

Study No. – 158

MARKET ACCESS AND CONSTRAINTS IN  
MARKETING OF GOATS AND THEIR PRODUCTS IN  
WEST BENGAL

*Ramesh Chandra Mondal*  
*Ashok Sinha*  
*Kalishankar Chattopadhyay*



AGRO-ECONOMIC RESEARCH CENTRE  
VISVA-BHARATI  
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## PREFACE

The present study entitled “Market Access and Constraints in Marketing of Goat and Their Products in West Bengal” was assigned by Ministry of Agriculture, Government of India in 2008.

With the growing demand for livestock products, goat husbandry is becoming an attractive activity. Goat meat is quite popular, both in domestic and international markets. Goat husbandry is mainly enterprised by the people of lower income groups in the rural areas. Goat enterprising units per households are comprised of 5.5 goats, which consists of 1.19 male goat, 2.43 female and 1.88 kids. Average annual income (Rs./Goat) from goat is Rs. 577.52. However, income from male, female and kids are Rs. 930.96, Rs. 606.81 and Rs. 404.95 respectively. Goat keepers sell their goats to local traders or middlemen in their village and local market whenever they are in need of cash. In the absence of weighing practice and awareness about the price for goat, the goat keepers are being heavily exploited by the traders. Due to lack of training to guide goat keepers to improve productivity through good husbandry practices, lack of feeding and health care facilities and poor marketing facilities, goat keepers have been struggling hard to maintain their occupation without any success. What is needed for development of goat rearing enterprise is a well developed physical and marketing infrastructure which promote linkage among goat keeper, traders, consumers and others.

The study was entrusted to Sri Ramesh Chandra Mondal, Ashok Sinha and Kali Sankar Chattopadhyay and they conducted field survey. Scrutiny of data and tabulation were done by Sri R.C Mondal with the help of Sri Ashok Sinha. Drafting of report, editing and finalization of the same after getting comments from the co-ordinating center, Agro-Economic Research Centre, Allahabad were done by Sri Mondal.

Sri Munshi Abdul Khaleque and Sri Nityananda Maji were involved in typing of report and Sri Dibyendu Mondal provided the secretarial assistance. Sri Amulya Ratan Patra did the works of Xeroxing.

On behalf of the center, the undersigned likes to take the opportunity to thank Prof. P.N. Mehrotra, Hony. Director of the Agro-Economic Research Centre, Allahabad for his valuable comments and suggestions on the draft report and the officials of the Directorate of Animal Resource Development Department, Government of West Bengal and the goat rearers of the study areas for their kind co-operation in conducting the study.

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(Kazi MB Rahim)  
Hony. Director

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# Chapter – I

## Introduction, Objectives and Methodology

### Introduction:

Human being had begun to domesticate goat since early dawn of civilization and since then it has occupied an important place in the world of livestock. Goat is reared almost in all corners of the world. It is stouter among the small ruminants. The temperament of the goat indicated that it is not easily confined to a flock, but looks out individually its own grazing pasture. It can graze even in more inaccessible and dangerous hummock and hilltops. Goat sustains easily, and the leaves of young tree and plants are its favorite food. It likes warmer and smooth climate. Reproduction of goat starts at an early age of eight to ten months. It is generally pastures one or two and sometimes more than two kids at a time. Human being domesticated goat for its milk, meat and skin. However, the economically weaker sections of people rear it for urgent need of money for family expenditure. It is reared at back yard; hence the maintenance cost of its rearing is negligible. It is considered as ‘Poor men’s cow’ and is characterized as a ‘moveable liquid asset’ for the people in rural areas.

### Background:

Almost all experts and researchers on goat opine that this animal is reared mainly by the poor and weaker section of section of people in rural areas, as sideline activity. The average size of goatherd comprises of 2 to 5 goats (doe and kids). However, in some of the cases, the size of herds is as high as 14 to 27 heads per farm (Deichert and Peters, 1984). When goats are reared for commercial and extension purposes, large number of goats is kept within a single flock. As for example, the ‘Gaddi’ breed of goats is commercially reared in Jammu and Kashmir and Himachal Pradesh and the State Goat farms and other research farms also keep large number of goats for extension and research purpose.

Adoption of goat rearing enterprise and its management depends upon the social acceptability and rearing environment. Thus, the system of goat management is mostly a function of social acceptance of community to goat, availability of land, pasture, human resource, capital and economic dependence on livestock in general and goats in particular, etc. Depending upon these factors, the systems of goat management vary from place to place (Rahaman, 1998; Mohona, 1983; Khushry and Yusuff, 1984).

Management of goat includes grazing, feeding, reproduction, health care, etc. The systems of goat management are of different types; village system, extensive system, semi-extensive system, intensive system and very intensive system, etc. These systems involve varying types of goat rearing (Debendra, 1983; Deichert and Peter, 1994).

In feeding of goats, the traditional practices of tethering and free grazing are still operative. The rearers just leave goats or fix goat to browse on the growing grass of indigenous pasture, road side marginal lands, idle grass land, fallow land and orchard area, etc. However, in case of commercial and semi-commercial farming, goats are raised through intensive, which includes controlled movement of goats, stall feeding, separate sheds for shelter, proper care of kidding of does and adequate health care, etc. Over and above, in the intensive or semi-intensive system of goat rearing, goats are usually kept in full confinement or semi-confinement (Parawan and Ovalo, 1984).

The small rearers usually keep their goats in the extended portion of their dwelling houses and even in their kitchens. However, in case of bigger flocks, they are kept in separate shed along with other big ruminants. In such case, as goats share sheds with other livestock, the cost of shed for goat keeping is negligible. Thus, the cost of maintenance of goat rearing is very low (Deichert and Peter, 1994).

Main costs of goat rearing are the value of shed and feed cost, which vary largely according to intensive, semi-intensive, semi-extensive and extensive systems of goat management. In intensive system, control feeding of goat is practiced and animals are kept in total confinement, whereas in semi-intensive system, controlled and supervised grazing are practiced. The extensive system of goat management is mainly characterized by free grazing. But the intensive system of goat management is economically more feasible than the other two systems, whereas the semi-intensive system is favorable than extensive one.

The marketing of goats is mostly a neglected sector. Sale of goats involves transactions of private nature, which is initially dominated between trader and middleman, and then between middleman and wholesaler, middleman and butcher and between middleman – wholesaler and meat processing unit, etc. In this process of marketing, the first sellers' share in the buyers' rupee varies from 52 – 99 per cent (Dixit and Shulka, 1995). However, for poor rearers, goat is considered to be 'living saving account' and it is sold at the time of financial needs. So the market force has limited effect on marketing of goats (Peterson, 1984).

The potentiality of goat in Indian economy is obviously important. Its husbandry, as opined by the experts and researchers, is mostly enterpriser by small and marginal farmers, agricultural and estate workers, small traders and the poor people of other occupations. So, goat is considered as 'poor man's cow', and goat husbandry contributes even 40 per cent to the income of the goat owners who remain below the poverty line (Bhattacharya, 1988). Since goat facilitates the poor rearers with money in need, it is also considered as 'living liquid asset' and dependable source of income. According to one estimate, it was expected that goat would contribute about Rs. 350 crores annually to the country's GNP.

Contribution of small ruminants – mainly goat – is remarkable in the rural economy of India. Large sections of rural people are engaged in the rearing of goats. In pastoral and agricultural subsistence societies in India, goats are reared for additional source of income, which considered being a 'living saving account' at time of disaster. For the poor people, goats are also used for the payment of social and ceremonial needs. By nature, goat can easily survive on available grass, shrubs and trees. Among the small ruminants, goat is the most useful animal for providing meat, milk and hide. However, the main product of goat is meat, which is very testy and preferable against any other types of meat. Goat meat has high protein contents and on the whole, it highly acceptable to the consumer for its chemical composition, physical texture and microbial profiles.

India is the richest country of the world in the livestock wealth. Goat population in India is about 124 million (2002), which accounts for 16.5% of world population in of goat. By the given number of goats, production of goat meat stands at the level of 0.47 million tones. The rate of slaughter for the same is also highest among the other livestock. It is evident from the fact (1990-2002) that the slaughter of goat stands at the rate 39.7%, which it is 31.8% for sheep, and 11% for buffaloes. Apart from that goat milk production in 2002 was 2.55 million tones and production of goat skin was figured for 0.1288 million tones. Demand for animal protein has been increasing in India at a faster rate – (Delgado, et al. 1999). It is evident from the fact that the annual meat consumption has increased from 3 million tones in 1983 to 4 million tones in 1993 and it is projected that the rate of meat consumption would be double by 2020.

Goats are distributed across all agro-climatic regions of the country. The density of goat population is highest in the states like West Bengal, Bihar, U.P., Tamilnadu, Maharastra and Jammu and Kashmir. Goat population of India is consisted of number of varieties. Some of the variety produced only fiber, some are reared for meat and milk and some for meat only.

Rapid urbanization combined with continued economic growth has been continuously pushing up the market demand for livestock products – mainly meat. As income of the people rises, their consumption pattern gets diversify from cereals to meat other livestock products and high valued diet. Thus, growth in the demand of meat could provide great opportunity to the goat rearers to reap higher income from goat keeping. But the goat keepers seldom have direct access to the markets of live goat, goat meat, milk and skin. Goat market in most parts of India is unorganized operating under the clutches of a nexus of small traders, market agents, middleman and ‘aratdars’ etc. So, the most of goat rearers find it difficult to penetrate these markets because of these nexus. Due to absence of strong networks of market access and information, an inefficient market is being operative so far the transaction of goat is concerned.

### **Transaction of goat and their products:**

#### **Live goat:**

Goat keeper - > Village Trader - > Butcher - > Consumer;

Similarly, marketing goat products like, skin is as follows:

Butcher -> Local trader -> Urban trader

In spite of such economic potential, it has not received proper attention either from the Government or from the experts and researchers. Problems and prospects of goat production or rearing have not been discussed broadly due to limited data and inadequate literature. It is generally found that the majority of the rich people of urban areas consume goat products. So, the income transfer from rich to poor and from urban to rural is possible. It is, therefore, important that research and development should be taken up on the basis of the need of the poor men, who actually involve themselves in rearing of goats in villages.

Thus, in the present study, an attempt has been made to find out the nature and access to the marketing of live goats and goat meat with the following objectives:

#### **Objectives:**

- To study the goat marketing system and marketing access to goat farmers.
- To ascertain the constraints in marketing of farmers goat.
- To identify leverage points for developing a system ensuring fair marketing access and prices of goats.
- To study the marketing system of goat products.

- To suggest suitable development strategies for efficient marketing of goats and their products.

### **Methodology:**

Keeping in view the objectives of the study, a multistage sampling technique has been adopted for the selection of the regions, districts, markets, villages, goat keepers, etc.

First of all, two regions namely 'Rarh' and 'Gangatic Plain' respectively have been selected and two districts from each region, namely - Burdwan and Murshidabad have been selected on the basis of highest concentration of goats' population. From each selected district, two important markets namely Natunhat and Gueskora for Burdwan district and Dakbangla and Baldanga for Murshidabad district have been selected purposively. Two villages, one in the vicinity of the market and the other far-off the market are selected on the basis of availability of sufficient number of goat keepers in the villages. A list of goat keepers is prepared and classify the owners of goats on the basis of herd size of goats in to 4 groups viz. 1-5, 6-15, 16-30 and >30 goats. Fifty goat keepers have been selected from 4 villages of 2 markets of each sample district on the basis of probability to proportion of their number in the respective group. Thus, a total of 100 goat keepers from two districts is the ultimate sample.

In order to know the system of goat marketing, 5 sellers and 5 buyers of goats are selected from each selected market. Thus, in all 20 sellers and 20 buyers of goats will be selected purposively from 4 markets of two districts.

Apart from these, the information of goat products (milk, meat, skin) is also be required for this study. Hence, 5 butchers, 5 petty skin merchants, merchants are also selected purposively from each selected market. Thus, 20 butchers, 20 petty skin traders are the respondents from 4 markets of two selected districts. Since, the presence of wholesale skin traders is found only one market of the sample districts, the acquired numbers of skin traders (8) have been selected from sample market for in depth survey.

**Reference year – From July 2007 to June 2008.**



## Chapter – II

### Profile of West Bengal

West Bengal is a state in eastern India. With Bangladesh, which lies on its eastern border, the state forms the ethno-linguistic region of Bengal. To its northeast lies the state of Assam and Sikkim and the country Bhutan, and to its southwest, the state of Orissa. To the west it borders the state of Jharkhand and Bihar, and to the northwest, Nepal.

West Bengal is on the eastern bottleneck of India, stretching from the Himalayas in the north to the Bay of Bengal in the south. The state has a total area of 88,752 square kilometers (34,267 sq.m). The Darjeeling Himalayan hill region in the northern extreme of the state belongs to the eastern Himalaya. This region contains sandakfu (3,636 metres/11,929 feet) the highest peak of the state. The narrow Terai region separates this region from the plains, which in turn translate into the Ganges delta towards the south. The Rarh region intervenes between the Ganges delta in the east and the Western Plateau and high lands. A small coastal region is on the extreme south, while the Sundarbans mangrove forest form a remarkable geographical landmark at the Ganges delta.

The Ganges is the main river, which divides in West Bengal. One branch enters Bangladesh as the Padma or Padda, while the other flows through West Bengal as the Bhagirathi River and Hooghly River. The Teesta, Torsa, Jaldhaka and Mahananda rivers are in the northern hilly region. The western plateau region has rivers such as the Damodar, Ajay and Kangsabati. The Ganges delta and the Sundarbans area have numerous river and creeks. Pollution of the Ganges from indiscriminate waste dumped into the river is a major problem. At least nine districts in the state suffer from arsenic contamination of groundwater, and an estimated 8.7 million people drink water containing arsenic above the World Health Organisation recommended limit.

West Bengal's climate varies from tropical savannah in the southern portions to humid subtropical in the north. The main seasons are summer, rainy season, a short autumn and winter. While the summer in the delta region is noted for excessive humidity, the western highlands experience a dry summer like northern India, with the highest day temperature ranging from 38<sup>0</sup>C (100<sup>0</sup>F) to 45<sup>0</sup>C (113<sup>0</sup>F). At nights, a cool southerly breeze carries moisture from the Bay of Bengal. In early summer brief squalls and thunderstorms known as Kalbaisakhi, or Nor'westers, often occur. Monsoons bring rain to the whole state from June to September. West Bengal receives the Bay of Bengal branch of the Indian Ocean monsoon that that moves in a northwest

direction. Winter (December – January) is mild over the plains with average minimum temperature of 15<sup>0</sup>C (59<sup>0</sup>F). A cold and dry northern wind blows in the winter, substantially lowering the humidity level. However, the Darjeeling Himalayan Hill region experiences a harsh winter, with occasional snowfall at places.

The vast majority of the 80,221.171 people of West Bengal are Bengalis. The Bihari minority is scattered throughout the state and communities of Sherpas and ethnic Tibetans can be found in regions bordering Sikkim. Darjeeling district has a large number of Gurkha people of Nepalese origin. West Bengal is home to indigenous tribal Adivasis such as Santals, Kol, and Koch-Rajbongshi and Toto tribe.

The official language is Bengali. Hindi and English are also used commonly. Nepali is spoken primarily in the Darjeeling district. Languages such as Rajbongshi, Santali and Ho are used in some parts of the state. Hinduism is the principal religion at 72% of the total population, while Muslims comprise 23%; Sikhism, Christianity and other religions make up the remainder. West Bengal has a population density of 904 inhabitants per square kilometer (2,341.3/sq mi) making it the most densely populated state in India. The state contributes 7.8% of India's population. The state's 1991-2001 growth rate 17.84% is lower than the national rate of 21.34%. The gender ratio is 934 females per 1000 males.

The literacy rate is 69.22%. Data of 1995-1999 showed the life expectancy in the state was 63.4 years, higher than the national value of 61.7 years. About 72% of people live in rural areas. The proportion of people living below the poverty line in 1999-2000 was 31.85%. Scheduled Castes and Tribes form 28.6% and 5.8% of the population respectively in rural areas, and 19.9% and 1.5% respectively in urban areas.

There are 19 districts in West Bengal – Bankura, Bardhaman, Birbhum, Cooch-Bihar, Darjeeling, East Midnapore, Hooghly, Howrah Jalpaiguri, Kolkata, Malda, Murshidabad, Nadia, North-24Parganas, North-Dinajpur, Purulia, South-24Parganas, Dakshin Dinajpur and West Midnapore. A district collector or district magistrate, appointed either by the Indian Administrative Service or the West Bengal Civil service, governs each district. Each district is subdivided into Sub-Divisions; Governed by a Sub-Division magistrate and again into Blocks, Blocks consists of panchayats (village councils) and town municipalities.

The capital and large city of the state is Kolkata – the third largest urban agglomeration and the fourth-largest city in India. Siliguri is an economically important town, strategically located in the northeastern Siliguri Corridor (Chicken's Neck) of India. Asansol, Durgapur and Raniganj are cities in the western industrial belt. Other major cities and towns in West Bengal are Howrah, Holdia, Kharagpur.

Agriculture is the leading occupation in West Bengal. Rice is the state's principal food crop. Other food crops are pulses, oil seeds, wheat, tobacco, sugarcane and potatoes. Jute is the main cash crop of the region. Tea is also produced commercially; the region is well known for Darjeeling and other high quality tea. However, the service sector is the largest contributor to the gross domestic product of the state, contributing 51% of the state domestic product compared to 27% from agriculture and 22% from industry. State industries are localized in the Kolkata region and the mineral-rich western highlands. Durgapur – Asansol colliery belt is home to a number of major steel plants. Manufacturing industries playing an important economic role are engineering products, electronics, electrical equipment, cables, steel, leather, textiles, jewellery, frigates, automobiles, railway coaches and wagons.

A significant part of the state is economically backward, namely, large parts of six northern districts of Cooch Behar, Darjeeling, Jalpaiguri, Malda, North Dinajpur and South Dinajpur; three western districts of Purulia, Bankura, Birbhum; and the Sundarbans area. Year after independence, West Bengal was still dependent on the central government for meeting its demands for food; food production remained stagnant and the Indian green revolution bypassed the state. However, there has been a significant spurt in food production since the 1980s, and the state now has a surplus of grains. The state's share of total industrial output in India was 9.8% in 1980-81, declining to 5% by 1997-98. However, the service sector has grown at a rate higher than the national rate.

### **Cattle Population (1982 – 2003):**

The economy of West Bengal is primarily based on agriculture and animal husbandry is closely associated with agriculture. The crop and livestock enterprises constitute two major functional component of mixed farming in determining agriculture-based economy. It is evident from the table - 2.1 that total livestock population of West Bengal is 34543 thousands in the year 2003. Among the cattle population, the number is figured for cows 52.06 per cent followed by goats – 34.03 per cent. The population other animals and not so signification – as far example, in total live stock, buffaloes constitute only 2.53 per cent, sheep – 4.08 per cent and pig 2.60 per cent. The table also indicates that composition of livestock population – as per the live stock census report – is more or less same over the year. The state West Bengal possesses 11.76 million of goats in 2003.

Table - 2.1: Population of Live Stock in the State

('000)

Live Stock	Year					
	1982	1988-89	1993-94	1997-98	2003	2008
Cows	15658 (52.69)	16510 (52.01)	17206 (49.32)	17832 (48.12)	17984 (52.06)	-
Buffaloes	987 (3.32)	965 (3.04)	980 (2.81)	998 (2.69)	876 (2.53)	-
Sheep	1365 (4.59)	1460 (4.60)	1415 (4.05)	1462 (3.94)	1411 (4.08)	-
Goat	10916 (36.73)	11890 (37.46)	14167 (40.61)	15648 (42.21)	11757 (34.03)	-
Pig	768 (2.58)	898 (2.83)	1018 (2.92)	1098 (2.96)	899 (2.60)	-
Total Live Stock	29718 (100.00)	31742 (100.00)	34887 (100.00)	37056 (100.00)	34543 (100.00)	-

Note: Percentage /Index number. Density Poultry is not included in the total livestock

Figures in Parenthesis are Percentage to the total

The table - 2.1 indicates that goat population found in the year 2003 is less than that of the previous census year. Any way if we go through the table – 2.2 we find that in the composition of goat population by age, the numbers goat of higher age group i.e. more than one year, are higher (about 60 per cent) as compared to goats of lower age group – below one year.

Table – 2.2: Population of Goat in the State

(Number in thousand)

	1982	1988 – 89	1993 – 94	1997 – 98	2003	2008
Up to 1 year	4376 (40.09)	4684 (39.40)	5148 (33.34)	5651 (36.11)	4715 (40.10)	-
Above 1 year	6540 (59.91)	7206 (60.60)	9019 (63.66)	9997 (63.89)	7042 (59.90)	-
Total	10916 (100.00)	11890 (100.00)	14167 (100.00)	15648 (100.00)	11757 (100.00)	-

Source: Statistical Abstract – 2005

Note : Percentage among the Sex. Figures in Parenthesis are Percentage to the total.

### **Production of Milk and other by-product:**

So far as the production of goat milk is concerned, detail data for the same was not available. However, goat milk has nominal contribution to total milk production of the state. On the whole milk production of the state has been increasing over the years (Table – 2.3).

Table 2.3.: Milk Production in the State

(Lakh M.Tonne)

Year	Milk Production			
	Cows	Buffaloes	Goats	Total Production
1991	N.A	N.A	N.A	29.12 (16.73)
1998	N.A	N.A	N.A	34.15 (19.62)
2003	N.A	N.A	N.A	36.00 (20.69)
2004	N.A	N.A	N.A	36.86 (21.18)
2005	N.A	N.A	N.A	37.90 (21.78)
Total	N.A	N.A	N.A	174.03 (100.00)

Note: Percentage/ index number, per capita availability

Figures in Parenthesis are Percentage to the total

It is evident from the table – 2.4 that goat meat has the highest contribution to the total meat from livestock. In 2006 the share of goat meat in total production of live stock meat is highest (45.28%) followed by cow buffaloes (40.31%), pigs/ pork (9.46%) and sheep – 4.93 per cent. The table also indicates that product of goat meat has increasing gradually over the years, while meat production from other livestock has been decreasing.

Table 2.4: Production of Meat at Registered Slaughter House in the State

('000 tonnes)

Year	Sheep	Goats	Pigs / Pork	Cattle & Buffaloes (Bovine)	Total
2000-01	16.2 (5.30)	133.3 (43.63)	31.6 (10.34)	124.4 (40.72)	305.5 (100.00)
2001-02	16.3 (5.30)	135.2 (43.97)	32.4 (10.53)	123.6 (40.20)	307.5 (100.00)
2002-03	15.4 (4.94)	138.9 (44.58)	34.1 (10.94)	123.2 (39.54)	311.6 (100.00)
2003-04	15.7 (4.91)	144.3 (45.16)	33.7 (10.55)	125.8 (39.37)	319.5 (100.00)
2004-05	16.2 (4.93)	148.3 (45.19)	31.2 (9.51)	132.5 (40.33)	328.2 (100.00)
2005-06	16.6 (4.93)	152.2 (45.28)	31.8 (9.46)	135.5 (40.31)	336.1 (100.00)

Note: Percentage among live stock and percentage change

Figures in Parenthesis are Percentage to the total

Since the infrastructures and other facilities of the registered slaughter house are not adequate, poor number of animals is found to have slaughtered in the registered slaughter houses. The table 2.5 indicates that the highest number of goats – (17.52 %) was slaughtered the registered slaughter houses. The percentage of other animals slaughter there as follows – cattle 6.78 %, buffalos – 8.22%, sheep – 14.62 % and pigs – 13.33%. However, the rate slaughtering of poultry was 25.71%. The table also indicates that in 2003 total meat production in from the registered slaughter houses of the state was about 450 thousands tones in which share of meat of different animal were as follows. Cattle – 25.17 %, buffaloes – 2.21%, sheep – 3.42%, goats 30.87%, pigs 7.58% and poultry – 30.75%. So goats alone is the highest contributes of meat production of the state.

Table 2.5: Live Stock Population and Meat Production from registered sectors in the State (2003)

Live Stock	Population in (No.)	Animal Slaughtered (No.)	Meat Production (tonnes)
Cattle	17984080	1219000 (6.78)	113280 (25.17)
Buffalo	875506	72000 (8.22)	9930 (2.21)
Sheep	14110490	2063000 (14.62)	15400 (3.42)
Goats	117566900	20595000 (17.52)	138910 (30.87)
Pigs	8988310	1198000 (13.33)	34120 (7.58)
Poultry	511145510	131417000 (25.71)	138380 (30.75)
Total	84040707	156564000 (18.63)	450020 (100.00)

Note: Percentage of animal slaughtered figures in parentheses are % to the total

### **Veterinary Hospitals:**

It is evident from the table –2.6 that Directorate of Animal Resource & Animal health of west Bengal Govt. has 91 state Animal Health Centres, 19 District Veterinary Hospitals, 341 Block Animal Health Centres and 271 Addl. Block Health centers. These health centers are mainly engaged with treatment of diseased animal. Apart from that there are other centres, which provide aids, suggestions etc. for the development of livestock.

Table – 2.6: Veterinary Institutions in West Bengal (As on 31<sup>st</sup> March)

Institutions	In Number				
	2001	2002	2003	2004	2005
State Animal Health Centre (S.A.H.C)	91	91	91	91	91
District Veterinary Hospital	19	19	19	19	19
Block Animal Health Centre (B.A.H.C)	341	341	341	341	341
Addl. Block Animal Health Centre (A.B.A.H.C)	271	271	271	271	271
Animal Development Aid Centre (A.D.A.C)	3247	3248	3248	3248	3248
Ambulatory Clinic Van	3247	3248	3248	3248	3248
A.I. Centre	3512	3699	4397	5344	5634
Check Post	10	10	10	10	10
Quarantine Station	3	3	3	3	3
Veterinary Pathological Lab.	45	45	45	45	27
C.M.S. Main and Sub-Depot	14	14	14	14	14
Parasitic Control unit	1	1	1	1	1
Vigilance Unit	5	4	5	5	5
Mobile Animal Health Centre cum Diagnostic Lab. (M.A.H.C. Cum D.I.A.G.)	1	1	1	1	1
Tuberculosis Control Unit	4	4	4	4	4

Source: Directorate of Animal Resources & Animal Health, Govt. of West Bengal.

## Chapter – III

### Profile of Selected Districts

#### **Burdwan:**

The district Burdwan is called the granary of West Bengal having the advantages of rich Gangetic Vindhya alluvial soil with the River Valley Projects. Burdwan is one of the most important and thickly populated districts in the State. It strikes a significant balance in agriculture and industry. The district is enriched with the rivers like Ganges, Ajoy, Damodar, Barakar, Kana, Brahmbhani, Khari and many other small rivulets.

Geographical location of the district is surrounded by the district of Nadia and part of Hoogly in the East, Bankura and part of Hoogly in the South, Birbhum in the West. This district is located between the latitude of 22° 56' and 23° 53' North and the longitude of 86° 48' and 88° 25' East.

Climate of the district is normally moderate excepting in the lateritic zone where climate is somewhat extreme. In lateritic zone, temperature is very high in summer days and low in winter; rainfall also is erratic and less than alluvial zone. The annual rainfall in the district is 1528 mm. The temperature ranges from 37.2° c to 26.0° c during summer and 26.4° c to 13.1° c during winter seasons. Climatic aberrations though not common in alluvial zone, there are some pockets vulnerable to flood, while the Western lateritic tract is usually drought prone.

The soil in the district is differentiated into 3 distinct classes, namely (i) Gangetic Alluvium – in the Eastern part of the district along the river Ganges. (ii) Vindhya Alluvium – between the rivers of Ajoy and Damodar, (iii) Laterites – red soils in the western part of the district.

While the topography of alluvial zone is plain and flat, it is rolling as undulating in the Western lateritic zone.

Most of the soils are low in N content; available P and K are medium. Soil analysis: that 63% of the soils are acidic and the rest are neutral in nature.

The geographical area of the district is 7, 00,100 hectares of which net area sown is 4, 55,300 hectares (65%) and gross cropped area is 6,81,604 hectares. Area under forest is only 31,000 hectares.



The major crops grown are rice being 85% of gross cropped area and balance covered by Jute, Potato, Wheat, Mustard, Pulses, Til, Sugarcane and Vegetables etc. and 150% is the cropping intensity of the district (1984-85).

There are 5 nos. of administrative subdivisions whereas the Agricultural subdivisions are 4. The headquarters of these four are Burdwan town for Burdwan Sadar, Kalna town for Kalna sub-division, Katwa town for Katwa sub-division and Durgapur city for Durgapur-Asansol sub-division. There are 33 blocks with 31 nos of panchayats, 27 nos of police stations, 6 nos of municipal towns and 15 nos of non-municipal towns in the district.

The marketing infrastructure in the district is well developed with 178 nos of local markets. Besides one regulated market at Katwa is in operation, another one is coming up at Kalna. Co-op Thana Marketing Societies also cater largely the needs of farmers for their inputs like Seed, Fertilisers, Pesticides and implements. Moreover there are 61 nos. of Cold Storages for storing about 3.25 lakhs M. T. potatoes.

Prospect and Possibility of Agriculture in Burdwan District both in terms of qualitative and quantitative development is enormous. Because of this, the District was taken up under I.A.D.P. in 1962. As a result of continuous intensive effect, production of cereals of 5-6 lakh tonnes in the 60's rose to 10-11 lakhs tonnes at the end 70's, that of Mustard 4785.9 M.T. in 76-77 to 21415 M.T. (almost 5 times) in 81-82 and that of Pulses 6846.4 M.T. in 76-77 to 11137.7 M.T. in 80-81 (almost twice). The District is endowed with vast natural resources both in agriculture and industry and the progress made on both the front is noteworthy.

### **Cattle Population:**

Distribution of cattle population of Burdwan district has been shown in the table – 3.1(a). The table reveals that the share of goats is 30 to 35 per cent in the total livestock population followed by cow around 20 per cent, buffalos & sheep and pigs about 4 per cent each and other livestock – 29 to 34 per cent. The table also reveals that composition of each type of livestock to total livestock population is more or less same over the years. Looking into the change of share of each live stock population from the base year 1993, it is found that cow population was increased by 2.93 per cent in 1998 and about 12 per cent in 2003, while the increase of buffalo population was only 1.26 per cent in 1998 and 0.94 per cent in 2003. So far as increase in sheep population is concerned, the rate of increase in the year 1998 from 1993 was nominal - only 0.49 per cent but the rate of increase was significant in 2003 – 9.30 per cent. Constant increase was noticed in case of goats, which increase by 10.85 per cent and 12.86 percent in the years 1998 and 2003 respectively. Pig population showed some

increase in the first phase i.e. 1998, but showed a decreasing trend in the second phase in the year 2003. Finally, the increase of other livestock between the years 1993 to 1998 was only 2.44 per cent but the increase figured for 13.78 per cent in 2000 as compared to 1993.

Table – 3.1(a): Population of Livestock (Year-wise) Burdwan District

Year	Live-Stock													
	Cows	% Share	Buffaloes	% Share	Sheep	% Share	Goats	% Share	Pig	% Share	Others	% Share	Total	% Share
1993	603580	20.19	128748	4.31	128883	4.31	998734	33.41	127620	4.27	1002110	33.51	2989675	100
1998	621249 (2.93)	19.68	430376 (1.23)	4.13	128946 (0.49)	4.08	1107080 (10.85)	35.07	137624 (7.84)	4.36	1031616 (2.94)	32.68	3156819 (5.59)	100
2003	671144 (11.94)	20.16	127539 (0.94)	3.83	140873 (9.30)	4.23	1127184 (12.86)	33.85	120994 (- 5.19)	3.63	1142178 (13.78)	29.30	3329912 (11.38)	100
2008	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Note: 1. Percent share to total and percent change over base year i.e. 1993

2. Figures in parentheses are change in %

Source: Statistical Abstract 2004 – 05

### Milk Production:

Data of milk production from individual animal was not available. However, it is evident from the table – 3.2(a) that total milk production of Burdwan district has increase from 268 thousand tones in the year 1990-91 to 480 thousand tones in 2006-07. The rate of increase from 1991 to 2001 was 77.24 per cent and from 1990-91 to 2006-07, the rate of increase was 79.10 per cent.

Table – 3.2(a): Year-wise Production of Milk (Burdwan)

Year	Live-stock (Unit 000 tonnes)					
	Cows	Buffaloes	Sheep	Goats	Others	Total
1990-91	-	-	-	-	-	268
2000-01	-	-	-	-	-	475 (77.24)
2003-04	-	-	-	-	-	464 (73.13)
2006-07	-	-	-	-	-	480 (79.10)

Note: Percent contribution to each milch animal to total production & percentage change over base year i.e. 1990-91 # excluding goat milk

### Average Production of Milk per day per Animal:

Official data on the above subject was not available. However, data for the same was collected from the knowledgeable persons during the field survey and compiled in the table - 3.3(a), which indicates that average production of milk per cow

per day during milking months in the corresponding years was 1.250 kg. to 1.50 kg. Due to various reasons, it is reported by the respondents that production of cow milk has a decreasing trend. Milk production of buffaloes was more or less constant, which was 3.250kg to 4.50 kg.

Table – 3.3(a): Average Production of milk per day per animal (Burdwan)

Year	Cows	Buffaloes	Goats	Total
1993	1.250	3.250	Nil	
1998	1.250	4.000	Nil	
2003	1.500	4.500	Nil	
2008				

Unit – ml.

Note: Percentage change over base year i.e 1993

Source: opinion poll of the survey data

In West Bengal goats are mainly reared for meat not for milk. So, milk production figures of goat milk are not available.

Data based on the opinions of milk sellers and consumers reveals (Table – 3.4) that average price of cow milk in the years – 1993, 1998, 2003 and 2008 was Rs. 8/-, Rs. 10/-, Rs. 12/- and Rs.15/- respectively, while prices of buffalo milk during the given years was Rs. 10/-, Rs, 12/- Rs. 14/- and Rs.16/- respectively. However, in term of percentage the changes in the price of cow milk were significant. In between 1993 to 1998. The price of milk increased by 25% in 1998 as compared to 1993, the increase rate was 50 percent in 2003 as compared to 1993 and 87.50 per cent in 2008 as compared to 1993. Similarly change of price of buffalo's milk was 20 per cent, 40 per cent and 60 per cent respectively in the given span of years.

