

Unit - One

Introduction

1.1 Background

Development is a dynamic & continuous, & universal process. Development has two components eg: economic & social development. Before 1980 only the economic development was considered for the development. After 1949, the world was divided into two parts according to development & under development by Late American president "Harry Truman". He wanted the open economic policy can sustain the American economic. Due to this reason he explained the meaning & method of development.

The decay between 1950-1960 was analysis of Economic growth. (per capita incomes, Total GDP, export should increase, was the indicator), But that indicator was increased the rich country more rich & poor country was more poor.

The decay of 1970, the basic need was considered for the development & due to this basic need the development was defined.

Only physical need was not indicators of development, so that after 1990 the social & human development was most important indicators indicated human development Report by UNDP.

In the South East Asia has also done some development model. e.g :-

-) Development is a process by which the member of society increases their personal and institutional capacities to mobilize and manage resource to produce sustainable and just distributed improvement in their quality of life consistent with their aspiration (by David Korten).
-) Economic development is defined as a sustainable increase in living standard that compass materials, consumption, education and environment protection (by World Bank).
-) The 20% richest peoples of the world were utilized 82.7% resources and poorest 20 % peoples utilized only 1.4% of incomes. Now a days also, 80 % of Total incomes occupied 20% of rich peoples, where as 80 % of poor peoples utilize 20% of total incomes of the world. The main goal is human development and the economic development is the means of human development & not End (by UNDP Report 1992).

) The human development perspective was the last Action of development in Nepal (by UNDP Reports 1998).

) The concept of Gender & development was changed time to time.
eg ;-

WID (Women in Development), WAD (Women and Development) & GAD (Gender and Development).

The Gender strategy gets important after 1980. The International Seminar has risen different issued about women development. To, summit that issued and emphasis with gender can obtain the development goal.

The gender development perspective can achieve the goal of sustainable & equity Participatory development. The successful Program for rural development of SAARC countries especially with reference of Nepal.

The Successful Rural development in India

1. Self-Employed Women Association 1988. – Women employment.
2. Co-operative Andholan of India
3. Peoples Institution for developments & Training. (Formation of Local, group, community & Empowerment.).

Bangladesh: Successful Rural Development

1. Group credit for the poor program. – (Group Credit.)
2. PROSHIKA – (Infrastructure & Human development.)

Pakistan: - Dandzai – (Rural education, Infrastructure.)

Philippines: - Commercial irrigation system.

We have learn the lessons.

1. Peoples participatory among the group.
2. Confined the people's main problems.
3. Economic development of lower level peoples of group.
4. For Rural development the, Agriculture, Self-employment, Empowerment should priorities.
5. To utilize the local resources.
6. Local groups common should summit at development process.

The rural development in Nepal from historical perspective. The 81 % total peoples of Nepal are depends in agriculture, so the development priority should give in agriculture. While political changes after 1950 and the successful program were eg;

1. Small farmer development program.
2. Production credit for rural women.
3. Community forestry.

4. Make own village self.
5. Poor with Bishweshwar.
6. Gramin Swabalamban Program.

Some rural development was started in Nepal. These were

) ***Tribhuwan village development program (TVDP)***. The main aim was Agriculture, Education, and Health & Small cottage industries.

1. Community level.
2. Rural development level.
3. Administration level.

) ***Panchayat Development Program:***

With the changes of political, situation the Panchayat development program was started after 2017 BS as the objective of

1. Institutional development.
2. Social mobilization.
3. Attitude changes.

) ***Integrated Rural Development:***

The Integrated Rural Development was started after 1970 with the strategy of development of Agriculture, Road, Irrigation, Livestock, Forest & Tourism. eg:-

1. Small farmers development program (SFDP).
2. PCRW were more successful.

Middle of 1970, The following Integrated development program was started.

1. Rasuwa - Nuwakot, Integrated Rural Development Program.
 2. Sagarmatha, Nuwakot, Integrated Rural Development Program.
 3. Koshi hill, Nuwakot, Integrated Rural Development Program.
 4. Mahakali hill sector, Nuwakot, Integrated Rural Development Program. Karnali-Bheri, Nuwakot, Integrated Rural Development Program.
1. Rapti Anchal, Nuwakot, Integrated Rural Development Program.
 2. Integrated Mountain hill development project.

1.2 Statement of the Research Problem

There are more than 60 castes/ethnic groups in the country (CBS, 2004). They are excluded and less explored by the government and society. They are one of the least developed groups and need helping

hands for their equitable development. In the field of education also, they are very behind. Most rural women have still been unable to afford an adequate education, cloths, shelter, food and so on.

