock.

Female body weight gain by graphical representation:

The graph 3 shows that, body weight gain of Cobb500 female birds at 1st, 2nd, 3rd, 4th, 5th and 6th weeks were respectively 127.5, 288, 447, 582, 720 and 830 (gm/bird) and the standard body weight gain 1st to 6th weeks were recorded at 160, 285, 410, 540, 645 and 750 (gm/bird). So the 1st and 2nd weeks body weight was increased in rapidly and 4th, 5th, 6th week body weight was decreased.

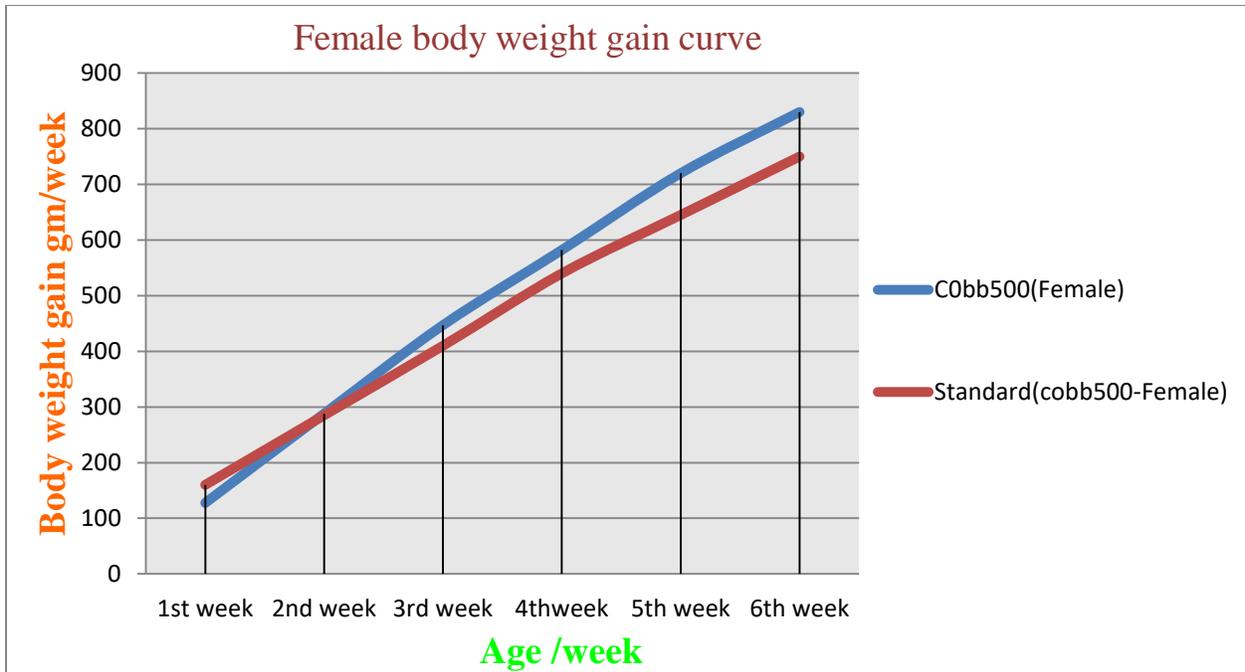


Fig 3: Body weight gain of cobb 500 female broiler breeder parent stock.

3.4 Feed Conversion Ratio :

In figure2, week wise feed conversion ratio indicates that FCR increases with the increases of age. It reveals that with the increases of age their feed intake increases but weight is not so increases.(Banerjee,2007).The figure show that ,average feed conversion ratio of Cobb500 (male and female) birds decreasing with their age . The body weight gain gradually increased in cobb500 (male and female) birds due to less feed intake.

The graphical representations of FCR are given bellow:

