

**PROBLEMS AND PROSPECTS OF SMALL SCALE
COMMERCIAL GOAT FARMING:
A Study of Jagatpur VDC, Chitwan District**

**A Thesis Submitted to
The Central Department of Rural Development,
Tribhuvan University,
in Partial Fulfillment of the Requirements for the Degree
of the Master of Arts (MA)
in
Rural Development**

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LETTER OF DECLARATION

I hereby declare that the thesis entitled **Problems and Prospects of Small Scale Commercial Goat Farming: A Study of Jagatpur VDC, Chitwan District** submitted to the Central Department of Rural Development, Tribhuvan University, is entirely my original work prepared under the guidance and supervision of my supervisor. I have made due acknowledgements to all ideas and information borrowed from different sources in the course of writing this thesis. The results of this thesis have not been presented or submitted anywhere else for the award of any degree or for any other purposes. I assure that no part of the content of this thesis has been published in any form before.

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LETTER OF RECOMMENDATION

This is to certify that the thesis submitted by **Shiva DattaDawadi** entitled **Problems and Prospects of Small Scale Commercial Goat Farming: A Study of Jagatpur VDC, Chitwan District** has been prepared under my supervision and guidance as a partial fulfillment of the requirements for the Degree of Master of Arts (MA) in Rural Development. Therefore, this is recommended for the final evaluation and approval.

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APPROVAL LETTER

We certify that this thesis entitled **Problems and Prospects of Small Scale Commercial Goat Farming: A Study of Jagatpur VDC, Chitwan District** submitted by **Shiva DattaDawadi** has been examined and found satisfactory in quality and accepted in partial fulfillment of the requirements for the degree of master of Arts (MA) in Rural Development.

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ABSTRACT

Nepal, being one of the developing agricultural country, sustainable development is only possible through the way of agricultural resonances by investigating and investing in resent technologies, ideas, skills and land matching seeds including commercialization in animal husbandry. The prime concern of the study were to analyze the status of small scale commercial goat farming in Chitwan district, to analyze the socio economic impact of small commercial goat farming in Chitwan District, to explore the supporting and constraining factors of small scale commercial goat farming in Chitwan district. A set of questionnaire entitled 'Problems and Prospects of Small Scale Commercial Goat Farming' was the tools for the collection of data, which were distributed to 114 households of Jagatpur VDC in Chitwan districts who were rearing at least four goats in their home for the purpose of business. Collected data have been analyzed and interpreted in descriptive ways. The study has used purposive and convenience sampling method. The result of the study showed that the Chitwan district is one of the potential district for the commercial goat farming and found most of the households used to rear at least some goats in their home for the purpose of self consume as well as the purpose of the business, it has great role in the socio-economic status of the people. The major problems of such small scale commercial goat farming in the study were found as lack of grass for feeding, lack of developed caste of goat, lack of manpower, lack of livestock insurance, lack of facilitated loan, lack of proper training (about livestock), lack of veterinary facility, low price of meat. And the different significant prospects were found in this profession which was as prospects to develop goat farming as a main occupation, prospects to increase the level of income, prospects to increase employment, prospects to capture national meat market, prospect to increase the production capacity of land, prospect to make healthier life.

TABLE OF CONTENTS

Contents	Page No.
Letter of Declaration	i
Letter of Recommendation	ii
Approval Sheet	iii
Acknowledgements	iv
Abstract	v
Table of Contents	vi
List of Table	viii
Acronyms	ix
CHAPTER I: INTRODUCTION	1-4
1.1 Statement of the Problem	2
1.2 Objectives of the Study	3
1.3 Significances of the Study	3
1.4 Limitations of the Study	3
1.5 Organization of the Study	4
CHAPTER-II: REVIEW OF LITARATURE	5-12
2.1 Goat Farming in Nepal	5
2.2 Policy Review Related to Livestock farming	5
2.3 Gaps between Policy and Implementation	10
2.4 Empirical Review	11
CHAPTER-III: METHODOLOGY	13- 15
3.1 Research Design	13
3.2 Nature and Sources of Data	13
3.3 Study Area	13
3.4 Universe and Sampling	14
3.5 Data Collection Techniques and Tools	14
3.6 Data Processing and Analysis	14
3.7 Ethical Issues	15
CHAPTER IV: AN INTRODUCTION TO STUDY AREA	16-22

4.1 Background	16
4.2 Jagatpur VDC: A Model of Success in Agree Business	18
4.3 Population Status of Age Group	18
4.4 Population Based on Mother Tongue	20
4.5 Family Size	20
4.6 Family Size Based on Occupation	21
4.7 Population Based on Education	21
CHAPTER V: DATA ANALYSIS AND INTERPRITATION	23- 34
5.1 Background of Population and Educational Level	23
5.1.1 Background of Population	23
5.1.2 Background of the Education	23
5.2 Land Holding by Sampled Household	24
5.3 Production of the Crops in the Sampled Area	25
5.4 Sources of Income	26
5.5 Marketing Channels	27
5.6 Livestock Information	27
5.7 Purpose of Livestock Farming	28
5.8 Financial Sources of Goat Farming	29
5.9 Influence of Goat Farming for the Economic Condition	30
5.10 Problems and Prospect of Goat Farming in Chitwan District	31
5.10.1 Problems of Goat Farming	31
5.10.2 Prospect of Commercial Goat Farming	32
CHAPTER VI: FINDINGS, CONCLUSION AND RECOMMENDATIONS	35-38
6.1 Findings	35
6.2 Conclusion	38
6.3 Recommendation	38

REFERENCES

APPENDIX

LIST OF TABLE

Table 2.1 Amount of fat, calories, protein and iron in different types of cooked meat	11
Table 4.1 Numbers of people in different age groups	19
Table 4.2 Population based on their mother tongue in Jagatpur VDC	20
Table 4.3 Family size in Jagatpur VDC	20
Table 4.4 Family numbers base on occupation in Jagatpur VDC	21
Table 4.5 Number of population based on the academic status in Jagatpur VDC	22
Table 5.1 Distribution of Age-wise Population Composition	23
Table 5.2 Distribution of Education wise Population Composition	23
Table 5.3 Land holding by sampled households	24
Table 5.4 Crops production by sample households	25
Table 5.5 Sources of income of sampled households	26
Table 5.6 Number of households according as the number goats	27
Table 5.7 Number of households according as the number of other Livestock	27
Table 5.7 Number of households as the purpose of Livestock Farming	29
Table 5.8 Number of households which have taken loan for goat farming	30
Table 5.9 Influence of goat farming for the Economic conditions	30

ACRONYMS

ARD	Agricultural Research for Development
CBO	Community-Based Organization
CFUG	Community Forestry User Groups
CLDP	Community Livestock Development Projects
DoLS	Deprivation of Lavery Safeguards
CBS	Central Bureau of Statistics
ECD	Early Child Development
FI-NGO	Financial Intermediary Non-Governmental Organizations
GDP	Gross Domestic Product
ICRA	International Centre for development oriented Research in Agriculture
ILO	International Labor Organization
INGO	International Non-Governmental Organization
IB	Insurance Board
ISRC	International Standard Recording Codes
MFI	Micro-Finance Institutions
NAP	National Agriculture Policy
NGO	National Governmental Organization
SFDB	Small Farmers' Development Bank
SLC	School Leaving Certificate
TU	Tribhuvan University
USDA	United States of Development of Agriculture
VDC	Village Development Committee

CHAPTER I

INTRODUCTION

A developing land locked country Nepal, has so many barriers in the way of improving the economic condition of the country. About 83% of the area of the country is covered by the hill and mountain region so that although it has some specific properties it is being the major barrier in establishing in the foundation of development. And also about 75% of the people are directly involved in agriculture. Hence, to make a good and drastic change in the economic status of the peoples of the country, it is only possible through the way of agricultural resonances by investigating and investing in resent technologies, ideas, skills as well as seeds including commercial animal husbandry.

Goats are among the main meat producing animals in Nepal, whose meat is one of the choicest meat and has huge domestic demand. Besides meat, goats provide other products like milk, skin, fiber and manure. Goats are important part of rural economy of the country. They provide food and nutritional security to the millions of marginal and small farmers and agricultural labors. However, the productivity of goats under the prevailing traditional production systems is very low (Sing and Kumar, 2007). It is because they are maintained under the extensive system on natural vegetation on degraded common grazing lands and tree lopping. Even these degraded grazing resources are shrinking continuously. So, rearing of goats under intensive system using improved technologies for commercial production has become imperative to meet the increasing demand of the goat meat in the domestic as well as international markets. In the context of Nepal, the main sources of meat are our neighboring country like India. Large amount of money is going out of the country day by day for the availability of the meat in the country. So if we can develop the commercial idea in goat farming, no doubt it will not only stop to pay large amount of money to out of the country, will also create various opportunities of employment and ultimately contribute to raise the economic status of the farmer leading to the nation.