The statements of the research problem are as following;

The poverty reduction, program was started in National planning commission since 2055 B.S. (Terai & Hill), but in livestock program, specially the poverty reduction program is not started until now. The semi commercial goat program was started since 2057/ 058 063/ 064 in 22 districts but not fully successful due to;

1. Climatically condition: - The Terai goat was given in hill area.
2. Time and distribution: The goat was distributed in the last of the fiscal year: -
3. Treatment : - The distributing goats were not PPA Vaccinated.
4. Basic requirement was not full filling eg;
 - a. Forage production
 - b. Goat housing, management
5. Lack of feed and fodder
 - a. Poor People was distributed 10 goats in a time, but they have no any feeding materials for goat.
6. The Moist Disturbance: - The programs could not smoothly run due to Moist disturbance.
7. Nobody knows the goat raising program is the only one earning means of Back ward women which will gives good impact & socio - economic changes, so that I was started the poverty programs in backward women through goat raised programs.

1.3 Objective of the study

The general objectives are as following: -

1. To know the real backward women in that society (search the new facts).
2. What is the great cause of being backward family?
3. How the goat-raising program can change the Socio-Economic condition of back ward women.
4. What are the social & Economical barriers to change the backward to forward condition?
5. To find out the cause effect relationship of any event.
6. To give the solution of the problems.

Specific objectives of the study are following: -

1. To assess the educational status of the backward women inhabitants of Birendranagar 1, Dharapani.
2. To assess the occupational status of the backward women inhabitants of Birendranagar 1, Dharapani.
3. To measure the income and expenditure condition of the backward women inhabitants of Birendranagar 1, Dharapani.

1.4 Importance of the study

In study area women are very poor as well as marginalized. They are unexplored in educational occupational and political field. This study will be helpful for those women who have been surviving through goat rearing occupation. So the importance of this study has following: -

1. The study will be helpful for development practitioners' forthcoming researcher to attention over major problems of rural women.
2. Goat raising program directly related to socio-economic condition of backward women, which will indicate the condition "after & before".
3. It helps to dig out the existing socio-economic condition of rural women.
4. This study will be informative to policy makers, leaders, related to development and social work.
5. To fulfill the partial need to pursue M.A. degree in Sociology.

1.5 Structure of the study/ Organizations of the study

The study has been organized into 6 chapters with required sub-topics. It has been designed in order to make the study more specific, precise, achievable and impressive. The organization of the study is as following: -

1. Chapter One: Introduction.
- Chapter Two: Review of the Literatures.
1. Chapter Three: Research Methodology.
 2. Chapter Four: General introduction of the study area.
 3. Chapter Five: Presentation and Analysis of Data.
- Chapter six: Summary, Conclusion and Recommendation.

1.6 Limitation of the study

The limitation of the study was the particular area of Birendranagar Dharapani & Bangesimal of Uttarganga. It was not generalize/represent whole country. The findings of the study does not represents the living standard and prosperity of whole Nepalese women because the particular time, particular amount of money, limited resources, limited research person, & particular place has taken for the study.

Unit -Two

Literature Review

The Review of Related literature has defined & searched the Research & finding about the Socio- Economic Development, Type of farming system (Goat raising program), Backward women, under poverty elevation Program, Gender situation & Beneficiary on the production system.

The Review of related literature involved the systematic identification, location and analysis of documents containing information related to the research problem. (Gay, L.R) The review of related literature is the major process the leads the past theory. (Consuelo G. Sevilla etal). Book, Reports, Journal, Research oriented dissertation & use of means of communication. Literature review is more use full & essential for research (O.R. Krishna swami). The farming system is the relationship between farm unit & farm resources where farm unit include the household, plants & animals. (Axin & Axin) .He also defined that, the recycling ratio and type of farming system and by the help of recycling relation to know what type of farming or categorized of system. Egg: - If recycling is high: - subsistence farming system. Where as RCR is low;- commercial farming system. The recycling ratio of Nepalese farming system is high and it becomes subsistence farming system. In the farming system of Nepal, the B R Acharya descried the composition of population are 89.5 Hindu, 5.3 Buddhist, 0.1% Jain, 2.7 % Muslim, .02% Christian & 2.38% are others. The poverty is 49% & rural settlements are 94 %. The people of Nepal are gating difficulties to know about relation, combination, poverty, due to agro ecological, moisture, regimes, altitude slop & socio- economic condition .are: -1) Landless farmers - Labor. 2) Small Farmers -: Own farm + labor, 3) Medium farming (own farming for subsistence.) 4) large farm errs-: large farm by selecting crop convert money. 5) Feudal farming. According to Poodle four type of farmer are Nepal. eg 1) Marginal land -: Total Agriculture land 31 %, 2) Small farms-: 33% of total agriculture land .3) Medium farmers; Agriculture land holding 18%, 4) Larger farmers Agriculture Land holding 18% . Nepalese farmers depend upon 1) photography 2) Cultural practices, 3) Availability of market 4) Seeds, 5) Pesticides, 6) Labor, According to Ecological perspective: - The farming system can divided into I) Multi crop