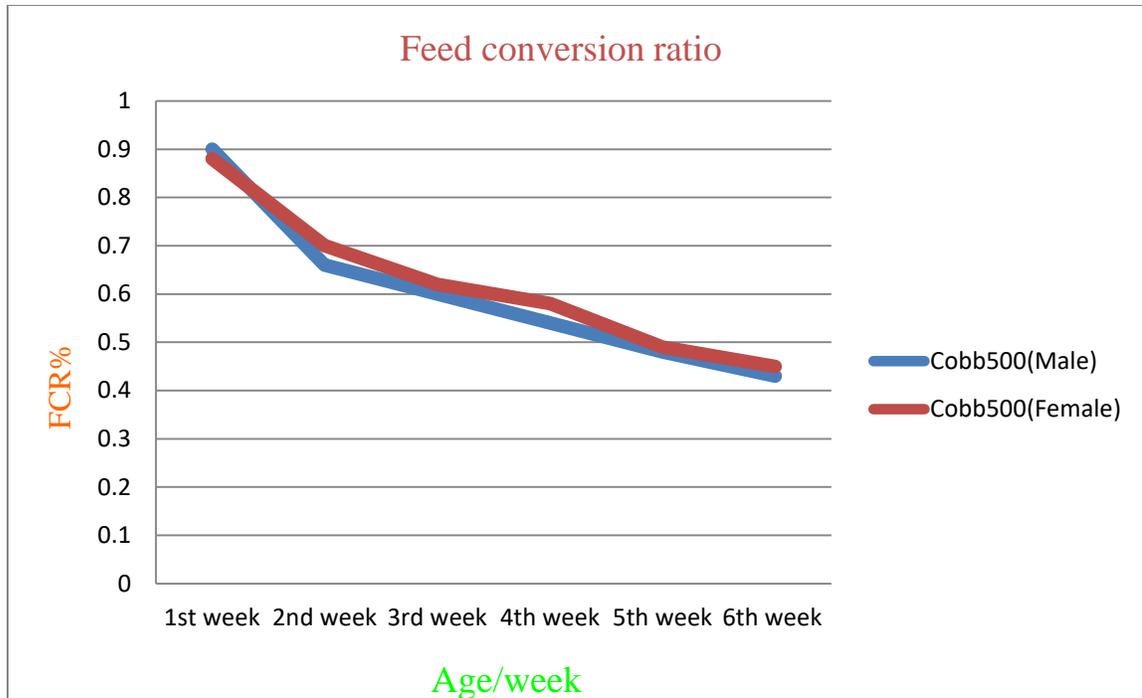


Fig 4: FCR of Cobb 500 broiler breeder

3.5. Mortality Rate:

In cobb500 chicks ,the mortality rate was increased at 1st week (0.13%)and decreased at 2nd,3rd ,4th ,5th week and 6th week (0.06%).(Figure:3).In this breed, the mortality rate were reduced at adult stage. The mortality rates of Cobb 500 broiler parent stock were at 2.31%.

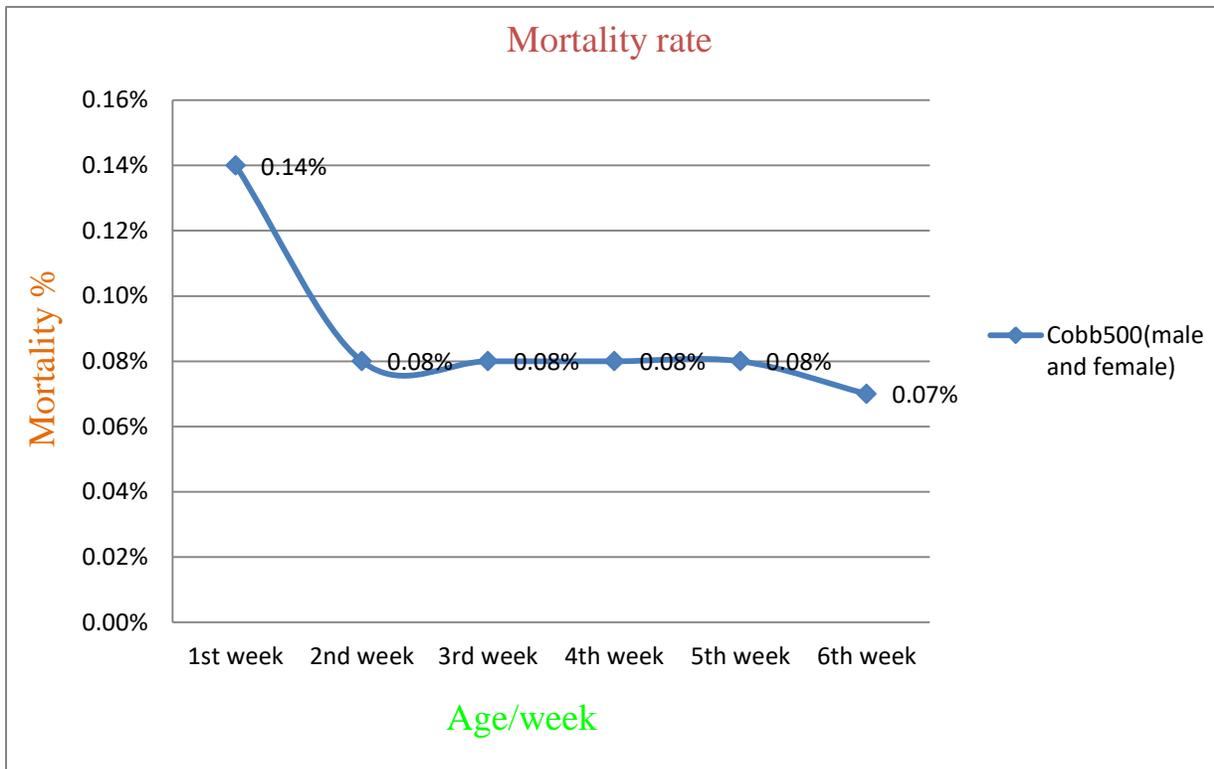


Fig 5: Weekly average mortality rate up to 6th week of age Cobb 500 (male and female).