Due to the fast socio- economic changes in the recent past, a rapid shift has take place in the dietary habits in the favor of non-vegetarian diet. As a result, the demand for goat and sheep meat has swiftly increased and the domestic market price for mutton has risen. Moreover, huge

expected increase in the demand of meat in developing countries, especially in the east and south east Asia in the next 20 years presents an excellent opportunities for exchanging export of live goats/ sheep and their meat from Indian countries (Dalgado et al., 1999). Responding to the market signals, the goat production system in Nepal has been slowly moving from extensive to intensive system of management for commercial production. However, in the absence of any systematic study, there have been questions from the entrepreneurs, progressive farmers and even researchers on the economic viability and sustainability of commercial goat farming under intensive system. Even though the history of goat rearing in home is long, no information is available on the socio-economic aspects of small scale commercial goat farming in the country. This study is planning to address the issues related to the small scale commercial goat farming in the country. The present paper has thus analyzed the prospects including the problems of the commercialization of small scale goat farming in the country.

Statement of the problem

Nowadays, large group of young people are highly interested in the field of commercialization in agriculture, especially in animal husbandry. In this process, some of the young farmers are being very much successful in their way but some of them are losing their investment as well. There is nothing in the world without any risks and challenges. So that a good entrepreneur is who can face the challenges in better way. So it is highly beneficial to have deep study about the various problems and prospects to be a successful entrepreneur.

Especially in commercialization in goat farming, there are so many problems and obstacles as well as many opportunities. Normally people have a kind of fear of losing the investment because of various problems regarding with this profession. Basically, a beginning entrepreneur does not have any idea about the developed caste of goat with their feeding process. Even they have some idea there is a kind of compulsion to be limited within the traditional framework because of the lack of fund. There is also the problem as well the prospects of market.

In this way, what is the present status of small scale commercial goat farming in Chitwandistrict? and how this playing role in enriching the the socio-economic status of the farmer? How much investment is required as corresponding to the number of the goat? What

kind of climate is required for this occupation? What would be the physical setting of the farm? How to manage the feed for the goat? What are the different kinds of the disease regarding with the goat? Where is the market of the produced goat? What is the status of goat farming in the context of Jagatpur VDC? What will be the socio- economic effect of this farming? are considered as the major problem of the study and the study also intended to get the different supporting and contrasting factors for the small scale commercial goat farming in the context of Jagatpur VDC.

Objectives of the study

The study will have the following the objectives:

- To analyze the status of small scale commercial goat farming in Chitwan district.
- To analyze the socio economic impact of small scale commercial goat farming in Chitwan District.
- To explore the supporting and constraining factors of small scale commercial goat farming in Chitwan district.

Significances of the study

It is very most important to know a lot about different supporting and constraining factor in which we are planning to get involved to be a successful entrepreneur. So that the research will certainly be beneficial to all the related stakeholders who are interested in the field of animal husbandry. This study will very much fruitful to know about the different problems and prospects of commercial goat farming so that a beginning entrepreneur may plan well.

The findings of the study may be useful for the planner, policy maker and implementers, project leaders, Government officials as well as change agent in the field of animal husbandry. The study may also be useful for the future researcher particularly in the study area.

Limitations of the study

The studyhas the following limitations:

- The result of the study cannot be generalized in other animals husbandry and other the places except the Chitwan district.

- The information that given by respondents are be taken directly as the final data of the study.
- The farmers which are rearing at least 4 goats in their home are selected as the respondent of the study.
- The respondent selected in the sample he/ she should have the experience of same occupation from at least twoyear before.
- Due to the lack of time, resource and money the study is limited onJagatpur VDC of Chitwan district.

Organization of the Study

This study has six chapters. The first chapter presents the introduction of the study. It includes the general background of the study, statement of the problem, objective of the study, Significance of the study, limitations of study and organization of the study.

The second chapter relates to the review of related literature, it includes the conceptual and empirical review, policy reviewrelated to the goat farming in national and international level. The third chapter deals research methodology, it include the study area, research design, nature and source of data, sample size and sampling procedures, data collection procedure and data processing and analysis. Forth chapter deals about the data presentation and its analysis. It includes the general background of the study area, income structures of respondents and socio-economic characteristics of the respondents, different problems and prospects of commercial goat farming based on primary data. The fifth chapter is the conclusion part of the study. It contains the summary, conclusion and recommendations.

CHAPTER II

REVIEW OF LITERATURE

Goat farming in Nepal

Goat farming in Nepal started years ago but commercial goat farming in Nepal recently going to be practice by some farmers. Goat farming has been practiced by a large section of population in rural areas of Nepal. Goat farming is a profitable business with a low investment because of its multi functional utility like meat and milk that are very nutritious. Goats are the widely used and most important livestock in Nepal, most of the goat farms are to produce goat meat there is not any dairy goat farms in Nepal.

Small ruminants (sheep and goats) are essential components of the mixed farming systems in the hills of Nepal, and are found in all parts of country. They are mainly kept for meat, although wool (sheep), fibre (goats) and manure are also important products from these animals. In the present subsistence farming system of the hills, farmers have little surplus agricultural produce to sell and so depend upon the sale of livestock and their products as a source of income. However, because of their inherent ability to utilize mountain terrain, unsuitable for crop farming, a high proportion of sheep and goats are found in the hills. Resource-poor farmers of the hills, who cannot invest large sums of money in cattle and buffalo, prefer sheep and goat husbandry which has no social, religious or cultural taboos, or caste restrictions.

According as the report of the CPDD there were 9.51 million goats in Nepal within the end of 2015 in which the rate of growth was 5.70 % than last year which is largely greater than other livestock. In same way with in the year of 2015, 53956 metric ton meat of goat were consumed which is in the second position after buffalo.

Policy Review related to Livestock farming

Nepal is in the process of transforming its government from a unitary system to a federal democratic structure through the new constitution, offering the opportunity to bring a new set of priorities and stakeholders to policymaking. About 66 percent of its population is involved in

agriculture, which accounts for 35 percent of the gross domestic product or GDP (National Sample Census of Agriculture-2011/12, 2013). The livestock subsector of agriculture contributes 24 percent of the total agricultural GDP (Ads Assessment Report, Agricultural Development Strategy Assessment,2012), and also plays important roles in human food and nutritional security, livelihood, regional balance, gender mainstreaming, and rural poverty alleviation (ILO, 2004). Yet, there is no separate national livestock policy in Nepal, and instead, its national livestock-related policies are spread across agriculture and other sectors. Some major policies related to livestock farming under different heading are reviewed.

National Agriculture Policy (NAP), 2004

The NAP, 2004 adopts a long-term vision oriented towards transforming the current subsistence-oriented farming system into a commercial and competitive one. The NAP aims to contribute to ensuring food security and poverty alleviation. Its objectives are:

- a. To increase agricultural production and productivity,
- b. To develop the basis of a commercial farming system and make it competitive in the regional and world markets, and
- c. To conserve, promote and properly utilize natural resources, as well as the environment and bio-diversity.

The policies of the NAP provided for achieving its objectives include:

- a. to ensure the needs of farmers with access to resources and with comparatively less access to resources,
- b. to provide special facilities by classifying farmers into those having less than half a hectare of land and lacking irrigation facilities, those belonging to dalit(so-called untouchable) and utpidit(downtrodden, underprivileged) classes and other marginal farmers and agricultural workers.

The Policy gives special priority to a set of high-value agricultural products, and seeks to develop commercial and competitive farming systems by a gradual extension of livestock insurance programs and organic farming. Overall, the NAP, 2004 has the merit of being decentralization-based, friendly to small-holder farmers of livestock, and inclusive of untouchables, marginalized groups and poor communities, Policy on commercializing different agro-products and attracting investors in agriculture.

Forestry Sector Policy, 2000 (Forest Policy, 2000)

The Forestry Sector Policy, 2000 is mainly concerned with the farmers for the use of forests to graze livestock and to collect fodder to feed livestock. The policy simplified the process of handover of institutional as well as group leasehold forestry to Community Forestry User Groups (CFUGs) and has stressed integration of the leasehold forestry program to local community development. The Policy recommended commercial management for forests in larger blocks in Terai and inner Terai districts. The Policy aims to base livestock quantities on the amount of fodder production and highland pasture so as to improve forest management and increase the production of fodder by community efforts.