Table – 3.4(a): Price of Milk per Liter (Burdwan)

Year	Cows	Buffaloes	Goats	Total
1993	8.00	10.00	-	9.00
1998	10.00 (25.00)	12.00 (20.00)	-	11.00
2003	12.00 (5.00)	14.00 (40.00)	-	14.00
2008	15.00 (87.50)	16 (60.00)	-	15.00

Note: Percentage change over base year i.e 1993

Source: Data based on opinion of milk seller and consumers

### **Meat Production from different livestock and their Prices:**

District wise data for meat production was not available. However, prices of meat have been assessed on the basis of reporting of some butchers and consumers

have been compiled in the table – 3.5(a), which indicates that the price of goats' meat has increased by 50.00 per cent in between 1993 to 1998, in between 1993-2003 the rate of increase was 75.00 percent and in between 1993-2008 the same was 100.00 per cent. However, changes of sheep meat was 35.00 per cent 100.00 per cent and 130.00 per cent respectively in the given time periods. Similarly changes of in the prices of pig in between 1993-98 was 42.85 per cent, 1993- 2003 was 71.43 per cent and 1993 – 2008 was 157.14 percent. The overall picture reveals that increase in the prices of goat meat during last fifteen year was 100.00 per cent, sheep meat - 130.00 percent and pig meat - 157 per cent.

Table - 3.5(a): Year wise Rate of Meat per Kg. (Burdwan)

Year	Live Stock			
	Buffaloes	Goats	Sheep	Pigs
1993	NA	100.00	65.00	35.00
1998	NA	150.00 (50.00)	100.00 (35.00)	50.00 (42.85)
2003	NA	175.00 (75.00)	130.00 (100.00)	60.00 (71.43)
2008	NA	200.00 (100.00)	150.00 (130.00)	90.00 (157.14)

Note: Percentage change over base year i.e. 1993. Figures in Parenthesis are the Percentage of changes.

Source: Data based on the opinion of butchers & Consumer.

### Live Stock Market:

In Burdwan, there are 13 numbers of Nagarpalika and 21 numbers of town. There is no organized cattle market in the district. However, there are eight numbers of unorganized markets (huts) where transaction of goats takes place with other animals like cow, bulls calves, he/she buffaloes, sheep etc. – table (3.6a).

Table – 3.6(a) : General information (Burdwan)

Year	Number of Nagar Palika	Number of Town area	Number of cattle markets		Exclusive of Goat market	
			Organized	Unorganized (Hut)	Organized	Unorganized
1993	13	21	-	8	nil	nil
1998	13	21	-	8	nil	nil
2003	13	21	-	8	nil	nil
2008	13	21	-	8	nil	nil

Note: 1. Percent share of goat markets to total livestock market

2. Percentage changes over base year i.e 1993. NK=Not known

### Veterinary Services:

Burdwan district has one district veterinary hospital, 10 State Animal Health Centres, 31 block Animal Health center and 277 additional health centers. The number of the stated health centers is almost constant during last five years (2001 – 2005). However, the number of A.I unit has increased substantially during the given five years – table - 3.7a. According the selected respondents the extension activities for all types of animals in general are very poor and for goats in particular are not at all.

Table – 3.7(a): Veterinary Institutions in Burdwan District (As on 31<sup>st</sup> March)

District/ Year	State Animal Health Centre (S.A.H.C)	District Veterinary Hospital	Block Animal Health Centre (B.A.H.C)	Aid Centre and Additional Aid Centre (A.D.A.C)	Ambulatory Clinic Van	A.I. Unit	Check Post	Quarantine Station	District Veterinary Pathological Laboratory	C.M.S (Main & Sub-Depot	Parasitic Control Unit (Main) & Sub-Depot	Vigilance Unit	Mobile Diagnostic Laboratory (M.A.H.C.)	Tuber culpsis control Unit
2001	10	1	31	277	N.A	299	1	-	3	1	N.A	-	-	-
2002	10	1	31	277	N.A	315	1	-	3	1	-	-	-	1
2003	10	1	31	277	-	358	1	-	1	1	-	-	-	1
2004	10	1	31	277	-	455	1	-	1	1	-	-	-	1
2005	10	1	31	277	-	461	1	-	1	1	-	-	-	1

Finally, data on registered butchers, slaughterhouses, and processing units of skin markets and export figures of meat, skin, etc. for goats are not available. So, any discussion or comment on the stated aspects is possible in this study.

### Murshidabad:

Murshidabad is the northern-most district of Presidency Division of West Bengal and lies between the latitude 24° 50' 20'' and 23° 43' 30'' in the northern hemisphere. The eastern-most extremity of the district is marked by 88° 46' 00'' east longitude and it's western-most extremity by 87° 49' 17''.

The district is bounded by Santal Parganas of Bihar and Birbhum district on the west ; on the north and east by the districts of Maldah, Rajshahi (Bangladesh) and Nadia; on the south by the districts of Burdwan and Nadia.

The district is located centrally in the lower Ganga valley. The west side of Bhagirathi is known as 'Rarh' and is substantially a continuation of the sub-Vindhyan region of laterite clay and calcereous nodules. The land is high and slightly undulating having a gentle slope from west to east. The soil is grayish or reddish, mixed with lime and iron oxide. The chief crop is the Winter Rice or Aman paddy.

The eastern portion of Bhagirathi is known as 'Bagri' which is mainly is composed of revering tract of Bhagirathi having alluvial and fertile soil Aus, jute, sugarcane, wheat, pulses and oilseeds etc. are grown extensively.

The present area of the district is 5341 sq. kms. The district comprises of five subdivisions viz. Jangipur, Lalbagh, Sadar or Berhampore and Kandi. The district headquarter is at Berhampore which is also the sub-divisional headquarter of Sadar sub-division. Raghunathgunj is the head quarter of Jangipur sub-division and Lalbagh as well as kandi for respective subdivisions. There are twenty-six Panchayat Samities covering twenty-one Police Stations in the district. Density of population is 699 per sq. km (As per 1981 Census).

Marketing of agricultural produce is largely controlled and managed by the private traders until now. There are nine (9) Govt. hats/markets, twenty one (21) nos. of retail as well as primary markets sheltered all over the district.

### Livestock Population:

Livestock population of Murshidabad district has been worked out in the table-3.1(b).The table indicates that share of goat population in the total livestock of the district is highest - more than 50 per cent followed by other livestock more than 30 per cent, cow - 15 per cent, buffaloes and sheep about 4 per cent to 5 per cent each and pig less than 1 per cent. The table also indicates that change in livestock population during last 5 years (1998-2003) is very disappointing. The population for all types of animals except cow and others has decreased during the last 5 years. However, only cow population shows a marginal increase – about 2 per cent during the same period.

Table – 3.1(b): Population of Livestock (Year-wise) Murshidabad

Year	Live-Stock												Total	% Share
	Cows	% Share	Buffaloes	% Share	Sheep	% Share	Goats	% Share	Pig	% Share	Others	% Share		
1993	312347	12.46	100352	4.00	124604	4.97	1265631	50.48	24611	0.98	704069	28.08	2507003	100
1998	321361 (2.89)	12.01	101619 (1.26)	3.80	124665 (0.05)	4.66	1402929 (10.85)	52.42	26540 (7.84)	0.99	725818 (3.09)	27.12	2676392 (6.76)	100
2003	444684 (42.37)	14.70	103141 (2.78)	3.41	118290 (-5.07)	3.91	1414791 (11.78)	46.78	21894 (11.04)	0.72	943394 (33.99)	31.19	3024300 (20.63)	100
2008	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Note: 1. Per cent share to total and per cent change over base year i.e. 1993

2. Figures in parentheses are change in %

Source: Statistical Abstract 2004 – 05

### Milk Production:

No data for milk production for individual livestock is available. However, the table – 3.2(b) indicate that rate of increase of total milk production is about 191.30 per cent during last 17 years (1990-91 to 2006-07).

Table – 3.2(b): Year-wise Production of Milk (Murshidabad)

(Unit '000 tonnes)

Year	Live-stock					Total
	Cows	Buffaloes	Sheep	Goats	Others	
1990-91	-	-	-	-	-	161#
2000-01	-	-	-	-	-	226 (40.37)
2003-04	-	-	-	-	-	271 (68.32)
2006-07	-	-	-	-	-	469 (191.30)

Note: Per cent contribution to each milch animal to total production & percentage change over base year i.e. 1990-91 # excluding goat milk

The table – 3.3(b) indicate that the rate of increase in milk production for cow has increase by 25 per cent and 30 per cent in the year 1998 and 2003 respectively in comparison with the base year 1993. Similarly, production of buffalo's milk has increased by 25 per cent and 33.33per cent in the year 1998 to 2003 respectively.

Table – 3.3(b): Average Production of milk per day per animal (Murshidabad)

Unit – ml.

Year	Cows	Buffaloes	Goats	Total
1993	1.000	3.000	Nil	4.000
1998	1.250	3.750	Nil	5.000
2003	1.300	4.000	Nil	5.300
2008	-	-	-	-

Note: Percentage change over base year i.e 1993

Source: opinion poll of the survey data

Since goats are reared only for meat not milk, data for production of goats' milk was not available. Average price of cow milk in 1993 was Rs.7.50/- per liter, which increases to Rs.14/- per liter in the year 2008. Similarly, price of buffalo's milk was increased from Rs.10/- per liter in 1993 to Rs.15/- per liter in the year 2008. In comparison with the base year 1993 percentage increase in the prices of cow milk in the year 1998, 2003 and 2008 was 33.33 per cent, 46.67 per cent and 86.67 per cent

respectively. However, increase in the prices of buffaloes milk were 20.00, 30.00 and 50.00 per cent in the given years as compared with base year 1993 – table –3.4(b).

Table – 3.4(b): Price of milk per liter (Murshidabad)

Year	Cows	Buffaloes	Goats	Average
1993	7.50	10.00	-	8.50
1998	10.00 (25.00)	12.00 (20.00)	-	11.00
2003	11.00 (5.00)	13.00 (40.00)	-	12.00
2008	14.00 (87.50)	15.00 (60.00)	-	14.50

Note: Percentage change over base year i.e 1993 are shown in parenthesis

Source: Data based on opinion of milk seller and consumers

### Livestock Market:

In Murshidabad district, there are 7 numbers of Nagarpalika and 19 numbers of towns. There is no organized cattle market in the district. However, there are 11 numbers of unorganized markets (huts) where transaction of goats takes place with other animals like cow, bulls calves, he/she buffaloes, sheep etc. – table (3.5b).

Table – 3.5(b): General information (Murshidabad)

Year	Number of Nagarpalika	Number of Town area	Number of cattle markets		Exclusive of Goat market	
			Organized	Unorganized (Hut)	Organized	Unorganized
1993	7	19	nil	11	nil	nil
1998	7	19	nil	11	nil	nil
2003	7	19	nil	11	nil	nil
2008	7	19	nil	12	nil	nil

Note: 1. Percent share of goat markets to total livestock market

2. Percentage change over base year i.e 1993

There were two skin markets in Murshidabad district in 1993, but it reduced to one in 2008 – (table – 3.6b).

Table – 3.6(b): Skin markets in the district (Murshidabad)

Year	Organized			Unorganized			Grand Total
	Rural	Urban	Total	Rural	Urban	Total	
1993	-	-	-	-	2	2	2
1998	-	-	-	-	1	1	1
2003	-	-	-	-	1	1	1
2008	-	-	-	-	1	1	1
Total	-	-	-	-	1	1	1

Note: 1. Percent share of different type of markets to total market



### Veterinary Service:

The district has seven State Animal Hospital, one District Veterinary Hospital, 225 Animal Aid Centre, 538 A.I. Units and others laboratory and others are five. The numbers of all hospitals and aid centers are constant over last 5 years – 2001-2005 but numbers of A. I. Units had increased from 310 in 2001 to 538 in 2005 (table-3.7b).

**Table - 3.7B : Veterinary Institutions in Murshidabad District (As on 31<sup>st</sup> March)**

District/ Year	State Animal Health Centre (S.A.H.C)	District Veterinary Hospital	Block Animal Health Centre (B.A.H.C)	Aid Centre and Additional Aid Centre (A.D.A.C)	Ambulatory Clinic Van	A.I. Unit	Check Post	Quarantine Station	District Veterinary Pathological Laboratory	C.M.S (Main & Sub-Depot	Parasitic Control Unit (Main) & Sub-Depot	Vigilance Unit	Mobile Diagnostic Laboratory (M.A.H.C.)	Tuber culpsis control Unit
2001	7	1	26	255	N.A	310	1	-	4	1	-	-	-	-
2002	7	1	26	255	N.A	331	1	-	4	1	-	-	-	-
2003	7	1	26	255	-	398	1	-	1	1	-	-	-	-
2004	7	1	26	255	-	529	1	-	1	1	-	-	-	-
2005	7	1	26	255	-	538	1	-	1	1	-	-	-	-

## Chapter – IV

### Socio-Economic Status and Access to Livestock, Goat etc. of Sample Households

As multi functional animal, goat plays very significant role in the economy of landless, small and marginal farmers in the state. Goats can easily service on available shrubs and trees. In pastoral and agricultural subsistence societies, goats are reared as source of additional income and as an insurance against disaster. Goats are also used in ceremonial feasting and payment of social dues.

Goat rearing is not acceptable occupation for all classes of people of the society. Only the poor and socially disadvantaged household tends to own small ruminants like goat/sheep rather than cow and buffaloes. So, in order to understand the goat rearing system in rural areas, it is need to understand the socio economic status of the rearing households. Data for the study have been collected from four villages of two districts, where the concentration of goat population is higher.

Data of goat rearing system have been collected from the selected households. These households are selected by ownership strata of rearing goat, which are as follows: strata – I - having goats 1 – 5, strata – 2 – owing goats 6 – 15, strata – 3 16 – 30 and strata – 4 owing goats more than 30.

The table 4.1 reveals that in both the districts, the majority of households (64 percent) own goats numbering 1 to 5, 33 per cent households have goats numbering 6 to 15 and remaining only 3 per cent households of have goat flock of 16 to 30 goats (table – 4.1).

Table - 4.1: Distribution of Sample Households by Size Class of Goatherd Across Market of Goats

Size class of goat	District – I (Burdwan)				District – II (Murshidabad)				Total
	Market – I (Natanhat)		Market – II (Guskara)		Market – I (Beldanga)		Market – II (Dakbangla)		
	Village– I	Village–II	Village–I	Village– II	Village– I	Village– II	Village– I	Village– II	
1 – 5	7 (58.33)	11 (84.62)	6 (46.15)	8 (66.66)	11 (84.62)	7 (58.33)	7 (53.85)	7 (58.33)	64 (64.00)
6 – 15	5 (41.67)	2 (15.38)	7 (53.85)	4 (33.34)	2 (15.38)	5 (41.67)	5 (38.46)	3 (25.00)	33 (33.00)
16 – 30	-	-	-	-	-	-	1 (7.69)	2 (16.67)	3 (3.00)
> 30	-	-	-	-	-	-	-	-	-
Total	12 (100.00)	13 (100.00)	13 (100.00)	12 (100.00)	13 (100.00)	12 (100.00)	13 (100.00)	12 (100.00)	100 (100.00)

Note: Figures in Parenthesis are Percentage to the total

Looking into the social groups of the rearing households, it is found that 84.00 per cent households belong to the other caste and remain 16.00 per cent households hail from scheduled caste (table – 4.2).

Table – 4.2: Distribution of Sample Households by Caste Across Market of Goats

Name of the Cast	District – I (Burdwan)				District – II (Murshidabad)				Total
	Market – I (Natanhat)		Market – II (Guskara)		Market – I (Beldanga)		Market – II (Dakbangla)		
	Village – I	Village–II	Village–I	Village– II	Village– I	Village – II	Village – I	Village – II	
SC	11 (91.67)	-	1 (7.69)	4 (33.33)	-	-	-	-	16 (16.00)
ST	-	-	-	-	-	-	-	-	-
OBC	-	-	-	-	-	-	-	-	-
Others	1 (8.33)	13 (100.00)	12 (92.31)	8 (66.67)	13 (100.00)	12 (100.00)	13 (100.00)	12 (100.00)	84 (84.00)
Total	12 (100.00)	13 (100.00)	13 (100.00)	12 (100.00)	13 (100.00)	12 (100.00)	13 (100.00)	12 (100.00)	100 (100.00)

Note: Figures in Parenthesis are Percentage to the total

The table - 4.3 shows that more than 74.00 per cent of the sample goat rearing households are either illiterate or some how could have been able to write his/her name. In the sampled households 19 per cent households obtained primary education and only 4.00 per cent have achieved the education up to secondary (2.00 per cent) and higher secondary level (2.00 per cent). The over all picture remains more or less same in the cases of the two selected district are studied separately.

Table – 4.3 Education Status of the Sample Households

Education status	District -I					District -II				
	Aral	Vedia	Joukri	Natanhat	Total	Baha	D. Nima	H. Nagar	Swalia	Total
Illiterate	4 (33.33)	1 (2.70)	1 (7.69)	5 (41.67)	11 (22.00)	3 (25.00)	1 (7.00)	6 (50.00)	6 (46.15)	16 (32.00)
Literate	4 (33.34)	2 (15.38)	12 (92.31)	4 (33.33)	22 (44.00)	7 (58.33)	8 (61.54)	3 (25.00)	7 (53.85)	25 (50.00)
Primary & Above	3 (25.00)	6 (46.15)	0	3 (25.00)	12 (24.00)	2 (16.67)	2 (15.38)	3 (25.00)	0	7 (14.00)
Below secondary	1 (8.33)	0	0	0	1 (2.00)	0	0	0	0	2 (4.00)
Secondary	0	2 (15.38)	0	0	2 (4.00)	0	2 (15.38)	0	0	0
Higher secondary	0	2 (15.38)	0	0	2 (4.00)	0	0	0	0	0
Graduate & above	0	0	0	0	0	0	0	0	0	0
Total	12 (100.00)	13 (100.00)	13 (100.00)	12 (100.00)	50 (100.00)	12 (100.00)	13 (100.00)	12 (100.00)	13 (100.00)	50 (100.00)

Note: Figures in Parenthesis are Percentage to the total

Since goat rearing is mainly enterprise by the people of low income groups the table - 4.4a, accordingly, shows that main occupation of 50 per cent goat rearing household are agricultural labour, and main occupation of remaining 50 per cent households are as follows: agriculture – 27 – per cent, goat rearing – 4.00 per cent, service – 1.00 per cent, other labour – 5.00 per cent, business – 6.00 per cent and others – 7.00 per cent. The table 4.4b confirms that the sampled households prefer goat-rearing enterprise is basically secondary occupation of the sample households.

The table reveals that 76.00 per cent of the sample households opted goat rearing as secondary occupation. Secondary occupation of remaining 24.00 per cent households are as follows agriculture – 7.00 per cent, agricultural labours – 7.00 per cent, other labours – 5.00 per cent, business – 4.00 per cent and service – 1.00 per cent.

Table– 4.4A: Distribution of Sample Households by Main Occupation Across Market of Goat

Main Occupation	District – I (Burdwan)				District – II (Murshidabad)				Total
	Market – I (Natunhat)		Market – II (Guskara)		Market – I (Beldanga)		Market – II (Dakbangla)		
	Village– I	Village– II	Village – I	Village – II	Village – I	Village – II	Village – I	Village – II	
Agriculture	1 (8.33)	-	9 (69.23)	1 (8.33)	1 (7.69)	3 (25.00)	8 (61.54)	4 (33.34)	27 (27.00)
Diary	-	-	-	-	-	-	-	-	-
Goat Rearing	-	-	-	-	3 (23.08)	-	1 (7.69)	-	4 (4.00)
Service	-	-	-	1 (8.33)	-	-	-	-	1 (1.00)
Labour	3 (25.00)	-	1 (7.69)	-	-	-	-	1 (8.33)	5 (5.00)
Profession	-	-	-	-	-	-	-	-	-
Business	-	-	1 (7.69)	3 (25.00)	1 (7.69)	1 (8.33)	-	-	6 (6.00)
Agriculture Labour	8 (66.67)	12 (92.31)	2 (15.39)	7 (58.34)	6 (46.16)	6 (50.00)	3 (23.08)	6 (50.00)	50 (50.00)
Others	-	1 (7.69)	-	-	2 (15.38)	2 (16.67)	1 (7.69)	1 (8.33)	7 (7.00)
All	12 (100.00)	13 (100.00)	13 (100.00)	12 (100.00)	13 (100.00)	12 (100.00)	13 (100.00)	12 (100.00)	100 (100.00)

Note: Figures in Parenthesis are Percentage to the total

Table – 4.5 : Distribution of Sample Households by Secondary Occupations Across Market of Goats

Secondary Occupation	District – I (Burdwan)				District – II (Murshidabad)				Total
	Market – I (Natunhat)		Market – II (Guskara)		Market – I (Beldanga)		Market – II (Dakbangla)		
	Village– I	Village– II	Village– I	Village– II	Village– I	Village– II	Village– I	Village– II	
Agriculture	1 (8.33)	-	-	2 (16.67)	3 (23.07)	-	1 (7.69)	-	7 (7.00)
Diary	-	-	-	-	-	-	-	-	-
Goat Rearing	11 (91.67)	13 (100.00)	9 (26.24)	8 (66.66)	7 (53.86)	7 (58.34)	11 (84.62)	10 (83.33)	76 (76.00)
Service	-	-	1 (7.69)	-	-	-	-	-	1 (1.00)
Labour	-	-	1 (7.69)	-	3 (23.07)	1 (8.33)	-	-	5 (5.00)
Profession	-	-	-	-	-	-	-	-	-
Business	-	-	1 (7.69)	-	-	3 (25.00)	-	-	4 (4.00)
Agriculture Labour	-	-	1 (7.69)	2 (16.67)	-	1 (8.33)	1 (7.69)	2 (16.67)	7 (7.00)
Others	-	-	-	-	-	-	-	-	-
All	12 (100.00)	13 (100.00)	13 (100.00)	12 (100.00)	13 (100.00)	12 (100.00)	13 (100.00)	12 (100.00)	100 (100.00)

Note: Figures in Parenthesis are Percentage to the total

Distribution of the sampled households by ownership of land has been depicted from the table – 4.5 which indicate that majority (60.00 per cent) of sampled goat rearing households are land less, 33.00 per cent are marginal farmers having land up to 1.00 hectare and only 7.00 per cent of the sample households are small farmers.

Table – 4.4B: Distribution of the Sampled Households by Ownership of Land

Size class of operated land (hectare)	District –1 (Burdwan)				District – 2 (Murshidabad)				Total
	Market – I (Natunhat)		Market – II (Guskara)		Market – I (Beldanga)		Market – II (Dakbangla)		
	Village – I	Village – II	Village – I	Village – II	Village – I	Village – II	Village – I	Village – II	
Land less	10 (83.33)	13 (100.00)	4 (30.77)	6 (50.00)	8 (61.54)	7 (58.33)	4 (30.77)	8 (66.67)	60 (60.00)
Up to 1	2 (16.67)	-	7 (53.85)	6 (50.00)	5 (38.46)	3 (25.00)	6 (46.15)	4 (33.33)	33 (33.00)
1 – 2	-	-	2 (15.38)	-	-	2 (16.67)	3 (33.08)	-	7 (7.00)
2 – 4	-	-	-	-	-	-	-	-	-
Above 4	-	-	-	-	-	-	-	-	-
Total	12 (100.00)	13 (100.00)	13 (100.00)	12 (100.00)	13 (100.00)	12 (100.00)	13 (100.00)	12 (100.00)	100 (100.00)

Note: Figures in Parenthesis are Percentage to the total

In course of the discussion of grazing land – 93.00 of the sampled households report that they do not possess growing land for their livestock in general and for goats herd in particular (table – 4.6)

Table – 4.6: Distribution of Sample Households by their Grazing Land Across Market of Goat

Size class of grazing land (hectare)	District –I (Burdwan)				District – II (Murshidabad)				Total
	Market – I (Natunhat)		Market – II (Guskara)		Market – I (Beldanga)		Market – II (Dakbangla)		
	Village – I	Village – II	Village – I	Village – II	Village – I	Village – II	Village – I	Village – II	
No grazing land	12 (100.00)	13 (100.00)	11 (84.62)	12 (100.00)	13 (100.00)	10 (83.33)	10 (76.92)	12 (100.00)	93 (93.00)
Up to 1	-	-	2 (15.38)	-	-	2 (16.67)	3 (23.08)	-	7 (7.00)
1 – 2	-	-	-	-	-	-	-	-	-
2 – 4	-	-	-	-	-	-	-	-	-
Above 4	-	-	-	-	-	-	-	-	-
Total	12 (100.00)	13 (100.00)	13 (100.00)	12 (100.00)	13 (100.00)	12 (100.00)	13 (100.00)	12 (100.00)	100 (100.00)

Note: Figures in Parenthesis are Percentage to the total

### Live Stock Position of the Sample Households:

It is evident from the table – 4.7 that concentration of animal resource is highest among the landless households in Burdwan district whereas concentration of animal source is highest among the marginal farmers in Murshidabad district. The overall picture – taking both the district together - indicates that the lands less households are rearing more livestock's than that of the marginal and small farmers. As for example, out of total livestock, the land less households are possessing 53.45 per cent of goats, 58.33 per cent of sheep, 62.50 per cent of cows and 61.67 per cent of other animals like bullocks etc. and the marginal farmers are found to be owing 41.82 per cent of goats, 22.22 per cent of sheep 31.25 per cent of cows, 66.67 per cent of buffaloes and 25.00 per cent of other animal and the remaining 4.73 per cent of goats, 19.45 per cent of sheep 6.25 per cent of cows, 33.33 per cent of buffaloes and 13.33 per cent of other animals are found to have owned by the small farmers.

Table – 4.7: Live-stock Position by the Size of Farms on the Sample Farms on July, 2007

Categories of Farms (ha)	District – I (Burdwan)									
	Goat		Sheep		Cows		Buffaloes		Others	
	No	Value	No	Value	No	Value	No	Value	No	Value
Land less	148 (57.81)	61,941.75 (55.31)	16 (84.21)	11360.32 (84.21)	24 (75.00)	40800.00 (73.91)	-	-	32 (65.31)	68820.00 (66.81)
Marginal (below 1 ha)	94 (36.72)	42,039.25 (37.54)	3 (15.79)	2130.06 (1.79)	7 (21.87)	11900.00 (21.56)	-	-	11 (22.45)	26367.00 (25.60)
Small (1 – 2 ha)	14 (5.47)	8014.50 (7.15)	-	-	1 (3.13)	2500.00 (4.53)	-	-	6 (12.24)	7819.00 (7.59)
Medimum (2-4 ha)	-	-	-	-	-	-	-	-	-	-
Large (> 4 ha)	-	-	-	-	-	-	-	-	-	-
All	256 (100.00)	1,11,995.50 (100.00)	19 (100.00)	13490.38 (100.00)	32 (100.00)	55200.00 (100.00)	-	-	49 (100.00)	103006.00 (100.00)
<b>District – 2 (Murshidabad)</b>										
Land less	146 (49.66)	69751.50 (53.47)	5 (29.41)	3712.70 (33.05)	6 (37.50)	10900.00 (35.05)	-	-	5 (45.46)	7500.00 (42.49)
Marginal (below 1 ha)	136 (46.26)	54974.00 (42.14)	5 (29.41)	3550.00 (31.60)	8 (50.00)	16500.00 (53.05)	4 (66.67)	53000.00 (76.81)	4 (36.36)	5832.00 (33.04)
Small (1 – 2 ha)	12 (4.08)	5733.00 (4.39)	7 (41.18)	3970.14 (35.34)	2 (12.50)	3700.00 (11.90)	2 (33.33)	16000.00 (23.19)	2 (18.18)	4320.00 (24.47)
Medimum (2-4 ha)	-	-	-	-	-	-	-	-	-	-
Large (> 4 ha)	-	-	-	-	-	-	-	-	-	-
All	294 (100.00)	130458.50 (100.00)	17 (100.00)	11232.84 (100.00)	16 (100.00)	31100.00 (100.00)	6 (100.00)	69000.00 (100.00)	11 (100.00)	17652.00 (100.00)

Contd... table – 4.7

Contd...table – 4.7

Categories of Farms (ha)	<i>Both Districts</i>									
	Goat		Sheep		Cows		Buffaloes		Others	
	No	Value	No	Value	No	Value	No	Value	No	Value
Land less	294 (53.45)	131693.25 (45.32)	21 (58.33)	15073.02 (60.97)	30 (62.50)	51700.00 (59.91)	-	-	37 (61.67)	76320.00 (63.25)
Marginal (below 1 ha)	230 (41.82)	97013.25 (40.01)	8 (22.22)	5680.06 (22.97)	15 (31.25)	28400.00 (32.91)	4 (66.67)	53000.00 (76.81)	15 (25.00)	32199.00 (26.69)
Small (1 – 2 ha)	26 (4.73)	13747.50 (5.67)	7 (19.45)	3970.14 (16.06)	3 (6.25)	6200.00 (7.18)	2 (33.33)	16000.00 (23.19)	8 (13.33)	12139.00 (10.06)
Medimum (2-4 ha)	-	-	-	-	-	-	-	-	-	-
Large (> 4 ha)	-	-	-	-	-	-	-	-	-	-
All	550 (100.00)	242454.00 (100.00)	36 (100.00)	24723.22 (100.00)	48 (100.00)	86300.00 (100.00)	6 (100.00)	69000.00 (100.00)	60 (100.00)	120658.00 (100.00)

Note: Figures in Parenthesis are Percentage to the total

In Burdwan district the flock size of goats 1 – 5, is consisted of 40.43 cent of male goats, 49.11 percent female goats and 41.24 per cent kids, but in the flock size of 6 – 15 goats, the percentages of male, female and kid goads are 59.57 per cent, 50.84 percent and 58.76 per cent respectively. The picture is slightly different in Murshidabad district where flock size of 1 –5 goats is consisted of 45.83 per cent of male, 48.85 per cent of female and 43.96 percent of kids, while in the flock size of 6 – 15, the share of male, female and kid are 33.33 percent, 33.59 per cent and 36.26 percent respectively, and in the flock size of 16-30, the highest share goes to male – 20.85 percent followed by kids – 19.78 per cent and female 17.56 - percent table – 4.8.

Table – 4.8 : Live-stock Position by the Size of Flocks of Goats on the Sample Farms on July – 2007

Size of Goats	<b>District – I (Burdwan)</b>							
	Goats				Sheep	Cows	Buffaloes	Others
	Male	Female	Kid	Total				
1 – 5	19 (40.43)	55 (49.11)	40 (41.24)	114 (44.53)	19 (100.00)	40 (100.00)	2 (100.00)	40 (81.63)
6 – 15	28 (59.57)	57 (50.89)	57 (58.76)	142 (55.47)	-	-	-	9 (18.37)
16 – 30	-	-	-	-	-	-	-	-
>30	-	-	-	-	-	-	-	-
All	47 (100.00)	112 (100.00)	97 (100.00)	256 (100.00)	19 (100.00)	40 (100.00)	2 (100.00)	49 (100.00)

Contd...table – 4.8

Contd...table – 4.8

Size of Goats	District – II (Murshidabad)							
	Goats				Sheep	Cows	Buffaloes	Others
	Male	Female	Kid	Total				
1 – 5	33 (45.83)	64 (48.85)	40 (43.96)	137 (46.60)	17 (100.00)	16 (100.00)	6 (100.00)	11 (100.00)
6 – 15	24 (33.33)	44 (33.59)	33 (36.26)	101 (34.35)	-	-	-	-
16 – 30	15 (20.85)	23 (17.56)	18 (19.78)	56 (19.05)	-	-	-	-
>30	-	-	-	-	-	-	-	-
All	72 (100.00)	131 (100.00)	91 (100.00)	294 (100.00)	17 (100.00)	16 (100.00)	6 (100.00)	11 (100.00)
Both Districts								
1 – 5	52 (43.70)	119 (48.97)	80 (42.55)	251 (45.64)	36 (100.00)	56 (100.00)	8 (100.00)	51 (85.00)
6 – 15	52 (43.70)	101 (41.56)	90 (47.87)	243 (44.18)	-	-	-	9 (15.00)
16 – 30	15 (12.60)	23 (9.47)	18 (9.58)	56 (10.18)	-	-	-	-
>30	-	-	-	-	-	-	-	-
All	119 (100.00)	243 (100.00)	188 (100.00)	550 (100.00)	36 (100.00)	56 (100.00)	8 (100.00)	60 (100.00)

Note : Percentage of all. Ma = Male, Fe = Female, Kid = Kids, Tot =Total

Figures in Parenthesis are Percentage to the total

### Income Source of the Sample Households:

In Burdwan district main source of income of sample land less households is agriculture and other labour, while the main source income of marginal and small farmers is agriculture followed by trade and service. However, the contribution of goat rearing to the annual income of land less households and marginal and small farmers is 7.12 per cent, 4.24 per cent and 1.89 per cent respectively. Similarly, in Murshidabad district main source of annual income of land less households, is agriculture (share cropping) followed trading/ business, labour and goat rearing, while main income source of marginal farmers is agriculture followed by trade/business, goat rearing and labour. But, the main income source of small farmers is only agriculture. The contribution goat enterprise to the total income is 8.27 percent for landless house hold, 8.33 percent for marginal farmers and 3.47 percent for small farmers (table – 4.9).



Table – 4.9 : Income from different sources on the sample farms (Amount Rs.)

Size of farm (ha.)	District – I (Burdwan)							District – II (Murshidabad)							Total income of both districts
	Sources							Sources							
	Agri	Dairy	Goat rearing	Labour	Profession/ service	Traders/ others	Total	Agri	Dairy	Goat rearing	Labour	Profession/ service	Traders/ others	Total	
Land less	9000	11750	74580	847710	-	104700	1047740	585500	52950	117883	267500	-	401000	1424833	2472573
%	0.86	2.01	7.12	80.91	-	9.99	100.00	41.09	2.14	8.27	18.77	-	28.14	100.00	
Marginal	550800	10200	36460	105200	-	158000	860660	468500	47400	67075	37000	-	180000	799975	1660635
%	64.00	2.18	4.24	12.22		18.36	100.00	58.56	2.85	8.38	4.63		22.50	100.00	
Small	193000	-	5060	-	-	70000	268060	43000	-	1548	-	-	-	44548	312608
%	72.00		1.89			26.11	100.00	96.53		3.47				100.00	
Medium	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Large	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All	752800	21950	116100	952910	-	332700	2176460	1097000	100350	186506	304500	-	581000	2269356	4445816
%	34.59	2.00	5.33	43.78		15.29	100.00	48.34	2.26	8.22	13.42		25.60	100.00	

Percentage of total income within district/ per household

It is evident from the table – 4. 10A that in the study area of market – I of Burdwan district, the main source of income of the sample households is daily labour which contributes 88.91 percent of total income, while main source in income of the sample households in the study area of market – II is also agriculture, but contributes 56.55 percent in total income. The contribution of goat rearing study areas of study area of markets – I and II are 8.90 percent and 5.30 percent respectively. In the study area of market – I, the contribution of other sources to total income is negligible, while in the study area of market – II, trade and other sources of income is significant – (table – 4.10A). The table also indicates that in the study areas of markets – I and II of the sample district – II, agriculture is the main source of income which contributes 32.11 percent and 52.06 percent respectively. The contribution of goat rearing to total income is 5.32 percent and 11.88 percent for markets – I and II respectively. . In the study area of market –II, the contribution of other sources to total income is negligible, while in the study area of market – I, trade and other are important sources of income of the sample households.