CHAPTER-4

CONCLUSION

From the current study it may be concluded that it is possible to achieve target body weight , production , of Cobb 500 in our country .In this study period management practice and production performance depends upon mainly feed intake, body weight gain, feed conversion ratio, mortality and health status of the birds. I observed and collected data up to 6th weeks of age. Result showed that the average observed weekly body weight gain and recommended body weight gain of Cobb 500 male (gm/bird) at 1st,2nd ,3rd,4th,5thand 6th week were 139.5 vs 160, 329 vs 330, 507.5 vs 520, 762 vs 690, 947 vs 850, 1120 vs 1000. The average observed weekly body weight gain and recommended body weight gain of Cobb 500 female (gm/bird) at 1st,2nd ,3rd,4th,5thand 6th week were 127.5 vs 160,288 vs 285,447 vs 410,582 vs 540,720 vs 645,830 vs 750. From the analysis of data it can be said that there are very insignificant amount of differences between the observed data and recommended data .Therefore it may be inferred that Cobb 500 performed well under the existing management system.

REFERENCES

- Alam, J., A. Sayeed, A. Rahman, F. Yasmin and J.Begum, (1998). An Economic Study on Poultry Farms in Bangladesh. *Bang. J. Livest. Res.*, 1: 1-5.
- Asghar, A., Farooq, M. Mian, M. N. and Khurshid, A. 2000. Economics of broiler production in Mardan division . *J. Rural Develop. Administ.*, 32: 56-64.
- Banerjee G.C. (2007). *Poultry, A Text Book of Animal Husbandry*, 8th edition. pp-837-931.
- Bangladesh Bureau of Statistics, 2008. *Statistical Pocket Book of Bangladesh*, Ministry of Planning, Government of the People's Republic of Bangladesh, Dhaka. Broiler parent stock production in Bangladesh. Proc.3rd WPSA, International poultry show and seminar , pp.15-23.
- B.B.S.(1998); *Statistical pocket book of Bangladesh* .Ministry of planning , Government of people's republic of Bangladesh, Dhaka.
- Cobb 500 Breeder management guide 2009.
- DLS. 2007. *Annual Progress Report*. Department of Livestock Services. Farm gate, Dhaka.
- Farooq, M., Mian, M. A., Faisal, S., Durrani, F. R., Arshad, M. and Khurshid, A. 2001. Status of broiler breeder stocks in Abbotabad and Mansehera. *Sarhad J. Ag.*, 17: 489-495.
- Farooq, M., Haq, Z. U., Mian, M. A., Durani, F. R. and Sayed, M. 2003. Cost of production, gross return and net profit in commercial egg production. *Pakistan Vet. J.*, 23: 41-48.
- Hossain, M. E., Chowdhury, S. D., Ahammed, M., Pramanik, M. A. H. and Rahman, M. R. 2005. Growth performance of kasila broiler parent stock reared on quantitative feed restriction, under Bangladesh condition. *Intl. J. Poult. Sci.*, 4: 153-158.
- Lobago, F., Melesse, G.. Mideksa. B.. Tibbo, M. (2002). Comparative performance of two broiler birds, (Cobb-500 and Ross) under small-scale production system in Debre Zeit, Central Ethiopia. *Bulletin of Animal Health and Production in Africa*. Vol:3. pp:34-39.

Rahman, M. M. and A. Rahman, 1998. Cattle and Poultry development activities. In: Kromobikash O Karjakrom, Directorate of Livestock Services (DLS), Bangladesh. 1st ed., pp: 31-55.

Saleque, M. A. and Rozen, S. M. 2007. Seasonal effects on the performance of broilers in Bangladesh. In: Proceedings of the 5th International Poultry Show and Seminar, The World Poultry Science Association, March 1-3, 2007, Dhaka, Bangladesh, pp: 10-17.

Acknowledgements

All praises are due to the Almighty God, whose blessings have been enabled the author to accomplish this word.

The author expresses her wholehearted senses of gratification, a sincere appreciation to her respected teacher and supervisor MD.Abdul Rahman, Assistant Professor, Department of Agril.Economics & Social Sciences, Chittagong Veterinary and Animal Sciences University, whose ingenuous and scholastic advice, judicious recommendations and untiring assistance have guided the author from the beginning of inception of intern studies until to the completion of this report.

The author would like to thanks to all of her friends and well wishers for their help, encouragements and inspiration during the study period and preparing a report.

The Author

October, 2016

Biography

I am Shaolin Ferdouse, daughter of Khaja Ferdouse Alam and Feruza Begum. I passed my Secondary School Certificate (SSC) examination from Ghatail S.E. Girls High School, Ghatail, Tangail in 2007(G.P.A-5.00) and Higher Secondary Certificate (HSC) examination from Cantonment Public School & College, Ghatail, Tangail in 2009(G.P.A-4.80). Now I am an intern veterinarian under the Faculty of Veterinary Medicine in Chittagong Veterinary and Animal Sciences University. I have immense interest to work in the field of Microbiology.