Rangeland Policy, 2012

The Policy defines rangeland as natural pasture land, grassland and shrub-land. It aims to increase productivity by improving forage/grass productivity, to protect livestock farmers' traditional rights for pasturing livestock in community rangeland and forest. The Policy seeks to secure the facilities traditionally enjoyed by livestock farmers using range-lands located within community forests. The Policy identifies provisions to collect and conserve the green forage (grass) during the rainy season and winter and dry seasons in order to ensure continuous supply of cattle feed round the year. The Policy seeks to determine livestock density on the basis of capacity of the rangelands for minimizing the grazing competition and pressure of both domesticated and wild animals, and imposes charges or penalties on cattle for using rangeland with the goal of limiting unproductive cattle on the rangeland.

Livestock Insurance Policy and Agriculture and Livestock Insurance Regulation (2013)

Livestock insurance is extremely important, as livestock husbandry is risky, particularly for small and low-income farmers who face financial ruin in case of theft, injury, illness or death of an animal. According to DOLS, premature mortality is about 2 percent to 3 percent per annum for cattle and buffalo and considerably higher for small ruminants and pigs. Livestock insurance helps livestock farmers to cope with such risks, and facilitates farmers' access to finance by increasing their creditworthiness. Although general insurance was introduced in Nepal in 1937 after the establishment of Nepal Bank Ltd, the country's first commercial bank, and the National Insurance Corporation was established in 1967, livestock insurance began only in 1987 in form

of livestock credit or micro-finance guarantee insurance against animal mortality and loss. In Nepal, many organizations provide livestock insurance services on a limited scale; they include the Small Farmers' Development Bank (SFDB), Micro-Finance Institutions (MFI), Community Livestock Development Projects (CLDPs) sponsored community-based organization (CBOs) and Financial Intermediary Non-Governmental Organizations (FI-NGOs) which are not regulated by the Insurance Board (IB), the national-level regulating body.

This gap should be addressed by a proper policy mechanism. In recognition of the need of systematizing livestock insurance, Nepal introduced Livestock Insurance Regulation and a Livestock Insurance Policy. The Livestock Insurance Regulation under the Insurance Board aims at encouraging financial institutions to finance more agricultural projects, as most financial institutions abstain from extending loans and advances to livestock and agricultural projects in the absence of proper insurance coverage. The Agriculture and Livestock Insurance Directive makes it obligatory for non-life insurance companies to issue insurance policies on livestock, crops and poultry.

National Land Use Policy, 2012

The Policy aims to encourage optimal use of land for agriculture by classifying the country's land territory into seven land use categories—agricultural, forest, residential, commercial, public, industrial, and others. Land in the agriculture category is for agricultural cultivation, livestock farming, and tree plantation. The Policy also aims to increase agricultural productivity by systematizing land fragmentation and by adopting a land pooling system. The goal is to encourage commercial, cooperative and contractual farming. This is the policy to allocate land for agricultural purposes including livestock farming. The Policy also aims to increase agricultural productivity by controlling land fragmentation, systematizing land-pooling activities, and encouraging commercial, cooperative and contractual farming

Animal Health Program Implementation Procedure, 2013 and Animal Health and Livestock Services Act, 1999

The policy rightly aims at promoting production, distribution, consumption and export of healthy livestock and making animal-health related programs more effective, as these functional areas are crucial in livestock management.

Birds Rearing Policy, 2011

The policy was issued within the framework of National Agriculture Policy (NAP), 2004 and Agri-business Promotion Policy, 2006. The policy covers the poultry business, encompassing chickens, cocks, hens, ducks, turkeys, quails and other local bird species. It plans to make the poultry business more productive, competitive and sustainable by improved quality of chicks through well-managed hatchery and rearing as well as by systematizing distribution of poultry products.

Approach Paper to 13th Plan and Agriculture/Livestock Development Policies

The Approach Paper to 13th plan (2013/14–2015/16) has made provisions for the livestock sub-sectoral development by including it in objectives, strategies and operating policies. The agricultural sector objectives set in the Approach Paper to the 13th Plan are

- a. To increase the production and productivity of crops and livestock products,
- b. To make crops and livestock products competitive and commercial,
- c. To develop and disseminate environment-friendly agro-technologies to minimize the adverse impacts of climate change, and
- d. To conserve, promote and utilize agro-biodiversity

The sectoral strategies for achieving the objectives are directed towards

- a. Promoting commercialization and diversification of agriculture and livestock
- b. Developing crop and livestock industries and enhancing their product quality
- c. Encouraging youths to take up commercial farming as a prestigious profession
- d. Promoting agricultural and livestock marketing, and

The operating policies to achieve the mentioned objectives are set as follows

- a. to expand promoting campaigns regarding artificial insemination and fodder and forage plantation,
- b. to develop rural infrastructures such as agro-roads, electricity, and communications,
- c. to develop agricultural marketing network including livestock wholesale markets and hat bazaars (open-air retail markets), and expand access of livestock information at local levels,
- d. to develop technical manpower for agricultural sector and provide entrepreneurship and skill development training required for agro-business,
- e. to encourage production of high quality seeds, high-yielding breeds and vaccination, and to develop bio-pesticides to treat animal for parasites,

- f. to make provisions for livestock insurance, concessional agricultural loans, subsidy on livestock related industrial equipment and tax rebate on trade to small and marginalized farmers, entrepreneurs and business people,
- g. to promote contract and cooperative farming with involvement of private entrepreneurs and cooperative sectors,
- h. to establish agriculture and livestock extension centers under the local bodies a teach VDC,
- i. to strengthen livestock related laboratories

Gaps between Policy and Implementation

National policy is a broad course of action adopted by the government in pursuit of its objectives. Nepal has already a rich body of policies in favor of agriculture. The National Agriculture Policy and the Approach Paper to the 13th Plan emphasize the central role of agriculture. Nevertheless, formulation of some important policies has been excessively delayed. Even though it has many attractive policies they are not yet as expected, the reasons behind this may be lack of supportive adequate legislation (acts), rules and regulations for credible enforcement, Inadequate resource allocation, Ineffective coordination, Irregular and weak policy and program monitoring and evaluation, Lack of climate change monitoring, Limited human resources and implementation capacity, and Lack of continuity in leadership (short tenures of ministers and secretaries). Therefore, the related officials should to give primary emphasis on the proper implementation of already formulated plan and policies.

Empirical Review

Kumar (2007) did a research on the title ‘Goat Farming in India: An emerging Agri- Business Opportunity’ with the objectives of to know about the different prospects commercialization in goat farming. The status, economics and prospects of commercialization of goat production in the country have been analyzed using primary data from eight commercial goat farms in different states. It has been revealed that several large and progressive farmers, businessman and industrialists have adopted commercial goat farming. The entry of large farmers, who have better access to technical knowledge, resources and market, into these activities would help in realizing the potentials of goat enterprise. A majority of commercial goat farms have been found operating with positive net returns. Goat rearing has been found equally rewarding under birth intensive and semi- intensive systems of management. Intensification and commercialization of goat

enterprise has been recorded important because of shrinking of resources for extensive grazing. Commercialization would help in increasing the goat productivity and bridging the demand-supply gap.

The meat of goat is one of the most demanded and healthiest meats than other. According to the USDA, goat meat is 50%-60% lower in fat than similarly prepared beef, but has similar protein content. The US department of agriculture also has reported that saturated fat in cooked goat meat is 40% less than that of chicken, even with the skin removed.

Table 2.1 Amount of fat, calories, protein and iron in different types of cooked meat

3 oz. cooked (Roasted)	Calories	Fat (Gr.)	Saturated fat (GR.)	Protein (Mg.)	Iron (Gr.)
Goat	122	2.58	.79	23	3.3
Beef	245	16	6.8	23	2.9
Pork	310	24	8.7	21	2.7
Lamb	235	16	7.3	22	1.4
Chicken	210	3.5	1.1	21	1.5

Sources: USDA, Handbook #8, 1989, Nutrition value of food

The table clearly shows that the goat meat is the healthiest meat than other, it has comparatively less fat and calories than other meat but it has more protein and iron than other.

Seresinhe and Marapana (2011) have conducted a research in Shree Lanka entitled ‘Goat Farming Systems in the Southern province of Shree Lanka: Feeding and management strategies’ with the aim to identify the different feeding and management strategies for goat farming. A survey (N= 276) was carried out to gather information on the goat farming systems in three districts in the Southern province of Shree Lanka. The objective was to identify the prospects and constrains to improve the economic productivity of the herd. Goats were ranked highest in population and second in terms of importance to the house hold. Buddhist were dominated in goat rearing while selling of live goats for meat production was popular in all three districts. Kid mortality become serious threat which was mainly due lack of nourishment for kids during early growth, susceptibility to contagious diseases etc. There was as increased risk of an epidemic outbreak in all districts due to their generally low health status. Employing bio-diversity based

concepts in feeding was more prominent in all districts. Despite the least attention to goat production, breeding improvement, introduce more strategic feeding during season and health care should be improved and proper marketing facilities should be organized. Recommendation to overcome this situation would be to educate farmers on scientific goat management practices.

