BEEF FATTENING PRACTICES AT SITAKUNDA UPAZILA, CHATTOGRAM

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Session: 2017-2018

A production report submitted in partial satisfaction of the requirements for the Degree of

Doctor of Veterinary Medicine (DVM)

Faculty of Veterinary Medicine

Chattogram Veterinary and Animal Sciences University

Khulshi, Chattogram-4225, Bangladesh

August 2023

BEEF FATTENING PRACTICES AT SITAKUNDA UPAZILA, CHATTOGRAM

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August 2023

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List of Acronyms Symbol Used

Abbreviation	Elaboration
%	Percentage
<	Less than
UMS	Urea molasses straw
GDP	Gross domestic product
DLS	Department of livestock services
AI	Artificial insemination
VFA	Veterinary field assistant
VS	Veterinary surgeon
ULO	Upazila livestock officer
NGO	Non-governmental organization
FMD	Foot and mouth disease
LSD	Lumpy skin disease
BQ	Black quarter
HF	Holstein Friesian
SW	Sahiwal
Etc.	Et cetera

BEEF FATTENING PRACTICES AT SITAKUNDA UPAZILA, CHATTOGRAM

Abstract

Due to the declining supply of Indian cattle, beef fattening is becoming more and more popular in Bangladesh. As 91.04% (According to the census 2022) of Bangladeshis are Muslim, a big portion of the fattened cattle is sold during Eid-ul-Adha. Approximately 40% of farmers practice fattening around the year and 60% are seasonal farmers who practice fattening for a period of less than 5 months to 8 months targeting Eid ul Adha. This study was conducted to evaluate the system of beef fattening practices in Sitakunda Upazila of Chattogram district of Chattogram division among small-scale beef fattening farmers. The data were collected through a structured questionnaire among 20 small-scale farmers of Sitakunda upazila from 17th May to 30th May 2023. The study's encouraging results include the fact that 20% of the young, literate generation are currently employed in the beef-fattening industry. At present new beef fattening technologies are being performed by farmers, like UMS(20%) and Silage(5%). Women (5%) are also involved in the farming business with great potential. Farmers dewormed their cattle regularly& this percentage is near 100. Intensive farming (60%) is comparatively more popular than semi-intensive as feeding under confinement prevents loss of energy through movement. The bad news is that 45% of farmers have no grassland. As a result, they rely mostly on expensive concentrate as their cattle feed. Over 65% of farmers are untrained. Approximately 30% of farmers do not vaccinate their cattle. Few farmers feed their cattle incorrectly, like with broiler feed, while some do it traditionally, like with jao vath.

Keywords: Beef fattening, Sitakunda, Small scale

Chapter-1 : Introduction

The process of increasing the health and weight conditions of beef cattle through improved methods of feeding and maintenance is known as beef fattening. Bangladesh is an agricultural country. So its economy mostly depends on four main components of agriculture. Livestock is one of them. Contributing about 2% to the country's GDP and 26% to the agriculture sector (FY 2021-2022). Among livestock, cattle are the most popular in Bangladesh. The total amount of livestock in Bangladesh exceeded 43 crore (FY 2021-22). Bangladesh is now self-sufficient in meat production and can meet the demand of population which is 830 gm per person.

The vision of livestock service is to ensure safe, adequate and quality animal meat supply to all. According to DLS 2023, the total number of cattle for Eid-ul-adha including fattened cows was 46 lakh 88 thousand. The demand for livestock for Eid-ul-adha in Bangladesh was 1 crore 3 lakh 94 thousand whereas available livestock was 1 crore 25 lakh 36 thousand which was more than the demand. At Chattogram district, the demand for livestock for Eid-ul-adha was 20 lakh 87 thousand whereas available livestock was 20 lakh 53 thousand (DLS 2023).

To develop a sustainable beef fattening system in Bangladesh it is important to know the total management system, factors, costs related to fattening farming and problems faced by small-scale farmers. For this reason, this study was conducted.

This study was conducted to evaluate the system of beef fattening practices in Sitakunda Upazila among small-scale beef fattening farmers. The specific objectives of the present study were**…**

1. To investigate the whole Management system of beef fattening (feeding, deworming, vaccination etc.)
2. The Socio-economic background of farmers.
3. To ascertain the total cost of the fattening period, marketing channel.
4. And problems faced by farmers.

Chapter-2 : Materials And Methods

2.1 Study area

The study was carried out in Sitakunda Upazila, Chattogram, Bangladesh. The study area has a latitude of 22°21'N, a longitude of 91°49'E, and an elevation of 29 meters. The area is fairly hot with an annual average temperature of 25.1°C. Mean monthly temperature has a variation of 9°C the hottest month is May having a mean temperature of 28°C. The average annual relative humidity of the area is 73.7% and the average monthly relative humidity ranges from 58% in January to 86% in August. The current study was carried out from 17th May to 30th May 2023.