Table – 4. 10A: Annual Income from Different Sources of the Sample Farms (Amount in Rs.)

Source of income	District – I						Total of the district
	Market – I			Market – II			
	V – I	V – II	Total	V – I	V – II	Total	
Agriculture	17500.00	-	17500.00	614000.00	129800.00	743800.00	761300.00
%	4.11		2.01	75.62	25.79	56.55	34.84
Diary	-	-	-	8150.00	13800.00	21950.00	21950.00
%	-	-	-	1.00	2.74	1.67	1.00
Goat Rearing	37870.00	23550.00	61420.00	30010.00	24670.00	54680.00	116100.00
%	8.90	5.30	7.06	3.70	4.90	4.16	5.31
Labour	370000.00	403200.00	773200.00	64600.00	115110.00	179710.00	952910.00
%	86.98	90.76	88.91	7.96	22.87	13.66	43.61
Profession	-	-	-	-	-	-	-
%	-	-	-	-	-	-	-
Traders	-	-	-	25200.00	145000.00	170200.00	170200.00
%	-	-	-	3.10	28.81	12.94	7.79
Others	-	17500.00	17500.00	70000.00	75000.00	145000.00	162500.00
%		3.94	2.01	8.62	14.90	11.02	7.44
All	425370.00	444250.00	869620.00	811960.00	503380.00	1315340.00	2184960.00
%	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Source of income	District – II						Total of the district
	Market – I			Market – II			
	V – I	V – II	Total	V – I	V – II	Total	
Agriculture	157000	94500	251500	251000	83000	334000	585500
%	36.98		32.11	66.38	31.50	52.06	41.09
Diary	4750	13300	18050	23900	11000	34900	52950
%	1.12	3.72	2.30	6.32	4.17	5.44	3.72
Goat Rearing	17170	24510	41680	36703	39500	76203	117883
%	4.04	6.85	5.32	9.71	14.99	11.88	8.27
Labour	52000	75000	127000	27000	113500	140500	267500
%	12.25	20.96	16.21	7.14	43.07	21.90	18.77
Profession	-	-	-	-	-	-	-
%	-	-	-	-	-	-	-
Traders	137500	42000	179500	3500	-	3500	183000
%	32.39	11.74	22.92	0.93	-	0.55	12.84
Others	57000	108500	165500	36000	16500	52500	218000
%	13.43	30.32	21.13	9.52	6.26	8.18	15.30
All	424520	357810	782330	378103	263500	641603	1424833
%	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Sector wise contribution to the aggregate income of the sample households are as follows: agriculture – 37.31 percent, diary – 2.27 percent, goat rearing – 6.48 percent, labour – 33.81 percent, trade – 9.78 percent and others – 10.54 percent – (Table – 4: 10B).

Table – 4: 10B: Annual Income from different sources of the Sample Farms

( in Rs.)

Source of income	Both district						
	Market – I			Market – II			Total
	V – I	V – II	Total	Total	V – I	V – II	
Agriculture	157000	94500	251500	83000	334000	585500	1346800
%	36.98	26.41	32.11	31.50	52.06	41.09	37.31
Diary	4750	13300	18050	11000	34900	52950	74900
%	1.12	3.72	2.30	4.17	5.44	3.72	2.07
Goat Rearing	17170	24510	41680	39500	76203	117883	233983
%	4.04	6.85	5.32	14.99	11.88	8.27	6.48
Labour	52000	75000	127000	113500	140500	267500	1220410
%	12.25	20.96	16.21	43.07	21.90	18.77	33.81
Profession	-	-	-	-	-	-	-
%	-	-	-	-	-	-	-
Traders	137500	42000	179500	-	3500	183000	353200
%	32.39	11.74	22.92	-	0.55	12.84	9.78
Others	57000	108500	165500	16500	52500	218000	380500
%	13.43	30.32	21.13	6.26	8.18	15.30	10.54
All	424520	357810	783230	263500	641603	1424833	3609793
%	100.00	100.00	100.00	100.00	100.00	100.00	100.00

It is also evident from the tables – 4.11 that sample households having flock size of goats 1- 5 numbers are occupying 59.40 per cent of annual income in Burdwan district and 66.73 per cent in Murshidabad district, while the households having flock size of goats 1 – 15 numbers are sharing the annual income 40.60 per cent in Burdwan and 28.96 per cent in Murshidabad. Only, the sample households of Murshidabad district own the flock size of goats - 16 – 30 numbers, but shares only 4.31 percent of total income.

Table – 4.11: Annual Income from Goats Rearing by Size of Flocks of Goats (Amount in Rs)

Size of flocks	District – I						Total of the district
	Market – I			Market – II			
	V – I	V – II	Total	V – I	V – II	Total	
1 - 5	227200	362700	589900	438910	294130	733040	1322940
%	(53.41)	(77.08)	(65.85)	(87.19)	(35.53)	(55.07)	(59.40)
6 – 15	198170	107820	305990	38880	209250	598130	904120
%	(46.59)	(22.92)	(34.15)	(7.72)	(25.28)	(44.93)	(40.60)
16 – 30	-	-	-	-	-	-	-
%	-	-	-	-	-	-	-
>30	-	-	-	-	-	-	-
%	-	-	-	-	-	-	-
All	425370	470520	895890	503380	827790	1331170	2227060
%	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)

Contd...table – 4.11

Contd...table – 4.11

Size of flocks	District - II						Total of the district	Total of both the district
	Market – I			Market – II				
	V – I	V – II	Total	V – I	V – II	Total		
1 - 5	380835	245195	626030	193738	151280	345018	971048	2293988
%	(89.52)	(68.53)	(79.93)	(48.99)	(54.70)	(51.34)	(66.73)	(62.30)
6 – 15	44587	112615	157202	161515	102695	264210	421412	1325532
%	(10.48)	(31.47)	(20.07)	(40.84)	(37.13)	(39.32)	(28.96)	(36.00)
16 – 30	-	-	-	40200	22575	62775	62775	62775
%	-	-	-	(10.17)	(8.16)	(9.34)	(4.31)	(1.700)
>30	-	-	-	-	-	-	-	-
%	-	-	-	-	-	-	-	-
All	425422	357810	783232	395453	276550	672003	1455235	3682295
	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)

#### Employment Position of the Sample Households:

Annual mandays involved in rearing of goat has been analysed in the table 4.12. The table indicates that annual mandays involved in the rearing goat in Burdwan district are 1559 days in village nearing the market and 1513 days in the village away from the market. Though male and female members of the sample households are involved in rearing of goat, the female members are found to be more active as compared to the male members. It is evident from the fact that in near village, the engagement for goat rearing of male members is 38.68 per cent where as engagement of female members is 61.32 per cent. A nominal variation is observed in the pattern of employment of male and female members by ownership of the size of flock of goats. The pattern of employment is to some extent different in Murshidabad district where, the participation of children in goat rearing is quite significant. As for example, out of total man days involved in goat rearing, employment generated in near village are 1962 man days and far village are 2004 man days. Employment generated by children is 27.93 per cent for the former village and 25.45 per cent for the later village.

The table 4.13 indicated that the main sector of employment of the sample households in either selected district is agriculture. In Burdwan, out of total mandays-(29287), employment generated in agriculture is 66.87 percent followed by goat rearing – 27.05 per cent and diary - 12.70 per cent. Data for other sectors like labour, profession, trade and others were not collected as these are not devised in the questionnaire. Similarly, in Murshidabad district, out of total mandays (27025), 56.91 per cent are generated from agriculture, 28.90 percent from goat rearing and 14.19 per

cent from dairy. The overall picture remains more or less same for both the districts as a whole.

Table – 4.12: Employment Days in Rearing of Goats by the Size of Flocks of Goats

Size of Flocks	<b>District – I</b>								
	Market -1								Days of the District
	Near the Village				Off the village				
	M	F	C	T	M	F	C	T	
>=5	320	496	-	816	415	712	-	1127	1943
%	39.22	60.78		100.00	36.82	63.18		100.00	
6 – 15	283	460	-	743	161	225	-	386	1129
%	38.09	61.91		100.00	41.71	58.29		100.00	
16- 30	-	-	-	-	-	-	-	-	-
%									
> 30	-	-	-	-	-	-	-	-	-
All	603	956	-	1559	576	937	-	1513	3072
%	38.68	61.32		100.00	38.07	61.93		100.00	
Size of Flocks	<b>District – II</b>								
	Market - 2								Days of the District
	Near the Village				Off the village				
	M	F	C	T	M	F	C	T	
>=5	284	785	413	1482	351	595	351	1297	2779
%	19.16	52.97	27.87	100.00	27.06	45.88	27.06	100.00	
6 – 15	97	186	109	392	27.06	45.88	27.06	100.00	1017
%	24.74	47.45	27.81	100.00	27.06	45.88	27.06	100.00	
16- 30	25	37	26	88	25	40	17	82	170
%	28.41	42.05	29.55	100.00	30.49	48.78	20.73	100.00	
> 30	-	-	-	-	-	-	-	-	-
All	406	1008	548	1962	591	903	510	2004	3966
%	20.69	51.38	27.93	100.00	29.49	45.06	25.45	100.00	
Size of Flocks	<b>Both District</b>								
	M	F	C	T	G. Total				
	>=5	1370	2588	764	4722	4722			
	%	29.01	54.81	16.18	100.00				
6 – 15	756	1139	251	2146	2146				
%	35.23	53.08	11.70	100.00					
16- 30	50	77	43	170	170				
%	29.41	45.29	25.29	100.00					
> 30	-	-	-	-	-				
%									
All	2176	3804	1058	7038	7038				
%	30.92	54.05	15.03	100.00					

Percentage to total

Note: M = Male, F = Female, C = Child, T = Total

Table – 4.13: Employment in Different Occupations on the Sample Farms

Name of Occupations	District –I (Burdwan)			District – II (Murshidabad)			Total of both districts
	Market			Market			
	Near Village	Off Village	Total	Near Village	Off Village	Total	
Agriculture	10886	8704	19590	8637	6743	15380	34970
%	67.77	65.82	66.89	60.26	53.13	56.91	62.10
Diary	2098	1489	3587	1820	2015	3835	7422
%	13.06	11.26	12.25	12.70	15.88	14.19	13.18
Goat Rearing	3080	3030	6110	3877	3933	7810	13920
%	19.17	22.91	20.86	27.05	30.99	28.90	24.72
Labour	NC	NC	NC	NC	NC	NC	NC
Profession	NC	NC	NC	NC	NC	NC	NC
Traders	NC	NC	NC	NC	NC	NC	NC
Others	NC	NC	NC	NC	NC	NC	NC
All	16064	13223	29287	14334	12691	27025	56312
%	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Percentage to all/ per households NC = Not Collected

### Asset Position of the Sample Household:

Asset position of the sample households through includes goat shed, farm equipment, and grazing land cage for kids and others, data only for goat shed and farm equipment are available. Out of total sample households (100), only 13 households of Burdwan district have goat shed worth Rs. 36000/- and in Murshidabad district only 3 households have goat shed valued Rs. 185000/-. However, 53 numbers of farm equipment are owned by the households of Burdwan and 129 numbers of farm equipments are owned by the sample households of Murshidabad district. Value of these farm equipments of Burdwan and Murshidabad districts are Rs. 47500/- and Rs. 66500/- respectively. Total value of these assets are Rs. 83500/- for Burdwan district and Rs. 85000/- for Murshidabad district. The share of goat shed to total asset value is Rs. 43.11 per cent in Burdwan district and 21.76 per cent in Murshidabad district (Table – 4.14).

### Access to Livestock:

The table - 4.14A indicates that total livestock population own by the sample households in July 07 to Dec. 07 of Burdwan and Murshidabad district is 336 and 341 respectively. Out of the total livestock the share of goats population is highest - 76.19 per cent in Burdwan and 86.22 in Murshidabad followed by caws - 8.93 per cent for the

former district and 4.76 for the later. Bullock population is 7.74 per cent in Burdwan and 1.49 per cent in Murshidabad. Sheep population is about 6 per cent for both the districts.

Similarly in the total livestock population in Jan 08 to June 08 is 333 and 330 numbers of Burdwan and Murshidabad district respectively. Through goat population has increased in Burdwan district by 1.59 per cent as compared to earlier period, it has been decreased by 3.19 per cent in Murshidabad district. The share of cow population has been decreased from 8.93 per cent in Dec, 07 to 7.74 per cent in June 08 in Burdwan district. But in Murshidabad district it is more or less constant. However, share of other live stock like sheep, bullocks and buffaloes Burdwan in either district is more or less same.

However, the over all picture of addition depletion in livestock population from July 07 - Dec. 07 to Jan 08 – June 08 - for both the district taking together indicates that goat population has decreased by 3.09 per cent and cow population decreased by 8.70 per cent, where as sheep population has increased by 8.33 per cent and population of other live stock which mainly includes poultry birds increased by 33.33 per cent. As regards to goat population the hopeful situation is that the kids' population has increased by 4.19 per cent.

Table – 4.14: Fixed Assets for the Purpose of Goats on the Sample Farms

Size of flocks	No of households	District-I										Total Value	
		Assets											
		Goat Shed		Farm Equipment		Grazing Land		Cage for Kids		Others			
		No	Value	No	Value	No	Value	No	Value	No	Value		
1- 5	64	2	6000	33	27500	-	-	-	-	-	-	33500	
%			17.91		82.09							100.00	
6 -15	33	11	30000	20	20000	-	-	-	-	-	-	50000	
%			60.00		40.00							100.00	
16-30	3	-	-	-	-	-	-	-	-	-	-	-	
%													
>30	-	-	-	-	-	-	-	-	-	-	-	-	
%													
All	100	13	36000	53	47500	-	-	-	-	-	-	83500	
%			43.11		56.89							100.00	
Size of flocks		District – II										Total value of both districts	
		Assets											
		Goat Shed		Farm Equipment		Grazing Land		Cage for Kids		Others			Total Value
		No	Value	No	Value	No	Value	No	Value	No	Value		
1-5	-	-	72	22600	-	-	-	-	-	-	22600	56100	
%				100.00								100.00	
6 - 15	1	5500	57	43900	-	-	-	-	-	-	49400	99400	

%		11.13		88.87							100.00	
16-30	2	13000	-	-	-	-	-	-	-	-	13000	13000
%											100	
>30	-	-	-	-	-	-	-	-	-	-	-	-
%												
All	3	18500	129	66500	-	-	-	-	-	-	85000	168500
%		21.76		78.24							100.00	

Table – 4.14A: Access to Livestock on the Sample Goat Rearers

Livestock	District – I (Burdwan)						District – II (Murshidabad)					
	Jul'07-Dec'07		Jan'08-June'08		Total		Jul'07-Dec'07		Jan'08-June'08		Total	
	No.	Value (Rs.)	No.	Value (Rs.)	No.	Value (Rs.)	No.	Value (Rs.)	No.	Value (Rs.)	No.	Value (Rs.)
Goat												
Male	47	42723	50	49995	97	92718	70	65448	62	56358	134	121806
Female	112	66864	105	63879	217	130743	130	61491	115	70446	248	131937
Kid	97	42001	102	40702	199	82703	94	39585	97	41800	188	81385
Total goats	256	151588	257	154576	513	306164	294	166524	274	168604	570	335128
%	76.19	44.68	76.95	46.87	76.56	45.76	86.22	63.72	83.03	62.95	84.95	63.33
Sheep	19	15200	20	16000	39	31200	17	13600	19	15200	36	28800
%	5.65	4.48	5.99	4.85	5.83	4.66	4.99	5.20	5.76	5.67	5.37	5.44
Cows	30	75000	26	66300	56	141300	16	40320	16	39200	32	79520
%	8.93	22.11	7.78	20.10	8.35	21.12	4.76	15.43	4.76	15.00	9.52	15.03
Buffaloes	2	11674	2	11800	4	23474	4	23200	4	23000	8	46200
%	0.60	3474.40	0.60	3.58	0.60	3.51	1.19	8.88	1.19	8.80	2.38	8.73
Bullocks	26	85072	25	80000	51	165072	5	16250	6	19800	11	36050
%	7.74	25.07	7.48	24.26	7.61	24.67	1.49	6.22	1.79	7.39	3.27	6.81
Others	3	750	4	1100	7	1850	6	1440	8	2050	14	3490
%	0.89	0.22	1.20	0.33	1.04	0.28	1.76	0.55	2.42	0.77	2.09	0.66
Total	336	339284	334	329776	670	669060	341	261334	330	267854	671	529188
%	100	100	100	100	100	100	100	100	100	100	100	100

### Goat Population of the Sample Households:

Data on goat population by age group of goats of the sample households is worked out in the table 4.15. The table indicates that during study period July – 07 to Dec. - 07 and Jan – 08 to June – 08, numbers goats owned by the sample households are 550 and 533 respectively, in which 22.10 percent goats are under the age group of less than 6 month in during July 07 to Dec. 07 and 18.20 percent during January 08 to June 08. The number of goats of the age group of 7 months to 12 months is 47.88 per cent and 48.03 per cent for July – 07 to Dec. 07 and January 08 to June 08 respectively. Numbers of goats of the age group of 1 year to 1.5 years accounts for 17.82 percent during July 07 to Dec. 07 and 25.70 percent during January 08 to June 08. Goats of age groups more than 1.5 years exist by 12.52 percent in between July 07 to December 07 and 8.07 per cent in between January 08 to June 08. So far as value (Rs. / Goat) are concerned, the table exhibits that during the 1<sup>st</sup> half of our study, the average value per goat under age group of less 6 months is Rs. 489.28 while during the second half of our study the estimated



value for the same is Rs. 502.28. Similarly, values of goats of other age groups are as follows: age group – 7 months to 12 months - Rs. 916.22 and Rs. 891.00 during July 07 to Dec. 07 and January 08 to June 08 respectively, age group 1year to 1.5 years - Rs. 1151.24 (July 07 to Dec. 07) and Rs. 1282.63 (Jan 08 to June 08) and age group more than 1.5 years Rs.1254.18 and Rs.1515.19 for the periods July 07 to Dec. 07 and Jan 08 to June 08 respectively. Average value of per goat for all age groups is Rs. 905.31 during July 07 to Dec. 07 and Rs. 971.28 during January 08 to June 08.

The table also indicates that most of the rearing goats of all age groups are home product, which accounts for 86.00 to 89.00 per cent and remaining 11.00 to 13.00 per cent is procured through purchase. Variation of purchase value for the goats of different age groups in between July 07 to Dec. 07 and January 08 to June 08 are as follows age groups (>6 months) Rs. 119.46, age groups ( 7 to 12 months ) Rs. 104.28, age groups (1yrs to 1.5 yrs) Rs. (-) 5.61 and age groups (> 1.5 yrs) Rs. (-) 96.5. The fact reveals that the rearing goats of higher age groups procured through purchased yield negative returns.

Table – 4. 15: Rearing of Goat of the Sample Households by Age and Breed of Goat (Deshi)  
(Both Burdwan and Murshidabad)

Name of the breed Deshi	<6 month			7-12 month		
	Jul'07- Dec'07	Jan'08- June'08	Jul'07- June'08	Jul'07-Dec'07	Jan'08-June'08	Jul'07- June'08
Nos.	190	191	381	153	149	302
%	34.55	35.83	35.18	27.82	27.95	27.89
Weight	894.9	874.78	1769.68	1205.64	1101.11	2306.75
Present Value	152133	159209.96	311463.68	204958.8	200402.02	405988
Value (Rs./Goat)	800.70	833.56	817.49	1339.60	1344.98	1344.33
Home Product (Nos.)	162	160	322	122	128	250
%	85.26	83.77	84.51	79.74	85.91	82.78
Purchased (Nos.)	28	31	59	31	21	52
%	14.74	16.23	15.49	20.26	14.09	17.22
Purchased (Value)	22419.6	25840.36	48231.91	41527.6	28244.58	69905.22

Name of the breed Deshi	1-1.5years			>1.5 years			Total		
	Jul'07- Dec'07	Jan'08- June'08	Jul'07- June'08	Jul'07- Dec'07	Jan'08- June'08	Jul'07- June'08	Jul'07- Dec'07	Jan'08- June'08	Jul'07- June'08
Nos.	141	136	277	66	57	123	550	533	1083
%	25.64	25.52	25.58	12.00	10.69	11.36	100.00	100.00	100.00
Weight	1312.71	1289.28	2601.99	702.24	584.82	1287.06	4235	4146.74	8381.74
Present Value	223160.7	234648.96	457950.24	119380.8	106437.24	226522.56	719950	754706.68	1475186.2
Value (Rs./Goat)	1582.7	1725.36	1653.25	1808.8	1867.32	1841.6468	1309	1415.96	1362.1295
Home Product (Nos.)	115	119	234	63	52	115	462	459	943
%	81.56	87.5	84.48	95.45	91.23	93.5	84	86.12	87.07
Purchased (Nos.)	26	17	43	3	5	8	88	74	123
%	18.44	12.5	15.52	4.55	8.77	6.5	16	13.88	11.36

Purchased (Value)	41150.2	29331.12	71089.75	5426.4	9336.6	14733.17	115192	104781.04	167541.93
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### Goats of the Sample Households by Age & Breed:

It has been stated earlier that only Deshi (Block Bengal/Bengal) goat are being reared by the sample household. Distribution of goats by their age groups has been

estimated in the table 4.15 which indicates that during July 07 to December 07, percentage share of goats of different age groups are as follows: goats < 6 months – 34.55%, 7 to 12 months – 27.82% , 1 to 1.5 yrs. – 25.64% and > 1.5 yrs – 12.00%. However, during January 08 to June –08, the percentage share of goats of different age groups in total goat population is more or less same as compare to July – 07 to December – 07. As regards to the nature of retention of goats, the table indicates that out of total goats of age group - < 6 months, 84.51 per cent of goats are of home product and remaining 15.49 per cent are purchased. Similarly, in the rearing goats of age group 7 –12 months, 82.78 per cent are home product and 17.22 per cent are purchased goats. In the age group of 1 to 1.5 yrs. of goats, 84.48 per cent are home product and 15.52 per cent are purchased and in the age group of > 1.5 yrs. 89.50 per cent is home product and 6.5 per cent are purchased.

### Goat of the Sample Households by Breed & Sex:

The tables – 4.16 and 4.17 indicates that during July 07 to December 07 goat population of the sample households consists of 21.27 per cent male-goats, 44.00 per cent female-goats and 34.73 per cent kids. Similarly, during January 08 to June 08, distribution of goat population are as follows; male-goats – 20.26 per cent, female-goats – 40.71 per cent and kids – 39.02 per cent. Thus, it is observed from the table that through male and female population of goats has decreased, the number of kids (goats) has increased by 4.29 in between January - June 08 as compared to July – December – 07. In this case also the share of home product goats are 78 to 83 per cent. i.e. male goats – 82.61 percent, female-goats – 78.19 percent and kids – 82.89 per cent.

Table - 4. 16: Rearing of goat of the sample households by age and breed of goat  
(Both Burdwan and Murshidabad)

Name of the breed all breed	<6 month			7-12 month			1-1.5years		
	Jul'07- Dec'07	Jan'08- June'08	Jul'07- June'08	Jul'07- Dec'07	Jan'08- June'08	Jul'07- June'08	Jul'07- Dec'07	Jan'08- June'08	Jul'07- June'08
Nos.	190	191	381	153	149	302	141	136	277
Weight	894.9	874.78	1769.68	1205.64	1101.11	2306.75	1312.71	1289.28	2601.99
Present Value	152133	159209.96	311463.68	204958.8	200402.02	405988	223160.7	234648.96	457950.24
Value (Rs./Goat)	800.70	833.56	817.48	1339.60	1344.98	1344.33	1582.70	1725.36	1653.25

Home Product (Nos.)	162	160	322	122	128	250	115	119	234
%	85.26	83.77	84.51	79.74	85.91	82.78	81.56	87.5	84.48
Purchased (Nos.)	28	31	59	31	21	52	26	17	43
%	14.74	16.23	15.49	20.26	14.09	17.22	18.44	12.5	15.52
Purchased (Value)	22419.6	25840.36	48231.91	41527.60	28244.58	69905.22	41150.20	29331.12	71089.75

Contd...table – 4.16

Contd...table – 4.16

Name of the breed all breed	>1.5 years			Total		
	Jul'07-Dec'07	Jan'08-June'08	Jul'07- June'08	Jul'07-Dec'07	Jan'08-June'08	Jul'07- June'08
Nos.	66	57	123	550	533	1083
Weight	702.24	584.82	1287.06	4235	4146.74	8381.74
Present Value	119380.8	106437.24	226522.56	719950	754706.68	1475186.2
Value (Rs./Goat)	1808.8	1867.32	1841.6468	1309	1415.96	1362.1295
Home Product (Nos.)	63	52	115	462	459	943
%	95.45	91.23	93.5	84	86.12	87.07
Purchased (Nos.)	3	5	8	88	74	123
%	4.55	8.77	6.5	16	13.88	11.36
Purchased (Value)	5426.40	9336.60	14733.17	115192.00	104781.04	167541.93

Table – 4.17 : Rearing of Goat on the Sample Households by Breed and Sex of Goat

Name of the breed (Deshi)	July 07 – Dec 07				Jan. 08 – June 08				Total (July 07 – June 08)			
	Male	Female	Kids	Total	Male	Female	Kids	Total	Male	Female	Kids	Total
No.	117	242	191	550	108	217	208	533	229	464	390	1083
Weight (in kg)	939	1762	1480	4181	864	1768	1425	4057	1803	3530	2905	8238
Present Value	169020	204300	118263	491583	204569	185101	128022	517692	373589	389401	246285	1009275
Rs./goat	1707.27	862.03	571.32	905.31	1894.16	853.00	615.49	971.28	1804.78	857.71	593.46	937.99
Home Product	79	180	178	437	92	175	166	433	171	355	344	870
%	79.80	75.95	85.99	80.48	85.19	80.65	79.81	81.24	82.61	78.19	82.89	80.86
Value	134874.545	155164.56	101694.75	395620.20	174262.48	149275	102171.4	420564.05	308617	304487.57	204149.49	816049.49
Purchased	10	57	29	96	16	42	42	100	26	99	71	196
%	20.20	24.05	14.01	19.52	14.81	19.35	20.19	18.76	17.39	21.81	17.11	19.14
Purchased (Value)	17072.73	49135.44	16568.25	86909.70	30306.52	35826.00	25850.60	97127.95	46924.22	84913.43	42135.51	183845.63
Rs./goat	1707.27	862.03	571.32	905.31	1894.16	853.00	615.49	971.28	1804.78	857.71	593.46	937.99

Percentage of home and purchased to number of goat /Value of per goat

### Maintenance Cost of Goat Rearing:

Goat in the sample area are mainly maintained by free grazing. The rearers just leave goats or fix goats to brows on the growing grass of indigenous pasture, roadside marginal land idle grass land, fallow land and orchard areas etc. Hence, maintenance of cost of goats in the sample area is very nominal. The table – 4.18A shows that total

maintenance cost (Rs./goat) during July 07 to December 07 in terms of grains, fodder and medicine is Rs. 29.93 and imputed value of family labour for grazing of goats is Rs.4.57. In detail the cost for grain is Rs.12.31, for fodder – Rs. 12.87 and medicine – Rs.4.75 per goat. The table also indicate that the per goat maintenance cost for kids is highest, Rs. 37.22 followed by male goats Rs. 35.21 and female goats Rs. 21.71 On the other hand grazing costs per goat is highest for male goats Rs. 9.39 followed by female goats – Rs. 4.03 and kids – Rs.2.22. However, the picture of the maintenance cost for goats is slightly different in the period January 08 to June – 08 as compared to July 07 to December – 07. During January – 08 to June – 08. Maintenance cost for male per goat is higher - Rs.39.09 followed by female goat - Rs.24.04 and kids Rs. - 11.11 and total maintenance cost per goat is 21.76 which is to same extent lowed than the earlier period (table – 4.18B). When we look into the annual maintenance cost (July –07 to June – 08 of goats by the table 4.18C, we find that maintenance cost of male goats is Rs.36.97, female goats is Rs. 22.83 and kids – Rs.23.48, and per head maintenance cost of goats as a whole is Rs.25.91.

**Table – 4.18A: Maintenance Cost (Rs./goat) of Goat of the Sample Goat Rearers From July 07 to Dec. 07**

Type of goat	No.	Maintenance												
		Grains		Fodder		Salt		Medicine		Other		Total	Family labour	Grazing
		Qty.	Value	Qty.	Value	Qty.	Value	Qty.	Value	Qty.	Value	Value	Days	Imputed value
Male	119	-	1927.8	-	807.72	-	-	-	1454.19	-	-	4189.71	27	1117.46
Value/Rs./goat		-	16.20	-	6.79	-	-	-	12.22	-	-	35.21	0.23	9.39
Female	243	-	3049.65	-	1289.6	-	-	-	935.55	-	-	5274.8	30	979.88
Value/Rs./goat		-	12.55	-	5.31	-	-	-	3.85	-	-	21.71	0.12	4.03
Kids	188	-	1793.74	-	4982.2	-	-	-	221.63	-	-	6997.57	17	418.22
Value/Rs./goat		-	9.54	-	26.50	-	-	-	1.18	-	-	37.22	0.09	2.22
Total	550	-	6771.19	-	7079.52	-	-	-	2611.37	-	-	16462.1	74	2515.56
Value/Rs./goat		-	12.31	-	12.87	-	-	-	4.75	-	-	29.93	0.13	4.57

**Table – 4.18B: Maintenance Cost (Rs. /goat) of Goat of the Sample Goat Rearers from Jan 08 to June 08**

Type of goat	No.	Maintenance												
		Grains		Fodder		Salt		Medicine		Other		Total	Family labour	Grazing
		Qty.	Value	Qty.	Value	Qty.	Value	Qty.	Value	Qty.	Value	Value	Days	Imputed value
Male	99	-	1956.24	-	395.38	-	-	-	1518.13	-	-	3869.75	31	1466.37
Value/Rs./goat		-	19.76	-	3.99	-	-	-	15.33	-	-	39.09	0.31	14.81
Female	225	-	2675.25	-	1410.75	-	-	-	1323.29	-	-	5409.30	27.00	1063.94

Value/Rs./goat		-	11.89	-	6.27	-	-	-	5.88	-	-	24.04	0.12	4.73
Kids	209	-	1588.31	-	452.67	-	-	-	281.16	-	-	2322.14	16.00	502.16
Value/Rs./goat		-	7.60	-	2.17	-	-	-	1.35	-	-	11.11	0.08	2.40
Total	533	-	6219.8	-	2258.80	-	-	-	3122.58	-	-	11675.43	74.00	3032.47
Value/Rs./goat		-	11.67	-	4.24	-	-	-	5.86	-	-	21.76	0.14	5.69

**Table – 4.18C: Maintenance Cost (Rs./goat) of Goat of the Sample goat Rearers From July 07 to June 08**

Type of goat/ Value/ (Rs./goat)	No.	Maintenance												
		Grains		Fodder		Salt		Medicine		Other		Total	Family labour	Grazy
		Qty.	Value	Qty.	Value	Qty.	Value	Qty.	Value	Qty.	Value	Value	Days	Imputed value
Male	218	-	3884.04	-	1203.1	-	-	-	2972.32	-	-	8059.46	58	2583.83
Value/ (Rs./goat)		-	17.82	-	5.52	-	-	-	13.63	-	-	36.97	0.27	11.85
Female	468	-	5724.90	-	2700.35	-	-	-	2258.84	-	-	10684.1	57	2043.82
Value/ (Rs./goat)		-	12.23	-	5.77	-	-	-	4.83	-	-	22.83	0.12	4.37
Kids	397	-	3382.05	-	5434.87	-	-	-	502.79	-	-	9319.71	33	920.38
Value/ (Rs./goat)		-	17.1407	-	13.69	-	-	-	1.27	-	-	23.48	0.08	2.32
Total	1083	-	12990.99	-	9338.32	-	-	-	5733.95	-	-	28063.3	148	5548.03
Value/ (Rs./goat)		-	12.00	-	8.62	-	-	-	5.29	-	-	25.91	0.14	5.12

### Survival Position of the Goats:

The table – 4.19 exhibits that total number of goats survived during the reporting period (July 07 to December 07) is 550 in which survival rate of male goats, female goats and kids are 117 (96.69%), 242 (97.19%) and 191 (95.03%) respectively, while during the reporting period of January 08 to June 08 number of goats survival is 533 in which number of male goats, female goats and kids are 108, 217 and 208. The survival rate of male goats, female goats, kids and total goats are 96.43 per cent, 96.02 per cent and 96.29 per cent respectively. Over all the survival rate for both the period is about 96.26 per cent and individually for male, female and kids are 96.57 per cent, 96.63 percent and 96.29 per cent.