Terefa, et al. (2004) have conducted a research on the topic 'Goat production and livelihood in Sekhukhune district of the Limpopo Province South Africa' with the objectives to find ways to transform the current subsistence system of producing indigenous goats by communal households in Sekhukhune District in the Limpopo Province of South Africa into a viable system of producing, processing and marketing goats and their by-products through formal markets. An exploration of the problem situation was done through the Agricultural Research for Development (ARD) method developed by the International Centre for development oriented Research in Agriculture (ICRA), an organization based in The Netherlands. The field study phase was characterized by village participatory approaches in the form of village meetings, focus group meetings, interviews with key informants, exploration of the area's natural resources through maps and transect walks, activity calendars, and several stakeholder workshops. In order to verify secondary data, information on livelihood options was collected through questionnaires at the household level. Current production and marketing systems were analyzed. Stakeholder perceptions on problems and solutions were documented. Finally, future plans were proposed. Results show that less than 25% of the households in Sekhukhune do own goats. Goat numbers range from 1 to over 200 per household. Goats are more common than other livestock (twice as many as sheep and almost three times as many as cattle). Farmers are not commercializing because the set-up of the goat industry does not promote commercialization. The study concludes that a two-phased action plan needs to be implemented in order to commercialize goats and their by-products:

Phase I: Establishing the market linkage by formation of a co-operative of the communal goat farmers;

Phase II: Improving the productivity of goats by targeted group approaches to address the needs of specific groups, taking into account their current socio-economic conditions.

CHAPTER-III

METHODOLOGY

Methodology is a useful bridge to solve the research problem in systematic way. It describes the methods and process applied to the entire aspect of the study. In other words, methodology is the way to gather information. Different tools and techniques are used in different phase of this study. Thus the framework of methodology contains population, sample, instrument, data collection procedure and data analysis procedure. This chapter shows the design of plan and procedure of the study. It determines the size of sample, method of sampling sources, methods of techniques of data collection, instrument of data collection and procedure of data analysis.

3.1 Research Design

The design of the study is exploratory and descriptive in nature because the study has focused on income, status and opportunities including different problems and status of goat farming in Jagatpur VDC of Chitwan district. Research design refers to the procedures for the collection of data and its analysis. This study has analyzed all the information collected by field survey.

3.2 Nature and Sources of Data

This study mainly based on primary and secondary data.

A. Primary data

The study mainly focused in collecting primary data from the sample selected from Jagatpur VDC of Chitwan district. The primary data are both qualitative and quantitative by schedule structured questionnaire including informal interviews and semi-structured questionnaire.

B. Secondary data

All the secondary data were collected from different published and unpublished official records, reports of government and non-government organizations.

3.3 Study area

Chitwan District is located in Narayani Zone of the Central Development Region of Nepal which is taken as the sample area of the study this is because Chitwan district is supposed as the most potential district for animal husbandry and for agricultural sector. Especially, Jagatpur VDC is taken as the sample for the study.

3.4 Universe and sampling

The population of the study is considered as the total population of Jagatpur VDC which have 11, 195 under 2635 households. The selection of the sample is done using purposive and convenience method of sampling. While selecting the sample for the study, the 114 households which are rearing at least 4 goats in their home for the purpose of selling as well were taken as the sample for the study.

3.5 Data collection techniques and tools

To collect the data regarding the socio-economic impact of commercial goat farming, the researcher visited the sampled farmers with structure questionnaires and unstructured interview. Field visit, observation, informal interview were used as the supportive techniques and tools of the study. The researcher followed the flowing techniques and tools in particular.

1. Survey Questionnaire

In this research, the researcher collected the information about the status and socio-economic impact of commercial goat farming as well as to know its supporting and contrasting factors with the help of structured and unstructured questionnaire.

2. Observation

An observation was also done towards the structure of the goat rearing place of the sampled farmer to collect the information about environment, grass planting, feeding, and physical setting of the form.

3. Interview

An informal interview was done to know further about the supporting and constraining factors of commercial goat farming.

3.6 Data processing and analysis

The data collected from the field survey, observation and informal interview were analyzed by comparing, frequency counting, tabulating through descriptive way.

3.8 Ethical Issues

Silverman (2000, p. 201) reminds researchers that they should always remember that while they are doing their research, they are in actual fact entering the private spaces of their participants. So, this raises several ethical issues that should be addressed during, and after the research had been conducted. Creswell(2003) states that, the researcher has an obligation to

respect the rights, needs, values and desires of the informants. Miles and Huberman (1994) list several issues that researchers should consider when analyzing data and other issues before, during, and after the research had been conducted. Some of the issues involve the following:

In the process of research, the researcher tried to address the ethical issues from the various points of view as:

- First, the researcher made clear about the purpose and process of the research to the respondents so that they could decide whether to participate or not.
- Then I ensured that the research will not harm in any way to the respondents.
- The respondent were informed that they will have right to refuse or terminate their participation at any stage of the research.

CHAPTER IV AN INTRODUCTION TO STUDY AREA

4.1 Background

Chitwan District is located in south western part of Narayani Zone, Central Development Region of Nepal between longitudes 83°54' 45'' to 84°48' 15''E and latitudes 27°21'45'' to 27°52' 30''N. The district boundaries are marked by Nawalparasi District in the west along the Narayani River and the Makwanpur District in the east and the Parsa District and Bihar, India in the south. It has the Tanahun, Gorkha and Chitwan Districts to the north. It occupies 2,218 sq.km area which is 1.5% of total area of Nepal.

Most part of Chitwan district lies on Siwalik region (86.5%) followed by Mid-mountain region (12.7%) and Terai region (0.8%). Elevation of the district ranges from 244m to 1945m. Bharatpur is the district headquarters of Chitwan.

Narayani river is the major river and flows from north to east separating the district's western boundary. Most of the catchment water drains to this river. Manahari from eastern side drains to Lothar which again drains to Rapti River. Kayarkhola, Ladarkhola and Riukho River also drain to Rapti River and finally Rapti drains to Narayani River. Marsyangdi, Trisuli and Seti Rivers drain to Narayani River from northern side. Kaligandaki River drains to Narayani from Northern western side. KiranKhola, ArunKhola and BinaKhola drain to Narayani from western side. The district has many lakes like Nanda-Bhausulake, Kasara lake, Gaduwa lake, Tamoreghaila lake, BaikunthaKunda etc.

According to the national census 2011, total population of Chitwan district is 579,984 out of which 279,087 (48.12%) are male and 300,897(51.12%) are female with an annual population growth 2.06%. The number of total households is 132,462 which refers the average no of family size is 4.38 people per family. And the population density per sq. Km is 261.49.

Though varieties of Caste and Ethnic groups reside in Chitwan, the Brahmin Hill (28.56%), Chhetree (11.36%) and Tharu (10.92%) are the dominant groups. Similarly Tamang, Gurung, Newar, Chepang/Praja, Kami and Magar do also have remarkable presence within the district.

In terms of religion, the majority of people (81.4%) in Chitwan are Hindu followed by Buddha (13.02%), Christian (3.39%) and smaller shares of Islam, Kirat, Sikh, Jain and of other religions.

Language wise 70.14% of total population speak Nepali, similarly 10.16% of people speak Tharu. Tamang is spoken by 4.92% followed by Chepang language with 3.71%, Gurung 2.83%, Bhojpuri 1.67%, Magar 1.61%, Newari 1.58% and Darai 1.14%. Along with these languages there are also various languages having users less than 1%.

As per Census report 2011, 77% of populations aged above five are literate and can read and write. Only 83.87% of boys and men aged five and above and 70.68% of women and girls in Chitwan can read and write. 1.93% of men aged above five can read only whereas the similar percentage for women is 2.01. 12.62% of total populations have passed School Leaving Certificate. As per ISRC 2014/15, there were 680 ECD/Pre-primary centers, 521 primaries, 289 lower Secondary, 197 Secondary and 80 higher secondary schools in Chitwan in 2012. There are 2 constituent campuses under TU and more than 20 affiliated campuses/colleges under TU.

According to ISRC 2014/15, there are 2 governmental hospitals, 28 institutions, 4 PHCC/HC, 5 HP, 31 SHP, 106 PHC Outreach Clinic, 226 EPI Clinic and 456 FCHV in 2011/12. 11 NGO/INGOs were found to be involved in Health sector.