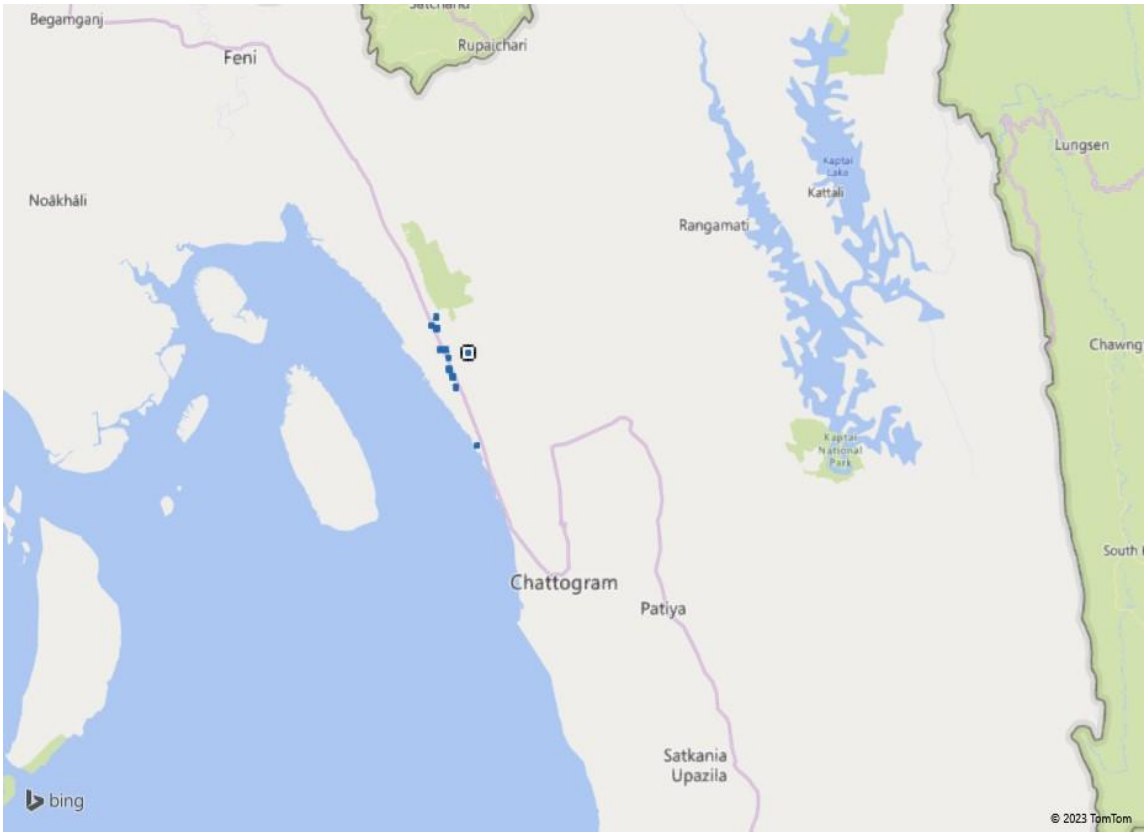

Figure-1: Geographical location of beef fattening farms in Sitakunda upazila.

2.2 Data collection

Data was collected through a structured questionnaire. The questionnaire was formed based on the objectives of the study. The questionnaire contained the following information socio-economic background of farm owner (Age, sex, education, occupation), Farm size, Farm type, owned or lent farmland and capital, Whole management system (Feeding, grazing, deworming, vaccination), cattle type, source of purchasing cattle, initial body weight, final body weight, selection criteria, animal cost, fattening cost, average selling price, marketing channel, who is responsible for the treatment, any training on fattening farming, any use of growth promoter, any death incidence during fattening period, problems faced by farmers during farming.

Data were collected randomly from 20 small-scale beef fattening farmers of different places in Sitakunda upazila. Data were collected following direct interviews and personal visits to their farms. The interview was conducted with both open and closed questions**.**

2.3 Data analysis

After collecting data, data were entered into an Excel sheet and then analyzed through STATA software.

Chapter-3 : Results and Discussion

3.1 Socio-economic background of Farm owner

Socio-economic background of farm owners is interrelated with the management of farms. Educated farmers are more concerned about organic farming and well management systems (regularly deworming their cattle and vaccinating their cattle against all endemic diseases).

Table 1 : Distribution of farmers according to their age, sex, educational level, occupation, Source of farm land& capital and training on beef fattening farming.

Parameters	Category	Percentage of respondents
Age	Young	20%
	Middle	70%
	Old	10%
Sex	Male	95%
	Female	5%
Education	Illiterate	5%
	Primary	15%
	Secondary	30%
	Higher	50%
Main Occupation	Student	15%
	Job	5%
	Agriculture	25%
	Businessman	55%
Farmland	Own	100%
	Lend	0%
Capital	Own	80%
	Lent money from relatives	5%
	Own & lent money from relatives	5%
	Bank loan	10%
Training on beef fattening	Have	35%
	Have not	65%

It was seen that the majority of farmers were middle aged (70%) and the minority were old age (10%). The number of young farmers increasing day by day(20%). 5% of female farmers were revealed who did their work with great potentiality.