**Table – 4.19: Survival Position of Rearing Goats on the Sample Farms**

Goat	No. of goat survived for July' 07 to Dec'07				No. of goat survived for Jan. 08 to June 08				No. of goat survived for both the period			
	Total No.	Death No.	Theft No.	Survived No.	Total No.	Death No.	Theft No.	Survived No.	Total No.	Death No.	Theft No.	Survived No.
Male	121	3	1	117	112	3	1	108	233	6	2	225
%	100.00	2.48	0.83	96.69	100.00	2.68	0.89	96.43	100.00	2.57	0.86	96.57
Female	249	7	-	242	226	7	2	217	475	14	2	459
%	100.00	2.89	-	97.19	100.00	3.09	0.89	96.02	100.00	2.95	0.42	96.63
Kids	201	7	3	191	216	6	2	208	417	13	5	399
%	100.00	3.48	1.49	95.03	100.00	2.78	0.93	96.29	100.00	3.12	1.20	95.68
Total	571	17	4	550	554	16	5	533	1125	33	9	1083
%	100.00	2.98	0.70	96.32	100.00	2.89	0.90	96.21	100.00	2.94	0.80	96.26

## Chapter – V

### Marketing of Goat of Sample Households

Efficient marketing of livestock and their products is essentially the pathway for income generation and livelihood for rural people of lower income groups. But markets of live stock and live stock products are thinly scattered and under developed in our country. Organized marketing of livestock and livestock product has still long way to go. In spite of long efforts for promotion and development of market mechanisms, any fruitful result is yet to be achieved. For small holder producers in the areas with the poor market access, there is hardly any option as an alternative to the traditional market. The livestock markets for both small and big ruminants are irregular, uncertain and lacking transparency in conducting of marketing functions. The lack of quarantine and veterinary facilities in the livestock markets are not able to contain the transmission of contiguous diseases and loss of animals due to infectious. Markets for live animals are often not located to the strategic location, which further increases marketing and transaction costs.

The economy state of West Bengal in general and the study areas in particular is primary based on agriculture and animal husbandry. Crop husbandry as well as rearing of livestock is two major components for agricultural based economy. According to livestock census (2003) total goat population is 11757 thousand goats, which are mostly “Black Bengal”, breed. The breed is mainly used for meat. The marketing of goats is neither orderly and nor efficiently operative. There are several marketing channel and several marketing intermediaries are involved in the transaction of goats. Hence, the producers are generally deprived of due share in the buyer’s / consumer’s prices. The goat keepers, traders, butchers etc. are the main intermediaries of goat transaction.

#### **Market Access of the Sample Household by the Flock Size of Goats:**

Market access of the sample households has been analyzed by their flock size of goats in the table – 5.1 which indicates that in Burdwan District the sample household in general are found to have sold out about 19.49 per cent of their total goats, during July – 07 to June – 08. So far as the place of selling is concerned, 4.68 per cent of total goats one sold at door and 14.81 per cent of goats are sold at market. However the nature of selling of goats for the owners of all flock size goat indicates that the owner of bigger size of flock (6- 15) are selling more goats at door and less number in market as compared to their counter parts i.e. owners of lower size of flock (1 – 5). On the other hand the sample households of Murshidabad are found to have

sold 21.41 per cent of the total goat during July-07 to June – 08. As regards to the place of selling, goat owners in all are found to have sold 6.74 percent of their goats at door and 13.76 percent at market. So, far as the selling nature of the owners of the flock of goats of different members groups are concerned, the owners of lower numbers of flock size are selling higher number of goats in the market and smaller numbers at door where as the owner big flock size are selling higher number of goats at door and lower number at market. More or less the similar results are observed when we look into the nature of selling of goats for both districts taking to gather (table – 5.1). The tables also reveals that the number of selling male, female and kids is 18.14 percent, 20.34 percent and 22.31 percent respectively. Goat rearing mainly is the enterprise of poor households and they sell their rearing goat of any sex at the time of urgent need of money. Same policy is also applicable in case of selling of male goats also. During survey period, rural works programme was operative in the village, and the poor people had access to employment in 100 days' employment programme, it was also reason for less incidence of selling of all goats in general and male in particular. Male goats are the castrated goats. They gain weight with their maturity. So, with a view to get higher price of male goats they are usually sold by the goat rears at full grown stages.

Table - 5.1: Market access by the Size of Flock of Goats

Size of flock	District - I (Burdwan)											
	Population of Goats				Sold at Door				Sold in the Market			
	M	F	K	T	M	F	K	T	M	F	K	T
1 - 5	34	104	86	224	1	3	7	11	5	16	16	37
%					2.94	2.88	8.14	4.91	14.71	15.38	18.60	16.52
6 - 15	63	113	113	225	2	7	4	13	6	20	13	39
%					3.17	6.19	3.54	4.50	9.52	17.70	11.50	13.49
16-30	-	-	-	-	-	-	-	-	-	-	-	-
>30	-	-	-	-	-	-	-	-	-	-	-	-
All	97	217	199	513	3	10	11	24	11	36	29	76
%					3.09	4.61	5.53	4.68	11.34	16.59	14.57	14.81
Size of flock	District - II (Murshidabad)											
	Population of Goats				Sold at Door				Sold in the Market			
	M	F	K	T	M	F	K	T	M	F	K	T
1 - 5	49	96	78	223	7	6	6	19	6	15	14	35
%					14.29	6.25	7.69	8.52	12.24	15.63	17.95	15.70
6 - 15	70	129	92	291	5	11	6	22	8	11	15	34
%					7.14	8.53	6.52	7.56	11.43	8.53	16.30	11.68
16 - 30	15	23	18	56	2	4	2	8	1	2	1	4
%					13.33	17.39	11.11	12.50	6.67	11.11	6.67	7.14
>30	-	-	-	-	-	-	-	-	-	-	-	-
All	134	248	188	570	14	21	14	49	15	28	30	73
%					10.45	8.47	7.45	8.60	11.19	11.29	15.96	12.81

Contd....table – 5.1

Contd....table – 5.1

Size of flock	Both Districts											
	Total Population of Goats				Sold at Door				Sold in the Market			
	M	F	K	T	M	F	K	T	M	F	K	T
1 - 5	83	200	164	447	8	9	13	30	11	31	30	72
%					9.63	4.50	7.93	6.71	12.36	15.50	18.29	15.89
6 - 15	133	242	205	580	7	18	10	35	14	31	28	73
%					5.26	7.44	4.88	6.03	10.53	12.70	14.21	12.72
16 - 30	15	23	18	56	2	4	2	8	1	2	1	4
%					13.33	17.39	11.11	14.29	6.67	8.70	5.56	7.14
>30	-	-	-	-	-	-	-	-	-	-	-	-
All	231	465	387	1083	17	31	25	73	26	64	59	149
%					7.17	6.64	6.60	6.74	10.97	13.70	15.57	13.76

### Market Access of Sample Households by their Caste:

The table – 5.2 indicate that the tendency of selling of goats is higher among the sample households belonging to the general caste as compared to the scheduled caste. It is evident from the fact that the households of general caste of Burdwan are found to have sold 47.37 percent (18.42 per cent at door and 28.95 per cent at market) of their total rearing goats while the households scheduled caste are found to have sold only 17.26 percent in which 3.58 percent at door and 13.68 per cent at market. On the other, sample households in Murshidabad have sold 21.41 per cent of the total goats in which 8.60 per cent at door and 12.81 per cent at market.

The selling nature of goats of the sample households for both the district reveals a different picture, which indicates that through households of either caste are selling more or less same percentage of goats in the market, i.e. general caste – 13.82 per cent and scheduled caste – 13.68 percent. Households of general castes are found to have sold more goats (9.21 per cent) at door as compared to the household of schedules castes (3.58 per cent).

Table – 5.2: Market Access by Caste

Size by Caste	District - I (Burdwan)											
	Population of Goats				Sold at Door				Sold in the Market			
	M	F	K	T	M	F	K	T	M	F	K	T
SC	93	206	176	475	2	8	7	17	10	33	22	65
%	-	-	-	-	2.15	3.88	3.98	3.58	10.75	16.02	12.50	13.68
OBC	-	-	-	-	-	-	-	-	-	-	-	-
%	-	-	-	-	-	-	-	-	-	-	-	-
General	4	11	23	38	1	2	4	7	1	3	7	11
%	-	-	-	-	25.00	18.18	17.39	18.42	25.00	27.27	30.43	28.95
Total	97	217	199	513	3	10	11	24	11	36	29	76
%	-	-	-	-	3.09	4.61	5.53	4.68	11.34	16.59	14.57	14.81

Contd....table – 5.2



Contd....table – 5.2

Size by Caste	District - II (Murshidabad)											
	Population of Goats				Sold at Door				Sold in the Market			
	M	F	K	T	M	F	K	T	M	F	K	T
SC	-	-	-	-	-	-	-	-	-	-	-	-
%	-	-	-	-	-	-	-	-	-	-	-	-
OBC	-	-	-	-	-	-	-	-	-	-	-	-
%	-	-	-	-	-	-	-	-	-	-	-	-
General	134	248	188	570	12	19	18	49	15	28	30	73
%	-	-	-	-	8.96	7.66	9.57	8.60	11.19	11.29	15.96	12.81
Total	134	248	188	570	12	19	18	49	15	28	30	73
%	-	-	-	-	8.96	7.66	9.57	8.60	11.19	11.29	15.96	12.81
Size by caste	Both Districts											
	Total Population of Goats				Sold at Door				Sold in the Market			
	M	F	K	T	M	F	K	T	M	F	K	T
SC	93	206	176	475	2	8	7	17	10	33	22	65
%	-	-	-	-	2.15	3.88	4.98	3.58	10.75	16.02	12.50	13.68
OBC	-	-	-	-	-	-	-	-	-	-	-	-
%	-	-	-	-	-	-	-	-	-	-	-	-
General	138	259	211	608	13	21	22	56	16	31	37	84
%	-	-	-	-	9.42	8.11	10.43	9.21	11.59	11.97	17.54	13.82
Total	231	465	387	1083	15	29	29	73	26	64	59	149
%	-	-	-	-	6.49	6.24	7.49	6.74	11.26	13.76	15.25	13.76

Note: M = Male, F = Female, K = Kid, T = Total, Percent sale at door and market to total population of goats

### Market Access of the Sample Households by their Farm Size:

Market access of goats of the sample households of different size group of from has been analyzed in the table – 5.3, which indicates that in Burdwan district sample households of landless category have sold – 4.55 per cent of their goats at door and 13.92 per cent at market, while the households belonging to the category of marginal fare are found to have sold 5.13 per cent of goats at door and 18.80 per cent in market. However, the households belonging to the small farmer group are selling 4.55 per cent of their goats at door and 11.36 per cent in the market.

Similarly, in Murshidabad district households under landless group sell 7.44 percent of their goats at door and 11.86 percent in market, households of marginal farm are found to have sold 11.85 per cent of their goats at door and 16.30 per cent in market. The only small farmer is found to have sold 40.00 per cent of their goats at door.

However, for both the district rearing households under landless group have sold 7.04 percent of goats at door and 14.66 per cent at market, households under category of marginal farm group are found to have sold 6.18 per cent their goats at door and 12.94 per cent in the market and household small farm group are found to have sold 6.56 per cent at the door and 8.20 per cent at the market.

Table –5.3: Market Access by the Size of Farms

Size of Farms	District - I (Burdwan)											
	Population of goats				Sold at door				Sold in the market			
	M	F	K	T	M	F	K	T	M	F	K	T
Land- less	66	152	134	352	2	6	8	16	7	26	16	49
%	-	-	-	-	3.03	3.95	5.97	4.55	10.61	17.11	11.94	13.92
Marginal	19	51	47	117	1	3	2	6	3	8	11	22
%	-	-	-	-	5.26	5.88	4.26	5.13	15.79	15.69	23.40	18.80
Small	12	14	18	44	-	1	1	2	1	2	2	5
%	-	-	-	-	-	7.14	5.56	4.55	8.33	14.29	11.11	11.36
Medium	-	-	-	-	-	-	-	-	-	-	-	-
Large	-	-	-	-	-	-	-	-	-	-	-	-
Total	97	217	199	513	3	10	11	24	11	36	29	76
%	-	-	-	-	3.09	4.61	5.53	4.68	11.34	16.59	14.57	14.81
Size of Farms	District - II (Murshidabad)											
	Population of goats				Sold at door				Sold in the market			
	M	F	K	T	M	F	K	T	M	F	K	T
Land- less	75	144	111	430	8	12	12	32	10	20	21	51
%	-	-	-	-	10.67	8.33	10.81	7.44	13.33	13.89	18.92	11.86
Marginal	54	95	74	135	3	7	5	16	5	8	9	22
%	-	-	-	-	5.56	7.37	6.76	11.85	9.26	8.42	12.16	16.30
Small	5	9	3	5	-	1	1	2	-	-	-	-
%	-	-	-	-	-	11.11	33.33	40.00	-	-	-	-
Medium	-	-	-	-	-	-	-	-	-	-	-	-
Large	-	-	-	-	-	-	-	-	-	-	-	-
Total	134	248	188	570	12	20	18	49	15	28	30	73
%	-	-	-	-	8.96	8.06	9.57	8.60	11.19	11.29	15.96	12.81
Size of Farms	Both Districts											
	Total Population of Goats				Sold at Door				Sold in the Market			
	M	F	K	T	M	F	K	T	M	F	K	T
Land- less	141	296	245	682	10	18	20	48	17	46	37	100
%	-	-	-	-	7.09	6.08	8.16	7.04	12.06	15.54	15.10	14.66
Marginal	73	146	121	340	4	10	7	21	8	16	20	44
%	-	-	-	-	5.48	6.85	5.79	6.18	10.96	10.96	16.53	12.94
Small	17	23	21	61	-	2	2	4	1	2	2	5
%	-	-	-	-	-	8.70	9.52	6.56	5.88	8.70	9.52	8.20
Medium	-	-	-	-	-	-	-	-	-	-	-	-
Large	-	-	-	-	-	-	-	-	-	-	-	-
Total	231	465	387	1083	15	29	29	73	26	64	59	149
%	-	-	-	-	6.49	6.24	7.49	6.74	11.26	13.76	15.25	13.76

**Breed wise Goats Sold at Door:**

It has been stated earlier that only 'deshi' breed (Black Bengal/Bengal) of goat are being reared by the sample households of both the selected district. The table – 5.4 shows that in Burdwan District, sample households of near market village are selling 1.03 of their total male goat, 2.76 percent of their total female goats and 2.34 percent of total kids. The average value (Rs. /goat) they receive for male, female and

kids are follows male - Rs.910.00, female- Rs. 557.12 and kids - Rs.383.78 Similarly, in Murshidabad, the percentage share of male, female and kids sold by the sample household of near market village are as follows: male – 7.46 percent, female – 6.05 percent and kids – 3.72 per cent and value (Rs.) per goats per male, female and kids are Rs.901.45, Rs 580.78 and 365.53 respectively.

On the other hand, the situation of off market village of Burdwan district is as follows: out of total goat, goats sold by their sex are as follows: male – 2.06 per cent, female – 1.84 percent and kids – 3.02 percent and value (Rs./goat) of goat each sex is as follows: male – Rs.857.95, female Rs.588.01 and kids Rs.375.35.

However, in Murshidabad district percentage share of goats (Male, Female, kids) sold at the door is male – 2.99 percent, female – 2.42 percent and kids – 3.72 percent and value per goats for each sex is Rs.850.00, Rs.557.12 and Rs. 344.87 respectively.

The overall picture of selling goats in near market village and off-market village for both the district reveals that the sample households of near-market village are selling – 4.76 percent of their total male goats, 4.52 percent of their total female goats and 3.10 percent of their kids goats at door and value per goats are as follows: male – Rs.902.23, female – Rs.493.07 and kid – Rs. 364.80.

Similarly, households of off-market village are found to have sold 2.84 percent of their male goats, 2.60 percent of female goats, and 2.58 percent of kids at door for which value (Rs./goats) they receive, is Rs.852.56 for male goat, Rs. 474.56 for female goats and Rs. 424.20 for kid.

Table – 5.4 : Breed wise Goats sold at Door

Name of Breed	District - I (Burdwan)											
	Population of goats				Villages Near market				Villages Off market			
	M	F	K	T	M	F	K	T	M	F	K	T
Deshi	97	217	199	513	1	6	5	12	2	4	6	12
%	-	-	-	-	1.03	2.76	2.51	2.34	2.06	1.84	3.02	2.34
Value (Rs.)	92678.65	129646.65	83798.90	306124.20	910.00	3342.70	1918.90	6171.60	1715.90	2352.06	2252.10	6320.06
Rs./Goat	955.45	597.45	421.10	596.73	910.00	557.12	383.78	514.30	857.95	588.01	375.35	526.67
	District - II (Murshidabad)											
Deshi	134	248	188	570	10	15	7	32	4	6	7	17
%	-	-	-	-	7.46	6.05	3.72	5.61	2.99	2.42	3.72	2.98
Value (Rs.)	128834.30	150647.60	79461.96	358943.86	9014.50	7011.76	2458.69	18484.95	3400.00	3342.70	2414.10	9156.80
Rs./Goat	961.45	607.45	422.67	629.73	901.45	467.45	365.53	577.65	850.00	557.12	344.87	538.64
	Both Districts											
Deshi	231	465	387	1083	11	21	12	44	6	12	11	29
%	-	-	-	-	4.76	4.52	3.10	4.06	2.60	2.58	2.84	2.68
Value (Rs.)	221512.95	280294.25	163260.86	<b>665068.06</b>	9924.50	10354.45	4377.59	24656.55	5115.90	5694.76	4666.20	15476.86
Rs./Goat	958.93	602.78	421.86	614.10	902.23	493.07	364.80	560.38	852.65	474.56	424.20	533.68

### Marketing of Goats at Door by their Breed through Different Channels of Marketing:

The nature of marketing of goats at door by the sampled households has been worked out in the table's 5.5A to 5.5C. The table 5.5A shows that numbers of goats sold at door by

the sample households in the periods July 07 to Dec.07 are altogether 38 in which numbers of male, female and kids are 7.12 and 19 respectively. The table also shows that out of total goats sold to different buyers are as follows: goat keepers–25.00 per cent female goats and 5.26 per cent kids; local butcher – 28.57 per cent male goats, 16.67 per cent female goats and 15.79 per cent kids; professional traders–57.14 per cent male, 50.00 per cent female and 63.16 per cent kids and local consumers – 14.29 per cent male, 8.33 per cent female and 15.79 per cent kids. The marketing pattern of goats in between Jan – 08 to June – 08 is more or less same as compared to the period earlier one. In between Jan –08 to June – 08 total numbers of goats sold by the sample households is 35 in which number of goats sold by sex i.e. male, female and kids are 7, 10, 18 respectively. The percentage of male goats sold to the butcher is 14.29 per cent, to the local traders – 71.43 per cent and to the local consumers 14.29 per cent. Similarly, female goats are sold to different buyers are as follows: goats keepers – 20.00 per cent, local butchers – 10.00 per cent, professional traders – 60.00 per cent and local consumers – 10.00 per cent. Kids are also traded off to goat keepers, local butchers, professional traders and local consumers by 5.56 per cent, 11.11 per cent, 61.11 per cent and 22.22 per cent respectively. The nature of selling of goats at doors during both the periods to gather indicates that 21.43 percent male goats are sold to local butcher, 64.29 per cent to professional traders, and 14.29 per cent to local consumers. Similarly, 22.73 per cent female goats are sold to goat keepers, 13.64 per cent to local butchers, 54.55 per cent to local traders and 9.09 per cent to the local consumers. Kids sold to different marketing agents are as follows: goat keeper – 5.41 per cent, local butcher – 13.51 per cent, trader – 62.16 per cent and consumer – 18.92 per cent.

So far as values (Rs/goats) for male female and kids to the different channel of marketing during July-07 to Dec. 07 are concerned the table 5.5A indicates that values per goat of female and kids received from the consumer are Rs. 570.00 and 405.00 respectively, while the butchers are found to have paid for each male, female and kids is Rs. 890.00, Rs.566.72 and Rs. 425.00 respectively. Similarly, the values per male, female and kids paid by the professional traders are as follows: male - Rs. 895.00, female - Rs.582.25 and kids - Rs. 335.50 and the values of male and kid goats sold to the local consumers at the rate of Rs.886.59 and Rs.420.00 respectively.

The values of different categories of goats i.e male female and kids are slightly higher during Jan-08 to June 08 as compared to July 07 to Dec. 07.

The table 5.5B indicates that the purchase values (Rs./goat) of female goats to goats keepers butchers, professional traders and consumers are Rs. 612.20, Rs. 622.56, Rs. 615.21 and Rs. 580.00 respectively. Similarly the selling price per male goats to the butchers, professional traders and local consumers are Rs.910.57, 922.36 and 936.72 respectively and

the value per kids paid by the different buyers are as follows: goats keepers - Rs.455.73, butchers - 448.60, traders - Rs. 384.46 and consumers - Rs. 472.42.

The prices trend of goats sold at door indicates that the prices of goats are relatively higher during Jan - 08 to June - 08 as compared to July 07 to Dec. 07. The overall picture for transaction of goats at different channels for the period of July -07 to June - 08 indicates that the percentages to figures of goats (male, female and kids) sold to the consumer are 0.00, 22.73 and 5.41 percentage respectively. The percentage figures show by 21.43, 13.64, and 13.51 respectively when goats are sold to local butchers. The local traders are found to have purchased 64.29 per cent of male, 54.55 percent of female and 62.16 per cent of kids and the remaining 14.29 percent male, 9.09 per cent female and 18.92 per cent kids were purchased by the local consumers (table 5.5C).

#### **Marketing of Goat at Door by their Weight:**

Number of goat sold at door by weight to different marketing channels during July 07 to Dec. 07 has been worked out in the table 5.6A which indicates that most (63.16 percent) of kid goats (weight  $\leq 5$  kg.) are sold to the local traders followed by consumers and local butchers – (15.79 per cent each). However, most of male and female goats (weight  $> 5$ kg. to 10kg.) are sold to professional traders (male 66.67 percent and female – 33.33 percent) followed by local butchers – male and female goats 33.33 percent and remaining 33.33 percent of female goats sold to goats keepers. Under the weight group of  $>10 - 15$  kg. male goats are sold to butcher, trader and butcher while female goats are mainly sold professional traders and goat keepers. One goats only under weight group of  $> 15$  kg. is found to have sold by the sample goat keeper to the professional trader. The over all picture indicates that out of total marketed male goats, the proportion marketed to different channel of marketing is as follows: professional traders - 57.14 percent, butcher – 28.57 percent and local consumer – 14.29 percent. Similarly, out of marketed female goats to different channels, the lion share (50.00 per cent) goes to professional traders followed by – goat's keeper – 25.00 per cent, local butchers – 16.67 per cent, and local consumers – 8.33 per cent. Most of kids are also sold to professional traders (63.13 per cent) followed by local consumer (15.79 per cent), butcher (15.79 per cent) and goat keepers (5.26 per cent).

Marketing nature of goats by the sample goat keepers for all the given weight groups of goats during January - 08 to June - 08 is more or less same as it was in July - 07 to December - 07. In both the period, the professional traders are found to have taken lead role in the transaction of goats. Looking at the table – 5.6B, we find that most 61.11 percent of kids under the weight group of less  $>5$  kg. are sold to the professionals traders followed by 22.22 percent to local consumer and 11.11 percent to local butchers during Jan. 08 to Jun.08. Sufficiently higher proportion on of goats of the

weight group > 5 to 10 kg. are also sold to professional traders (male 75.00 percent and female 57.14 per cent ) and remaining goats are sold to the local consumers male (25.00 per cent) and female (14.29 per cent), butchers female (14.29 per cent) and goats keepers (female 14.29 percent).

Similarly, under the weight group of > 10 - 15 kg. 50.00 per cent of male and 50.00 per cent of female goats are sold to the professional traders, while remaining 50.00 per cent male goats and 50.00 percent of female goats are sold to the butchers and goats keepers respectively. Only one male goat of the weight group of >15 kg. is found to have sold to the traders.

The nature of selling of goats of different weight groups for the entire period July – 07 to June – 08 reveals that the main channel of marketing of goats of the sample goat keepers is the professional traders, who are found to have purchased more than 71.43 percent of male goats, 57.14 percent of female goats and 62.16 percent of kids across different age groups of goats.. The next important marketing channels of marketing of (for all weight groups) goats is the local butchers, who are found to have purchased – 14.29 to 40.00 percent of male goats and 14.29 to 20.00 percent of female goats. The local consumer have also participated for marketing of goats and purchased about 10.00 to 14.29 per cent of male goats and 18.92 per cent of kids. The goat keepers, who are also purchased same female goats and kids from the sample goats keepers mainly for rearing purposes. They are found to have purchased about 14.29 percent to 50.00 percent of female goats of different weight groups and only 5.41 percent of kids from the age group of > 5 years – (Table – 5.6C).

### **Marketing of Goats at Door by Sex & Type of Buyers:**

Marketing of goats at door by sex and type of buyer across the districts has been worked out in the table – 5.7, which indicates that in the district – 1 out of marketed male goats, 66.67 per cent and 33.34 per cent are being sold to traders and butchers respectively. Prices of per male goat sold to the trader and butchers are Rs.907.31 and Rs.861.88 respectively.

On the other hand out of marketed female goats 70.00 per cent are sold to the traders and 30.00 per cent to the goat keepers, and price (Rs./goat) paid by these buyers are Rs.600.56 and 588.89 respectively. In the marketing of kids, the traders are found to have purchased 81.82 percent at a price Rs. 361.04 per goat, whereas the goat keepers have purchased 18.18 percent at the rate of Rs.430.37 per goat.

Similarly, in the marketing of goats in the district – II, the maximum number of buyers is the professional traders, who are found to have purchase 66.67 per cent of male goats, 57.89 per cent of female goats and 55.56 per cent of kids and price (Rs./goat) they paid for the goats are Rs.911.31, Rs.592.57 and Rs.356.24 respectively for male, female and kids. However, the local butchers have purchase 25.00 percent of male goat at the rate of Rs. 890.88 per goat, 15.79 per cent of female goats at the rate of per goat Rs. 578.43 and 11.11 per cent of kids at a rate Rs.395.32 per kid.

**Table 5.5A : Marketing of goats by their breed (at Door) through different channels Jul 2007 – Dec. 2007**

Marketing Items	Type of Buyers															
	No. sold to goat keeper for July 07 to Dec.07			No. sold to local Butcher for July 07 to Dec. 07			No. sold to professional traders for July 07 to Dec. 07			No. sold to local consumers & other for July 07 to Dec 07			No. sold to all buyers for July 07 Dec. 07			
Breed	M	F	K	M	F	K	M	F	K	M	F	K	M	F	K	All goat
Deshi	-	3	1	2	2	3	4	6	12	1	1	3	7	12	19	38
%	0.00	25.00	5.26	28.57	16.67	15.79	57.14	50.00	63.16	14.29	8.33	15.79	100.00	100.00	100.00	-
Barbari	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Jamunapari	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total No. Sold	-	3	1	2	2	3	4	6	12	1	1	3	7	12	19	38
Total Value (Rs.)	-	1710.00	405.00	1780.00	1133.44	1275.00	3580.00	3493.50	4026.00	886.59	565.00	1230.00	6248.76	6910.56	6324.91	21017.42
Value/ No. of Goat	-	570.00	405.00	890.00	566.72	425.00	895.00	582.25	335.50	886.59	565.00	410.00	892.68	575.88	332.89	553.09

**Table 5.5B : Marketing of goats by their breed (at Door) through different channels Jul 2007 – Dec. 2007**

Marketing Items	Type of Buyers															
	No. sold to goat keeper for Jan. 08 to June 08			No. sold to local Butcher for Jan. 08 to June 08			No. sold to professional traders for Jan. 08 to June 08			No. sold to local consumers & other for Jan. 08 to June 08			No. sold to all buyers for Jan. 08 to June 08			
Breed	M	F	K	M	F	K	M	F	K	M	F	K	M	F	K	All goat
Deshi	-	2	1	1	1	2	5	6	11	1	1	4	7	10	18	35
%	0.00	20.0	5.56	14.29	10.00	11.11	71.43	60.00	61.11	14.29	10.00	22.22	100.00	100.00	100.00	-
Barbari	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Jamunapari	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total No. Sold	-	2	1	1	1	2	5	6	11	1	1	4	7	10	18	35
Total Value (Rs.)	-	1224.40	455.73	910.57	622.56	897.20	4611.80	3691.26	4229.06	936.72	580.00	1889.68	6459.32	6133.60	6999.30	19281.15
Value/ No. of Goat	-	612.20	455.73	910.57	622.56	448.60	922.36	615.21	384.46	936.72	580.00	472.42	922.76	613.36	388.85	550.89



**Table - 5.5C : Marketing of Goats by their Breed (at Door) through Different Channels July 2007 – June 2008**

Marketing Items	Type of Buyers															
	No. sold to goat keeper for July 07 to June 08			No. sold to local Butcher for July 07 to June 08			No. sold to professional traders for July 07 to June 08			No. sold to local consumers & other for July 07 to June 08			No. sold to all buyers for July 07 June 08			
Breed	M	F	K	M	F	K	M	F	K	M	F	K	M	F	K	All goat
Deshi	0	5	2	3	3	5	9	12	23	2	2	7	14	22	37	73
%	0.00	22.73	5.41	21.43	13.64	13.51	64.29	54.55	62.16	14.29	9.09	18.92	100.00	100.00	100.00	-
Barbari	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Jamunapari	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total No. Sold	0	5	2	3	3	5	9	12	23	2	2	7	14	22	37	73
Total Value (Rs.)	0.0	2934.40	860.73	2690.57	1756.00	2172.20	8191.80	7184.76	8255.06	1823.31	1145.00	3119.68	12705.68	13020.06	14407.67	40133.41
Value/ No. of Goat	0.0	586.88	430.37	896.86	585.33	434.44	910.20	598.73	358.92	911.66	572.50	445.67	907.55	591.82	389.40	549.77

**Table 5.6A: Marketing of Goats at Door by their Weight through Different Channels from July 2007 – December 2007**

Marketing Items	Type of Buyers														
	No. sold to goat keeper for July 07 to Dec. 07			No. sold to local Butcher for July 07 to Dec. 07			No. sold to professional traders for July 07 to Dec. 07			No. sold to local consumers & other for July 07 to Dec. 07			No. sold to all buyers for July 07 to Dec. 07		
	M	F	K	M	F	K	M	F	K	M	F	K	M	F	K
Wt<= 5 kg.	0	1	1	-	1	3	-	4	12	-	1	3	-	7	19
%	0.00	14.29	5.26	0.00	14.29	15.79	0.00	57.14	63.16	-	14.29	15.79	-	100.00	100.00
> 5 – 10	-	1	-	1	1	-	2	1	-	-	-	-	3	3	-
%	0.00	33.33	-	33.33	33.33	-	66.67	33.33	-	-	-	-	100.00	100.00	-
> 10 – 15	-	1	-	1	-	-	1	1	-	1	-	-	3	2	-
%	-	50.00	-	33.33	-	-	33.33	50.00	-	33.33	-	-	100.00	100.00	-
> 15	-	-	-	-	-	-	1	-	-	-	-	-	1	-	-
%	-	-	-	-	-	-	100.00	-	-	-	-	-	100.00	-	-
Total No. Sold	-	3	1	2	2	3	4	6	12	1	1	3	7	12	19
%	0.00	25.00	5.26	28.57	16.67	15.79	57.14	50.00	63.16	14.29	8.33	15.79	100.00	100.00	100.00
Total Value (Rs.)	0	1710.00	405.00	1780.00	1133.44	1275.00	3580.00	3493.50	4026.00	886.59	565.00	1230.00	6246.59	6901.90	6936.00
Value/ No. of Goat	-	570.00	405.00	890.00	566.72	425.00	895.00	582.25	335.50	886.59	565.00	410.00	892.37	575.16	365.05

Note: percent share of different channels

**Table 5.6B : Marketing of Goats at Door by their Weight through Different Channels from January 08 to June 08**

Marketing Items	Type of Buyers														
	No. sold to goat keeper for Jan. 08 – June 08			No. sold to local Butcher for Jan. 08 – June 08			No. sold to professional traders for Jan. 08 – June 08			No. sold to local consumers & other for Jan. 08 – June 08			No. sold to all buyers for Jan. 08 – June 08		
Weight (Kg)	M	F	K	M	F	K	M	F	K	M	F	K	M	F	K
<=5	-	-	1	-	-	2	-	-	11	-	-	4	-	-	18
%	-	-	5.56	-	-	11.11	-	-	61.11	-	-	22.22	-	-	100.00
> 5 – 10	-	1	-	-	1	-	3	4	-	1	1	-	4	7	-
%	-	14.29	-	-	14.29	-	75.00	57.14	-	25.00	14.29	-	100.00	100.00	-
> 10 – 15	-	1	-	1	-	-	1	1	-	-	-	-	2	2	-
%	-	50.00	-	50.00	-	-	50.00	50.00	-	-	-	-	100.00	100.00	-
> 15	-	-	-	-	-	-	1	1	-	-	-	-	1	1	-
%	-	-	-	-	-	-	100.00	100.00	-	-	-	-	100.00	100.00	-
Total No. Sold	-	2	1	1	1	2	5	6	11	1	1	4	7	10	18
%	-	20.00	5.56	14.29	10.00	11.11	71.43	60.00	61.11	14.29	10.00	22.22	100.00	100.00	100.00
Total Value (Rs.)	-	1224.40	455.73	910.57	622.56	897.20	4611.80	3691.20	4229.06	936.72	580.00	1889.68	6459.09	6118.16	7471.67
Value/ No. of Goat	-	612.20	455.73	910.57	622.56	448.60	922.36	615.20	384.46	936.72	580.00	472.42	922.73	611.82	415.09

**Table 5.6C : Marketing of Goats at Door by their Weight through Different Channels from July 07 to June 08**

Marketing Items	Type of Buyers														
	No. sold to goat keeper for July 07 – June 08			No. sold to local Butcher for July 07 – June 08			No. sold to professional traders for July 07 – June 08			No. sold to local consumers & other for July 07 – June 08			No. sold to all buyers for July 07 – June 08		
Weight (Kg)	M	F	K	M	F	K	M	F	K	M	F	K	M	F	K
<=5	-	1	2	-	1	5	-	4	23	-	1	7	-	7	37
%	-	14.29	5.41	-	14.29	13.51	-	57.14	62.16	-	14.29	18.92	-	100.00	100.00
> 5 – 10	-	2	-	1	2	-	5	5	-	1	1	-	7	10	-
%	-	20.00	-	14.29	20.00	-	71.43	50.00	-	14.29	10.00	-	100.00	100.00	-
> 10 – 15	-	2	-	2	-	-	2	2	-	1	-	-	5	4	-
%	-	50.00	-	40.00	-	-	40.00	50.00	-	20.00	-	-	100.00	100.00	-
> 15	-	-	-	-	-	-	2	1	-	-	-	-	2	1	-
%	-	-	-	-	-	-	100.00	100.00	-	-	-	-	100.00	100.00	-
Total No. Sold	-	5	2	3	3	5	9	12	23	2	2	7	14	22	37
%	-	22.73	5.41	21.43	13.64	13.51	64.29	54.55	62.16	14.29	9.09	18.92	100.00	100.00	100.00
Total Value (Rs.)	-	2934.40	860.74	2690.58	1755.99	2172.20	8191.80	7184.76	8255.06	1823.32	1145.00	3119.69	12705.68	13020.06	14407.67
Value/ No. of Goat	-	586.88	430.37	896.86	585.33	434.44	910.20	598.73	358.92	911.66	572.50	445.67	907.55	591.82	389.40

Note: Value per goat

**Table – 5.7 : Marketing of Goats at Door by Sex and Type of Buyers**

Type of buyers	District - I								District - II								All	
	Male		Female		Kids		Total		Male		Female		Kids		Total		No.	Value
	No.	Value	No.	Value	No	Value	No.	Value	No.	Value	No.	Value	No.	Value	No.	Value		
Goat keepers	-	-	3	588.09	2	430.37	5	509.23	-	-	5	580.27	4	424.65	9	502.46	14	505.84
%	-	-	30.00	-	18.18	-	20.83	0.00	-	-	26.32	-	22.22	-	18.37	-	19.18	-
Butchers	1	895.88	-	-	-	-	1	895.88	3	890.88	3	578.43	2	395.32	8	621.54	9	758.71
%	33.33	-	-	-	-	-	4.17	0.00	25.00	-	15.79	-	11.11	-	16.33	-	12.33	0.00
Traders	2	907.31	7	600.56	9	361.04	18	502.62	8	911.31	11	592.57	10	356.24	29	620.04	47	561.33
%	66.67	-	70.00	-	81.82	-	75.00	0.00	66.67	-	57.89	-	55.56	-	59.18	-	64.38	0.00
Local consumers	-	-	-	-	-	-	-	0	1	925	-	-	2	401.88	3	663.44	3	331.72
%	-	-	-	-	-	-	-	0.00	8.33	-	-	-	11.11	-	6.12	-	4.11	-
Others	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	-	-	-
%	-	-	-	-	-	-	-	0.00	-	-	-	-	-	-	-	-	-	-
Total	3	901.6	10	594.33	11	395.71	24	498.64	12	909.06	19	583.76	18	394.52	49	629.11	73	563.87
%	100.00		100.00		100.00		100.00		100.00		100.00		100.00		100.00		100.00	

Note : Value per goat

### **Marketing of Goats in the Market by their Breed:**

It has been stated earlier that only Deshi variety of goats is being reared by the sample households, so, data of marketing for said variety of goat have been worked out in the tables – 5.8A, 5.8B and 5.8C.