Chitwan district is also known as the medical city of Nepal. There are many top rated medical institutions in the district, although most of them are situated in and around Bharatpur Municipality. People from all over Nepal and also from North India come here for treatment. After Kathmandu and Pokhara, it is the third most medically developed district.

As per CBS 2011, 470927 people in Chitwan are 10 years and above and are considered for economic analysis. It is noticed that in Chitwan district, 53.8% of people are economically active. 48% of population is usually active and employed; however 0.8% of populations are usually active but unemployed.

Agriculture is the main economic activities of Chitwan District; around 30.79% of the population has their own agriculture business. 18.59% of the populations are involved in wage/salary earning. 10.09% of population are involved in own non-agricultural business, 8.15% in extended economic and 29.65% in household chores. 3% of population are seeking job, 30.51% are involved in study and 10.75% are involved in none of activity.

Now a days the trained of Foreign migration as worker is also rising. Remittance from foreign employment is also one of the sources of income. Especially the skill workers migrate to Gulf

Countries for certain years. Similarly the non-skilled workers of southern part seasonally migrate to India.

Among total land of Chitwan 59.7% of land is occupied by forest and 34.7% of land is used for agriculture and grass land. Similarly, only 2.8% of land is shrub, 1.7% of total land is barren land and 1.1% water bodies (Environmental Statistics, 2013).

Chitwan is one of the most potential districts for different kinds of agri-business and tourism. Recently, many young entrepreneurs are highly motivated to get involved in some kind of livestock business like; goat farming, cow farming, chicken farm, fish farm, pig farm etc...out of these livestock, goat farming is one of the oldest business in Chitwan district. Even the history of big goat farm in Chitwan district is not so long, people used to keep few goats in their house for the purpose of personal use or bussinessial point of view sincemany years. We can see the direct impact of such small scale of goat farming in their economic activities. So that, there are many people who are running their families with the help of money which they used to get from such small scaling business of the goat.

4.2 Jagatpur VDC: A model of Success in Agree Business

Jagatpur VDC is 20 Km south-west from headquarter Bharatpur. The study area is one of the historical districts for agri-business and serves as a gateway for the thousands of internal and external tourists every year to famous adobe of the wildlife and headquarters of Chitwan National Park, Kasara. The area with large number of luxurious hotels and natural beauties is a popular internal and external tourist destination from many years. Mainly, it is famous for exploring jungle on elephant rides seeing rare animals like one horned rhino and various species of wild cats. As a government crocodile breeding project and an old temple of Hindu God Bikram Baba inside the Chitwan National Park it's quite famous among the locals.

Because of having a bit more access of grazing for goat, Jagatpur VDC is one of the most potential areas for goat farming. Most of the families used to rear some goats in their home in Japatpur VDC with the hope of having some sort of support to make domestic expenses.

4.3 Population status of Age Group

Nepal is an agro- based society. Labor contribution is an important part of the country. So age structure of the population plays a significant role in the agri-business. Here, the age group of the people is categorized in to different groups.

4.1 Numbers of people in different age groups

Age group	Male	Female
0-4	472	404
5-9	622	617
10-14	740	754
15-19	650	656
20-24	354	577
25- 29	290	542
30-34	296	451
35-39	281	390
40-44	283	303
45-49	277	337
50-54	249	258
55-59	199	189
60-64	159	138
65-69	133	131
70-74	88	93
≥ 75	124	138
Total	5217	5978
Grand Total	11,195	

Source: VDC profile 2068

The table shows total population in this VDC, which is 11,195 out of which male are 5217 and women are 5978. According to the table, the maximum number of the people lies on the active group of the people which means that the VDC contains huge number of active population.

4.4 Population based on their mother tongue

According as their mother tongue, Jagatpur VDC has many ethnic groups and their own languages. The distribution of the population on the basis of their mother tongue languages of this VDC is given as:

Table 4.2 Population based on their mother tongue in Jagatpur VDC

Caste	Total
Nepali	8,338
Tamang	1,294
Daral	678
Magar	253
Tharu	155
Newar	181
Bote	67
Bhojpuri	37
Hindi	21
Rai	11
Maithili	17
Others	37

Source VDC profile 2068

The table shows that, around 74.47% of the people of this VDC used to speak Nepali and around 11.55% of people used to speak Tamang.

4.5 Family Size

There are 2635 families in Jagatpur VDC of Chitwan district. Most of them are lead by male. The following table shows the average family size of this VDC.

Table 4.3 Family size in Jagatpur VDC

Gender	Number of member
Male	5217
Female	5978
Family size	4.25

Source: VDC profile 2068

From the table, in the sampled VDC, there are 2635 households in total which contribute to have 11,195 populations in total so that the average family size in the sample VCD is 4.25 persons per house.

4.6 Family Size based on occupation

Occupation structure implies that the earning pattern of the people. Nepal is agriculture country; most of the people depend up on this sector. Most of the people are directly and indirectly involved in agriculture. This study also attempt to find out the present occupational status of the house hoods.

Table 4.4 Family numbers based on occupation in Jagatpur VDC

Occupation	Number of households	Percentage
Agriculture	1847	70.09
Government service	95	3.61
Business	128	4.86
Foreign Employment	254	9.64
Wages	204	7.74
Other	107	4.06
Total	2635	100

Source: VDC Profile 2068

Table shows the total households about 2635 where 1847 (70.09 percentage) households follow agriculture as occupation. 204 (7.74%) households have adopted daily wages. 254 (9.64%) households had adopted foreign employment. 128 (4.86%) households have adopted business occupation. 95 (3.61%) households had adopt government service and 107 (4.06%) households have adopted other occupation.

4.7 Population Based on Education

Education level is the indicator of all kind of status of the society. The following tables show the academic status of the sample VDC.

Table 4.5 Number of population based on the academic status in Jagatpur VDC

Gender	Population aged 5 and above				Literacy rate
		Can read and write	Can read only	Cannot read and write	
Male	4745	3893	43	809	82.04
Female	5574	3857	32	1685	69.20

Source: VDC profile 2068

The table shows that about 82% in male got literate and around 69.20% in female were literate in Jagatpur VDC.

CHAPTER V

DATA ANALYSIS AND INTERPRITATION

5.1 Background of Population and Educational Level of sampled households

5.1.1 Background of Population

The distribution of population of the sampled household in the study area according to their age is shown in the following table:

Table 5.1 Distribution of Age-wise Population Composition

Age-group	Male	Female	Total	Percentage
0-14	81	93	174	29.29
15-59	184	170	354	59.60
60 and above	38	28	66	11.11
Total	303	291	594	100.00

Source: Field Survey

The above mentioned table represents the distribution of the population according to their age in the sampled households. In which, out of total 594 people, it is found that 29.29% of the people are in-between the age of 0-14 years, 59.60% of the people are in the age of 15-59 years, and similarly, about 11.11% of the people of the age more than 60 years. It could be seen that, majority of the people in the study are of the working age. Because of maximum number of the people in the study are physically strong, it can assume that there could be so many young entrepreneur in the various field so obvious in agri-business.

5.1.2 Background of the Education

The distribution of the population in the sampled households according to their academic qualification is shown in the following table:

Table 5.2 Distribution of Education wise Population Composition

Education Level	Male	Female	Total	Percentage
SLC	72	46	118	19.9
Intermediate	56	41	97	16.3
Diploma	37	18	55	9.25

Master	19	3	22	3.70
Literate Only	127	94	221	37.21
Illiterate	25	56	81	13.64
Total			594	100.00

The above mentioned table shows that about 86.36% of the total population of the sampled households got literate. The academic qualification of the people got varies, out of these literate people includes 19.9% have passed SLC, 16.3% of the people have passed Intermediate, 9.25% have passed Diploma and around 3.7 of the people have passed Master in some subjects. Only 13.64% of the people were got illiterate, most of which are also trying to be literate through various adult education programme.

5.2 Land Holding by Sampled Household

The researcher has observed that all the participants have cultivated land and it is also observed that there was not any barren land. All the land is used for producing seasonable food items. Out of the total land it is estimated that 10% of the land is occupied by residential buildings and animal farm. The amounts of the land (in Kattha) that are holding by the sampled households are found as

5.3 Land holding by sampled households

Land (in Kattha)	No. of house holds	Percentage
0-5	14	12.20
5-10	24	21.10
10-15	35	30.71
15-20	22	19.29
More than 20	19	16.70
Total	114	100

The table shows that very few (12.2 %) people have the land less that 5 Kattha. 21.1% of the sample households have the land between 5-10 kattha while 30.71% of the sampled households

have the land 10-15 kattha. Similarly, 16.70% of the households have the land 15-20 kattha while 16.70% of the people have more than 20 kattha (1 Bigah). It seems that from the table, more than 50% of the sampled households have the land from 10-20 kattha which seems to be quite sufficient for normal food for a family of about 5 people. In an average, the area of the land that the people holding are satisfactory to consume the food for the family and it is also found that those families which do not have sufficient land to cultivate they used to take the land in rent (Adhiya, Bandaki etc). Although the distribution of the lands is not equivalent and sufficient it seems to be satisfactory in the sampled area.