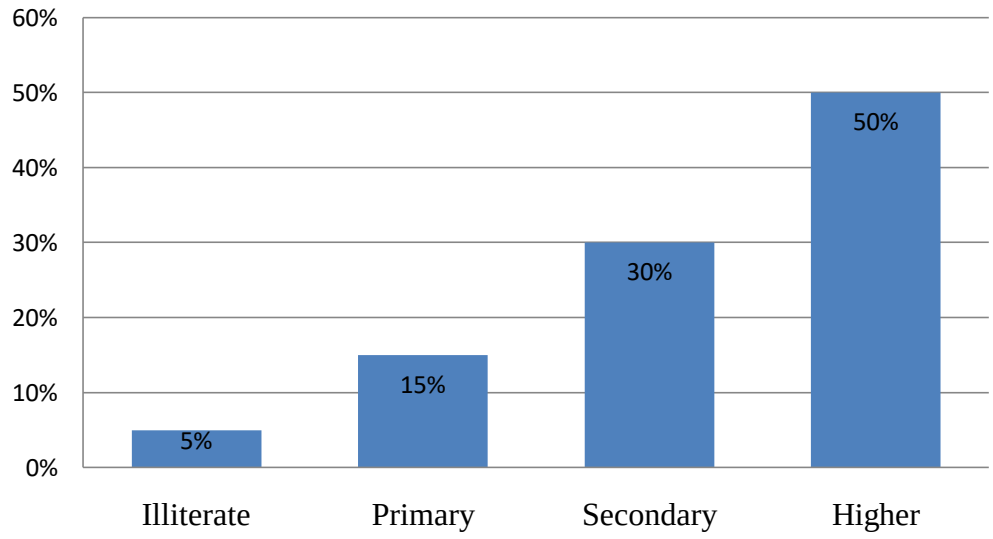

Fig-2: Education level of farmers.

Higher educated people are involved more in beef fattening than before. The main occupation of farmers that was revealed was businessman (55%). Approximately 15% of students were involved in the farming business. Only 5% were job person. Out of 20 farmers, 25% were involved in agriculture. About 100% of farmers owned land.

About 80% of farmers had taken their capital, 5% lent money from relatives and 10% took loans from banks which is similar to a previous study (rahman 2012). About 35% of farmers had taken training on beef fattening whereas about 65% had not taken any training. Which is contraindicated to the earlier findings (Kamal 2019).

3.2 Factors associated with Beef fattening

The number of cattle is less than 20 in 75% of farms and more than 20 in 25% of farms. Intensive farming is liked by 60% of farmers whereas 40% of farmers like semi-intensive farming.

Table 2 : Factors associated with Beef fattening

Parameters	Category	Percentage of respondents
Farm size	<20	75%
	>20	25%
Farm type	Intensive	60%
	Semi-intensive	40%
Breed	Indigenous	40%
	Crossbreed	30%
	both	30%

Sex of animal	Bull	45%
	Bullock	10%
	Bull, cow	40%
	Bull, Bullock	5%
Preferred color of animal	No preference	30%
	Red	65%
	Black & white	5%
Age at started fattening(month)	<10	30%
	12-18	50%
	>18	20%
Available grazing land	Have grazing land	55%
	No grazing land	45%
Vaccination	Regularly	70%
	No vaccination	30%
Name of vaccination	FMD	70%
	FMD, LSD	15%
	FMD, BQ	15%
Fattening period	<5	20%
	5-8	40%
	8-12	20%
	12-24	20%
Average Initial weight (kg)	<60	35%
	>60 - <100	30%
	>100 - <130	20%
	>130 - <220	15%
Final body weight (kg)	120-160	55%
	200-250	30%
	500-550	15%
Selection criteria	No	20%
	Breed, color	40%
	other character	40%
Any death incidence during the fattening period	Yes	80%
	No	20%
The technology used for fattening	UMS	20%
	Silage	5%
	Vitamin, mineral, amino acids	40%
	None	35%
Responsible person for veterinary care	AI technician	35%
	VFA	40%
	ULO& VS	10%
	NGO worker	5%
	Private vet practitioners	10%