Since there was no scope for identifying the individual type of buyers in the market, the sample house holds did not report to whom (goat keeper, trader, Butcher or consumers) they have sold their goats. Hence, total number of goats sold in the market has been worked out in the stated tables. According to the table – 5.8A, total number of goats sold in the market by the sample households during July – 07 to Dec. 07 is 84 in which 16.67 percent is male goats, 42.86 per cent of female goats and 40.48 percent kids. Prices (Rs./goat) received by the sample house for these goats (male, female and kids) are Rs.918.45, 592.45 and 407.89 respectively. Marketing costs (Rs./goat) for male, female and kids are Rs.34.28, Rs.23.65 and Rs.23.24 respectively. The net returns (Rs./goat) from male goats, female goats and kids are male - Rs.884.17, female - Rs. 568.80 and kids - Rs. 384.65 respectively.

Similarly, total numbers of goats sold during January - 08 to June - 08 are 65, in which shares of male goats are 18.46 percent, female goats – 43.08 percent and kids – 38.46 per cent. Values per goat received by the sample households for male, female and kids are Rs.972.67, Rs.636.18 and Rs.467.29 respectively. Marketing costs(Rs./goat) involved are Rs.54.17, Rs. 43.72 and Rs.48.03 respectively. The net returns per goats are as follows: male - Rs.918.50, female - Rs.592.46 and kids – Rs, 419.26 (Table – 5.8B).

Marketing pattern of goats for both the period i.e. July - 07 to December – 07 and January – 08 to June – 08 has been displayed in the table - 5.8C. The table indicates that total number of goats during this period is 149, in which the share of male, female and kids is 17.45 per cent, 42.95 per cent and 39.60 per cent respectively. The average price per goat received for these goats during this period is as follows: male - Rs.943.47, female - Rs.611.58 and kid - Rs.432.13. Marketing costs per male goats is Rs.43.35, per female goat - Rs. 32.43 and per kid Rs.33.36. Hence, the net returns per goats are as follows: male - Rs. 900.13, female - Rs.579.16 and kid - Rs.398.76.

Table – 5.8A : Off Marketing of Goat by their Breed (unorganized markets)  
July - 07 to December - 07

Marketing Items/ breed	Type of Buyers														
	No. sold to goat keeper for July 07 to Dec.07			No. sold to Butcher for July 07 to Dec. 07			No. sold to professional traders for July 07 to Dec. 07			No. sold to local consumers / other for July 07 to Dec 07			No. sold to all buyers for July 07 Dec. 07		
Breed	M	F	K	M	F	K	M	F	K	M	F	K	M	F	K
Deshi	N K	N K	N K	N K	N K	N K	N K	N K	N K	N K	N K	N K	14	36	34
%	-	-	-	-	-	-	-	-	-	-	-	-	16.67	42.86	40.48
Barbari	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Jamunapari	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total No. Sold	-	-	-	-	-	-	-	-	-	-	-	-	14	36	34
Total Value of goat (Rs.)	-	-	-	-	-	-	-	-	-	-	-	-	12858.30	21328.20	13868.26
Value/ No. of Goat	-	-	-	-	-	-	-	-	-	-	-	-	918.45	592.45	407.89
Marketing Costs	-	-	-	-	-	-	-	-	-	-	-	-	87.77	158.32	102.46
Loading – unloading charges (Rs.)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Transport cost (Rs.)	-	-	-	-	-	-	-	-	-	-	-	-	56.7	112.2	81.22
Imputed family labour value	-	-	-	-	-	-	-	-	-	-	-	-	332.46	580.72	490.22
Others	-	-	-	-	-	-	-	-	-	-	-	-			
Total cost (Rs.)	-	-	-	-	-	-	-	-	-	-	-	-	476.93	851.24	673.90
Cost (Rs./goat)													34.28	23.65	23.24
Net Return	-	-	-	-	-	-	-	-	-	-	-	-	12381.37	20476.96	13194.36
Returns per goats	-	-	-	-	-	-	-	-	-	-	-	-	884.17	568.80	388.07

Table – 5.8B : Off marketing of goat by their Breed (unorganized markets)  
January - 08 to June - 08

Marketing Items/ breed	Type of Buyers														
	No. sold to goat keeper for Jan.08 to June 08			No. sold to Butcher for Jan.08 to June 08			No. sold to professional traders for Jan.08 to June 08			No. sold to local consumers / other for Jan.08 to June 08			No. sold to all buyers for Jan.08 to June 08		
Breed	M	F	K	M	F	K	M	F	K	M	F	K	M	F	K
Deshi	N K	N K	N K	N K	N K	N K	N K	N K	N K	N K	N K	N K	12	28	25
%	-	-	-	-	-	-	-	-	-	-	-	-	18.46	43.08	38.46
Barbari	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Jamunapari	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total No. Sold	-	-	-	-	-	-	-	-	-	-	-	-	12	28	25
Total Value of goat (Rs.)	-	-	-	-	-	-	-	-	-	-	-	-	11672.14	17813.04	11682.25
Value/ No. of Goat	-	-	-	-	-	-	-	-	-	-	-	-	972.67	636.18	467.29
Marketing Costs	-	-	-	-	-	-	-	-	-	-	-	-	102.54	244.77	148.54
Loading – unloading charges (Rs.)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Transport cost (Rs.)	-	-	-	-	-	-	-	-	-	-	-	-	73.53	145.67	111.08
Imputed family labour value	-	-	-	-	-	-	-	-	-	-	-	-	418.31	666.57	578.92
Others	-	-	-	-	-	-	-	-	-	-	-	-	55.66	167.06	122.12
Total cost (Rs.)	-	-	-	-	-	-	-	-	-	-	-	-	650.04	1224.07	960.66
Cost (Rs./goat)	-	-	-	-	-	-	-	-	-	-	-	-	54.17	43.72	48.03
Net Return	-	-	-	-	-	-	-	-	-	-	-	-	11022	16588.97	10721.59
Returns per goats	-	-	-	-	-	-	-	-	-	-	-	-	918.5	592.46	428.86



Table – 5.8C : Off marketing of goat by their Breed (unorganized markets)  
July 07 to June 08

Marketing Items/ breed	Type of Buyers														
	No. sold to goat keeper for July 07 to June 08			No. sold to Butcher for July 07 to June 08			No. sold to professional traders for July 07 to June 08			No. sold to local consumers / other for July 07 to June 08			No. sold to all buyers for July 07 to June 08		
Breed	M	F	K	M	F	K	M	F	K	M	F	K	M	F	K
Deshi	NK	NK	NK	NK	NK	NK	NK	NK	NK	NK	NK	NK	26	64	59
%	-	-	-	-	-	-	-	-	-	-	-	-	17.45	42.95	39.60
Barbari	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Jamunapari	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total No. Sold	-	-	-	-	-	-	-	-	-	-	-	-	26	64	59
Total Value of goat (Rs.)	-	-	-	-	-	-	-	-	-	-	-	-	24530.34	39141.24	25550.51
Value/ No. of Goat	-	-	-	-	-	-	-	-	-	-	-	-	943.47	611.58	432.13
Marketing Costs	-	-	-	-	-	-	-	-	-	-	-	-	190.31	403.09	251.00
Loading – unloading charges (Rs.)	-	-	-	-	-	-	-	-	-	-	-	-	0	0	0
Transport cost (Rs.)	-	-	-	-	-	-	-	-	-	-	-	-	130.23	257.87	192.30
Imputed family labour value	-	-	-	-	-	-	-	-	-	-	-	-	750.77	1247.29	1069.14
Others	-	-	-	-	-	-	-	-	-	-	-	-	55.66	167.06	122.12
Total cost (Rs.)	-	-	-	-	-	-	-	-	-	-	-	-	1126.97	2075.31	1634.56
Cost (Rs./goat)	-	-	-	-	-	-	-	-	-	-	-	-	43.35	32.43	33.36
Net Return	-	-	-	-	-	-	-	-	-	-	-	-	23403.37	37065.93	23915.05
Returns per goats	-	-	-	-	-	-	-	-	-	-	-	-	900.13	579.16	405.36

### Marketing of Goats in the Marketing by their Weight:

Marketing of goats by their weight has been worked out in the tables – 5.9A, 5.9B and 5.9C. Looking into the table 5.9A, it is found that out of marketed male goats of different weight groups during July - 07 to December - 07, the percentage figure goats in the weight group of >5 to 10 kg. is highest - 57.14 per cent followed by in the weight group of > 10 to 15 kg – 28.57 per cent and weight group of > 15kg - 14.29 per cent. Similarly, in case of marketing female goats, the percentage share of different weight group are as follows: age group - > 5 to 10 kg. - 72.22 per cent, weight group - >10 to 15kg - 22.22 per cent and age group - >15kg - 5.56 per cent. The kids are generally belong to the weight group of >= 5kg., so cent percent of kids are sold within one weight group. The market cost and return per goat is same as in table – 5.8A.

During January – 08 to June – 08 selling pattern of goats i.e male, female and kids is more or less same as in the period of July 07 – Dec. 07. During January - 08 to June – 08, out of marketed male goats, 75.00 are from the weight group of > 5 to 10 kgs. 16.67 per cent is from the weight group of >10 to 15 kgs. and remaining 8.33 per cent is from the weight group of >15kgs. Similarly, 67.86 per cent of marketed female goats is from the weight group of >5 - 10kg, 25.00 per cent is of weight group of >10 – 15 kg. and 7.14 per cent from the weight group of >15 kg. The cost and return from selling of goats during the period under different weight group of goats are same as the table 5.8B (Table – 5.9B).

The selling pattern of goat in the market by their weight for entire period from July-07 to June - 08 has been worked out in the table 5.9C, which indicates that 65.38 per cent of male goats sold in the market is from the weight group > 5 to 10 kg., 23.08 per cent is from the weight group of > 10 to 15 kg. and remaining 11.54 per cent of male goat is from the weight group of > 15kg. As regards to the female goats, 70.31 per cent is from the weight group of > 5 to 10 kg., 23.44 per cent from the weight group of > 10 – 15 kg. and 6.25 per cent is from the weight group of > 15 kg. However, all the kids are marketed from the age group of < 5 kg. The costs and return per goat sold in the market during July-07 to June-08 is same as the table- 5.8C (Table-5.9C).

### **Marketing of Goats by Size Class of Goat Herd:**

The sample household is occupying the goatherd in different size classes. The households who are occupying herd size of 1 to 5 numbers of goats are found to have sold 9.64 per cent of total male goats at door and 13.25 per cent of the same in the market. The percentage figure of selling female goat is 4.00 per cent at door and 15.50 per cent at market and in case of kids, the percentage figures for selling at door and at market are 8.54 percent and 18.29 per cent respectively. The sample households who are occupying herd size of goats numbering 6 to 15 goats are found to have sold 4.51 per cent of their total male goat the door and 10.53 per cent at the market. As regards to the female goat, the percentage figures for selling at door and in the market are 6.97 per cent and 12.70 per cent respectively. So far as the selling of kids is concerned, the percentage figures for selling at door and in the market are 6.60 per cent and 14.21 per cent respectively. Only a few households are occupying the herd size of goats number 16 –30 and they are found to have sold 6.67 per cent of their male goats at door and same number in the market. However, in case selling female goats on their part, the percentage figures of selling at door and in the market are 17.39 per cent and 8.70 per cent respectively. However, the percentage figures for selling kids at door and in the market, are 11.11 percent and 5.56 per cent respectively.

The overall picture reveals that the households, who have higher size of goats herd are usually selling more goat at door and less in the market as compared to the selling type of the households having lowed sizes of goat herd (Table – 5.10).

Table – 5.9A: Off marketing of goat by their weight (unorganized market)  
July 07 to Dec. 07

Weight (kg.)	Type of Buyers														
	No. sold to goat keeper from July 07 – Dec.07			No. sold to Butcher from July 07 – Dec.07			No. sold to professional traders from July 07 – Dec.07			No. sold to local consumers / others from July 07 – Dec.07			No. sold to all buyers from July 07 – Dec.07		
	Male	Female	Kids	Male	Female	Kids	Male	Female	Kids	Male	Female	Kids	Male	Female	Kids
Wt. <= 5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	34
%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.00
> 5 – 10	-	-	-	-	-	-	-	-	-	-	-	-	8	26	0
%													57.14	72.22	
> 10 – 15	-	-	-	-	-	-	-	-	-	-	-	-	4	8	0
%													28.57	22.22	
> 15	-	-	-	-	-	-	-	-	-	-	-	-	2	2	0
%													14.29	5.56	
Total No. Sold	-	-	-	-	-	-	-	-	-	-	-	-	14	36	34
%	-	-	-	-	-	-	-	-	-	-	-	-	100	100	100
Total Value of goat (Rs.)	-	-	-	-	-	-	-	-	-	-	-	-	12858.30	21328.20	13868.26
Value/ No. of Goat	-	-	-	-	-	-	-	-	-	-	-	-	918.45	592.45	407.89
Marketing costs	-	-	-	-	-	-	-	-	-	-	-	-	87.77	158.32	102.46
Loading – unloading charges (Rs.)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Transport cost (Rs.)	-	-	-	-	-	-	-	-	-	-	-	-	56.7	112.2	81.22
Imputed family labour Value	-	-	-	-	-	-	-	-	-	-	-	-	332.46	580.72	490.22
Others	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total cost (Rs.)	-	-	-	-	-	-	-	-	-	-	-	-	476.93	851.24	673.90
Cost (Rs./goat)	-	-	-	-	-	-	-	-	-	-	-	-	34.28	23.65	23.24
Net Return	-	-	-	-	-	-	-	-	-	-	-	-	12381.37	20476.96	13194.36
Net return per Goat	-	-	-	-	-	-	-	-	-	-	-	-	884.17	568.80	388.07

Table – 5.9B: Off marketing of goat by their weight (unorganized market)  
January 08 to June 08

Weight (kg.)	Type of Buyers														
	No. sold to goat keeper from Jan. 08 to June 08			No. sold to Butcher from Jan. 08 to June 08			No. sold to professional traders from Jan. 08 to June 08			No. sold to local consumers / others from Jan. 08 to June 08			No. sold to all buyers from Jan. 08 to June 08		
	Male	Female	Kids	Male	Female	Kids	Male	Female	Kids	Male	Female	Kids	Male	Female	Kids
Wt. >= 5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25
%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100
> 5 – 10	-	-	-	-	-	-	-	-	-	-	-	-	9	19	-
%													75.00	67.86	-
> 10 – 15	-	-	-	-	-	-	-	-	-	-	-	-	2	7	-
%	-	-	-	-	-	-	-	-	-	-	-	-	16.67	25.00	-
> 15	-	-	-	-	-	-	-	-	-	-	-	-	1	2	-
%													8.33	7.14	-
Total No. Sold	-	-	-	-	-	-	-	-	-	-	-	-	12	28	25
%													100	100	100
Total Value of goat (Rs.)	-	-	-	-	-	-	-	-	-	-	-	-	11672.14	17813.04	11682.25
Value/ No. of Goat	-	-	-	-	-	-	-	-	-	-	-	-	972.67	636.18	467.29
Marketing costs	-	-	-	-	-	-	-	-	-	-	-	-	102.54	244.77	148.54
Loading – unloading charges (Rs.)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Transport cost (Rs.)	-	-	-	-	-	-	-	-	-	-	-	-	73.53	145.67	111.08
Imputed family labour Value	-	-	-	-	-	-	-	-	-	-	-	-	418.31	666.57	578.92
Others	-	-	-	-	-	-	-	-	-	-	-	-	55.66	167.06	122.12
Total cost (Rs.)	-	-	-	-	-	-	-	-	-	-	-	-	650.04	1224.07	960.66
Cost (Rs./goat)	-	-	-	-	-	-	-	-	-	-	-	-	54.17	43.72	48.03
Net return	-	-	-	-	-	-	-	-	-	-	-	-	11022	16588.97	16721.59
Net return per Goat	-	-	-	-	-	-	-	-	-	-	-	-	918.50	592.46	428.86

Table – 5.9C: Off Marketing of Goat by their Weight (unorganized market)  
July 07 to June 08

Weight (kg.)	Type of Buyers														
	No. sold to goat keeper from July 07 – June 08			No. sold to Butcher from July 07 – June 08			No. sold to professional traders from July 07 – June 08			No. sold to local consumers / others from July 07 – June 08			No. sold to all buyers from July 07 – June 08		
	Male	Female	Kids	Male	Female	Kids	Male	Female	Kids	Male	Female	Kids	Male	Female	Kids
Wt. >= 5	-	-	-	-	-	-	-	-	-	-	-	-	0	0	59
%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100
> 5 – 10	-	-	-	-	-	-	-	-	-	-	-	-	17	45	0
%													65.38	70.31	
> 10 – 15	-	-	-	-	-	-	-	-	-	-	-	-	6	15	0
%													23.08	23.44	
> 15	-	-	-	-	-	-	-	-	-	-	-	-	3	4	0
%													11.54	6.25	
Total No. Sold	-	-	-	-	-	-	-	-	-	-	-	-	26	64	59
%													100	100	100
Total Value of goat (Rs.)	-	-	-	-	-	-	-	-	-	-	-	-	24530.34	39141.24	25550.51
Value/ No. of Goat	-	-	-	-	-	-	-	-	-	-	-	-	943.47	611.58	432.13
Marketing costs	-	-	-	-	-	-	-	-	-	-	-	-	190.31	403.09	251.00
Loading – unloading charges (Rs.)	-	-	-	-	-	-	-	-	-	-	-	-	0	0	0
Transport cost (Rs.)	-	-	-	-	-	-	-	-	-	-	-	-	130.23	257.87	192.30
Imputed family labour Value	-	-	-	-	-	-	-	-	-	-	-	-	750.77	1247.29	1069.14
Others	-	-	-	-	-	-	-	-	-	-	-	-	55.66	167.06	122.12
Total cost (Rs.)	-	-	-	-	-	-	-	-	-	-	-	-	1126.97	2075.31	1634.56
Cost (Rs./goat	-	-	-	-	-	-	-	-	-	-	-	-	43.35	32.43	33.36
Net Return	-	-	-	-	-	-	-	-	-	-	-	-	23403.37	37065.93	23915.95
Net return per Goat	-	-	-	-	-	-	-	-	-	-	-	-	900.13	579.16	405.36

Table – 5.10: Marketing of Goat by Size Class of Goat Herd

Size of flocks	Total Number of Goats				Sold at Door			
	Male	Female	Kids	Total	Male	Female	Kids	Total
1 – 5	83	200	164	447	8	8	14	30
%	-	-	-	-	9.64	4.00	8.54	6.62
6 – 15	133	242	205	580	6	17	13	36
%	-	-	-	-	4.51	7.02	6.34	6.21
16 – 30	15	23	18	56	1	4	2	20
%	-	-	-	-	6.67	17.39	11.11	35.71
30 >	-	-	-	-	-	-	-	-
All	231	465	387	1083	15	29	29	73
%	-	-	-	-	6.49	6.24	7.49	6.74
Size of flocks	Sold in the Market				Total Sold			
	Male	Female	Kids	Total	Male	Female	Kids	Total
1 – 5	11	31	30	72	19	39	44	102
%	13.25	15.50	18.29	16.11	22.89	19.50	26.83	22.82
6 – 15	14	31	28	73	20	48	41	109
%	10.53	12.81	13.66	12.59	15.04	19.83	20.00	18.79
16 – 30	1	2	1	4	2	6	3	11
%	6.67	8.70	5.56	7.14	13.33	26.09	16.67	19.64
30 >	-	-	-	-	-	-	-	-
All	26	64	59	149	41	93	88	222
%	11.26	13.76	15.25	13.76	17.75	20.00	22.74	20.50

Percentage share of door and markets to population

The prices of goats (Rs./goat) received by the sample households in the market are slightly higher as compared to the prices of goats sold at door. The table – 5.11 reveals that the owner of goat herd of 1 – 5 goats usually get higher price of their goats sold in the market as compared to the selling price of goat at door. The market price (Rs./goat) of male, female and kids is higher by Rs. 44.22, Rs. 26.61 and Rs. 44.70 respectively as compared to the price of the same sold at door. Similarly, the owners of the heard size 6 – 15 goats also get higher price at market as compare price received at door. The market prices for male, female and kids are higher by Rs. 54.18, Rs. 19.50 and Rs. 41.15 respectively. However, the differences of market prices of goats as compare prices of the same at door for the households having herd size 16 – 30 goats reveals that as compared to prices at door, market prices of male goats are higher by Rs. 16.00, female goats by Rs. 2.27 and kids by Rs. 48.65. Taking all the herd size together, the market prices as compared to prices at door are higher by Rs. 38.13 for male, Rs. 16.13 for female and Rs. 44.83 for kids.

Table – 5.11: Price Received by Goat Keepers in Different Markets

Size of flocks	Sold at Door						Sold in the Market					
	Male		Female		Kids		Male		Female		Kids	
	No	Value	No	Value	No	Value	No	Value	No	Value	No	Value
1 – 5	8	897.51	8	583.77	14	386.45	11	941.73	31	610.38	30	431.15
6 – 15	6	888.66	17	592.65	13	390.12	14	942.84	31	612.15	28	431.27
16 – 30	1	930.00	4	610.23	2	386.35	1	946.00	2	612.5	1	435.00
30 >	-	-	-	-	-	-	-	-	-	-	-	-
All	15	905.39	29	595.55	29	387.64	26	943.52	64	611.68	59	432.47
Size of flocks	Difference in the Price between Both Market											
	Male		Female		Kids							
	No	Value	No	Value	No	Value						
1 – 5	3	44.22	23	26.61	16	44.70						
6 – 15	8	54.18	14	19.50	15	41.15						
16 – 30	0	-	2	2.27	1	48.65						
30 >	-	-	-	-	-	-						
All	11	38.13	35	16.13	30	44.83						

Value per goat

#### Purchase of goat by different buyers in the market:

Since the sample households of either village are unable provide information about the identity of the buyers i.e to whom they had sold their goats at markets, the aggregate figure for all types of buyers of goats in the market has been worked out in the tables 5.12A, 5.12B and 5.12C.

The table 5.12A shows that out total goats sold from the sample villages of district – I during July - 07 to December - 07, 52.64 per cent of goats are from the villages of off market and 47.36 per cent of goats from the villages of near market. As regards to the marketing of male, female and kids, the table indicates that out of marketed male goats, the share from the villages of near market is relatively higher (54.55 per cent) as compared to the share (42.86 per cent) of the villages of off market. Numbers of female goats sold in the market are 36 in which 47.22 percent is found to have sold from the villages of near market and 52.78 percent are sold from the villages of off the market. Similarly, out of total market kids, 44.83 percent are from the villages of the near market and 55.17 percent are from the villages of off the market.

So far as the value (Rs./goats) of these goats are concerned, goats from the villages of near the market fetch some higher prices than that of the goats sold from the villages of off the market. The table indicates that price of a male goats from the villages of near market is Rs. 891.67 while the price of the same from the villages of off the market is Rs. 888.12. Similarly price of female goat of the former villages is Rs. 587.53 where as price of the same from the later village is 572.32. The price of a kid goat from the former village is Rs. 396.26 when the price of later villages is Rs. 384.76.

The marketing pattern of the district –II during July – 07 June – 08 has been worked out in the table – 5.12B, which indicates that out of marketed male goat, the share of the villages near to the market is 60.00 per cent and share of the villages far from the market place is 40.00 per cent. In case of marketed female goats, the share of the former villages is 57.14 per cent and the share of later villages is 42.86 per cent. Similarly, in the marketed kids, share of former village is 56.67 per cent and later village is 43.33 per cent. So far as the price per goat of the sample district – II is concerned, average prices for male, female and kids from villages of near the market are Rs.907.17, Rs.611.31 and Rs.416.32 respectively, while prices of the same from the villages of the off market are Rs. 903.74, Rs.612.26 and Rs. 408.41 respectively.

Marketing pattern for entire period i.e. July –07 to June - 08 for both the district together has been displayed in the table 5.12C, which indicates that in the total marketed goats, the share of male, female and kids from the villages of near to the market are 57.69 per cent, 51.56 per cent and 50.85 per cent respectively, while the share of later i.e. off the market are 42.31 per cent, 48.44 per cent and 49.15 per cent respectively.

However, the average prices of male, female and kids for both the district is worked out in the table – 5.12C are as follows: price of male goat of the near market and off the market are Rs. 899.42 and Rs. 895.93 respectively; prices of female goats are Rs. 599.42 and Rs. 592.29 respectively and prices of kids are Rs. 406.44 and Rs.396.59 respectively.

Table–5.12A: Purchased of Goats by Different Buyers in the Markets from July 07 to Dec. 07

Type of buyers	District - I											
	Villages				Villages				Villages			
	Near the Market				Off the Market				Total			
	Male	Female	Kids	Total	Male	Female	Kids	Total	Male	Female	Kids	Total
Goat Keepers	-	-	-	-	-	-	-	-	-	-	-	-
Number	-	-	-	-	-	-	-	-	-	-	-	-
Value	-	-	-	-	-	-	-	-	-	-	-	-
Butchers	-	-	-	-	-	-	-	-	-	-	-	-
Number	-	-	-	-	-	-	-	-	-	-	-	-
Value	-	-	-	-	-	-	-	-	-	-	-	-
Local Consumers	-	-	-	-	-	-	-	-	-	-	-	-
Number	-	-	-	-	-	-	-	-	-	-	-	-
Value	-	-	-	-	-	-	-	-	-	-	-	-
Traders	-	-	-	-	-	-	-	-	-	-	-	-
Number	-	-	-	-	-	-	-	-	-	-	-	-
Value	-	-	-	-	-	-	-	-	-	-	-	-
All	-	-	-	-	-	-	-	-	-	-	-	-
Number	6	17	13	36	5	19	16	40	11	36	29	76
%	54.55	47.22	44.83	41.36	45.45	52.78	55.17	52.64	100	100	100	100
Value per goat	891.67	587.53	396.26	583.43	888.12	572.32	384.76	570.74	890.24	581.25	391.37	578.10



Table –5.12B:Purchased of Goats by Different Buyers in the Markets from Jan. 08 to June 08

Type of buyers	District - II											
	Villages				Villages				Villages			
	Near the Market				Off the Market				Total			
	Male	Female	Kids	Total	Male	Female	Kids	Total	Male	Female	Kids	Total
Goat Keepers	-	-	-	-	-	-	-	-	-	-	-	-
Number	-	-	-	-	-	-	-	-	-	-	-	-
Value	-	-	-	-	-	-	-	-	-	-	-	-
Butchers	-	-	-	-	-	-	-	-	-	-	-	-
Number	-	-	-	-	-	-	-	-	-	-	-	-
Value	-	-	-	-	-	-	-	-	-	-	-	-
Local Consumers	-	-	-	-	-	-	-	-	-	-	-	-
Number	-	-	-	-	-	-	-	-	-	-	-	-
Value	-	-	-	-	-	-	-	-	-	-	-	-
Traders	-	-	-	-	-	-	-	-	-	-	-	-
Number	-	-	-	-	-	-	-	-	-	-	-	-
Value	-	-	-	-	-	-	-	-	-	-	-	-
All	-	-	-	-	-	-	-	-	-	-	-	-
Number	9	16	17	42	6	12	13	31	15	28	30	73
%	60.00	57.14	56.67	57.53	40.00	42.86	43.33	42.47	100	100	100	100
Value per goat	907.17	611.31	416.62	662.44	903.74	612.26	408.41	642.27	905.34	611.75	413.03	653.51

Table–5.12C: Purchased of Goats by Different Buyers in the Markets from July 07 to June 08

Type of buyers	Both District											
	Villages				Villages				Villages			
	Near the Market				Off the Market				Total			
	Male	Female	Kids	Total	Male	Female	Kids	Total	Male	Female	Kids	Total
Goat Keepers	-	-	-	-	-	-	-	-	-	-	-	-
Number	-	-	-	-	-	-	-	-	-	-	-	-
Value	-	-	-	-	-	-	-	-	-	-	-	-
Butchers	-	-	-	-	-	-	-	-	-	-	-	-
Number	-	-	-	-	-	-	-	-	-	-	-	-
Value	-	-	-	-	-	-	-	-	-	-	-	-
Local Consumers	-	-	-	-	-	-	-	-	-	-	-	-
Number	-	-	-	-	-	-	-	-	-	-	-	-
Value	-	-	-	-	-	-	-	-	-	-	-	-
Traders	-	-	-	-	-	-	-	-	-	-	-	-
Number	-	-	-	-	-	-	-	-	-	-	-	-
Value	-	-	-	-	-	-	-	-	-	-	-	-
All	-	-	-	-	-	-	-	-	-	-	-	-
Number	15	33	30	78	11	31	29	71	26	64	59	149
%	57.69	51.56	50.85	52.35	42.31	48.44	49.15	47.65	100.00	100.00	100.00	100.00
Value per goat	899.42	599.42	406.44	622.94	895.93	592.29	396.59	606.5	897.79	596.5	402.2	615.81

### Variation of Price of Goat Sold at door and in the Market:

It is evident from the table – 13 that the owners of the goats in both the districts receive high prices of goats sold in the market as compared to the price they received by selling goats at door.

Goats of the weight group >5 kg. in district – I are sold at the door at a price Rs. 401.72 per goat while the prices of the same sold in the market is Rs. 431.35. Thus, the selling at the market is higher by Rs.29.63. Similarly, in the case goats under weight group of 5 Kg. to 10 kg, the selling price at door is Rs. 605.12 while the market price of the same is Rs. 629.22, hence the market price is higher by Rs. 21.10. As regards to the goat of the weight group > 10 kg to 15 kg, the market price is higher by Rs.33.30 as compared to the selling price of the same at door.

In district – II, the selling price of goats in market is higher than that of the selling price at door. Here also for goats under the weight group of >5kg, the selling price in the market is higher by Rs.35.22 as compared to the selling price of the same at door. As regards to the goats under the age group >5 kg to 10kg, the selling price in the market is higher by Rs.22.59 than the selling of the same at door. Similarly, the market price of goats of the weight group >10 to 15 kg is higher by Rs.37.73 as compared to selling price of the same sold at door. Variation of selling of goat at door and at market for both the districts as a whole also indicates that the selling price of goats is higher at the market than that of the selling price of the same sold at door. On the whole selling prices of goats across different weight groups i.e. > 5kg, 5 to 10kg, >10 to 15kg in the market are higher by Rs. 32.55, Rs.22.67 and Rs. 35.77 than that the selling price of goats at the door.

### **Marketing Cost and Net Gain:**

The market cost and net gain of the sample goat keepers has been worked on head of goat keepers to all buyers in the tables 5.14A, 5.14B and 5.14C.

The table – 5.14A indicates that in the district- 1 total marketing cost (Rs/goat) is Rs 19.73 in which transport cost is Rs.3.90, loading –unloading cost is Rs.2.11, market fee is Rs.3.85, feeding charge Rs.3.07 and other miscellaneous cost, which includes the other expenses of goat keepers, is Rs.6.81. The selling price of goat is Rs.583.86 and net gain per goat is Rs.564.13.

In the district –II, the marketing costs, which include transport cost, loading/unloading cost, market fees; feeding cost and other miscellaneous cost are - Rs.4.45, Rs.1.86, Rs.3.41, Rs.2.71 and Rs.6.02 respectively. Altogether total marketing cost is Rs.17.46 and net gain per goat is Rs.583.15 (Table-5.14B).

On the whole, total number of goats sold both at door and in the market by the sample households is 295. Marketing cost (Rs/goat) for the same is Rs 18.42 in which transport cost, loading-unloading cost, market fee, feeding charge and miscellaneous costs are Rs. 4.20 Rs.1.97, Rs.3.60, Rs.2.87 and Rs.6.37 respectively. Gross return per goat is Rs.592.57 and net return is Rs.573.55 (Table- 5.14C).