5.3 Production of the Crops in the sampled area

Jagatpur VDC is one of the potential area for the land production because it's fertile mud, irrigation facility, productive manpower, facility of fertilizer, developed seeds of crops etc. The average production of different crops in the sampled households is given in the table below.

Table 5.4 Crops production by sample house holds

Types of Crops	Production (Quintal)	Percentage
Paddy	1450	46.62
Wheat	470	15.11
Maize	634	20.39
Others	556	17.88
	3110	

The table shows that, in the study area, the sample households used to product 1450 quintals of paddy in total in a year which is 46.62% of the total production of the crops while 20.39% of the of the total product is hold by the maize and similarly 15.11% of the total production is hold by wheat. And about 17.88% of the total production is holds by other crops (mainly by different cash crops). Since, the people can easily get the assess of the water for the crops from various source (like: deep boring, rapati and kerunga river, public kulo and nahar etc.) most of the area of Chitwan is assume to be good for agriculture that's why the study area is one of the most potential area for the agricultural product.

5.4 Sources of Income

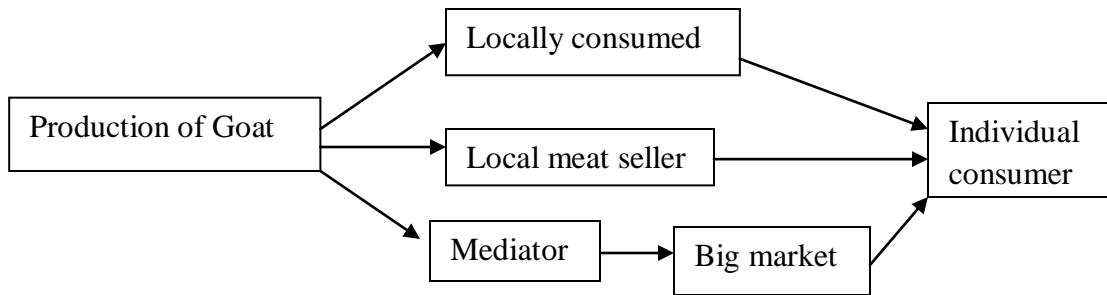
It is found that sample households used to manage their financial resources from different area including goat farms. The average (annual, monthly) income of the sample households from different sources is presented below:

Table 5.5 Sources of income of sampled house holds

Sources	Persons Engaged	Annual Income (tentative, in Rs)	Per household Average Income	Percentage
Goat Farm	174	7,980,000	5833.33	19.85
Agriculture	253	5,454,000	3986.84	13.58
Livestock (other than goat)	140	3, 858,000	2820.17	9.59
Wage Work	39	1,404,000	1026.32	3.49
Service	37	7,992,000	5842.10	19.89
Business/Trade	38	4,412,000	3225.14	10.98
Remittance	43	2,948,000	2154.97	7.34
Pension	9	1,944,000	1,421.05	4.83
Other	41	4,200,000	3070.18	10.45
Total		40192000	29,380.117	100

The table shows that the average monthly income of each sampled a household which is about Rs. 29,380.117 from various sources. Among the varieties of income sources, goat farming is the second highest income source of the sampled households which occupied 19.85% of the total income of the sample households in which the greatest income source of the people is found as service which occupied 19.89% of the total income of the sample households, both of which are seems to be equal. Form this evidence; we can declare that goat farming is one of the main sources of income for the sampled households.

5.5 Marketing Channels



From the informal interview and the questionnaire survey, the researcher has sketched out the general marketing channel of the goat farming. First of the all, a newly born goat is become ready to sell around 6-10 month according to its weight. Then, most of the goats that the farmer produced used to be sold from their home by the local meat seller. It is also found that, the people tried to make their goat ready to sell in the time of Dashain and Tihar because a huge number of meat is used to be demanded by the local neighboring consumer in this season according as Hindu religion. It is also found that the goats produced by the sampled households also used to be exported to the nearer big cities (like, Narangadh, Kathmandu etc.) by the help of the mediator, but the farmer want to sell their product for the local consumer because generally they used to get a bit high range of the price (in an average, Rs. 400/Kg) than from mediator.

5.5 Livestock Information

Chitwan is regarded as a developed district in the field of agriculture and livestock due to the emerging possibility of poultry, goat farms, dairy products and various fish ponds. Agro and livestock based professional practice in Chitwan has increased the economic activity in rural areas. Domestic animals like cows, buffalos, goats, poultry farming, fish form etc are the main livestock in Chitwan district. People have been keeping livestock from the ancient period but history of commercialization of livestock is very short. In the study area, commercialization of livestock farming does not go back to more than three decades. Farmers keep livestock for the purpose of milk, meat, biogas and use bi-products in the farmlands.

The financial sources of livestock farming are cooperative, bank, self saving, villagers, mother groups etc. Livestock farming plays a vital role to uplift the economic condition of the farmers in the study area. According to the farmers, the study area is suitable for livestock farming.

Livestock farming has various direct and indirect benefits such as use of house wastage, give nutritional food, employment, biogas and manure are direct benefits. The following table shows the number of the goats that the sampled households have;

Table 5.6 Number of households according as the number goats

No. of goats	4-7	8-11	12-15	More than 15	Total
No. of households	46	34	21	13	114

From the above mentioned table it was found that out of 114 sampled households 46 households have 4-7 goats, 34 families have 8-11 goats, 21 families have 12-15 goats and only 13 families have more than 15 goats, generally, the households having more than 15 goats used to export their products to the nearer big cities.

Table 5.7 Number of households according as the number of other Livestock

Livestock	Number of Livestock				
	0	1-2	3-4	5 or more	Total
Buffalos	38	53	9	4	114
Cows	74	36	4	-	114
Pig	105	-	6	3	114
Chicken	49	16	19	30	114
Duck	97	-	6	11	114

It is found that out of 114 sampled households; only 66 households used to keep buffalos in their home, while only 40 households used to have cows in their home. And, only 9 houses used to keep pig on their home but 65 families have chicken in their home and only 17 families have duck in their home.

Jagatpur VDC is in the leading position in the agricultural product as well as in the livestock farming like poultry farm, fish farming and duck rearing etc. Since the present study is mainly focused on the small scale goat farming so it obvious to have some numbers of goats in their home, but it is interesting to get that some of the families are also rearing other livestock from bussinessial point of view like poultry farm, fish farming etc. Even they can help in generating their income of the farmer, farmer usually used to be motivated to rear goat because of its easy

process of managing their foods, do not require to have any expertise, every family members can help in rearing and high demand of local goats. Therefore, the farmers who are rearing different kinds of livestock, they generally prefer to goat rearing.

5.6 Purpose of Livestock Farming

The main purposes of livestock farming in the study area are to produce milk, meat, bio-gas and use byproduct in the farm land. The researcher found that there was multiple purpose of livestock farming. The responses are shown in the table below.

Table 5.7 Number of households as the purpose of Livestock Farming

S.N.	Purpose	Self Consume only	Self consume + Business	Total
1.	Meat (Goat)	-	114	114
2.	Milk Production (Buffalos and cow)	26	37	63
3.	Meat (Pig)	-	9	9
4.	Meat (Chicken)	42	23	65
5.	Meat (Duck)	7	10	17
6.	Fertilizer	108	6	114

It is found that, the primary purpose of goat farming in the study area is to produce meat for business as well as to self consume. All most all of the sampled households used to keep goats for the purpose of business. But in other livestock it is found the mixed purpose of keeping livestock in their home either self use only or business. Out of 63 families, only 26 families used to keep cows and buffalos to produce milk for self consume while 37 used to keep cows and buffalos for the purpose of self consume and business. In the same way, people used to keep pig in their home for the purpose of business and self consume. Similarly, out of 65 families, 42 families used to keep chicken for self consume but about 23 families used keep chicken for both purpose. In the same way, out of 17 families, 7 families used to keep duck for the purpose of self

consume while other 10 families used to keep duck for both purpose. Other than producing meat and milk, the people have another next purpose of livestock farming for the fertilizer for their crops in which 108 families used to use the fertilizer in their own land but remaining 6 families used sell as well.