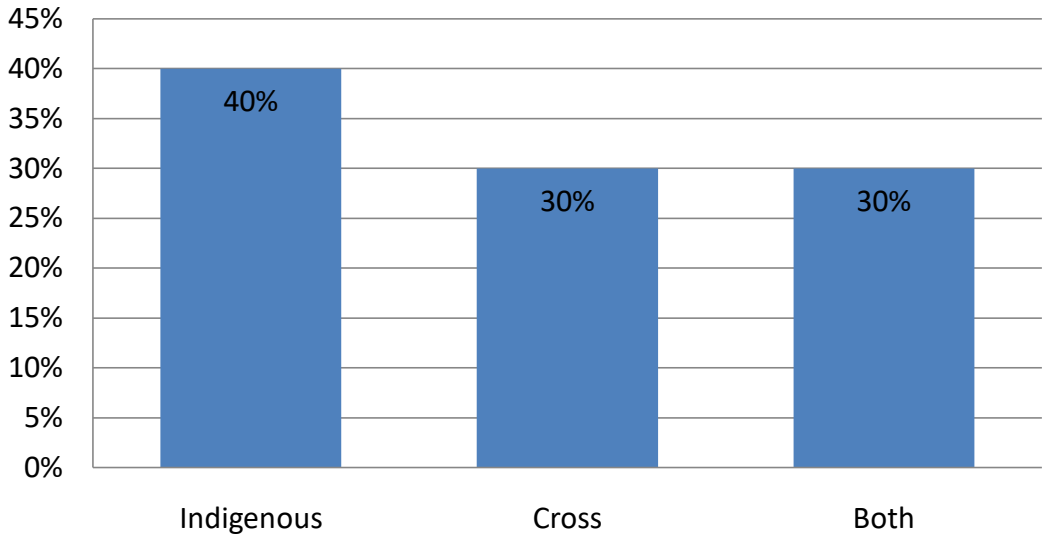

Fig-3: Preferred breed of cattle in the study area.

Among the farmers 40% selected indigenous breed, 30% cross breed (HF, SW) and 30% both, which is dissimilar to the previous study of (Kamal 2019). The majority of farmers (45%) rear uncastrated male cattle (bull) as a higher percentage of customer chooses the meat of male beef. 10% rear castrated male cattle (bullock) and 5% rear both. And 40% rear bull and cow. Most of the farmers (65%) prefer red coat color cattle as demand for red coat color cattle is high in Bangladesh.

55% of farm has available grazing land which is an important factor for beef fattening. 70% of farmer regularly vaccinate their cattle. 70% of farmer regularly vaccinate their cattle against FMD, 15% against FMD & LSD and 15% against FMD&BQ.

20% of farmers fattened their cattle for less than 5 months. About 40% of farmers practice fattening for 5 to 8 months. 20% for about 8 months to 1 year and the remaining 20% for 1 to 2 years. No use of growth promoters was shown by farmers of the study area. 20% of farmers used UMS, 5% silages as a new technology & 40% used vitamins, minerals, amino acids & others for fattening purposes.

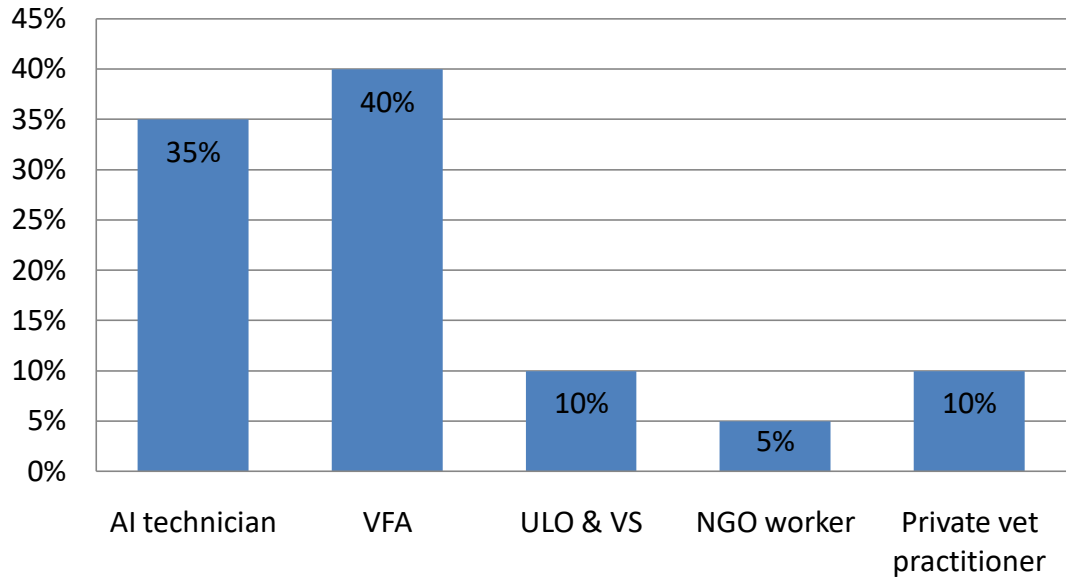

Fig : Responsible person for veterinary care in the study area.

Only 10% of farmers took treatment & care for their animal from an Upazila livestock officer (ULO) & veterinary surgeon(VS), 35% took treatment from AI(Artificial insemination) technician, 40% from VFA (Veterinary field assistant) and 10% from private vet practitioner. The result is very disappointing.