**Table –5.13: Variation in the price of sold goat between at door and in the markets on the sample farms by the weight of goats**

Weight of goats (Kg)	District - I					District – II					Both District				
	At door (sold)		In the market		Difference in the price	At door (sold)		In the market		Difference in the price	At door (sold)		In the market		Difference in the price
	Total sold (no.)	Price received	Total sold (no.)	Price received		Total sold (no.)	Price received	Total sold (no.)	Price received		Total sold (no.)	Price received	Total sold (no.)	Price received	
> 5	10	4017.2	29	12509.15	0	13	5256.29	26	11428.30	0	23	9273.49	55	23937.45	0
Rs./goat		401.72	0	431.35	29.63	0	404.33	0	439.55	35.22	0	403.20	0	435.23	32.55
5 – 10	10	6051.2	39	24539.58	0	29	17638.67	37	23340.34	0	39	23689.87	76	47879.92	0
Rs./goat	0	605.12	0	629.22	24.1	0	608.23	0	630.82	22.59	0	607.43	0	630.00	22.67
>10 – 15	4	3595.52	8	7457.44	0	7	6316.66	10	9401.10	0	11	9912.18	18	16858.54	0
Rs./goat	0	898.88	0	932.18	33.3	0	902.38	0	940.11	37.73	0	901.11	0	936.88	35.77
>15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
All	24	13663.92	76	44506.17	0	49	29211.62	73	44169.74	0	73	42875.54	149	88675.91	0
Rs./goat		569.33	-	585.61	16.28	-	596.16	-	605.06	8.90	-	587.34	-	595.14	7.80

5.14A: Marketing Costs & Net Gain through Different Channels in Marketing of Goats by the Sample Goats Keepers in the District – I

Channels								
SL	Particulars	Goat keeper to goat Rearers	Goat keepers to butchers	Goat keepers to professional traders	Goat keepers to local consumers	Goat keepers to others	Goat keeper to all buyer	Goat keeper to all buyer (per goat)
1	Total no. of goats sold	-	-	-	-	-	100	1
2	Marketing cost	-	-	-	-	-	-	-
i)	Transport	-	-	-	-	-	390.00	3.90
ii)	Loading and unloading	-	-	-	-	-	211.00	2.11
iii)	Market fee	-	-	-	-	-	385.00	3.85
iv)	Feeding charge	-	-	-	-	-	307.00	3.07
v)	Miscellaneous charges	-	-	-	-	-	680.00	6.80
3	Total marketing cost	-	-	-	-	-	1983.00	19.83
4	Price received	-	-	-	-	-	58170.09	581.70
5	Net gain	-	-	-	-	-	56197.09	561.87

Table – 5.14B: Marketing Costs & Net Gain through Different Channels in Marketing of Goats by the Sample Goats Keepers in the District –II

Channels								
SL	Particulars	Goat keeper to goat Rearers	Goat keepers to butchers	Goat keepers to professional traders	Goat keepers to local consumers	Goat keepers to others	Goat keeper to all buyer	Goat keeper to all buyer (per goat)
1	Total no. of goats sold	-	-	-	-	-	122	1
2	Marketing cost	-	-	-	-	-	-	-
i)	Transport	-	-	-	-	-	542.90	4.45
ii)	Loading and unloading	-	-	-	-	-	226.92	1.86
iii)	Market fee	-	-	-	-	-	416.02	3.41
iv)	Feeding charge	-	-	-	-	-	330.62	2.71
v)	Miscellaneous charges	-	-	-	-	-	734.44	6.02
3	Total marketing cost	-	-	-	-	-	2250.90	17.46
4	Price received	-	-	-	-	-	73381.36	601.49
5	Net gain	-	-	-	-	-	71130.46	583.03

Table – 5.14C: Marketing Costs & Net Gain through Different Channels in Marketing of Goats by the Sample Goats Keepers in the Both District

Channels								
SL	Particulars	Goat keeper to goat Rearers	Goat keepers to butchers	Goat keepers to professional traders	Goat keepers to local consumers	Goat keepers to others	Goat keeper to all buyer	Goat keeper to all buyer (per goat)
1	Total no. of goats sold	-	-	-	-	-	222	1
2	Marketing cost	-	-	-	-	-	-	-
i)	Transport	-	-	-	-	-	932.90	4.20
ii)	Loading and unloading	-	-	-	-	-	437.92	1.97
iii)	Market fee	-	-	-	-	-	801.02	3.60
iv)	Feeding charge	-	-	-	-	-	637.62	2.87
v)	Miscellaneous charges	-	-	-	-	-	1414.44	6.37
3	Total marketing cost	-	-	-	-	-	4233.90	19.07
4	Price received	-	-	-	-	-	131551.45	592.57
5	Net gain	-	-	-	-	-	127327.55	573.50

### Income from Goat and their Product:

Since goats in West Bengal are brought up only for meat not for other products. So, income from goat rearing in the present study is based only on goat. Income from goat products (milk & manure) is not accountable. The goat rears do not keep account for that.

The table 5.15 shows that total income of the sample households from goat rearing during July-07 to December-07 is Rs. 62538.99, in which share male, female and kids goats are 34.82 per cent, 36.07 per cent and 29.11 per cent respectively. Similarly, during January-08 to June-08, total income from goats is Rs. 60759.65 in which the share of male, female and kids are 31.39 percent, 36.64 per cent and 31.98 per cent respectively.

Total income from goats for entire period July-07 to June-08 is Rs. 128298.64, in which the shares of different types of goats are as follows: male-33.19 percent, female-36.34 percent and kids-30.47 percent. However, the net returns (Rs./goat) from different types of goats i.e. male, female and kids are Rs. 930.96, Rs. 606.81 and Rs. 404.95 respectively.

Table – 5.15: Income from Goat and their Product of the Sample Goat Rearers

Period of production	Items of Product											Total income
	Milk		Value of dung manure (Rs.)	Value of goats sold (Rs.)								
	Qty.	Value		Male		Female		Kids		Total		
				No	Value	No	Value	No	Value	No	Value	
July 07 to Dec. 07	nil	nil	nil	21	19107.06 (909.86)	48	28238.76 (588.31)	53	20193.17 (381.00)	122	67538.99 (553.60)	67538.99
%	-	-	-	17.21	28.29	39.34	41.81	43.44	29.90	100.00	100.00	
Jan. 08 to June 08	nil	nil	nil	19	18131.46 (954.29)	38	23946.64 (630.17)	43	18681.55 (434.45)	100	60759.65 (607.60)	60759.65
%	-	-	-	19.00	29.84	38.00	39.41	43.00	30.75	100.00	100.00	
Total	nil	nil	nil	40	37238.52 (930.96)	86	52185.40 (606.81)	96	38874.72 (404.95)	222	128298.64 (577.92)	128298.64
%	-	-	-	18.02	29.02	38.74	40.67	43.24	30.30	100.00	100.00	

Note: Percentage share of total value, Figure in parentheses are value per goat.

Data for other products of goats were not available from the goat keepers during in depth survey. So, details of the product of goat cannot be incorporated in the study.

## Chapter – VI

### Buyers and Sellers of Goat in the Market

There is no separate market for goat in Burdwan district. It is evident from the table – 6.1A that the selected livestock markets are away about 22 km. from the district headquarter. These are weekly huts held 4 – 5 days in a month. Average numbers of goat sold/purchased in these huts are about 488 numbers. On an average the types of sellers are goat keeper – (32.00 per cent) and trader - (68.00 per cent) and among the buyers the goats keepers are 21 percent, butcher – 40 percent, professional traders – 34 percent and other like direct consumer 0.50 percent. Market fees on goat sold rangers to Rs. 6/- to Rs. 7/- per goat. So far as the infrastructure facilities of selected markets of Burdwan district are concerned, the market are situated on road side within same specific boundary and on the day of marketing good numbers of middle and brokers were found to have present.

Table – 6.1A: General Information of Selected Goat Markets in District (Burdwan)

Type of market	Distance from H.Q (Km.)	Coverage area (Km)	Area of Market (H.Q)	Weekly/ fortnightly/ monthly	Number of days held in a month	Average Nos. of goat sold on market.days	Type of sellers in %			Type of buyers in %				Market fee paid by (per goat/ or value of goat)		
							Goat keepers	Butchers	Traders	Goat keepers	Butchers	Professional Traders	Others	Sellers	Buyers	
Unorganized	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Exclusive goat markets	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
With live stock markets	22	10		Weekly	4-5	488	32%	-	68%	21%	40%	34%	05%	Rs. 7-8/goat	-	-
Regulated market	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Exclusive goat market	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
With live stock market	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Source: Survey Data

In Murshidabad district, the numbers of unorganized cattle markets (hut) are twelve. There is no separate goat market in the district. The selected markets (hut) are about 18 km. away from the district headquarters. The markets are weekly markets usually held 4-5days in a month. In the selected markets the average number of goats

sold and purchased is 572 in which the sellers are traders (64%) and goat keeper (36%). Among the buyers, the incidence of goat keepers, butchers and professional traders and others are 18 per cent, 42 per cent, 37 per cent and others - 3 per cent respectively. Market fees for transaction of goat is Rs.6-7 per goat (table-6.1b). So far as the animal skin markets are concerned there were two full-fledged skin markets in Murshidabad in 1993, but the number has reduced to only one in 2008 (table-6.1B).

Table – 6.1B:General Information of Selected Goat Markets in District (Murshidabad)

Type of market	Distance from HQ (Km.)	Coverage area (Km)	Area of Market (H.Q)	Weekly/ fortnightly/ monthly	Number of days held in a month	Average Nos. of goat sold on market days	Type of sellers in %			Type of buyers in %				Market fee paid by (per goat/ or value of goat)	
							Goat keepers	Butchers	Traders	Goat keepers	Butchers	Professional Traders	Others	Sellers	Buyers
Unorganized	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Exclusive goat markets	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
With live stock markets	18	12		Weekly	4-5	572	36%	-	64%	18%	42%	37%	03%	Rs. 6-7/goat	-
Regulated market	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Exclusive goat market	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
With live stock market	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

### Infrastructure Facilities of the Selected Markets:

Nature of availability of infrastructure facilities of goat as well as livestock market in both the sample district has been worked out in the table - 6.2. The table indicates that the selected markets of either districts have limited infrastructure facilities. Though the market are situated on the road side and have the transport facilities (mainly public bus), they are lacking platform, shelter and lighting facilities, etc. for goat in the market. In these markets, there are no feeding facilities of livestock during marketing period.

### Breed wise Goat in the Selected Markets:

All the goats bought in the selected markets are mainly Black Bengal variety (98.75 per cent) only 1.25 per cent is other breeds. Purposes of purchase of goats in the markets are as follows: 13.59 per cent for rearing purpose, 65.06 per cent for slaughtering inside the selected district and 21.35 per cent to sell out side the selected district. Goats are brought to the markets within the block constitute about 84.31 per

cent. Arrival of goats within the district and out side of the district is 99.26 per cent (14.95per cent + 84.31 per cent) and 0.74 per cent respectively (table – 6.3).

Table – 6.2 : Infrastructure Facilities of Selected Market (Burdwan & Murshidabad)

Particulars		District – I			District - II			Markets of both district
		Market			Market			
Infrastructure facilities		I	II	Total	I	II	Total	
1. Market on road	Yes	25	25	50	25	25	50	100
	%	100.00	100.00	100.00	100.00	100.00	100.00	100.00
	No	-	-	-	-	-	-	-
2. Boundary	Yes	13	25	50	25	25	50	88
	%	50.00	100.00	100.00	100.00	100.00	100.00	88.00
	No	12	-	-	-	-	-	12.00
	%	50.00	-	-	-	-	-	-
3. Lighting	Yes	-	-	-	-	-	-	-
	No	25	25	50	25	25	50	100
	%	100.00	100.00	100.00	100.00	100.00	100.00	100.00
4. Platform	Yes	-	-	-	-	-	-	-
	No	25	25	50	25	25	50	100
	%	100.00	100.00	100.00	100.00	100.00	100.00	100.00
5. Shelter	Yes	-	-	-	-	-	-	-
	No	25	25	50	25	25	50	100
	%	100.00	100.00	100.00	100.00	100.00	100.00	100.00
6. Feeding facilities	Yes	-	-	-	-	-	-	-
	No	25	25	50	25	25	50	100
	%	100.00	100.00	100.00	100.00	100.00	100.00	100.00
7. Presence of middleman / brokers	Yes	25	25	50	25	25	50	100
	No	-	-	-	-	-	-	-
	%	100.00	100.00	100.00	100.00	100.00	100.00	100.00
8. Transport facility	Yes	25	25	50	25	25	50	100
	No	-	-	-	-	-	-	-
	%	100.00	100.00	100.00	100.00	100.00	100.00	100.00
9. Others	Yes	-	-	-	-	-	-	-
	No	25	25	50	25	25	50	100
	%	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Table - 6.3: Breed Wise of Goats in the Selected Markets

Particulars	District - 1 <sup>st</sup>			District – 2 <sup>nd</sup>			Markets of both districts
	Market			Market			
	I	II	Total	I	II	Total	
1. Breed wise Sell							
i. Deshi %	100.00	100.0	100.00	95.00	100.00	100.00	98.75
ii. Barbari %	-	-	-	-	-	-	-
iii. Jamunapari %	-	-	-	-	-	-	-
iv. Others*	-	-	-	5.00	-	-	1.25
2. Purpose of Purchase							
i. Rearing %	12.23	11.54	11.87	16.17	14.44	15.30	13.59
ii. Slaughter %	67.54	72.11	69.82	58.21	62.39	60.30	65.06
iii. Sell for the out side %	28.23	16.35	18.31	25.62	23.17	24.40	21.35
3. Arrival of Goats							
i. With in block %	87.11	83.76	84.44	82.56	85.78	84.17	84.31
ii. With in District %	12.89	14.55	14.72	17.12	13.27	15.19	14.95
iii. Out side the district %	-	1.69	0.84	0.32	0.95	0.64	0.74

\* Other breed



Note: data based on the reporting of the buyers, sellers and other knowledgeable persons of the localities

### Market Agents of Goats:

The markets agents of goats are sellers, buyers, skin traders and skin whole seller. Total number of them is 88. In the sample design of the study, the required number of skin whole sellers is 2 from each selected market of 2 selected districts. Since, the skin traders are available in only one market of district – II, so data from available 8 numbers of skin whole sellers are collected for the study (table – 6.4). Data from skin processes is not available as - due to same reason - the owners of the processing houses were not eager to supply the same. Nature of transaction of live goats and its skin by these market agents has been discussed separately.

Table – 6.4: Sample Number of Marketing Agents of Goat

Name of marketing agents of goat	District – I		District – II		Total
	Market – 1	Market - 2	Market – 1	Market - 2	
Seller	5 (25.00)	5 (25.00)	5 (17.86)	5 (25.00)	20 (22.73)
Buyer	5 (25.00)	5 (25.00)	5 (17.86)	5 (25.00)	20 (22.73)
Butcher	5 (25.00)	5 (25.00)	5 (17.86)	5 (25.00)	20 (22.73)
Skin trader	5 (25.00)	5 (25.00)	5 (17.86)	5 (25.00)	20 (22.73)
Skin whole seller	-	-	8 (28.56)	-	8 (9.08)
Skin processor	-	-	-	-	-
Total	20 (100.00)	20 (100.00)	28 (100.00)	20 (100.00)	88 (100.00)

Note: Percentage distribution among the marketing of agents

### Distribution of Sellers of Goats by their Caste:

Out of selected 20 sellers of goats from both the selected district, number of sellers belonging to scheduled caste is 2 (10.00 per cent), OBC – 1 (5.00 per cent) and remaining 17 (85.00 per cent) from the other caste (table – 6.5).

Table – 6. 5: Distribution of Seller by Caste

Category of the caste	District – I		District – II		Total
	Market – 1	Market - 2	Market – 1	Market - 2	
SC	1 (20.00)	1 (20.00)	-	-	2 (10.00)
ST	-	-	-	-	-
OBC	1 (20.00)	-	-	-	1 (5.00)
Others	3	4	5	5	17

	(60.00)	(80.00)	(100.00)	(100.00)	(85.00)
Total	5 (100.00)	5 (100.00)	5 (100.00)	5 (100.00)	20 (100.00)

Note: Percentage of caste (on the basis of 1<sup>st</sup> round survey)

### **Selling of Goats by the Type of the Sellers:**

The type of sellers involve in selling of goats are goat keepers, professional traders, butcher and others (those who owned goats for some personal purposes but did not utilize for the same and brought to the market for selling). Out of total goats sold in the market during July - 07 to December - 07 by sample sellers, the shares of selling goats by different types of sellers are as follows: goat keeper - 3.21 per cent, professional trader - 62.43 per cent, butchers - 2.62 percent and other 1.43 per cent. The values par goat they received are Rs. 697.63, Rs.803.66, Rs. 621.03 and Rs. 673.60 respectively. However, the average value of male goats received by the sample sellers is Rs. 956.12 per goat which varies between Rs. 922.84 to Rs. 966.65 among the type of sellers. Similarly, average value (Rs. /goat) of female and kids is Rs. 648.18 and Rs. 437.78 respectively which varies between Rs. 651.27 to 623.32 and Rs. 432.67 to Rs. 441.46 respectively among the type of sellers (table - 6.6).

During January - 08 to June - 08 the marketing pattern of goats by the selected market agents i.e. goats keepers, professional traders, butchers and others is more or less same as the marketing pattern of said agents during July - 07 to December - 07. However, prices of goats received by the marketing agents are relatively high during January - 08 to June - 08 as compared to the prices of July - 07 to December - 07. It is evident from the fact that average value of goats during the earlier period (July - 07 to December - 07) is Rs. 754.86 while the same is Rs. 769.53 in the latter period (January - 08 to June - 08). Accordingly, all the marketing agents are found to have earned some higher price during the latter period as compare to the former period (table - 6.7).

Looking in to the selling pattern of goats by the market agents for both the periods together (July - 07 to June - 08), it is found that the share of individual agents in selling of goats is more or less same. However, the average prices of goats is Rs. 754.24 which vary between Rs.668.20 to Rs, 775.39 among the different agents. The professional traders are found to have earned the highest price and the butchers get the lowest by selling goats in the selected markets. The average price per male, female and kids goats are Rs. 967.91, Rs. 660.55 and Rs. 448.43 respectively (table- 6.8).

Table – 6.6: Sale of goat by the type of sample sellers July 07 to Dec. 07

Type of seller	Number of goat sold during July 07 to Dec.07			Price Received						Total goats sold	Total price received	Rs./Goat
	Male	Female	Kids	Male	Rs./Male	Female	Rs./Female	Kids	Rs./Kid			
Goat keepers	13	6	8	12380.55	952.35	3859.44	643.24	2596.02	432.67	27	18836.01	697.63
%	3.20	2.64	3.85	3.19		2.62		2.62		3.21	2.97	
Processional traders	267	152	106	255826.05	958.15	98993.04	651.27	67101.92	441.46	525	421921.01	803.66
%	65.76	66.96	50.96	65.90		67.28		67.60		62.43	66.49	
Butchers	5	7	10	4833.25	966.65	4502.68	643.24	3028.69	432.67	22	12364.62	621.03
%	1.23	3.08	4.81	1.25		3.06		3.05		2.62	1.95	
Others	3	5	4	2768.52	922.84	3116.60	623.32	2198.10	439.62	12	8083.22	673.60
%	0.74	2.20	1.92	0.71		2.12		2.21		1.43	1.27	
Total	406	227	208	388184.72	956.12	147136.86	648.18	99262.56	437.28	841	634584.14	754.56
%	100	100	100	100		100		100		100	100	

Table – 6.7: Sale of goat by the type of sample sellers Jan. 08 to June 08

Type of seller	Number of goat sold during July 07 to Dec.07			Price Received						Total goats sold	Total price received	Rs./Goat
	Male	Female	Kids	Male	Rs./Male	Female	Rs./Female	Kids	Rs./Kid			
Goat keepers	16	11	9	15576.80	973.55	7352.51	668.41	4903.47	445.77	36	27832.78	773.13
%	4.08	4.95	4.25	4.05		4.92		4.81		4.36	4.38	
Processional traders	276	156	132	271433.58	983.455	105203.28	674.38	73516.56	471.26	564	450153.42	798.14
%	70.41	70.27	62.26	70.65		70.39		72.09		68.28	70.82	
Butchers	6	12	5	5886.93	981.155	8134.56	677.88	5351.40	445.95	23	19372.89	621.03
%	1.53	5.41	2.36	1.53		5.44		5.25		2.78	3.05	
Others	4	5	3	3889.40	972.35	3328.35	665.67	2270.60	454.12	12	9488.35	790.70
%	1.02	2.25	1.42	1.01		2.23		2.23		1.45	1.49	
Total	392	222	212	384207.04	980.12	149450.40	673.2	101977.92	459.36	826	635635.36	769.53
%	100	100	100	100		100		100		100	100	

Table – 6.8: Sale of Goat by the Type of Sample Sellers July 07 to June 08

Type of seller	Number of goat sold during July 07 to June 08			Price Received						Total goats sold	Total price received	Rs./Goat
	Male	Female	Kids	Male	Rs./Goat	Female	Rs./Goat	Kids	Rs./Goat			
Goat keepers	29	17	17	27957.35	962.74	11211.95	654.74	7499.49	439.37	63	46668.79	727.78
%	3.63	3.79	4.05	3.62		3.78		3.73		3.78	3.67	96.49
Processional traders	543	308	238	527259.6	970.54	204196.3	662.18	140618.48	456.77	1089	872074.43	775.39
%	68.05	68.60	56.67	68.26		68.85		69.88		65.33	68.66	
Butchers	11	19	15	10720.18	974.56	12637.24	670.95	8380.09	437.1	45	31737.51	668.2
%	1.38	4.23	3.57	1.39		4.26		4.16		2.70	2.50	
Others	7	10	7	6657.92	951.13	6444.95	644.5	4468.7	445.83	24	17571.57	675.99
%	0.88	2.23	1.67	0.86		2.17		2.22		1.44	1.38	
Total	798	449	420	772391.8	967.91	296587.3	660.55	201240.48	448.43	1667	1270219.5	754.24
%	100	100	100	100		100		100		100	100	

The market cost of the sellers include transport cost, loading/unloading cost, feeding cost, mandi fee, value of family labour, charge of hire labour and others (pocket expenses, etc.). The table – 6.9 indicates that total marketing cost of the sample seller towards selling of goats during July – 07 to December – 07 is Rs. 20234.46, in which the share of different cost items are as follows: transport charge – 17.04 per cent, loading/unloading cost 10.64 per cent, feeding cost 16.79 per cent, ‘mandi fee 13.30 per cent, value of family labour 28.76 per cent, cost of hire labour 6.94 per cent and other cost 6.53 per cent. Market costs are more or less during January – 08 to June – 08 and proportion of the different items of market cost is also same in January – 08 to June – 08 as compared to the proportion share of different costs during July – 07 to December – 07. The net return for all the goats sold by different sellers is Rs.737.72 per goat.

Table – 6.9: Detail of Marketing Cost of the Sample Seller

Period of selling goat	Item of costs involved (Rs.)							
	Transport charge	Loading / Un-loading	Feeding costs	Mandi Fees	Value family labour	Charges of hired labour	Others	Total
July 07 to Dec. 07	3448.10	2152.96	3397.64	2691.20	5819.72	1404.47	1320.37	20234.46
%	17.04	10.64	16.79	13.30	28.76	6.94	6.53	100.00
Jan.08 to June 08	3436.16	2188.90	3427.90	2709.28	5823.30	1404.20	1222.48	20212.22
%	17.00	10.83	16.96	13.40	28.81	6.95	6.05	100.00
Total	6884.26	4341.86	6825.54	5400.48	11643.02	2808.67	2542.85	40446.68
%	17.02	10.73	16.88	13.35	28.79	6.94	6.29	100.00
Average amount for both the period	3442.13	2170.93	3412.77	2700.24	5821.51	1404.335	1271.425	20223.34
%	17.02	10.73	16.88	13.35	28.79	6.94	6.29	100.00
Net return – 1229772.82						per goat – 737.72		

Note: Percentage of different costs

### Buyers of Goats in the Market:

In the selected market, the sample numbers of buyers of goats is 20 in which distribution of buyers by their caste is as follows: scheduled caste 30.00 per cent, scheduled tribe 5.00 per cent, OBC 10.00 per cent and others 55.00 per cent (table – 6.10).

Table – 6.10: Distribution of Buyers by Caste (Nos.)

Name of the caste	District – I		District – II		Total
	Market – 1	Market - 2	Market – 1	Market - 2	
SC	2 (40.00)	2 (40.00)	1 (20.00)	1 (20.00)	6 (30.00)
ST	1 (20.00)	-	-	-	1 (5.00)
OBC	1 (20.00)	-	1 (20.00)	-	2 (10.00)
Others	1 (20.00)	3 (60.00)	3 (60.00)	4 (80.00)	11 (55.00)
Total	5 (100.00)	5 (100.00)	5 (100.00)	5 (100.00)	20 (100.00)

Note: Percentage distribution of caste

Distribution of the same buyers by their education level is displayed in the table 6.11 which indicates that 35.00 per cent of buyer are illiterate, 25.00 per cent of the buyers has achieved education up to primary level and 2.00 per cent of the buyers has higher secondary degree. There is no buyer of higher qualification like graduate or post graduate

Table – 6.11: Distribution of Buyers by their Education Level (Nos.)

Name of the caste	District – I		District – II		Total
	Market – 1	Market - 2	Market – 1	Market - 2	
Illiterate	2 (40.00)	2 (40.00)	1 (20.00)	2 (40.00)	7 (35.00)
Up to primary	1 (20.00)	2 (40.00)	1 (20.00)	1 (20.00)	5 (25.00)
Primary to secondary	2 (40.00)	1 (20.00)	2 (40.00)	1 (20.00)	6 (30.00)
H.S	-	-	1 (20.00)	1 (20.00)	2 (10.00)
Graduate	-	-	-	-	-
Above Graduate	-	-	-	-	-
Total	5 (100.00)	5 (100.00)	5 (100.00)	5 (100.00)	20 (100.00)

Note: Percentage distribution by education.

### **Purchase of Goats by the Sample Buyers:**

Total number of goats purchased by different buyers in the market during July – 07 to December – 07 is 830 in which 41.81 per cent of total goats are purchased by butcher, 44.82 per cent are purchase by trader, 3.98 per cent by the commission agents, 0.36 per cent by the goat keepers, 8.67 per cent by the whole sellers and 0.36 per cent by the consumers. Purchase value per goat of different buyers are as follows: butcher - Rs. 775.35, trader - Rs. 657.49, commission agent – Rs. 908.66, goat keepers - Rs, 512.97, whole sellers Rs.775.21 and consumer Rs. 724.83. However, value (Rs. /goats) individual type of goat i.e. male, female and kids vary among different type of buyers. The consumers pay highest price per male goat (Rs. 960.54) while the traders pay highest price for female goat (Rs. 652.25) and the goat keepers pay highest price for kids. The price of male goats paid by the different buyers vary from Rs. 968.74 to Rs.908.66 per goat, prices of female goats vary from Rs.622.10 to Rs. 652.25 and the prices of kids vary from Rs. 404.55 to Rs. 424.33 (table – 6.12).

Similarly, total number of goats purchased by different buyers in between January – 08 to June – 08 is 735 in which butchers are found to have purchased 38.78 per cent of total goats. The percentage shares of goats purchased by other buyers are as follows: Traders – 44.35 per cent, commission agents – 7.21 per cent, Goat keepers – 0.82 per cent, Whole sellers- 8.30 per cent and consumers – 0.54 percent. Cost incurred for buying these goats to different buyers is as follows: The cost incurred to butcher is Rs. 725.45 per goat while the same for the traders is 771.32 and for commission agents, goat keepers, whole-sellers and consumers are Rs.848.08, Rs. 753.10, Rs. 710.66 and Rs. 669.28 respectively (table – 6.13).

The average value per male goat is Rs. 954.68 which varies between Rs. 982.24 to Rs. 937.23 among the buyers. The variation price of female goat among the buyers is from Rs. 630.55 to Rs. 674.58 and such variation for kids is from Rs. 415.35 to 444.66 (table – 6.14)

The table - 6.15 shows that the single breed of goat are purchase by the buyers. Out of the total purchase by the different buyers the highest share is recorded for traders 44.60 per cent followed by butcher - 40.38 per cent, whole seller - 8.50 per cent, commission agent 5.50 per cent, goat keepers - 0.58 per cent and consumer - 0.45 per cent.

Table – 6.12: Goat Purchased by the Sample Buyers by the Type of Goat July 07 to December 07

Type of buyers	Number of goat purchased during July 07 to Dec.07			Price Paid						Total goats purchased	Total price paid	Rs./goat
	Male	Female	Kids	Male	Rs./goat	Female	Rs./goat	Kids	Rs./goat			
Butcher	157	76	114	148578.52	946.36	73701.00	646.5	46768.50	410.25	347	269048.02	775.35
%	38.48	32.90	59.69	42.65		50.77	-	59.41		41.81	44.72	
Trader	184	114	74	167855.84	912.26	46035.40	622.1	30693.72	414.78	372	244584.96	657.49
%	45.10	49.35	38.74	48.19		31.71		38.99		44.82	40.66	
Commission agent	33	0	0	29985.78	908.66	0.00	-	0.00	-	33	29985.78	908.66
%	8.09	-	-	8.61	-	-	-	-	-	3.98	4.98	
Goat keeper	0	1	2	0.00	968.74	690.25	652.25	848.66	424.33	3	1538.91	512.97
%	0.00	0.43	0.87	0.00	-	0.48		1.08		0.36	0.26	
Whole seller	32	40	0	29390.08	918.44	24734.00	618.35	0.00	-	72	54124.08	751.72
%	7.84	17.32		8.44	-	0.00	-	-	-	8.67	9.00	
Consumer	2	0	1	1921.08	960.54	0.00	630.55	404.55	404.55	3	2325.63	775.21
%	0.49	0.00	6.94	0.55	-	0.00		0.51		0.36	0.39	
All	408	231	191	348341.22	935.83	145160.65	632.3	78715.43	412.12	830	601607.38	724.83
%	100.00	100.00	100.00	100.00	-	100.00	-	100.00	-	100.00	100.00	

Note: Per goat value

Table – 6.13: Goat Purchased by the Sample Buyers by the Type of Goat January - 08 to June - 08

Type of buyers	Number of goat purchased during Jan.08 to June 08			Price Paid						Total goats purchased	Total price paid	Rs./goat
	Male	Female	Kids	Male	Rs./goat	Female	Rs./goat	Kids	Rs./goat			
Butcher	127	42	116	125280.42	986.46	28332.36	674.58	53139.60	458.1	285	206752.38	725.45
%	36.29	12.00	33.14	39.41	-	22.80		59.61		38.78	37.34	
Trader	158	117	51	152027.60	962.2	76362.39	652.67	23059.65	452.15	326	251449.64	771.32
%	45.14	61.90	26.02	47.82		61.45		25.87		44.35	45.41	
Commission agent	41	0	12	39612.15	966.15	0.00	-	5335.92	444.66	53	44948.07	848.08
%	10.88	-	6.12	12.46	-	-	-	5.99		7.21	8.12	
Goat keeper	2	3	1	1991.48	995.74	2070.75	690.25	456.38	456.38	6	4518.61	753.10
%	4.24	16.67	9.41	0.00		1.67		0.51	-	0.82	0.82	
Whole seller	21	25	15	20379.24	970.44	16221.25	648.85	6750.00	450	61	43350.49	710.66
%	5.57	12.63	7.58	6.41		13.05	-	7.57	-	8.30	7.83	
Consumer	1	2	1	985.55	985.55	1287.00	643.50	404.55	442.35	4	2677.10	669.28
%	6.37	5.56	2.97	0.31		0.00	-	0.45		0.54	0.48	
All	350	189	196	317905.72	973.53	124273.75	634.05	89146.10	421.65	735	553696.29	753.33
%	100	100	100	100.00	-	100.00	-	100.00	-	100.00	100.00	

Note: Per goat value



Table – 6.14: Goat Purchased by the Sample Buyers by the Type of Goat July - 07 to June - 08

Type of buyers	Number of goat purchased during July 07 to June 08			Price Paid						Total goats purchased	Total price paid	Rs./goat
	Male	Female	Kids	Male	Rs./goat	Female	Rs./goat	Kids	Rs./goat			
Butcher %	284	118	230	273858.9	966.41	102033.4	660.54	99908.1	434.38	632	475800.4	752.85
	37.47	28.10	59.43	41.10		37.87		59.52		40.38	41.18	
Trader %	342	231	125	319883.4	937.23	122397.8	637.98	53753.37	431.5	698	496034.6	710.65
	45.12	55.00	32.30	48.01		45.43	-	32.02		44.60	42.94	
Commission agent %	74	0	12	69597.93	937.41	0	0	5335.92	444.66	86	69609.93	809.42
	9.76	0	3.10	10.45		0	-	3.18	-	5.50	6.03	
Goat keeper %	2	4	3	1991.48	982.24	2761	674.58	1305.04	432.91	9	5748.22	638.69
	0.26	0.95	0.78	0.30		1.02	-	0.78	-	0.58	9.84	
Whole seller %	53	65	15	49769.32	944.44	40955.25	635.93	0	-	133	91663.61377	689.20
	6.99	15.48	3.88	7.47		15.20	-	0	-	8.50	7.93	
Consumer %	3	2	2	2906.63	973.05	1287	630.55	809.1	415.35	7	5002.73	714.68
	0.40	0.48	0.52	0.44		0.48	-	0.48		0.45	0.43	
All %	758	420	387	666246.9	954.68	269434.4	649.94	167861.5	417.76	1565	1155303.67	738.21
	100	100	100	100.00		100.00		100.00		100	100.00	0

Note: Per goat value

Table – 6.15: Goat Purchased by the Sample Buyers by the Breed of Goat July - 07 to June - 08

Type of buyers	Number of goat purchased during July 07to June 08				Price paid				Total goats purchased	Total price paid
	Deshi	Jamuna-pari	Barbari	Others	Deshi	Jamuna-pari	Barbari	Others		
Butcher	632	-	-	-	475800.4	-	-	-	632	475800.4
%	40.38				41.18				40.38	41.18
Trader	698	-	-	-	496034.6	-	-	-	698	496034.6
%	44.60				42.94				44.60	42.94
Commission agent	86	-	-	-	69609.93	-	-	-	86	69609.93
%	5.50				6.03				5.50	6.03
Goat keeper	9	-	-	-	5748.22	-	-	-	9	5748.22
%	0.58				9.84				0.58	9.84
Whole seller	133	-	-	-	91663.61377	-	-	-	133	91663.61377
%	8.50				7.93				8.50	7.93
Consumer	7	-	-	-	5002.73	-	-	-	7	5002.73
%	0.45				0.43				0.45	0.43
All	1565	-	-	-	1155303.67	-	-	-	1565	1155303.67
%	100				100				100	100

Note: Breed wise value of goat

Detail of marketing cost incurred to the sample buyers for buying goats is worked out in table – 6.16, which indicates that average marketing cost all together for the sample buyers is Rs. 31886.50 (Rs.19.13 per goat) in which the cost for individual item are as follows: transport cost - 20.57 per cent, loading/ unloading cost - 12.68 per cent, feeding cost - 4.87 per cent, mandi fee - 29.27 per cent, charges of hire labour - 7.98 per cent and other which includes pocket expenses, tiffin, etc. - 3.96 per cent.