5.7 Financial Sources of goat farming

In the study area the researcher has found that out of 114 sampled households, only 37 household have taken loan from different financial sources for goat farming, such as from dairy cooperative, banks, villagers, women groups and rest of other were doing this business by investing the money from self saving. But it is observed that the main financial investment for this farming is loan from mother group and cooperative, this can be shown as

Table 5.8 Number of households which have taken loan for goat farming

S.N	Sources	No. of Households
1.	Mother Groups	19
2.	Commercial bank	3
3.	Agriculture D. Bank	1
4.	Co-operative	9
5.	Others	5

It is also obtained that the reason to take the loan from mother groups by maximum number of the farmer is because most of them are involved in some mother groups so that they can have easy access of loan in low interest rate.

5.8 Influence of goat farming for the Economic conditions

The researcher got the responses of the farmers on the statement that ' Are you feeling positive influence on your economic condition from goat farming?' as follows

Table 5.9 Influence of goat farming for the Economic conditions

Influence on Economic condition	Number of Households	Percentage
Good	94	82.47
General Influence	20	17.53
No Influence	-	0

The researcher obtained that from the study, the role of goat farming in the sample households is very significant this because 82.47% of the sampled household said they have good influence of goat farming to uplift their economic condition. In the same 17.5% of sampled household appreciate general influence of goat farming in their economic conditions while got no one saying no influence on their economic condition.

5.9 Problems and Prospect of small goat farming in Chitwan district

The problem and prospect of small scale goat farming in Chitwan district are analyzed by counting the frequencies of the each statement that the respondents have kept. On the basis of the respondents view different problems and prospect of goat farming found as bellows:

5.9.1 Problems of goat farming in Chitwan district

1. Lack of grass for feeding

Most of the farmers are used to feel lack of the green grass is one of the main problem in this sector. It is found that out of 114 sampled households 96 (84.21%) of the sampled households said it is the major problem of this sector. There are many reasons behind this like not having the idea about the developed types of grass, not having the proper land because of plotting of land, lack of other feeding materials etc.

2. Lack of developed caste of Goat

Out of the 114 sampled households 63 household said lack of the developed caste of the goat is also one of the problem for the commercialization in goat farming. In the time of the survey, researcher himself also got almost all of the farmers used to rear local caste of the goats, which also supports the result.

3. Lack of manpower

Out of 114 sampled households 51 households said lack of manpower for rearing goats is one of the problems of this sector. This may be because, most of the people below the age of 20 years are generally used to be busy in academic activities and high number of young people are used to be out of the house (national or international) that's why lack of the man power is also got as the problem.

4. Lack of Livestock insurance

Out of 114 sampled households 31 households said that lack of livestock insurance is one of the problems of the goat farming. Farmers complained that they have not been able to get access to the insurance. Even though the Government of Nepal have forced insurance companies to do cattle insurance and have given a minimum cap for insurance premium but they have not been able to reach the farmers.

5. Lack of facilitated loan

Out of the 114 sampled households 29 households said that lack of the facilitated loan is as the problem for goat farming. Farmers do not have financial support for having improved caste of the goat. Local cooperatives are not proactive in providing loans for goat farming. As the loan in Nepalese context is collateral based, some farmers does not have adequate collateral. A subsidy based low interest rate loan is required by the farmers.

6. Lack of Proper Training (about livestock)

Out of 114 households 21 families said that lack of the proper training about animal husbandry is also being of the problem. From the informal interviews with the farmers, they expect some kind of training programme about livestock farming and agricultural field visiting programme for the better practice of this business.

7. Lack of Veterinary Facility

Out of 114 sampled households 20 families said lack of the veterinary facility as one of the problem. By the observation while visiting to the sample household, the researcher himself found only one veterinary in the VDC. Even though almost all of the families have some kind of the livestock, but the veterinary service is not found satisfactory so it is also considered as one of the problem in this business.

8. Low price of meat

Only 23 families out of the 114 families select low price of the meat as one of the problem for goat farming in the context of the Jagatpur VDC. Eventhough the price of the goat meat is getting higher in the resent year, it is also supposed as fewer because of the investment in a goat to make it ready to sell.

5.9.2 Prospect of commercial goat farming

1. Prospects to develop goat farming as a main occupation

Most of the respondents are agreed with the statement the goat farming can be developed as the main occupation. 78 respondents out of the 114 households were agreed with the statements. In some recent year, many young entrepreneurs are highly motivated to the agri-business especially towards goat farming in Chiwan district. This also suggests us goat rearing also can be develop as one of the main occupation of the people.

2. Prospects to increase the level of income

From the above analysis it can be seen that goat farming is in the second position to generate the income source of the sampled people. Out of the 114 sampled households 97 respondents we agreed with the statements that the small scale goat farming also have some potential to increase the economic level of the people. So that we can suppose one of the main prospect of goat farming is to increase the income level of the people.

3. Prospects to increase employment

From the observation in the field, informal interview with the participants and survey questionnaire, we can conclude that the goat farming has potential to increase employment in the society. From the above mentioned analysis, 174 people are directly involved in this programme. And, 81 respondents out of 114 respondents we agreed with this statement. So that we can assumed the increasement in employment is also one of the prospect of goat farming.

4. Prospects to capture national meat market

Recently, Chitwan is the leading position to product meat in the nation especially from poultry, in the same way, if we are able to draw a bit attention of the young entrepreneur in commercial goat farming, certainly it may have the possibility to capture the national meat market. In the study 38 respondents marked that it has the prospect to capture the national meat market.

5. Prospect to increase the production capacity of land

No doubt, the proper use of the fertilizer produced by goat farming obviously increases the production capacity of the land because fertilizer produced by goats are used to be the best one for the land. In the study 74 respondents out of 114 respondents are agreed with the statement that the goat farming has prospect to increase the production capacity of the land, so it is also assumed as one of the prospect to increase the production capacity of the land.

6. Prospect to make healthier life

As we already reviewed in the previous section, goat meats are used to be taken healthiest as well as the choicest meat among other. People used to rear goats in home for the purpose of self consumption as well as for business so that this may have a great role to make healthier life of the people. In the study, 41 people are agreed with the statements, so this is also supposed as one of the prospect of goat farming.

CHAPTER VI

FINDINGS, CONCLUSION AND RECOMENDATIONS

This study has analyzed the impact of small scale commercial goat farming on the socio-economic status of the farmers who are engaged in this profession. This study is prepared on the basis of both primary as well as secondary data. Primary data are gathered from the field survey questionnaire and the secondary data are from various publications such as district profile, office record etc. Out of 2635 households, 114 households which are rearing at least four goats for the purpose of business are taken as sample for the study. Collected data have been analyzed and interpreted in descriptive ways. Major findings, conclusion and recommendations are presented below:

6.1 Findings

The major findings of study are as follows

- The total family members of sampled households (114) are 594. The average family size per household is 5.21. Out of 594 only 13.64 percentage people are illiterate who are unable to read and write. Mainly these illiterate people are involved in the goat rearing. Literate persons who are in the age group of 15 to 59 are interested in getting exposure in cities and in the capital city Kathmandu and those who could not get better opportunities in Nepal seek employment opportunities in foreign countries. But the researcher found that, in some recent year a huge number of young people are also highly motivated to the agribusiness including commercial goat farming.
- The average land holding by sampled household is 12.85 kattha (20 kattha =1 bigha) which can be assume as satisfactory for food production and livestock farming in small scale.
- Other sources of income apart from goat farming of sampled households are foreign employment, other livestock, services, business and others (vegetable farming, cash crops). Out of 594 people, 314 people are directly involved with the livestock farming among these 314 people 174 are involved in goat farming. Income source generated by goat rearing occupied the second highest position after service in sampled households in which, 19.85% of the total income is contributed by goat farming whereas 19.89% of the total income is contributed by service.