3.3 Feeding system in beef fattening

35%of farmers used rice straw < 2.5 kg whereas 65% of farmers used 3 to 5 kg per cattle per day. 5% of farmers did not feed green grasses to their cattle.

Table: 3 Feeding system in beef fattening

Parameters	Category	Percentage of respondents
Amount of Straw	<2.5 kg/day	35%
	3-5 kg/day	65%
Amount of Green grass	<10 kg/day	55%
	10-30 kg/day	40%
	No green grass	5%
Amount of concentrate	<3 kg/day	40%
	3-6 kg/day	45%
	8-12 kg/day	15%

55% of the farmers feed < 10 kg of green grasses to their cattle whereas 40% of farmers feed 10-30 kg of green grasses per cattle per day. 5% of the farmers fed their cattle only concentrate and rice straw no green grasses.40% of the farmers fed < 3 kg concentrate, 45%

of the farmers fed 3 to 6 kg & 15% fed 8 to 12 kg per cattle per day. 20% of the farmers treated their rice straw with urea. On the other hand, 5% of the total farmers were fed silage to their cattle.

3.4 Fattening Cost

In this study area marketing cost is around 3 to 5 thousand taka.

Table: 4 Fattening Cost

Parameters	Fattening period (in months)	Cost (taka)
Feed cost	<5 5-8 8-12 12-24	20000-36000 20000-40000 30000-50000 40000-70000
Treatment cost	<5 5-8 8-12 12-24	2000-8000 3000-10000 5000-10000 5000-15000
Caring cost	<5 5-8 8-24	1000-2000 2000-3000 3000-5000
Total cost	<5	32000 (25%) 38000 (50%) 45500 (25%)
	5-8	30000 (25%) 44000 (25%) 47000-63000 (50%)
	8-12	34000-45000 (50%) 55000-80000(50%)
	12-24	65000 (25%) 80000-90000(75%)

Table: 5 Animal buying and selling price

Parameter	Cost (Taka)	Percentage of respondents
Animal Buying costs	30000-60000 60000-80000 80000-120000	50% 30% 20%
The Selling price of the beef cattle	<90000 90000-150000 150000- 300000	20% 65% 15%

3.5 Marketing channel

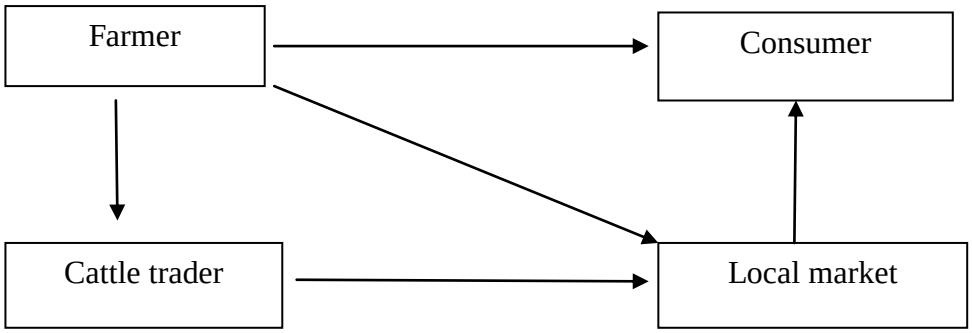

Figure-5 : Marketing channel

Cattle are taken to the local market for selling before Eid-ul adha only on hut days. In the marketing of cattle middlemen and butchers are involved.

3.6 Problems Faced in Fattening

Problems faced by respondents are listed below-

Table: 6 Problems Faced in Fattening

Parameters	**Percentage of respondents**
The High price of feed	30%
High treatment cost	20%
Lower growth rate	10%
Lack of Green grasses	15%
Higher marketing cost	10%
Lower Market price	15%

The high price of feed was the greatest problem in farming which is not similar to the study conducted by (rahman 2012) where they found shortest of animal feed was the greatest problem.

Chapter-4 : Conclusion

Farmers raise beef cattle for fattening without any scientific expertise in the majority of Bangladeshi villages. The result of this study will help farmers understand feeding, management systems and costs. Also, problems he/she may face in farming, and researchers to investigate more about beef fattening farming. Farmers should get proper training on the production and management practices of beef cattle fattening.

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Acknowledgements

All glory and honor belongs to Allah, who created everything in nature and gave me the ability to finish my study. I feel great pleasure to express my deepest sense of gratitude and indebtedness to my supervisor Professor Mr. Goutam Kumar Debnath, Department of Dairy and Poultry Science, Faculty of Veterinary Medicine, Chattogram Veterinary and Animal Sciences University for his guidance and valuable suggestions.

I would like to express my deep sense of gratitude and thanks to Professor Dr. Mohammad Lutfur Rahman, Dean, Faculty of Veterinary Medicine and Professor Dr. A. K. M. Saifuddin, Director of External Affairs for their helpful advice and support.