farming 2) Inter cropping farming, 3) Mono cropping farming. There are four type of Nepalese farming system, which based upon crops related to ecological dimensional structure of Nepal Crop based farming system .1) Low land (rice farming system) 2) up land farming (maize based) 2) Horticulture based farming -: Socio-economic condition. 3) Livestock based farming system, a) Low yield, b) Transhumance system. 4) Integrated mixed farming system.

a) Agro - ecological, b) Socio-economic environment

1) FARM TASK (Nepalese agriculture is subsistence Farming system)

Livelihood & subsistence 1) House hold task,. (In side of house work) eg, cooking food, washing, fetching, curing, feudal wood from forest, shopping, child bearing, sending to school, social gathering, entertaining guist. 2) Farm related task. (Out side the housework in field) a) Crop based production, b) Livestock production, c) Horticulture production. (4) Labor utilization. 1) Human component labor -: Human resources a) hired & exchanged labor. b) Non- family labor, 2) Animal components labor. 3) Mechanical components labor. The human component labor is family labor & non-family labor. Where as the animals labor are bullock labors? The mechanical labors are Tractors. Thresher, Pump set, etc. (5) Gender issue. 1) Gender & development, 2) Women in development. The gender & development are synonymous words which explain ed the development of gender where as the woman in development are the empowerment of women in socially, culturally, politically, economically, equity and equality in co- ordination, co-operation ,equal opportunity, literacy, etc.

2) Gender perspective on agriculture farming

I) Comparative crops	
Women	Men
1. Subsistence crops	1. Cash crop: sugarcane, tobacco, potato
2. Cereal crops	2. Horticulture crops: maize, millet barley, paddy
3. Small animal -goats	3. Large animal-cattles
4. Poultry farm	4. Technical farms

II) Separate field	
Women	Men
1. Kitchen garden	1. Large scale vegetable in the main fields
2. Vegetable in kitchen garden	

III) Separate task	
Women	Men
1. Seed collection	1. Digging, ploughing
2. Seed selection	2. Preparation of lands
3. Seed sowing	3. Spraying

IV) Share tasks.

- Weeding

-Harvesting period.

V) Women managing farm,

VI) Technical issues; _ Crops, L livestock, & Horticulture

> 90% of harvesting & transplanting by women.

- Women have done farm management decision.

(VII) Decision making .is one of the important activities witch indicate the household right. (Acharye & Bennett,)

- Agriculture related work 42% decided by women.

Decision of fruit related work		Decision of livestock related work	
Men	16%	Men	24%
Women	21%	Women	11 %
Mix	63 %	Mix	65% (tree)

(VIII) Socio - economic issues		
Fodder collection		
	Men	Women
Mahakali race	60%	40%
Bar gale Ray	8 %	92%
Magyar, Goring, Taming	50 %	50% (Agriculture work)
Farm labor (Newar & Rai)	50 %	50%
Magar & Rai		> 50 %

(Subsistence agriculture)

(IX) Economical issues. (Variable -: land, labor, capital, credit, & information)

- Agriculture cropping system. Women 39%
- Labor exchange Women 11 %

On the whole household ratio which are related with economic issues 39% women, 11% jointly labor & rest of the percentage are covered by male,.

- i) Small farms--: Female >59 % & joint 23 %
- ii) Middle farms -: Female 45 % & joint 29 %
- iii) Big farms -: Men 45 %

3) WOMEN IN FARMING

96% women are involve in agriculture – system.,

>98 % women are involved in agriculture labor.

The women in agriculture labor fulfill 59% labor.

Women involve in agriculture labor are

- i) Unpaid agriculture labor. (They do not have right over what they earn.).

-Women contribution involved 44% for agriculture.

-Family income s 50% from women earning.

- (2) Main responsibilities -: Generally, women have the main responsibilities to care house children, domestic fowls and animals in their society as day-to-day routine.

2) Main duties -: Main duties of the women are in the subsistence food grains & vegetable production, in the name of kitchen garden, cooking, cleaning. The population of Nepal is 50.04% women of total population (population census 2058).