- In some recent year, the researcher found that the young entrepreneurs are highly motivated to commercialization of goat farming. .
- Farmers in the study area are rearing livestock for the purpose of milk production, meat, farming and energy (biogas). The main livestock in the study area are goats, buffaloes, cows, and poultry.
- The financial sources of livestock farming in the study area is loan from cooperative, mother groups, banks, self-saving, villagers, women groups etc. Farmer prefers mother group and cooperatives than banks because of it's easier process to get loan.
- It is found that 40.35% of the sampled households have 4-7 no. of goats, 29.82% of the sampled households have 8-11 no. of goats, 18.42% of the sampled households have 12-15 no. of goats, and 11.40% of the sampled households have more than 15 no. of goats. The researcher also found that 66.67% of the sampled households are rearing buffalos, 35.08 % of the sampled households are rearing cows, 7.89% of the sampled households are rearing pigs, 57.01% of the sampled households are rearing chickens and 15.02% of the sampled households are rearing ducks.
- The researcher found that no one sampled household have got opportunity to insurance their livestock.
- In an average, the monthly income of a sampled household is about Rs. 29,380.117 out of which 19.85 % is contributed by the goat farming which is in the second highest position to generate the income source of the sampled households.
- It is found that, the primary purpose of goat farming in the study area is to produce meat for business. All most all of the sampled households used to keep goats for the purpose of business. But in other livestock, it is found the mixed purpose of keeping livestock in their home either self use only or business. Out of 63 families, only 26 families used to keep cows and buffalos to produce milk for self consume while 37 used to keep cows and buffalos for the purpose of self consume and business. In the same way, people used to keep pig for the purpose of business and self consume. Similarly, out of 65 families, 42 families used to keep chicken for self consume but about 23 families used keep chicken for both purpose. In the same way, out of 17 families, 7 families used to keep

duck for the purpose of self consume while other 10 families used to keep duck for both purpose. Other than producing meat and milk, the people have another purpose of livestock farming for the fertilizer for their crops in which 108 families used to use the fertilizer in their own land but remaining 6 families used to sell as well.

- The researcher obtained that from the study, 82.47% of the sampled household said they have good influence of goat farming to uplift their economic condition. In the same way, 17.5% of sampled household appreciate general influence of goat farming in their economic conditions while got no one saying no influence on their economic condition.
- It is found that, most of the families used to expend their income from goat farming in domestic purpose and their children's education.
- Farmers in Chitwan are facing so many problems regarding goat farming, some of the major problems are;
 - ❖ Lack of grass for feeding
 - ❖ Lack of developed caste of goat
 - ❖ Lack of manpower
 - ❖ Lack of livestock insurance
 - ❖ Lack of facilitated loan
 - ❖ Lack of proper training (about livestock)
 - ❖ Lack of veterinary facility
 - ❖ Low price of meat
- There are not only problems, the researcher found so many prospects of goat farming in Chitwan districts. According to the farmers the major prospect of this profession in the Chitwan districts are;
 - ❖ Prospects to develop goat farming as a main occupation
 - ❖ Prospects to increase the level of income
 - ❖ Prospects to increase employment
 - ❖ Prospects to capture national meat market
 - ❖ Prospect to increase the production capacity of land

❖ Prospect to make healthier life

- On the basis of the information collected from the survey study, the small scale commercial goat farming has significant role in the socio-economic status of the people, so the study helps to make the conclusion that there is a good possibility of commercialization of goat farming so we can do this business in the larger scale which may be the mile stoning step to uplift our economic condition.

6.2 Conclusion

A huge number of young entrepreneur are highly motivated in the commercialization of agri-business in some recent year in the context of Nepal, especially in Chitwan. Chitwan is being developed as one of the leading districts in agriculture as well as livestock farming because of its well climate and access of various facilities. From the study, it can be concluded that, small scale goat rearing in the projected area is one of the main source of income generation which has a very influencing positive effect on the socio-economic status of the people. Even though the history of commercial goat farming is not so long, people are encouraged to rear some local goats in their home than other livestock with the purpose of self consume as well business in the projected area. For the purpose of livestock farming, people used to assume cooperative and mother group as the easier way to financial management. Even the cost of the goat's meat is higher in some recent days; people in projected area are not completely satisfied with the live goat's cost. The study also concluded that there are various problems or the barriers for the small scale commercial farming in the projected area mainly; lack of grass for feeding, lack of developed caste of Goat, lack of manpower, lack of Livestock insurance, lack of facilitated loan, lack of proper training (about livestock), lack of veterinary facility, low price of meat etc. Even this have so many problems, it have also so many prospects like; prospects to develop goat farming as a main occupation, prospects to increase the level of income, prospects to increase employment, prospects to capture national meat market , prospect to increase the production capacity of land, prospect to make healthier life.

6.3 Recommendation

Nepal remains a predominantly agrarian economy. About 66 percent of its population is involved in agriculture, which accounts for 35 percent of the gross domestic product or GDP. The

livestock subsector of agriculture contributes 24 percent of the total agricultural GDP, and also plays important roles in human food and nutritional security, livelihood, regional balance, gender mainstreaming, and rural poverty alleviation. Yet, there is no separate national livestock policy in Nepal, and instead, its national livestock-related policies are spread across agriculture and other sectors. In this context, the government of Nepal should have to make a separate policy for livestock farming so that farmers can get different subsidies and supports and hence they are encouraged to this profession.

To make more participation in the commercialization of goat farming, it is necessary to have an organized marketing system, service of facilitated loan as well insurance of livestock so the study recommend to the related official to manage those things so that the farmer feel secure with this profession.

Government should enhance and increase the access of market and provide necessary technical support such as veterinary animal feeding and environmental information.

Farmers are not aware of improved caste and feed of the goats. So it is necessary to make them aware about different developed caste of goats in the place of local goats.

At last, the commercialization in goat farming can be established as one of the main occupation which can help people to live a bit satisfied life so the researcher suggest to the new entrepreneur to seek different alternatives related to agribusiness especially commercialization in goat farming.

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Appendix A

PROBLEMS AND PROSPECTS OF SMALL SCALE COMMERCIAL GOAT FARMING

Household Survey:

1. For individual farmer (main person of house):

a) Name.....a) Age:..... b) Sex:.....c) Ward (Add.):

e) Religion f) Occupation: (i) Main: (ii) Other:.....

2. Description of family member.

S.N.	Name	Age	Sex	Education	Occupation
1					
2					
3					
4					
5					
6					

3. Livestock Information

Livestock	Number	No. of people engaged	Livestock	Number	No. of people engaged
Goat			Chicken		
Buffalo			Duck		
Cow			Sheep		
Pig			Other		

4. Main purpose of livestock farming

Livestock	Self consume	Business	Both
Goat			
Buffalo			
Cow			
Pig			
Chicken			
Duck			

5. Have you got training about goat farming?

a) Yes

b) No

If yes, from which organization? a)..... b)..... c).....

6. Have you taken advice from J.T.A.?

a) Yes b) no

If yes, which types of advice? a).....b)..... c).....

7. Do there any role of fertilizer produced by this farm in raising the production of crops?

a) Yes b) No

8. Have you taken loan for this farming?

a) Yes b) No

If yes, from which sector. (i) Unorganized sector (ii) organized sector.

9. From where did you take the loan (tick on the following)?

S.N	Name of the bank	Interest rate	Remarks
a.	Mother Groups		
b.	Commercial bank		
c.	Nepal Bank		
d.	Co-operative		
e.	Others		

10. Did you feel difficulty to get loan?

a) Yes b) No

11. What kind of difficulty did you face?

a) High interest rate b) Lengthy process
c) Far d) Other.....

12. Are you feeling positive influence on your economic condition from goat farming?

a) Good

b) General

c) No

13. What is the main source of food for goats?

a) green grass from forest

b) Green grass from own land

c) Choker/ wheat

c) Others:1..... 2.

14. Have ever seen any kind of disease in goats?

a) Yes

b) No

if yes, what kind of.....

15. Do you have access of veterinary doctor and JTA?

a) Yes

b) No

If yes, a) always b) Normally c) Rarely

16. How long does it take to be ready for a goat to sell from birth?

a) 6 month

b) one year

c) Other.....

17. From where the goats are selling?

a) From house

b) From nearest market

18. What is the selling price of male and female goat?

.....

19. Are you satisfied with the selling price of goat?

a) Yes

b) no

If no, why.....

20. Land Ownership Record

Types of land	Amount of land (owned)	Rented in
Khet		
Bari		
Others		

21. Production of crops

Crops	Production (Quintals)
Paddy	
Wheat	
Maize	
Others	

22. Annual Income (Individual family)

Sources	Income (Rs.)
Goat Farm	
Agriculture	
Wage Work	
Service	
Business/Trade	
Remittance	
Pension	
Other	
Total	

23. Do you have experienced any kind of support for government or any organization for goat farming?

a) Yes

b) No

If yes, How.....

24. What are the problems of Goat Farming? (Write in priority order)

1.

2.

3.

4.

25. What are the problems of Goat Farming? (Write in priority order)

1.

2.

3.

4.

26. Do you have any suggestion, recommendation, and view about goat farming?

.....

Thank You

Appendix B

Number of sample households on the basis of their caste

Caste	No. of households
Bramin	44
Tamang	10
Darai	12
Magar	6
Tharu	13
Bote	3
Rai	4
BK	9
Sunar	6
Damai	7
Total	114

Number of sample households according as their living ward of Jagatpur VDC

Ward no.	No. of households
1	19
2	24
3	16
4	18
5	22
6	15
Total	114