Finally, I express my warmest sense of gratitude to my parents and all well-wishers.

The Author

August 2023

Biography

I am Ondrila Akter, from Chattogram. I passed the Secondary School Certificate examination in 2014 (G.P.A-5.00) and the Higher Secondary Certificate examination in 2014 (G.P.A-4.75). I am a student of the 23rd batch and now I am an intern student under the Faculty of Doctor of Veterinary Medicine in Chattogram Veterinary and Animal Sciences University. In the future, I would like to work as a Veterinary Practitioner.

Appendix

Questionnaire prepared for data collection

Farmers information:

Owner name:……Phone number:……

Address:…….....

Age: young/ middle/ old Sex: Male/ Female

Main Occupation:……Education: Primary/Secondary/Higher/illiterate

Farming information:

Farm size:……Farm type: Intensive/ Semi- intensive Breed:…….

Cattle type: Bull/ Bullock/ culled cow Average initial body weight of animal: ----------kg

Any preferred colour : …… Available grazing land: Yes/ No Farm land :Own/Rented

Capital: Own/ Bank loan/ NGO loan/ lend Deworming: Yes/No

Vaccination: Yes/No Name of vaccination:…….

Source of purchasing cattle:…….

Selection criteria:…….

Age at starting fattening:……..M/Y Fattening period:…….M/Y

Feeding:

Rice straw:……kg/day Green grass:……..Kg/day

Concentrate:……..kg/day UMS: Yes/No

Others:……..

Use of any Growth promoters: Yes/ No

If yes what are those:…….....

Fattening cost /animal:

a) Animal cost:
b) Feed cost:
c) Housing cost:
d) Treatment and prevention cost:

e) Caring cost:
f) Interest on invested capital:
g) Marketing cost:
h) Others cost:

Any training about beef cattle fattening farming: Yes/ No

Is there any incidence of death of animal during fattening period? Yes/No

If yes, how many? :

What was/were the cause(s) of death? ----------

Who is responsible for veterinary care of the farm? ----------

Average final body weight of animal:

Marketing Channel:…….....

Average selling price:

Problem faced in beef cattle farming:…….....

……
……
…….

Conscent: I hereby give my conscent for images and information related to my farm to be reported by Ondrila Akter who is conducting this research as a part of DVM degree at CVASU.

Signature of farm owner:……

Image Gallery

Data collection

Collected data entered into Excel sheet

	A	B	C	D	E	F	G	H	I	J	K	L
1	SN	Date	Address	Owner Name	Phone number	Age	Sex	Main Occupation	Education	Farm size	Farm type	Breed
2	1	20/5/23	Uttar mahmudabad,barabkunda	Md. Ismail Hossein	1814818527	Middle	Male	Farmer	Primary	4	Semi-intensive	HF & indigenous
3	2	20/5/23	Uttar mahmudabad,barabkunda	Md. Ibrahim	1815632198	old	Male	Farmer	Illiterate	14	Semi-intensive	Indigenous
4	3	20/5/23	Uttar mahmudabad,barabkunda	Shahab uddin	1799820337	Young	Male	Job	Secondary	6	Semi-intensive	Indigenous
5	4	20/5/23	Uttar mahmudabad,barabkunda	Nurul Goni	1857594295	Middle	Male	Farmer	Primary	9	Semi-intensive	Indigenous
6	5	22/5/23	Nadaliea,5 no barabkunda union	Md. Baccu Mia	1322986107	old	Male	Farmer	Primary	25	Intensive	Indigenous
7	6	22/5/23	Nadaliea,5 no barabkunda union	Asset hill Agro Farm	1711127376	Middle	Male	Businessman	Higher	12	Intensive	SW
8	7	22/5/23	Nadaliea,5 no barabkunda union	Md, Tajul Islam	1811192196	Middle	Male	Businessman and farmer	Secondary	14	Intensive	SW
9	8	23/5/23	Haruner Bari, Chowdhury para,college road, sitakunda	Rokeya Begum	1828988104	Middle	Female	vehicle business	Higher	19	Intensive	HF & indigenous
10	9	23/5/23	Uttar Khaderkhil,Nunachora,sitakunda	Md. Tuhin Chowdhury	1908410694	Young	Male	Student	Higher	20	Semi-intensive	HF,SW & indigenous
11	10	24/5/23	Uttar Guramara, Baro kumira, sitakunda	Saidul Hasan	1627315078	Middle	Male	Business	Higher	40	Intensive	Indigenous
12	11	24/5/23	Uttar Guramara, Baro kumira, sitakunda	Md. Juel	1813275633	Middle	Male	Business	Higher	12	Intensive	SW, HF,Brahman
13	12	24/5/23	Uttar Guramara, Baro kumira, sitakunda	Md. Liton	NA	Middle	Male	Business	Secondary	16	Intensive	Indigenous
14	13	25/5/23	Moulobipara, 5 no ward, sitakunda	Fahmidul Islam	1613815854	Young	Male	Student	Higher	28	Intensive	Indigenous
15	14	25/5/23	South idilpur,sitakunda	Md. Kamrul Hasan	1718244334	Middle	Male	Farmer	Higher	17	Intensive	HF,SW
16	15	30/5/23	South Rahamat nagar,Sirajvuia rastar matha,Sitakunda	Md. Minhaj uddin	1864252357	Young	Male	Student	Higher	8	Semi-intensive	Indigenous, HF
17	16	30/5/23	Yakub nagar, Botthol,sitakunda	Aminur Rahman	1715085740	Middle	Male	Business	Higher	8	Intensive	Indigenous, SW
18	17	30/5/23	Yakub nagar, Botthol,sitakunda	Md. Afsar	1883618290	Middle	Male	Business	Secondary	7	Semi-intensive	Indigenous, HF
19	18	30/5/23	Maddham Yakub nagar, Botthol,sitakunda	Md. Mynul Islam	1768897165	Middle	Male	Business	Secondary	6	Intensive	SW
20	19	17/5/23	Gofur masjid bari, choto dargahut,sitakunda	Saiful islam	1813210782	Middle	Male	Businessman and farmer	Secondary	7	Semi-intensive	Indigenous
21												
22												
23												
24												
25												