- Women are involved in homely work & non-earning occupation .The women are working 18-hour/ day. (CBS- 2003)
- The total food production of world, the women takes 44%. (I.L .O 1992).
- 50% of total incomes are earning by women / family.

4) LIVESTOCK OCCUPATION IN NEPAL

The 73% work has been done by women in livestock occupation beyond the main duties (cooking, cleaning & water fetching & home kitchen garden).

The details are below.

Description of work	Total work by women work load %	Involvement %
Management of animal feed	37.88 %	58.34 %
Collection of fodders	25.49 %	68.00 %
Production of agriculture product for use of livestock	6.55%	62.33 %
Animal house management	20.58%	80.95%
Use of animal product and marketing	9.45%	66.65%
Total	100%	

(Source -: Field survey 2003)

iii) Pick season of agriculture.

The women work 18-hours/ day in picks season & 6 hours in rest of time, where as men work only 8 hour/day. (Agriculture Ministry 1994).

iv) Involvement of women in other sectors.

Nepalese farmers work 20-35% in other sectors. eg - non agriculture sectors.

40 % of active women work in other sectors, where as rest of other are involving in agriculture.

v) High demand of women workers during plating and harvesting time.

- Short-term wages labor.

- Daily wageworker.

(B) Self employment worker.

This type of worker found in Tibetan - Berman language family Indo-

Aryan family which are less than 15% .

(C) Wage Labors.

Nepalese women farmers are more than 50% in seasonal daily wages Workers. Mostly they are unemployment & wages which they will gets is less than men employer. The bargaining capacity also less due to lack of organization.

(D) Long term dependent labors. (Domestic servant & kamaiya).

Nepalese women are directly or indirectly more or less domestic servant or a long time kamiyas (like slave).

5) WOMEN AND AGRICULTURE

	High hill	Mountain	Terai
Agriculture involvement	54 %	60%	42%
Planting of cereal crops decision	43 %	43%	43%
Animals domesticated & marketing decision		44% women	31% men
Animal feeding, housing, cleaning, decision. All from women			
Animal, marketing, credit, no. of animal keeping decision			74.16%.

DECISION MAKING BY WOMEN

1. House owner/housewife a mother 30.77%
2. Daughter in law 68 %
3. Daughter & grand mother 3.85%

Active participation for production

1. Vegetable 67%
2. Horticulture 50%
3. Livestock 73%

Women involve in agriculture

1. In world 50%,
2. In Asia 50-60%,
3. In Sub Sahara Africa 80%.

According to Agriculture Senses of 2058 B .S.

- i) Total agriculture land is 18%.
- ii) 27, 00000 farmers depend open 26,00000ha of agriculture land.
- iii) 95 ha or 18.6 propane (one bigha 8 katha) are getting/ farmers.
- iv) >.1 ha, the poor farmers are 70% which include 30% of total agriculture lands.
- v) < 5 ha, the rich farmers are 1.5% which include 14% of total agriculture lands.
- vi) Farmers holding agriculture land in Terai is average 1.33 ha, in mountain 0.77 ha, & in hill, 0.68 ha. (According to CBS – 2058,).

The statistical data of poverty elevation, of Nepal was published in 10th Kartik, 2063, B.S. & The absolute poverty was reduced 11%, which was declared by the chairman of poverty elevation project Dr. Mohan Man Sainju. The absolute poverty is 31%, now 31% in Nepal. He was addressed that the 10th, five year plan was planned the poverty elevation skim through the community for the benefit of targeted peoples. The program was started from 6 districts to reach 25 districts, according to experience. The program was analyzed and concluded that, among the targeted peoples involve 45% are Dalits (backward). 32 % are ethnic groups with the 56% of women .The real identification of targeted groups, and timely the use of found and responsibilities should within the poor family are the main feature of program .The program aim was to reach with the whole country up to 2015 BS.

The increasing trend of poverty in Nepal and SAFTA (Sought Asia freedom for tread association) (Sharma, Apalya). He concluded that, the economic development of Nepal has shown 2.7% economic growth & 1,20,00000, or 47 % population is under hunger. (FAO-2007,). The Asian bank, World bank &, International monitory fund are ready to help to reducing the poverty & economic development but the development polices of them are to be increase, liberalization, privatization, dependency& open world economic.