Table – 6.16: Detail of Marketing Cost of the Sample Buyers

Period of selling goat	Item of costs involved (Rs.)									
	Transport charge	Loading / Un-loading	Feeding costs	Mandi Fees	Value family labour	Charges of hired labour	Others			Total
							1	2	3	
July 07 to Dec. 07	6397.44	3982.08	1501.44	8976.00	6364.80	2448.00	408.00	816.00	0.00	30893.76
%	20.71	12.89	4.86	29.05	20.60	7.92	1.32	2.64	0.00	100.00
Jan.08 to June 08	6717.312	4101.5424	1606.541	9694.08	6810.336	2643.84	416.16	889.44	0	32879.25
%	20.43	12.47	4.89	29.48	20.71	8.04	1.27	2.71	0.00	100.00
Total	13114.75	8083.62	3107.98	18670.08	13175.14	5091.84	824.16	1705.44	0.00	63773.01
%	20.56	12.68	4.87	29.28	20.66	7.98	1.29	2.67	0.00	100.00
Average amount for both the period	6557.38	4041.81	1553.99	9335.04	6587.57	2545.92	412.08	852.72	0.00	31886.51 (Rs.20.37)
%	20.57	12.68	4.87	29.27	20.66	7.98	1.29	2.67	0.00	100.00

Figure in parentheses is cost per goat

### Distribution of Butchers:

Distribution of sample butchers by their social status is worked out in the table – 6.17. The table indicates that majority of butchers from each district belong to the other caste. Out of the total sample butcher 85.00 per cent belong to others caste, 10.00 per cent are from scheduled caste and 5.00 per cent from other backward caste.

Table – 6.17: Distribution of Butcher by Caste

Category of the caste	District – I		District – II		Total
	Market – 1	Market - 2	Market – 1	Market - 2	
SC	1	1	-	-	2
%	20.00	20.00	-	-	10.00
ST	-	-	-	-	-
%	-	-	-	-	-
OBC	-	1	-	-	1
%	-	20.00	-	-	5.00
Others	4	3	5	5	17
%	80.00	60.00	100.00	100.00	85.00
Total	5	5	5	5	20
%	100.00	100.00	100.00	100.00	100.00

Note: Percentage of caste (on the basis of 1<sup>st</sup> round survey)

When we look into the sample butchers by their age, we find that under market – I of the district – I, 2 butchers are from the age group of >15 to 35, 2 butchers are from age group of >35 to 50 and only one butcher is of above 50 years old. In market – II of the same district, 1 butcher is from the age group of >25 to 35 years, 3 butchers are from the age group of >35 to 50 years, and one butcher is of above 50 years. Similarly, in market – I of district – II, one butcher is from the age group of >25 to 35 years, 3 butchers are from the age group of >35 to 50 years and one butcher is of above 50 years. However, in market – II of the same district, 4 out of 5 sample butchers are from the age group of >25 to 35 years and remaining one butcher is from above 50 years – (Table – 6. 18).

Table – 6. 18: Distribution of Butcher by Age

Distribution of Butcher by Age	District – 1		District – 2		Total
	Market – 1	Market - 2	Market – 1	Market - 2	
18- 25 yrs.	-	-	-	-	-
%	-	-	-	-	-
>25 - 35	2	1	1	-	4
%	40.00	20.00	20.00	-	20.00
> 35 - 50	2	3	3	4	12
%	40.00	60.00	60.00	80.00	60.00
> 50	1	1	1	1	4
%	20.00	20.00	20.00	20.00	20.00
Total	5	5	5	5	20
%	100.00	100.00	100.00	100.00	100.00

Note: Percentage distribution of age

So far as type of shed of the sample butchers is concerned, in market – I of the district – I, three butchers have ‘kutcha’ shed, one butcher has semi ‘pucca’ shed and one butcher owns hut. In the market – II of the district, two butchers have kutcha shed, two butchers have hut and one butcher has semi pucca shed. In the market – I of the district – II, two butchers have semi pucca shed, two butchers have kutcha shed and one butcher has hut. Among the butcher of market – II of the district – II, four butchers have kutcha shed and one butcher has semi pucca shed (table – 6.19)

Table – 6.19: Type of Shed Structure of the Butcher

Type of shed	District – I		District – II		Total
	Market – 1	Market - 2	Market – 1	Market - 2	
Pucca.	-	-	-	-	-
%	-	-	-	-	-
Semi pucca	1	1	2	1	5
%	20.00	20.00	40.00	20.00	25.00
Kutcha	3	2	2	4	11
%	60.00	40.00	40.00	80.00	55.00
Hut	1	2	1	-	4
%	20.00	40.00	20.00	-	20.00
Total	5	5	5	5	20
%	100.00	100.00	100.00	100.00	100.00

Note: Percentage distribution of age

Out of the 20 sample butcher of the two selected district, 9 (45.00 per cent) have reported that the condition of their shed is better, 10 (50.00 per cent) have reported that their sheds remain in good condition, however, only one butcher reports for bad conditions of his shed which he will remodel soon (table – 6.20).

Table – 6.20: Condition of Shed Structure of the Butcher

Condition of shed	No.		No.		Total
	District – I		District – II		
	Market – 1	Market - 2	Market – 1	Market - 2	
Better	2	3	2	2	9
%	40.00	60.00	40.00	40.00	45.00
Good	2	2	3	3	10
%	40.00	40.00	60.00	60.00	50.00
Bad	1	-	-	-	1
%	20.00	-	-	-	5.00
Total	5	5	5	5	20
%	100.00	100.00	100.00	100.00	100.00

Note: Percentage distribution of shed

### Purchase and Disposal of Goats by the Butchers:

The table – 6.21 indicates that number of goats purchase by the sample butcher in between July – 07 to December – 07 is 488 in which number of goats slaughtered is 472 (96.72 per cent). The slaughtering rates of male, female and kids are 97.52 per cent, 92.51 per cent and 93.75 per cent respectively. However, during the period of January – 08 to June – 08 the slaughtering rate is slightly higher (97.49 per cent) as compared to earlier period July – 07 to December – 07. The slaughtering rate of male goats is higher in January – 08 to June – 08 than that of the earlier period July 07 to December- 07, but slaughtering rate for female and kids is lower in the former period as compared to later.

Table – 6.21: Purchase and Disposal of Goats and their Product (Butchers) July 07 to June 08

Period of Disposal	Type of goats purchased										No. slaughtered				
	Male			Female			Kids			Total		Male	Female	Kids	Total
	No	Value		No	Value		No	Value		No	Value				
July 07 to Dec. 07	404	369837.76	915.44	52	31843.76	612.38	32	12963.84	405.12	488	414645.36	394	48	30	472
%												97.52	92.31	93.75	96.72
Jan. 08 to June 08	337	317319.2	941.6	62	39381.16	635.18	40	17148	428.7	439	373848.36	335	57	36	428
%												99.41	91.94	90.00	97.49
Total	741	687156.96	927.34	114	71224.92	624.78	72	30111.84	418.22	927	788493.72	729	105	66	900
%												98.38	92.11	91.67	97.09

Note: 1. percentage of slaughtered 2. Value per goat

### Disposal of Goat Meat:

It is evident from the table 6.22 that the butcher are found to have sold 86.54 per cent of their meat to the consumer, 8.54 per cent to hotel and 5.01 per cent to others

in during July – 07 to December – 07. The nature of disposal of meat for the next period (January – 08 to June – 08) is more or less same.

Table – 6.22: Purchase and Disposal of Goat and their Product (Butchers)

Period of Disposal	Disposal of meat, legs, head & intestine							
	Consumer		Hotel		Others		Total Meat	
	Kg	Value	Kg	Value	Kg	Value	Kg	Value
July 07 to Dec. 07	2855.82	479777.76	278.85	44616.00	165.33	27279.45	3300.00	551673.21
%	86.54	86.97	8.45	8.09	5.01	4.94	100.00	100.00
Jan. 08 to June 08	2407.54	482904.93	235.08	42314.22	139.38	27178.75	2782.00	552397.90
%	86.54	87.42	8.45	7.66	5.01	4.92	100.00	100.00
Total	5263.36	962682.69	513.93	86930.22	304.71	54458.20	6082.00	1104071.11
%	86.54	87.19	8.45	7.87	5.01	4.93	100.00	100.00

### Cost Items for Selling Meat by the Butchers:

The table 6.23 reveals that total cost of sample butchers from selling of meat is Rs. 4389.00 in which the lion share goes to the cost of hired labour 43.18 per cent followed by the rent of the shop 13.67 per cent, cost of water, electricity 7.29 per cent, feeding cost 7.06 per cent, value of family labour 6.31 per cent, license fee 6.15 per cent charge of Municipality/ other authority 5.70 per cent and salt 1.03 per cent. In details, the cost structure of both the period i.e. in between July – 07 to December – 07 and January – 08 to June – 08 is more or less same.

Table – 6.23: Cost Incurred (Rs.) Butcher

Items of cost	July 07 to Dec. 07	%	Jan. 08 to June 08	%	Total July 07 to June 08	%
Feeding costs	150	7.22	160	6.92	310	7.06
Salt	20	0.96	25	1.08	45	1.03
Value of family lab.	122	5.87	155	6.70	277	6.31
Charges of hired labour	915	44.05	980	42.39	1895	43.18
Licensed fee	135	6.50	135	5.84	270	6.15
Charge of Municipality/Other	125	6.02	125	5.41	250	5.70
Rent of shop	300	14.44	300	12.98	600	13.67
Cost of water, electricity, etc.	160	7.70	160	6.92	320	7.29
Other charges	150	7.22	272	11.76	422	9.61
Total	2077	100.00	2312	100.00	4389	100.00

### Cost and in Income (Butchers):

The table – 6.24 indicates that in between July – 07 to December – 07 cost incurred per households and per goat to the butcher are Rs.103.85 and Rs. 4.26 respectively and net income per household and per goat is Rs. 7900.69 and Rs. 323.80

respectively. Cost and net income per households and per goat are relatively hire in between January – 08 to June –08 has compared to the period July – 07 to December – 07. Cost per household and per goat are Rs. 115.60 and Rs. 5.27 respectively and net returns are Rs.10009.25 and Rs. 456.00 respectively.

Table – 6.24: Cost and Income (Rs.)

Cost and Income	July 07 to Dec. 07	Per household cost & income	Per goat cost & income	Jan. 08 to June 08	Per household cost & income	Per goat cost & income	Total July 07 to June 8	Per household cost & income	Per goat cost & income
1.Price of goats	414645.36	20732.27	849.68	373848.36	18692.42	851.59	788493.72	19712.34	850.59
2. Total charge paid	2077.00	103.85	4.26	2312.00	115.60	5.27	4389.00	109.73	4.73
Total cost	416722.36	20836.12	853.94	376160.36	18808.02	856.86	792882.72	19822.07	855.32
1. Meat	551673.21	27583.66	1130.48	552397.90	27619.90	1258.31	1104071.11	27601.78	1191.02
2. Skin	23062.88	1153.14	47.26	23947.45	1197.37	54.55	47010.33	1175.26	50.71
Total income	574736.09	28736.80	1177.74	576345.35	28817.27	1312.86	1151081.44	28777.04	1241.73
Net income	158013.73	7900.69	323.80	200184.99	10009.25	456.00	358198.72	8954.97	386.41

Note: Per household income, Per goat income

### Skin Traders:

Distribution of skin traders by their cast is displayed in the table 6.25 which indicates that 2 households (10.00 per cent) are schedule caste, one (5.00 per cent) household belongs to other backward caste and remaining 17 (85.00) skin traders belongs to other caste.

Table – 6.25: Distribution of Skin traders by Caste

Category of the caste	District – I		District – II		Total
	Market – 1	Market - 2	Market – 1	Market - 2	
SC	1	1	-	-	2
%	20.00	20.00	-	-	10.00
ST	-	-	-	-	-
%	-	-	-	-	-
OBC	1	-	-	-	1
%	20.00	-	-	-	5.00
Others	3	4	5	5	17
%	60.00	80.00	100.00	100.00	85.00
Total	5	5	5	5	20
%	100.00	100.00	100.00	100.00	100.00

Note: Percentage of caste (on the basis of 1<sup>st</sup> round survey)

Number of family members involves in each sample skin traders is worked out in the table – 6.26 which indicates that in most of the cases (sample skin trader) only one family member is engaged in skin trading. Only in case of market – II of district – II more than one family member is engaged in skin trading.

Table – 6.26: Distribution of Family Members Involved in Skin Trading

Category of the caste	District – I		District – II		Total
	Market – 1	Market - 2	Market – 1	Market - 2	
Upto 1	5	5	4	5	19
%	100.00	100.00	80.00	100.00	95.00
>1 - 5	-	-	1	-	1
%	-	-	20.00	-	5.00
>5 - 10	-	-	-	-	-
%	-	-	-	-	-
> 10	-	-	-	-	-
%	-	-	-	-	-
Total	5	5	5	5	20
%	100.00	100.00	100.00	100.00	100.00

Note: Percentage of caste (on the basis of 1<sup>st</sup> round survey)

### Marketing Cost and Net Return of Sample Skin Traders:

The table – 6.27 indicates that on average, the purchasing price goat skin during July – 07 to December – 07 is Rs. 47.24 which is slightly higher - Rs.52.25 during January – 08 to June – 08. The selling prices of skin during July – 07 to December – 07 and January – 08 to June – 08 are Rs. 58.22 and Rs.61.55 respectively. The marketing cost involve for these two periods are Rs. 1.25 and 1.60 respectively. Hence, the net returns per skin are Rs.10.98 during July 07 to December – 07 and Rs. 9.30 during January – 08 to June – 08.

Table - 6.27:Detail Of marketing cost of the sample skin trader

Period of selling goat	Cost involve (Rs.)														
	Avg. No of skin collected	Price paid	Avg. price paid per skin	Price received from whole-seller/others	Avg. price received per skin	Net return (Rs./skin)	Charges to and fro	Loading / Un-loading	Preservation cost	Storage charge	Interest charge	others	Total cost	Avg. cost per skin	Net return
July 07 to Dec. 07	1566	73977.84	47.24	91172.52	58.22	10.98	622.67	476.45	390.35	-	-	472.22	1961.69	1.25	10.98
Jan.08 to June 08	1439	75187.54	52.25	88570.62	61.55	9.30	765.44	532.20	410.33	-	-	588.57	2296.54	1.60	9.30
Total	3005	149165.38	49.64	179743.14	59.81	10.18	1388.11	1008.65	800.68	-	-	1060.79	4258.23	1.42	10.18
Average amount for both the period	1502.5	74582.69	49.64	89871.57	59.81	10.18	694.06	504.33	400.34	-	-	530.40	2129.12	1.42	10.18

### Wholesale Skin Traders:

The required number of wholesale skin traders was available in the single market area i.e. market – I of the district – II. Hence, data have been collected from these sample wholesale skin traders.



In the distribution of wholesale skin traders by their caste in the table – 6.28. From the table it is found that all the sample skin trader belong to the other caste.

Table – 6.28: Distribution Whole Sale of Skin Traders by Caste

Category of the caste	District – I		District – II		Total
	Market – 1	Market - 2	Market – 1	Market - 2	
SC	-	-	-	-	-
%	-	-	-	-	-
ST	-	-	-	-	-
%	-	-	-	-	-
OBC	-	-	-	-	-
%	-	-	-	-	-
Others	-	-	8	-	8
%	-	-	100.00	-	100.00
Total	-	-	8	-	8
%	-	-	100.00	-	100.00

Note: Percentage of caste (on the basis of 1<sup>st</sup> round survey)

The wholesale skin traders usually collect goat skin from the butcher and the skin traders who usually collect (Purchase) skin from butcher of different areas. During July – 07 to December – 07, total number of goat skin purchased by the sample wholesale skin traders are 5376 for which average price per skin is Rs.61.36. In between January – 08 to June - 08 number of skin purchased is 4861 and cost incurred per skin is Rs. 63.75. However, for both the periods purchasing price of skin from the traders is relatively higher as compared to the skin purchased from the butcher.

On the other hand, the wholesale skin traders have sold these skins to leather processors and others (commission agents of the processors). By selling out these pieces of skin, the wholesale skin trader get Rs. 89.69 and Rs. 86.47 from the processor and other respectively during July – 07 to December – 07. However, during January – 08 to June – 08 the wholesale skin trader get some higher prices which are Rs. 72.94 and Rs. 70.12 from the processor and other respectively. The average price per skin is Rs. 81.52. The total cost per skin is Rs. 79.15. Hence, net return is Rs. 2.37 per skin.

#### **Cost Involve to Wholesale Skin Trader and Net Return:**

Average cost for transaction of skin by the whole skin trader for both the period July – 07 to December – 07 and January – 08 to June – 08 has been worked out in the table 6.30 which indicates that average cost per skin for different items of cost are as follows: cost for loading/unloading Rs. 1.48, preservation cost Rs. 0.44, processing cost Rs.1.33, cost for water and electricity Rs.2.98, value of family labour Rs. 2.59, value hired labour Rs.2.93, payment of salary Rs. 2.97, interest paid Rs. 0.44, wastage value Rs. 0.54 and other cost Rs.0.96 and the value of skin purchased from different sources is Rs.62.49. Annual net return of the sample skin traders is Rs.59161.32 and return per skin is Rs. 11.58 (Table – 30).

Table - 6.29: Transaction of Skin of Whole Seller ( Unit Rs.)

Period of skin transaction	Collection of skin from different sources								Sold to				Total	
	Butcher		Trader		Other		Total		Processor		Other			
	No	value	No	value	No	value	No	value	No	value	No	value	No	value
July 07 to Dec. 07	1920	112578	3456	217313			5376	329891	5032	451334	305	26374	5337	477708
Rs/Skin	35.71	58.63	64.29	62.88			100.00	61.36		89.69		86.47		89.51
Jan.08 to June 08	1684	105461	3177	204408			4861	309869	4593	334999	284	19914	4877	354913
Rs/Skin	34.64	62.63		64.34				63.75		72.94		70.12		72.77
Average amount for both the period	1802	109019.5	3316.5	210860.5	0	0	5118.5	319880	4812.5	393166.5	294.5	23144	5107	416310.5
Rs/Skin		60.50		63.58				62.49		81.70		78.59		81.52

Table – 6.30: Cost involve (Rs) for the Periods. July - 07 to December - 07 and January - 08 to June - 08

Period of selling goat	Average Cost involve (Rs.)											
	Loading / Un-loading	Preservation cost	Processing charge	Cost for water & electricity	Value of family labour	Value of hired labour	Payment of salary	Interest paid	Wastage value	Others	Cost of skin	Total cost
July 07 to Dec. 07	7906.84	2301.11	7470.21	15578.60	13031.13	15343.88	15517.18	2268.97	2823.73	3542.91	329891.00	415675.56
Jan.08 to June 08	7220.57	2179.62	6158.49	14931.67	13441.15	14668.79	14946.12	2185.47	2719.81	6302.12	309869.00	394622.81
Total	15127.42	4480.73	13628.69	30510.26	26472.28	30012.67	30463.30	4454.43	5543.54	9845.04	639760.00	810298.36
Average amount for both the period	7563.71	2240.36	6814.35	15255.13	13236.14	15006.33	15231.65	2227.22	2771.77	4922.52	319880.00	405149.18
	1.48	0.44	1.33	2.98	2.59	2.93	2.97	0.44	0.54	0.96	62.49	79.15
Net Return - Rs. 11161.32										Return per Skin – Rs. 2.37		

## Chapter – VII

### Problems and Constraints of Goat Rearing

The people of lower income groups in West Bengal are rearing Goat, the major contributor of meat production. At village level, goats are being raised as sideline activity, so the management of the same is still remains at subsistence level. The activity does not give support in term of regular income flow of the rearers, but only provide some ad-hoc cash many, which the goat keepers use during urgent need for family expenditure. The major constraints as perceived by the sample goat rearers are presented in the tables – 7.1 to 7.10.

#### Availability of Proper Breed of Goats:

General perception is that high yielding breeds of livestock would provide better income as compared to the traditional breeds. But so far as rearing of goats in West Bengal is concerned, the traditional breed of goats – “Black Bengal/ Bengal Breed” could survive smoothly than that of the any other breed of goat. So, the sample goat keepers of the study area are not so much eager to change the breeding system of goats. Accordingly, majority of the sample households opine that the availability proper breed of goat for rearing purpose is not a problem (Table – 7.1).

**Table – 7.1: Opinion of the Respondents (No.) about Availability of Proper Breed**

Availability of proper breed	District - I					District - II					Total
	Market – I		Market - II		Sub-Total	Market – I		Market - II		Sub-Total	
	Village 1	Village 2	Village 1	Village 2		Village 1	Village 2	Village 1	Village 2		
Yes (No.)	10	11	8	8	37	10	12	11	12	45	82
%	83.33	84.62	61.54	66.67	74.00	76.92	100.00	84.62	100.00	90.00	82.00
No (No.)	2	2	5	4	13	3	-	2	-	5	18
%	16.67	15.38	38.46	33.33	26.00	23.08	-	15.38	-	10.00	18.00
Total (No.)	12	13	13	12	50	13	12	13	12	50	100.00
%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	

#### Availability of Feed:

Availability of feed for goats is one of the major problems. As regards to availability of feeds, 86.00 per cent sample households of the sample district – I and 82.00 per cent households of the sample district – II opine that feeding of goats is rather a problem of goat rearing (Table – 7.2).

**Table – 7.2: Opinion of the Respondents (No.) about Availability of Feed at Reasonable Price**

Availability of feed at Reasonable Price	District - I					District - II					Total
	Market – I		Market - II		Sub-Total	Market – I		Market - II		Sub-Total	
	Village 1	Village 2	Village 1	Village 2		Village 1	Village 2	Village 1	Village 2		
Yes (No.)	2	2	1	2	7	2	1	3	3	9	16
%	16.67	15.38	7.69	16.67	14.00	15.38	8.33	23.08	25.00	18.00	16.00
No (No.)	10	11	12	10	43	11	11	10	9	41	84
%	83.33	84.62	92.31	83.33	86.00	84.62	91.67	76.92	75.00	82.00	84.00
Total (No.)	12	13	13	12	50	13	12	13	12	50	100
%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

### Availability of Proper Treatment:

The main problem of goat rearing in the study area is non-availability of veterinary facilities and lack of proper treatment for goat. On the question of availability of proper treatment for goats, 94.00 per cent of the sample households of the district – I, and 89.00 per cent households of the district – II reported that they were not getting proper treatment of goat when these are affected from diseases (Table – 7.3). The most of sample households reported that the facilities for advice for health care and diagnosis of diseases for goats are desperately inadequate. In most of the cases, medicine are not available from the government veterinary hospitals, so, the goat rearers have to purchase the same from the market, when the animal (goats) become ill.

**Table – 7.3: Opinion of the Respondents (No.) about Availability of proper Treatment from**

Availability of proper treatment from Vet. Hospital	District - I					District - II					Total
	Market – I		Market - II		Sub-Total	Market – I		Market - II		Sub-Total	
	Village 1	Village 2	Village 1	Village 2		Village 1	Village 2	Village 1	Village 2		
Yes (No.)	1	-	1	1	3	2	1	3	2	8	11
%	8.33	-	7.69	8.33	6.00	15.38	8.33	23.08	16.67	16.00	11.00
No (No.)	11	13	12	11	47	11	11	10	10	42	89
%	91.67	100.00	92.31	91.67	94.00	84.62	91.67	76.92	83.33	84.00	89.00
Total (No.)	12	13	13	12	50	13	12	13	12	50	100
%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

### Availability of Knowledge of Diagnosis of Diseases:

In the rural areas, the accesses to the medical store are poor. So, 93.00 per cent of the sample households reported that they had to purchases medicine at higher prices. Since, the “Black Bengal” breed of goat could survive easily even an odd environment so the mortality rate for it is to some extent lower as compared to the other breeds of goat – as reported the sample households. According to the sample households, due to the existing feeding system of goats - fixing goats with 5 to 10 meter rope in the fellow marginal lands and allowing than to search out browse and

small plant for grazing – invite to some extent higher intensity of disease/illness. Frequent uses of pesticides and insecticide in the crop land sprinkle out to the browse and grass land and consuming such toxically grass/brows, goats often become ill. Apart from that existing system of goat rearing (backyard farming) also invite certain diseases (table – 7.4).

Table– 7.4: Opinion of the Respondents (No.) about Availability Knowledge of Diagnosis of Diseases

Availability of knowledge of diagnosis of diseases	Frequent visit of doctors	Availability of medicine form hospital	Availability of free medicine	Whether prices of medicine is high	Whether mortality is high	Whether intensity of disease of goat is high
Yes (No.)	2	3	2	93	31	41
%	2.00	3.00	2.00	93.00	31.00	41.00
No (No.)	98	97	98	7	69	59
%	98.00	97.00	98.00	7.00	69.00	59.00
Total (No.)	100	100	100	100	100	100
%	100.00	100.00	100.00	100.00	100.00	100.00

### Availability of Grazing Land:

There is no access to grazing land for the sample households (Table – 7.5). Goats, in the study areas, are mainly fed on grazing grass and browses in the mango garden, on the flood protective embankment on the bank of ponds/ tanks, on the roadside fellow land and other marginal lands. Such feed feeding cannot provide required nutrition to the goats, unless they are given additional feed.

Table – 7.5: Opinion of the Respondents (No.) about Availability of Grazing Land

Availability of grazing land	District - I						District - II						Total
	Market – I		Sub-Total	Market - II		Sub-Total	Market – I		Sub-Total	Market - II		Sub-Total	
	Village 1	Village 2		Village 1	Village 2		Village 1	Village 2		Village 1	Village 2		
Yes (No.)	-	-	-	-	-	-	-	-	-	-	-	-	-
%	-	-	-	-	-	-	-	-	-	-	-	-	-
No (No.)	12	13	25	13	12	25	13	12	25	13	12	25	100
%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Total (No.)	12	13	25	13	12	25	13	12	25	13	12	25	100
%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

### Availability of Sufficient Place for Keeping Goats:

In the sample villages goats are kept in the dwelling houses, kitchen, extended portion of dwelling /kitchen house, and some cases in the separate shed along with other ruminants. According to the sample respondent of the village – I of the district – I, 20.00 per cent of the sample households have and easy access to places for keeping goats and in the cases of 80.00 per cent of the sample households somehow manage for the same. Similarly in village – II of district – I, 60.00 per cent households have poor access to keep goats. However, in the district – II, 52.00 per cent of the sample households have access to keep goats and 48.00 per cent keep the goats in their dwelling places, while in the village – II of the district – II, 68.00 per cent household

have poor access to keep goat and 32.00 per cent household report that they have access to keep goats (table – 7.6).

Table–7.6: Opinion of the Respondents (No.) about Availability of Sufficient Place for Keeping Goats

Availability sufficient place for keeping goats	District - I						District - II						Total
	Market – I		Sub-Total	Market - II		Sub-Total	Market – I		Sub-Total	Market - II		Sub-Total	
	Village 1	Village 2		Village 1	Village 2		Village 1	Village 2		Village 1	Village 2		
Yes (No.)	9	11	20	8	8	16	6	7	13	8	9	17	66
%	75.00	84.62	80.00	61.54	66.67	64.00	46.15	58.33	52.00	61.54	75.00	68.00	66.00
No (No.)	3	2	5	5	4	9	7	5	12	5	3	8	34
%	25.00	15.38	20.00	38.46	33.33	36.00	53.85	41.67	48.00	38.46	25.00	32.00	34.00
Total (No.)	12	13	25	13	12	25	13	12	25	13	12	25	100
%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

### Opinion about Available Market Structure:

It is evident from table - 7.7 that 22.00 per cent sample households of district – I and 24.00 per cent of district – II opine that available market structure is appropriate and 22.00 per cent of the sample households of each district opine that the available market structure is adequate.

Table – 7.7: Opinion of the Respondents (No.) about Available Marketed Structure

Available market structure	District - I					District - II					Total
	Market – I		Market - II		Sub-Total	Market – I		Market - II		Sub-Total	
	Village 1	Village 2	Village 1	Village 2		Village 1	Village 2	Village 1	Village 2		
Appropriate	2	4	3	2	11	4	3	3	3	13	24
%	16.67	30.77	23.08	16.67	22.00	30.77	25.00	23.08	25.00	26.00	24.00
Adequate	2	3	2	4	11	3	2	4	2	11	22
%	16.67	23.08	15.38	33.33	22.00	23.08	16.67	30.77	16.67	22.00	22.00

### Availability of Market Infrastructure:

There is no regulated market for goats in the study areas. Goats are sold mainly between goat keepers and middlemen/professional traders through mutual compromise. There is no auction or other systems of marketing of goats. Though there are several weekly “huts” for marketing of goats in the study areas but the infrastructure facilities in these “huts” are too much inadequate. Such inadequate infrastructure facilities of goat market also confirm by the sample households by the table – 7.8, which indicates that 80.00 per cent and 76.00 per cent sample households of market – I and market – II of the district – I have reported that they have poor access to infrastructure facilities. Similarly, 76.00 per cent sample households of the villages of market – I and II of the sample district – II have reported for inadequate infrastructure facilities of goat markets.

Table – 7.8: Opinion of the Respondents (No.) about Availability of Market Infrastructure

Availability of market infrastructure	District - 1						District - 2						Total
	Market – I		Sub-Total	Market - II		Sub-Total	Market – I		Sub-Total	Market - II		Sub-Total	
	Village 1	Village 2		Village 1	Village 2		Village 1	Village 2		Village 1	Village 2		
Yes (No.)	2	3	5	4	2	6	3	3	6	3	3	6	23
%	16.67	23.08	20.00	30.77	16.67	24.00	23.08	25.00	24.00	23.08	25.00	24.00	23.00
No (No.)	10	10	20	9	10	19	10	9	19	10	9	19	77
%	83.33	76.92	80.00	69.23	83.33	76.00	76.92	75.00	76.00	76.92	75.00	76.00	77.00
Total (No.)	12	13	25	13	12	25	13	12	25	13	12	25	100
%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

### Availability of Transport Facilities:

As regards to the transport facilities for marketing of goats 60.00 per cent of the sample households of market – I (district – I) and 44.00 per cent of market – II (district – I) have reported that they have smooth transport facilities. However, in district – II altogether 52.00 per cent opine that they have good transport facilities (Table – 7.9).

Table -.7.9:Opinion of the Respondents (No.) about Availability of Transport Facility

Availability of transport facility	District - 1						District - 2						Total
	Market – I		Sub-Total	Market - II		Sub-Total	Market – I		Sub-Total	Market - II		Sub-Total	
	Village 1	Village 2		Village 1	Village 2		Village 1	Village 2		Village 1	Village 2		
Yes (No.)	7	8	15	6	5	11	7	6	13	8	5	13	52
%	58.33	61.54	60.00	46.15	41.67	44.00	53.85	50.00	52.00	61.54	41.67	52.00	52.00
No (No.)	5	5	10	7	7	14	6	6	12	5	7	12	48
%	41.67	38.46	40.00	53.85	58.33	56.00	46.15	50.00	48.00	38.46	58.33	48.00	48.00
Total (No.)	12	13	25	13	12	25	13	12	25	13	12	25	100
%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

### Availability of Credit:

For development of goat rearing system, requirement of some capital is essential. Since, majority of goats rearers in the rural areas are poor or people of lower income groups, they required some credit for the same. But they have poor access to availability of credit. It is evident from the table 7.9 that 96.00 per cent of the sample goat rearers of the villages of district – I have either no or poor access to the capital. Similarly, 86.00 per cent sample households of the village of the district – II, have reported poor access to capital for development of goat rearing. However, only 4.00 per cent of the sample households of the village – I of market – I in district – I are found to have received credit from the formal source of lending agency but the amount they have received is not adequate.







It is evident from the above discussion that selling of goats and their products are mainly made in the traditional markets which are thinly scattered and under developed. This market lacks basic marketing infrastructures. Marketing of by-products like hide and skins have also required due attention.

In order to encourage efficient marketing systems of goats and their products, there is need for making investment to create physical infrastructure in the markets. Developed physical infrastructure will promote the linkage between producer, processor and consumer.

For efficient marketing, there are also need for regulatory and legal frameworks, for which the government should create a level playing field for different types of market agents, promote appropriate market institutions, infuse higher competition among the various market players and encourage small rearers to integrate with agribusiness firms. Measures also to be taken to bring transparency in the conduct of marketing functions.

## Chapter – VIII

### Summary and Conclusion

Goat is reared almost in all corners of the world. Human being domesticated goat for its milk, meat and skin. When goats are reared for commercial and extension purposes, large number of goats is kept within a single flock. Adoption of goat rearing enterprise and its management depends upon the social acceptability and rearing environment. Thus, the system of goat management is mostly a function of social acceptance of community to goat, availability of land, pasture, human resource, capital and economic dependence on livestock in general and goats in particular, etc. Management of goat includes grazing, feeding, reproduction, health care, etc. The systems of goat management are of different types; village system, extensive system, semi-extensive system, intensive system and very intensive system.

The marketing of goats is mostly a neglected sector. The potentiality of goat in Indian economy is obviously important. Large sections of rural people are engaged in the rearing of goats. By nature, goat can easily survive on available grass, shrubs and trees. Goat population in India is about 124 million (2002), which accounts for 16.5% of world population in of goat. By the given number of goats, production of goat meat stands at the level of 0.47 million tones. Goats are distributed across all agro-climatic regions of the country.