	A	M	N	O	P	Q	R	S	T	U	V
1	SN	Cattle type	Avg initial body weight of animal	Any preferred color of animals	Available grazing land	Farm land	Land size(Shotok)	Capital	Deworming	Vaccination	Name of Vaccination
2	1	Bull, cow	130	No	yes	Own	2.5	Own	yes	No	NA
3	2	Bull, cow	60	Red	yes	Own	3.5	Lend from relatives	yes	No	NA
4	3	Bull, cow	60	No	yes	Own	3	Own	yes	Yes	FMD
5	4	Bull, cow	35	No	yes	Own	2.5	Own	yes	Yes	FMD
6	5	Bullock	100	Red	No	Own	32	Own and lend from relatives	yes	Yes	FMD,BQ
7	6	Bull	220	Red	No	Own	40	Own	yes	Yes	FMD,BQ
8	7	Bull	60	Red	No	Own	8	own and some loan from agricultural bank	yes	Yes	FMD,BQ
9	8	Bull, cow	100	No	No	Own	10	Own	yes	Yes	FMD
10	9	Bull,Bullock	120	NA	yes	Own	3	Own	yes	Yes	FMD,LSD
11	10	Bull	120	Red and deep color	Yes	Own	40	Own	yes	Yes	FMD
12	11	Bull	250	NA	No	Own	25	Own and bank loan	yes	Yes	FMD,LSD
13	12	Bullock	100	Red	Yes	Own	3	Own	yes	No	NA
14	13	Bull, cow	100	Red	yes	Own	3	Own	yes	Yes	FMD,LSD
15	14	Bull	55	White-Black,Red	No	Own	10	Own	yes	Yes	FMD
16	15	Bull, cow	50	Red	yes	Own	1	Own	yes	No	NA
17	16	Bull	100	Red	No	Own	3	Own	yes	No	NA
18	17	Bull, cow	40	Red	yes	Own	2.5	Own	yes	No	NA
19	18	Bull	200	Red	No	Own	3	Own	yes	yes	FMD
20	19	Bull	70	Red	yes	Own	10	Own	yes	yes	FMD
21											
22											
23											
24											
25											

	A	Y	Z	AA	AB	AC	AD	AE	AF	AG
1	SN	Age at started fattening(Month)	Fattening period(Month)	Rice straw (Kg/day)	Green grass (Kg/day)	Concentrate(Kg/day)	UMS	Others	Use of any Growth promoter	If yes, what are those
2	1	18	4	5	8	0.5	No	No	No	NA
3	2	10	8	5	7	4	No	No	No	NA
4	3	10	8	5	6	4	No	No	No	NA
5	4	0	15	5	8	4	No	No	No	NA
6	5	18	7	3	no	5	yes	jao vath	No	NA
7	6	24	6	4	15	10	yes	No	No	NA
8	7	12	10	1	30	12	No	No	No	NA
9	8	24	3	5	12	4	yes	No	No	NA
10	9	18	5	3	30	2.5	No	No	No	NA
11	10	18	2	1.5	2	2	yes	No	No	NA
12	11	30	6	5	10	8	No	No	No	NA
13	12	18	3	3	8	5	No	No	No	NA
14	13	18	5	2.5	7	3.5	No	No	No	NA
15	14	18	5	2	25	6	No	No	No	NA
16	15	3	24	3	20	4	No	No	No	NA
17	16	24	8	2	10	3	No	No	No	NA
18	17	0	24	2.5	25	2	No	No	No	NA
19	18	18	12	1	10	2	No	No	No	NA
20	19	8	6	3	8	1	No	silage(2-3kg)	No	NA
21										
22										
23										
24										
25										

	A	B	C	D	E
1	Age:	Young=1	Farm size:	<20=1	
2		Middle=2		>20=2	
3		old=3	Breed:	Indigenous=1	
4	sex:	Male=1		crossbreed=2	
5		Female=2		Both=3	
6	Occupation:	Student=1			
7		Job=2			
8		Farmer=3			
9		Businessman=4	Avg initial body weight of animal:	<60=1	
10	Education:	illiterate=0		>60 - <100=2	
11		Primary=1		>100 - <130=3	
12		Secondary=2		>130 - <220=4	
13		Higher=3	Fattening period:	<5=1	
14	Farm type:	Intensive=1		5-8=2	
15		Semi-intensive=2		8-12=3	
16	Cattle type:	Bull=1		12-24=4	
17		Bullock=2	problems faced by farmers	High price of feed=1	
18		Bull,cow=3		High treatment cost=2	
19		Bull,Bullock=4		Lower Growth rate=3	
20	Preferred color:	No=0		Lack of green grasses=4	
21		Red=1		Higher marketing cost=5	
22		white-black=2		Lower market price=6	
23	Available grazing land:	No=0			
24		Yes=1	final body weight	120-160=1	
25	Capital:	Own=1		200-250=2	
26		Lend from relatives=2		500-550=3	
27		Own &lend from relatives=3	Agenat started fattening	<10=1	
28		own & bnak loan=4		12-18=2	
29	Vaccination:	No=0		>18=3	
30		Yes=1	Selling price	<90000=1	
31	Name of vaccination	FMD=1		90000-150000=2	
32		FMD, LSD=2		150000- 200000=3	
33		FMD, BQ=3	Animal cost	30000-60000=1	
34	Source:	Own=1		60000-80000=2	
35		Local market=2		80000-120000=3	
36		village people=3			

Sheet1 Sheet2 Sheet3

Data analysis

```
. tab Anypreferredcolorofanimals
```

Any preferred color of animals	Freq.	Percent	Cum.
0	6	30.00	30.00
1	13	65.00	95.00
2	1	5.00	100.00
Total	20	100.00	

```
. tab Availablegrazingland
```

Available grazing land	Freq.	Percent	Cum.
0	9	45.00	45.00
1	11	55.00	100.00
Total	20	100.00	

```
. tab Capital
```

Capital	Freq.	Percent	Cum.
1	16	80.00	80.00
2	1	5.00	85.00
3	1	5.00	90.00
4	2	10.00	100.00
Total	20	100.00	

```
. tab Selectioncriteria
```

Selection criteria	Freq.	Percent	Cum.
0	4	20.00	20.00
1	8	40.00	60.00
2	8	40.00	100.00
Total	20	100.00	

```
. tab UMS
```

UMS	Freq.	Percent	Cum.
0	16	80.00	80.00
1	4	20.00	100.00
Total	20	100.00	

```
. tab Others
```

Others	Freq.	Percent	Cum.
0	18	90.00	90.00
1	1	5.00	95.00
2	1	5.00	100.00
Total	20	100.00	

```
. tab Anytraining
```

Any training	Freq.	Percent	Cum.
0	13	65.00	65.00
1	7	35.00	100.00
Total	20	100.00	

```
tab Anydeathincidenceduringfatten
```

Any death incidence during fattening period	Freq.	Percent	Cum.
0	16	80.00	80.00
1	4	20.00	100.00
Total	20	100.00	

```
tab AnimalcostTK
```

nimal cost (TK)	Freq.	Percent	Cum.
0	1	5.00	5.00
1	10	50.00	55.00
2	5	25.00	80.00
3	4	20.00	100.00
Total	20	100.00	

```
tab AvgfinalBWTk
```

Avg final B.W (Tk)	Freq.	Percent	Cum.
1	11	55.00	55.00
2	6	30.00	85.00
3	3	15.00	100.00
Total	20	100.00	

```
tab AvgsellingpriceTK
```

```
. tab MainOccupation
```

Main Occupation	Freq.	Percent	Cum.
1	3	15.00	15.00
2	1	5.00	20.00
3	5	25.00	45.00
4	11	55.00	100.00
Total	20	100.00	

```
. tab Education
```

Education	Freq.	Percent	Cum.
0	1	5.00	5.00
1	3	15.00	20.00
2	6	30.00	50.00
3	10	50.00	100.00
Total	20	100.00	

```
. tab Farmsize
```

Farm size	Freq.	Percent	Cum.
4	1	5.00	5.00
6	2	10.00	15.00
7	2	10.00	25.00
8	2	10.00	35.00
9	1	5.00	40.00
12	2	10.00	50.00
14	2	10.00	60.00
16	1	5.00	65.00
17	1	5.00	70.00
19	1	5.00	75.00
20	1	5.00	80.00
25	1	5.00	85.00