Rapid urbanization combined with continued economic growth has been continuously pushing up the market demand for livestock products – mainly meat. Thus, growth in the demand of meat could provide great opportunity to the goat rearers to reap higher income from goat keeping. But goat market in most parts of India is unorganized - operating under the clutches of a nexus of small traders, market agents, middleman and ‘aratdars’ etc. So, the most of goat rearers find it difficult to penetrate these markets because of these nexus. Due to absence of strong networks of market access and information, an inefficient market is being operative so far the transaction of goat is concerned.

Thus, in the present study, an attempt has been made to find out the nature and access to the marketing of live goats and goat meat with the following objectives:

#### **Objectives:**

- To study the goat marketing system and marketing access to goat farmers.
- To ascertain the constraints in marketing of farmers goat.

- To identify leverage points for developing a system ensuring fair marketing access and prices of goats.
- To study the marketing system of goat products.
- To suggest suitable development strategies for efficient marketing of goats and their products.

### **Methodology:**

Keeping in view the objectives of the study, a multistage sampling technique has been adopted for the selection of the regions, districts, markets, villages, goat keepers, etc.

First of all, two regions namely 'Rarh' and 'Gangatic Plain' respectively have been selected and two districts from each region, namely - Burdwan and Murshidabad have been selected on the basis of highest concentration of goats' population. From each selected district, two important markets namely Natunhat and Gueskora for Burdwan district and Dakbangla and Baldanga for Murshidabad district have been selected purposively. Two villages, one in the vicinity of the market and the other far-off the market are selected on the basis of availability of sufficient number of goat keepers in the villages. A list of goat keepers is prepared and classify the owners of goats on the basis of herd size of goats in to 4 groups viz. 1-5, 6-15, 16-30 and >30 goats. Fifty goat keepers have been selected from 4 villages of 2 markets of each sample district on the basis of probability to proportion of their number in the respective group. Thus, a total of 100 goat keepers from two districts is the ultimate sample.

In order to know the system of goat marketing, 5 sellers and 5 buyers of goats are selected from each selected market. Thus, in all 20 sellers and 20 buyers of goats will be selected purposively from 4 markets of two districts.

Apart from these, the information of goat products (milk, meat, skin) is also be required for this study. Hence, 5 butchers, 5 petty skin merchants, merchants are also selected purposively from each selected market. Thus, 20 butchers, 20 petty skin traders are the respondents from 4 markets of two selected districts. Since, the presence of wholesale skin traders is found only one market of the sample districts, the acquired numbers of skin traders (8) have been selected from sample market for in depth survey.

**Reference year – From July 2007 to June 2008.**

## II

### Profile of West Bengal:

West Bengal is a state in eastern part of India. With Bangladesh, which lies on its eastern border, the state forms the ethno-linguistic region of Bengal. West Bengal has a population density of 904 inhabitants per square kilometer; making it the most density populated state in India. The state contributes 7.8% of India's population. Agriculture is the leading occupation in West Bengal. Rice is the state's principal food crop. State industries are localized in the Kolkata region and the mineral-rich western highlands. Total livestock population of West Bengal is 34543 thousands in the year 2003. The state West Bengal possesses 11.76 million of goats in 2003 (Table –8.1).

Table - 8.1: Population of Live Stock in the State

Live Stock	Year					
	1982	1988-89	1993-94	1997-98	2003	2008
Cows	15658 (52.69)	16510 (52.01)	17206 (49.32)	17832 (48.12)	17984 (52.06)	-
Buffaloes	987 (3.32)	965 (3.04)	980 (2.81)	998 (2.69)	876 (2.53)	-
Sheep	1365 (4.59)	1460 (4.60)	1415 (4.05)	1462 (3.94)	1411 (4.08)	-
Goat	10916 (36.73)	11890 (37.46)	14167 (40.61)	15648 (42.21)	11757 (34.03)	-
Pig	768 (2.58)	898 (2.83)	1018 (2.92)	1098 (2.96)	899 (2.60)	-
Total Live Stock	29718 (100.00)	31742 (100.00)	34887 (100.00)	37056 (100.00)	34543 (100.00)	-

Note: Percentage /Index number. Density Poultry is not included in the total livestock

Figures in Parenthesis are Percentage to the total

In 2006 the share of goat meat in total meat production of the state is highest (45.28%) followed by cow buffaloes (40.31%), pigs/ pork (9.46%) and sheep – 4.93 per cent. cattle – 25.17 %, buffaloes – 2.21%, sheep – 3.42%, goats 30.87%, pigs 7.58% and poultry – 30.75%. So goats alone are the highest contributors of meat production of the state.

Directorate of Animal Resource & Animal health of west Bengal Govt. has 91 state Animal Health Centre, 19 District Veterinary Hospitals, 341 Block Animal Health Centre and 271 Addl. Block Health centers.

### III

#### Profile of Sample Districts:

##### Burdwan

The district Burdwan is called the granary of West Bengal having the advantages of rich Gangetic Vindhya alluvial soil with the River Valley Projects. Burdwan is one of the most important and thickly populated districts in the State. This district is located between the latitude of 22° 56' and 23° 53' North and the longitude of 86° 48' and 88° 25' east.

Distribution of cattle population of Burdwan district has been shown in the table – 8.2. The table reveals that the share of goats in total cattle population of the district is 30 to 35 per cent followed by cow around 20 per cent, buffalos & sheep and pigs about 4 per cent each and other livestock – 29 to 34 per cent (Table –8.2).

Table – 8.2: Population of Livestock (Year-wise) Burdwan District

Year	Live-Stock													
	Cows	% Share	Buffaloes	% Share	Sheep	% Share	Goats	% Share	Pig	% Share	Others	% Share	Total	% Share
1993	603580	20.19	128748	4.31	128883	4.31	998734	33.41	127620	4.27	1002110	33.51	2989675	100
1998	621249 (2.93)	19.68	430376 (1.23)	4.13	128946 (0.49)	4.08	1107080 (10.85)	35.07	137624 (7.84)	4.36	1031616 (2.94)	32.68	3156819 (5.59)	100
2003	671144 (11.94)	20.16	127539 (0.94)	3.83	140873 (9.30)	4.23	1127184 (12.86)	33.85	120994 (- 5.19)	3.63	1142178 (13.78)	29.30	3329912 (11.38)	100
2008	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Note: 1. Percent share to total and percent change over base year i.e. 1993

2. Figures in parentheses are change in %

Source: Statistical Abstract 2004 – 05

Data of milk production from individual animal was not available. Total milk production of Burdwan district has increase from 268 thousand tones in the year 1990-91 to 480 thousand tones in 2006-07. The rate of increase from 1991 to 2001 was 77.24 per cent and from 1990-91 to 2006-07 the rate of increase was 79.10 per cent. District wise data for meat production was not available. There is no organized cattle market in the district.

Burdwan district has one district veterinary hospital, 10 State Animal Health Centre, 31 block Animal Health center and 277 additional health centers.

##### **Murshidabad**

Murshidabad is the northern-most district of Presidency Division of West Bengal and lies between the latitude 24° 50' 20'' and 23° 43' 30'' in the northern hemisphere. The eastern-most extremity of the district is marked by 88° 46' 00'' east longitude and its western-most extremity by 87° 49' 17''.

The district is bounded by Santal Parganas of Bihar and Birbhum district on the west; on the north and east by the districts of Maldah, Rajshahi (Bangladesh) and Nadia; on the south by the districts of Burdwan and Nadia.

The present area of the district is 5341 sq. kms. The district comprises of four subdivisions viz. Jangipur, Lalbagh, Sadar or Berhampore and Kandi. There are twenty-six Panchayat Samities covering twenty-one Police Stations in the district. Density population is 699 per sq. km (As per 1981 Census).

Marketing of agricultural produce is largely controlled and managed by the private traders until now. There are nine (9) Govt. hats/markets, twenty one (21) nos. of retail as well as primary markets sheltered all over the district.

In livestock population of Murshidabad district, share of goat population is highest - more than 50 per cent followed by other livestock more than 30 per cent, cow 15 per cent, buffaloes and sheep about 4 per cent to 5 per cent each and pig less than 1 per cent - (Table-8.3).

Table – 8.3: Population of Livestock (year-wise) Murshidabad

Year	Live-Stock													
	Cows	% Share	Buffaloes	% Share	Sheep	% Share	Goats	% Share	Pig	% Share	Others	% Share	Total	% Share
1993	312347	12.46	100352	4.00	124604	4.97	1265631	50.48	24611	0.98	704069	28.08	2507003	100
1998	321361 (2.89)	12.01	101619 (1.26)	3.80	124665 (0.05)	4.66	1402929 (10.85)	52.42	26540 (7.84)	0.99	725818 (3.09)	27.12	2676392 (6.76)	100
2003	444684 (42.37)	14.70	103141 (2.78)	3.41	118290 (-5.07)	3.91	1414791 (11.78)	46.78	21894 (11.04)	0.72	943394 (33.99)	31.19	3024300 (20.63)	100
2008	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Note: 1. Per cent share to total and per cent change over base year i.e. 1993

2. Figures in parentheses are change in %

Source: Statistical Abstract 2004 – 05

No data for milk production for individual livestock is available. However, total milk production of the district has increased from 161 thousand tones in 1990 – 91 to 469 thousand tones in 2006 – 07, the rate of increase during last fifteen years is about 191.30 per cent. Data for meat production was not available.

The district has seven State Animal Hospital, one District Veterinary Hospital, 225 Animal Aid Centre, 538 A.I. Units and others laboratory and others five. The numbers of all hospitals and aid centers are constant over last 5 years – 2001-2005 but numbers of A. I. Units had increased from 310 in 2001 to 538 in 2005.

#### IV

#### Main Findings:

In both the sample districts, the majority (64 per cent) of households have flock size of goats numbering 1 to 5, 33 per cent households have flock size is consisting of 6 to 15 and remaining 3 per cent households have the flock size of goats numbering – 16 to 30.

Among the sample households, 84.00 per cent households belong to the other caste and remain 16.00 per cent households hail from scheduled caste. The education status of the sample households shows that more than 74.00 per cent of the sample goat rearing households are either illiterate or some how could have been able to write his/her name.

Since goat rearing is mainly enterprise by the people of low income groups, the main occupation of 50.00 per cent goat rearing household are agricultural labour and percentage figures of main occupation of remaining households are as follows: agriculture – 27.00 per cent, goat rearing 4.00 per cent, service – 1.00 per cent, other labour 5.00 per cent, business 6.00 per cent and others 7.00 per cent.

Pursuing secondary occupation, 76.00 per cent of the sample households opted goat rearing as secondary occupation.

Looking into the land account of the sample households, it is found that majority (60.00 per cent) of goat rearing households are land less, 33.00 per cent are marginal farmers having land up to 1.00 hectare and 7.00 per cent of the sample households are small farmers. Access to grazing land of the sample households is almost negligible.

Concentration of animal resource is highest among the landless households in Burdwan district, whereas concentration of the same is highest among the marginal farmers in Murshidabad district. However, in the distribution of live stock among the sample households for both the districts, the land less households are possessing 53.45 of goats, 58.33 per cent of sheep, 62.50 percent of cows and 61.67 percent of other animals like bullocks etc. and the marginal farmers of are found to be owing 41.82 per cent of goats, 22.22 per cent of sheep, 31.25 percent of cows, 66.67 per cent of buffaloes and 25.00 percent of other animal, and the remaining 4.73 per cent of goats, 19.45 per cent of sheep, 6.25 per cent of cows, 33.33 percent of buffaloes and 13.33 percent of other animals are found to have owned by the small farmers (Table –8.4).



Table – 8.4 : Live-stock Position by the Size of Farms on the Sample Farms on July, 2007

Categories of Farms (ha)	<b>District –I (Burdwan)</b>				
	Goat	Sheep	Cows	Buffaloes	Others
	No	No	No	No	No
Land less	148 (57.81)	16 (84.21)	24 (75.00)	- -	32 (65.31)
Marginal (below 1 ha)	94 (36.72)	3 (15.79)	7 (21.87)	- -	11 (22.45)
Small ( 1 – 2 ha)	14 (5.47)	-	1 (3.13)	- -	6 (12.24)
Medimum (2-4 ha)	-	-	-	- -	-
Large (> 4 ha)	-	-	-	- -	-
All	256 (100.00)	19 (100.00)	32 (100.00)	- -	49 (100.00)
<b>District – 2 (Murshidabad)</b>					
Land less	146 (49.66)	5 (29.41)	6 (37.50)	-	5 (45.46)
Marginal (below 1 ha)	136 (46.26)	5 (29.41)	8 (50.00)	4 (66.67)	4 (36.36)
Small ( 1 – 2 ha)	12 (4.08)	7 (41.18)	2 (12.50)	2 (33.33)	2 (18.18)
Medimum (2-4 ha)	-	-	-	-	-
Large (> 4 ha)	-	-	-	-	-
All	294 (100.00)	17 (100.00)	16 (100.00)	6 (100.00)	11 (100.00)
<i>Both Districts</i>					
Land less	294 (53.45)	21 (58.33)	30 (62.50)	-	37 (61.67)
Marginal (below 1 ha)	230 (41.82)	8 (22.22)	15 (31.25)	4 (66.67)	15 (25.00)
Small ( 1 – 2 ha)	26 (4.73)	7 (19.45)	3 (6.25)	2 (33.33)	8 (13.33)
Medimum (2-4 ha)	-	-	-	-	-
Large (> 4 ha)	-	-	-	-	-
All	550 (100.00)	36 (100.00)	48 (100.00)	6 (100.00)	60 (100.00)

Note: Figures in Parenthesis are Percentage to the total

In Burdwan district, the flock of goats under the size class 1 – 5, is consisted of 40.43 cent of male goats, 49.16 percent female goats and 41.24 per cent kids, but in the flock size of 6 – 15 goats, the percentage figures of male, female and kid goats are 59.57 per cent, 50.84 percent and 58.76 per cent respectively. Similarly, in Murshidabad district, the flock size of 1 – 5 goats is consisted of 45.83 per cent of male, 46.85 per cent of female and 45.96 percent of kids, in the flock size of 6 – 15

goats, the share of male, female and kid are 33.33 percent, 33.37 per cent and 36.48 percent respectively. In the flock size of 16-30, the highest share goes to male 20.85 percent followed by kids - 19.78 per cent and female - 17.56 percent

In Burdwan district main source of income of in sample land less households is agriculture and other labour, while the main source income of marginal and small farmers is agriculture followed by trade and service. Similarly, in Murshidabad district main source of annual income of land less households, is agriculture (share cropping) followed by trade/ business, labour and goat rearing, while main income source of marginal farmers is agriculture followed by trade/business, goat rearing and labour. Agriculture is being the main income source of small farmers.

The main sector of employment of the sample households in either selected district is agriculture, which generates 67.77 percent of total income in Burdwan and 56.91 percent in Murshidabad district.

Goat shed and farm equipment are the main asset of the sample households. The share of goat shed to total asset value is 43.11 per cent in Burdwan district and 21.76 per cent in Murshidabad district.

Total livestock population own by the sample households in July 07 to Dec. 07 in Burdwan and Murshidabad district is 336 and 341 respectively. In the total livestock population, the share of goats is highest - 76.19 per cent in Burdwan and 86.22 per cent in Murshidabad followed by cows 8.93 per cent and 4.76 percent respectively. Bullock population is 7.74 per cent in Burdwan and 1.49 per cent in Murshidabad. Sheep population is about 6 per cent for both the districts.

Similarly, the total number of livestock population during Jan 08 to June 08 of Burdwan and Murshidabad district is 294 and 274 respectively. Through goat population has increased in Burdwan district by 1.59 per cent as compared to earlier period, it has been decreased by 3.19 per cent in Murshidabad district. The share of cow population has been decreased from 8.93 per cent in Dec, 07 to 7.74 per cent in June 08 in Burdwan district. But in Murshidabad district it is more or less constant. However, share of other live stock like sheep, etc. in either district is more or less constant.

Addition and depletion in livestock population from July 07 - Dec. 07 to Jan 08 – June 08 for both the district indicates that goat population has decreased by 3.09 per cent but cow population decreased by 8.70 per cent. Sheep and other live stock, which mainly includes population of poultry birds, have increased by 8.33 per cent and 33.33

per cent respectively. As regards to goat population, the hopeful situation is that the kids' population has increased by 4.19 per cent.

Numbers goats owned by the sample households during study period July – 07 to Dec.- 07 and Jan. – 08 to June – 08, are 550 and 533 respectively. Most of these rearing goats (86.00 to 89.00 per cent) are home product, and remaining 11.00 to 13.00 per cent are procured through purchase. Goat herd of the sample households during July 07 to December 07 consists of 21.27 per cent male-goats, 44.00 per cent female-goats and 34.73 per cent kids. Similarly, distribution of male, female kids in the goat herd of the sample households during January 08 to June 08, is 20.26 per cent, 40.71 per cent and 39.03 per cent respectively. The annual maintenance cost of goats by sex are as follows: male goats - Rs.36.97, female goats - Rs. 22.83 and kids – Rs.23.48, and per head maintenance cost of goats as a whole is Rs.25.91.

Total number of goats survived during the reporting period (July 07 to December 07) is 550 in which numbers of male goats, female goats and kids are 117 (96.69%), 242 (97.19%) and 191 (95.03%) respectively, while during the reporting period of January 08 to June 08 number of goats survived is 533 in which number of male goats, female goats and kids are 108 (96.43%), 217 (96.02%) and 208 (96.29%) respectively and the rate of survival of total goats is 96.32 per cent and 96.21 percent respectively.

## V

There are several marketing channel and several marketing intermediaries like goat keepers, traders, butchers etc. are involved in the transaction of goats. Hence, the producers are generally deprived of due share in the buyer's / consumer's prices.

On the whole the owners of lower numbers of flock size of goat are selling higher numbers in the market and smaller numbers at door where as the owner big flock size are selling higher number of goats at door and lower number at market.

### **Selling of Goats at Door:**

Though, households of either caste are selling more or less same percentage of goats in the market, i.e. general caste – 13.68 per cent and scheduled caste – 13.82 percent, households of general castes are selling more goats at door as compared to the household of schedules castes.

Goat rearing households under landless group are selling 7.04 percent of goats at door and 14.66 per cent at market, marginal farm group are found to have sold 6.18

per cent their goats at door and 12.94 per cent in the market and household small farm group are found to have sold 6.56 per cent at the door and 8.20 per cent at the market.

The sample households from the villages of near-market are selling – 4.76 percent of their total male goats, 4.52 percent of their total female goats and 3.10 percent of their kids goats at door and value per goats are as follows: male – Rs.902.23, female – Rs.493.07 and kid – Rs. 364.84. Similarly, households of off-market village are found to have sold 2.60 percent of their male goats, 2.58 percent of female goats, and 2.84 percent of kids at door. Prices per goat they receive, is Rs.852.65 for male goat, Rs. 474.56 for female goats and Rs. 424.20 for kid. The prices of goats sold at door indicate that these are relatively higher during Jan - 08 to June - 08 as compared to July 07 to Dec. 07.

Marketing of goats at door by sex and type of buyer indicates that out of marketed male goats in the district – I, 66.67 per cent are sold to traders and 33.33 per cent to the butchers, Prices of per male goat sold to the trader and butchers are Rs.907.31 and Rs.861.88 respectively.

On the other hand out of marketed female goats, 70.00 per cent are sold to the traders and 30.00 per cent to the goat keepers, and price (Rs./goat) paid by these buyers are Rs.600.56 and 588.89 respectively. In the marketing of kids, the traders are found to have purchased 81.82 percent at a price Rs. 361.04 per goat, whereas the goat keepers have purchased 18.81 percent at the rate of Rs.430.37 per goat.

In the district – II, professional traders are found to have purchase 66.67 per cent of male goats, 57.89 per cent of female goats and 55.56 per cent of kids and price (Rs./goat) paid for these goats are Rs.911.31, Rs.592.57 and Rs.356.24 respectively. The local butchers have purchase 25.00 percent of male goat at the rate of Rs. 890.88 per goat, 15.79 per cent of female goats at the rate of per goat Rs. 578.43 and 11.11 per cent of kids at a rate Rs.395.32 per kid.

Marketing pattern of goats by their breed (desi breed) at the door indicates that total number of goats brought for marketing is 73, in which the share of male, female and kids is 19.17 per cent, 30.15 per cent and 50.68 per cent respectively.

Marketed goat at door by different weight group indicated that the traders' share in the purchase of goats are highest i.e. 57.14 per cent of male goats, 50.00 per cent female and 63.16 per cent kids. However, the butchers were found to have purchased 28.57 male goats, 16.67 per cent female goats and 15.79 per cent kids. Next, the share of consumers in purchase of male, female and kids are 14.29 per cent,

8.33 per cent and 15.79 per cent respectively and the goat keepers are found to have purchased only female and kids by 25.00 and 5.26 per cent respectively.

### **Selling of Goats in the Market:**

The selling pattern of goats by their breed (Deshi) indicates that out the 149 marketed goats, the share of male, female and kids are 17.75 per cent, 42.95 per cent and 39.60 per cent respectively. The marketing costs of these goats are Rs. 43.35, Rs.32.43 and 33.36 respectively. Net returns per goat are Rs. 900.13, Rs. 579.16 and Rs. 405.36 respectively.

The selling pattern of goat in the market by their weight indicates that 65.38 per cent of male goats sold in the market are from the weight group > 5 to 10 kg., 23.08 per cent is from the weight group of > 10 to 15 kg. and remaining 11.54 per cent of male goat is from the weight group of > 15kg. As regards to the female goats, 70.31 per cent is from the weight group of > 5 to 10 kg., 23.44 per cent from the weight group of > 10 – 15 kg. and 6.25 per cent is from the weight group of > 15 kg. However, all the kids are marketed from the age group of < 5 kg. The goats return per goat sold in the market are as follows: male - Rs.943.47, female - Rs.611.58 and kid - Rs.432.13. Marketing costs per male goats is Rs.43.35, per female goat - Rs. 32.43 and per kid Rs.33.36. Hence, the net returns per goats are as follows: male - Rs. 900.13, female - Rs.579.16 and kid - Rs.398.76. The market prices as compared to prices at door are higher by Rs. 32.55, Rs.22.67 and Rs. 35.77 respectively for goats across different weight groups i.e.  $\leq 5$ kg, 5 to 10kg, >10 to 15kg.

The sample household is occupying the goatherd in different size classes. The overall picture reveals that the households these who have higher size of goats, herd usually selling more goat at door and less in the market as compared to the the households having lowed sizes of goat herd. The prices of goats (Rs./goat) received by the sample households in the market are slightly higher as compared to the prices of goats sold at door. The market price (Rs./goat) of male, female and kids for the owner of the flock size 1 – 5 goats is higher by Rs. 44.22, Rs. 26.61 and Rs. 44.70 respectively as compared to the price of the same sold at door. Owners goats (male, female and kids) belonging to the flock size of 6 – 15 goats, received a higher selling price per goat by Rs. 54.18, 19.50 and 41.15 for male, female and kids respectively at market as compared to the selling price at door. The margin of prices for goats sold in the market by the sample households having herd size- 16 – 30 is Rs.16.00 for male, Rs. 2.27 for female and 48.65 for kids.

Selling of goats between near and off the market indicates that in the total marketed goats, the share of male, female and kids from the villages of near to the market are 58.54 per cent, 55.91 per cent and 56.82 per cent respectively, while off the market the share are 41.46 per cent, 44.09 per cent and 43.18 per cent respectively and prices of male goat of the near market and off the market are Rs. 899.42 and Rs. 895.93 respectively; prices of female goats are Rs. 599.42 and Rs. 592.29 respectively and prices of kids are Rs. 406.44 and Rs.396.59 respectively.

### Marketing Cost and Net Gain:

Total number of goats sold both at door and in the market by the sample households are 222. Marketing cost (Rs/goat) i.e. transport cost, loading-unloading cost, market fee, feeding charge and miscellaneous costs etc. are Rs. 4.20, Rs.1.97, Rs.3.60, Rs.2.87 and Rs.6.37 respectively. Gross return per goat is Rs.592.57 and net return is Rs.573.55.

Total income from goats for entire period July-07 to June-08 is Rs. 128298.64 in which the shares of different types of goats are as follows: male- 29.02 per cent, female- 40.67 per cent and kids-30.30 percent (Table –8.5).

Table – 8.5: Income from Goat and their Product of the Sample Goat Rearers

Period of production	Items of Product											Total income
	Milk		Value of dung manure (Rs.)	Value of goats sold (Rs.)								
	Qty	Value		Male		Female		Kids		Total		
				No	Value	No	Value	No	Value	No	Value	
July 07 to Dec. 07	nil	nil	nil	21	19107.06 (909.86)	48	28238.76 (588.31)	53	20193.17 (381.00)	122	67538.99 (553.60)	67538.99
%	-	-	-	17.21	28.29	39.34	41.81	43.44	29.90	100.00	100.00	
Jan. 08 to June 08	nil	nil	nil	19	18131.46 (954.29)	38	23946.64 (630.17)	43	18681.55 (434.45)	100	60759.65 (607.60)	60759.65
%	-	-	-	19.00	29.84	38.00	39.41	43.00	30.75	100.00	100.00	
Total	nil	nil	nil	40	37238.52 (930.96)	86	52185.40 (606.81)	96	38874.72 (404.95)	222	128298.64 (577.92)	128298.64
%	-	-	-	18.02	29.02	38.74	40.67	43.24	30.30	100.00	100.00	

Note: Percentage share of total value, Figure in parentheses are value per goat.

Data for other products of goats were not available from the goat keepers during in depth survey. So, details of the product of goat cannot be incorporated in the study.

## VI

There is no separate market of goat in the study area. Goats are sold and purchased in the livestock/general markets along with others animals.

Market agents of goats and there product are sellers, buyers, skin traders and skin whole-seller. The seller are goat keepers, professional traders and others. In the selected markets, the average price (Rs./goats) of goats received these seller is Rs. 754.24, which vary between Rs. 668.20 to Rs. 775.39 among these sellers. The average selling price of male, female and kids goats are Rs. 967.91, Rs. 660.55 and Rs. 448.43 respectively.

In the selected market the buyers of goats are butcher, traders, commission agent, goat keeper, whole-seller and consumer. The percentage share of buying goats of these buyers are as follows: butchers – 40.38%, trader – 44.60%, Commission agent – 5.50%, goat keepers – 0.58%, whole seller – 8.50% and consumer – 0.45% - (Table 8.6).

Table–8.6: Goat Purchased by the Sample Buyers by the Breed of Goat July - 07 to June - 08

Type of buyers	Number of goat purchased during July 07to June 08				Price paid				Total goats purchased	Total price paid
	Deshi	Jamunapari	Barbari	Others	Deshi	Jamunapari	Barbari	Others		
Butcher	632	-	-	-	475800.4	-	-	-	632	475800.4
%	40.38				41.18				40.38	41.18
Trader	698	-	-	-	496034.6	-	-	-	698	496034.6
%	44.60				42.94				44.60	42.94
Commission agent	86	-	-	-	69609.93	-	-	-	86	69609.93
%	5.50				6.03				5.50	6.03
Goat keeper	9	-	-	-	5748.22	-	-	-	9	5748.22
%	0.58				9.84				0.58	9.84
Whole seller	133	-	-	-	91663.61377	-	-	-	133	91663.61377
%	8.50				7.93				8.50	7.93
Consumer	7	-	-	-	5002.73	-	-	-	7	5002.73
%	0.45				0.43				0.45	0.43
All	1565	-	-	-	1155303.67	-	-	-	1565	1155303.67
%	100				100				100	100

Note: Breed wise value of goat

The average price (Rs./goat) for male, female and kids goats paid by these buyers are Rs. 954.68, Rs. 649.94 and Rs. 417.76 respectively. The average marketing cost (Rs./goat) incurred to the buyers is Rs. 20.37. For marketing of meat, costs incurred to the sample butchers are as follows: average cost per goat Rs. 850.59, other recurring cost per goat – Rs. 4.73. The average prices of meat Rs. 1191.92 and average price per skin is Rs. 50.71. Hence, the average gross return per goat purchased by the butchers for selling meat is Rs. 1241.73. Deducting the cost, the net return released by the butchers per goat is Rs. 386.4. The major portion of meat is sold to the consumers (86.54 per cent) and the average price for the same is Rs. 183.00 per kg..

Small skin traders generally collected goat skin from the butchers. Average price of a skin purchased by the skin traders is Rs. 49.64 and cost etc. incurred to the same to resell the skin to the whole-sale skin traders are Rs. 1.42. The average selling price of skin of the small trader to whole-sellers is Rs. 59.81. Hence, the net return of the small traders is Rs. 10.18 per skin.

The average purchasing price of whole-sale skin trader is Rs. 62.49 and cost incurred per skin up to marketing is Rs. 16.66. The average selling price per skin to the processor is Rs. 81.52. Hence, the net return to the wholesale skin traders is Rs. 2.37 per skin.

## VII

“Black Bengal/ Bengal Breed” could survive smoothly than that of the any other breed of goat. Accordingly, majority of the sample households opine that the availability proper breed of goat for rearing purpose is not a problem.

As regards to availability of feeds, 86.00 per cent sample households of the sample district – I and 82.00 per cent households of the sample district – II opine that feeding of goats is rather a problem of goat rearing.

The main problem of goat rearing in the study area is non-availability of veterinary facilities and lack of proper treatment for goat. The sample households have no access to grazing land. They have also had poor access to make separate arrangement for keeping goats. Most of them keep goats in their dwelling premises.

Goats are sold mainly through mutual compromise between goat keepers and middlemen /professional traders. Most of the sample households reported for inadequate infrastructure facilities of goat markets.



As regards to the transport facilities for marketing of goats 60.00 per cent of the sample households of market – I (district – I) and 44.00 per cent of market – II (district – I) have reported that they have smooth transport facilities. However, in district – II altogether 52.00 per cent of the sample households opine that they have good transport facilities.

For development of goat rearing system, requirement of some capital is essential. Since, majority of goats rearers in the rural areas are poor or people of lower income groups, they required some credit for the same. But most of them have poor access to availability of credit.

Apart from that government assistance, aid and advices towards development of goats rearing is not up to the mark. All sample households opine that there should be separate arrangements from the Government department for development of goat rearing enterprise.

### **Conclusion:**

With the growing demand for livestock products, goat husbandry is becoming an attractive activity. Goat meat is quite popular, both in domestic and international markets. Goat husbandry is mainly enterprised by the people of lower income groups in the rural areas. Goat enterprising units per households are comprised of 5.5 goats, which consists of 1.19 male goat, 2.43 female and 1.88 kids. Average annual income (Rs./Goat) from goat is Rs. 577.52. However, income from male, female and kids are Rs. 930.96, Rs. 606.81 and Rs. 404.95 respectively. The main products of goats are meat and skin. The butchers are involved in the production of the same. Prices of meat (2008) various from Rs.160.00 to Rs. 185.00 and each raw skin fetches Rs. 50.00 to Rs. 70.00. Goat keepers sell their goats to local traders, butchers, whole sellers and consumers in their village and local market, whenever they are in need of cash. In the absence of weighing practice and awareness about the price for goats, the traders and others are heavily exploiting the goat keepers. Lack of training to guide goat keepers to improve productivity through good husbandry practices is another lacuna. There are no major investments by the Government to either promote goat husbandry or to conserve the breeds. Indiscriminate breeding, lack of feeding and health care facilities and poor marketing facilities, goat keepers have been struggling hard to maintain their occupation without any success. Hence, sufficient investment for creation of physical and marketing infrastructure for goats and their product (skin) is quite essential. The developed infrastructure would obviously promote linkage among producers (goat

rearers), traders, processors and consumers. Such linkages would fetch higher income to the goat rearers.

### **Suggestions and Policy Implication:**

Goat, the major contributor of meat production, are being reared by the people of lower income groups in West Bengal. At village level, goats are being raised as side line activity, so the management of the same still remains at subsistence level. The activity does not give support in terms of regular income flow of the rearers, but only provide some ad-hoc cash money, which the goat keepers use during urgent need for family expenditure. Thus, goat keeping is economically effective to the people of lower income groups in the rural area. So, in order to intensify goat rearing at village level, the following measures may be suggested:

1. Economic support, however, can play an important role to intensify goat keeping. As the rearers are mainly poorer people, financial crisis is the part and parcel of their livelihood. Under the circumstances, they can not afford to maintain bigger flock and better management of goats. If they would be made easy access to the institutional agencies for land and assistance, they could obviously intensify their goat keeping activities by increasing the herd size of goats and providing better management for the same. **Attention should be made by part of the government and institutional agencies to provide loan to the goat rearers at concessional rate of interest.**
2. At village level, there is acute crisis of pastures and grazing lands, etc. for goat and other livestock. Since the small ruminants, like goats and sheep feed on the twigs, browse, small plants, bush etc., the rearing conditions of goats could be improved through converting the fallow, barren, uncultivable and other marginal lands to pasture and grazing lands. **Attention can be made by the panchayat functionaries in extensification of grazing land by converting the marginal and uncultivable lands to pasture land.**
3. Most of the goat rearers, at village level. Do not know the scientific system of goat management, nor they are willing to undertake the same. So, in order to intensify the goat keeping in a real perspectives, it is essential to motivate the goat keepers towards some region specific and breed specific goat development programmes, like substitution of indigenous breed to improve breed, making awareness for maintaining nutrition requirement of goats, improvements in the reproduction system, health care, veterinary aid and advice etc. Through the Animal Resource Development Department of Government of West Bengal

has been doing all these, yet the services, aids and advice etc. that the goat rearers get from this Department, are extremely inadequate. **Attention must be paid by the Animal Resource Development Department of Government of West Bengal along with other Goat Research Institutions to evolve improve breed for this region. Apart from this extension official of the Government of West Bengal are to be involved in disseminating knowledge at the doorstep of the goat rearers.**

4. There are no organized or regulated goat markets in West Bengal. Transactions of goats take place mainly between the middlemen and goat rearers. On such transactions, the middlemen take the major advantage from the goat rearers. So, in order to protect the goat keepers' interest in particular and intensifying goat keeping in general, regulated markets and co-operative marketing societies, which could regulate the marketing system of goat, should be established. **Attention must be paid by the Directorate of Marketing, Government of West Bengal to initiate the involvement of market functionaries in a more regulated way.**
5. Skin of small ruminants skin is one of the important export earner in India. These have also considerable economic value, but their collection processing and marketing are underestimated. So, there is need to develop systematic collection and scientific processing and marketing of goat skins. **Attention to the concerned Government Departments to develop these aspect of skin trading.**

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