The Adoption of Improve Livestock Technologies in the Farmers Field, Situation analysis -Improving Livestock productivity in mix crop Livestock farming system in Sought -Asia (Nepal), ILRI/ICRISAT,/NARC). Livestock is the integral component of Nepalese farming system. The manure & drought power needed for an Agriculture operation are supplied from livestock & return crop residues and Agriculture by-products are used for livestock feeding. The farming system of Nepal are subsistence type & farmers rear buffaloes, cattle, goat & cultivated cereals, vegetable & fruits in homestead of keeping single crop in livestock
The productivities of livestock in Nepalese farming system are subsistence type due to different resources. To improve the productivity many Government and non-Government organization have been involved in technology & Constraints on adoption in the farmer's field.

6) The Research finding was (Bovine Research program NARC, Khumaltar).

- a) Land holding size.
- b) Land use pattern.
- c) Agriculture production-; Average Agriculture production in kg/ha are, Rice 2584, Maize 617, Wheat 628, Oil seed 210, Legume 415 etc.
- d) Production of different origins (kg /ha): - Rice straw 3415, Maize straw
- e) 2990, Wheat straw 1279, Oil sees straw 400, Legume straw 864.
- f) Herd composition of cattle & Buffaloes.
- g) Livestock raising system, -: Livestock raising system (% of house hold) 81% totally confined, & 19% partially confined.
- h) Production of major Livestock commodities (Average) .

-Lactation period (month) -: 9.08,
 -Milk production liter/day -: 8.47 for

cattle.

-Manure production (kg) -: 7799.57 " "
 - Milk sale in liter / day, -: Rs, 16.98, " "
 - Manure sale in Rs -: 506.
 - Total incomes -: Rs 17684.14, " "

-Lactation period (months) -: 9.79 for buffalo.

-Milk production (liter/day)-: 10.30 "
 "

Milk sale liter /day -: 11.86 " "
 -Total incomes Rs / month -: 5473.09 " "
 - He buffalos meat sale in Rs-: 3000 " "

(g) Use of milk by the house holds (average),

- Milk production in flush season -: 10.7924.
 - Quality of home consumption in flush season -: 1.9540.
 - Quality of sold in liter in flush season-: 9.55.
 -Selling price/ Rs/liter -: 18.6424.

Sale of milk in flush season (Percentage of respondents)

- DDC, 25 %, Co - operative 55.7 %., Consumers 9 % , Middle man 4.2 % , Retailer 3.6 % , Restaurants .6 % & Hotels 1.8 % .

(h) Familiarity of Livestock Technology.

All together 82.7 % of the respondents are familiar with the improved or crossbred buffalo raising technology.

The familiarity of improve livestock technology (percentage of respondents).

- Cross bred buffalo raising 82.7 % .
- Cross by product 72.3 %

(I) Adoption of improved livestock technologies, regarding adoption of the above technologies and the adoption rate.

Response toward improvement in the technology.

- Cross-bred buffalo -19.6 %.
- Cross byproduct - 35.2 %.
- Both - 37.4 % .
- Non - 7.8 %

(J) Problems with adoption.

Different factors that might be hindering the adoption of technology was classified into groups. i) Bio physical problems, ii) Socio - economic problems.

Biophysical problems.

AI together five factors wear considered as biophysical pro balms.

- Respondents of disease 32.3% followed by low yields of crops (29 %).
- High mortality rate of animals (26.4 %)
- Lack of quality foddors (16.6 %) .
- Lack of AI facility / breeding bulls (14.9 %)

Socio- Economic problems.

Regarding socio - economic problems.

- Lack of cash is the most important problems.(32.4 %) followed by low market price of their products (2 4.9 %).
- High expense on medicine to treat their animals (14.7).
- Lack of pastureland for grazing (14.5).
- High risk in adopting the technologies (12.9) .
- Lack of training in improved technologies (9.9) .
- Lack of credits facilities (5.9) .
- High import cost of livestock and related commodities (3.4).
- Unmanaged improved policy (1.7)

(k) Source of getting the technologies.

Source of technology dissemination as responded by percentage of farmers.

- ARS/DLSO, 59.8 % .
- Market 4.5 % .
- Training 16.8 % .

- Co-Operative (farmers society) 6.7 % .
 - ARS & Training, 5 % .
 - Co - operative & training, 7.3 % .
- (L) Feeding and nutrition.

1) Source of feed -: AL Almost 81 % of HHS feed their livestock on homemade Feed., are value are 11% for concentrate feed that is available in market , rest of feeds, their animals with mixed ration .

2) Basis of feed provided. -: About 85 % of HHS feed their animals based upon their production across the location, while approximately 15%, feed their animals on the basis of their wish.

3) Composition of feed .-: The composition are,

- Maize -: 34 % .
- Rice police / bran -: 29 % .
- Wheat grain / bran - : 13 % .
- Sun flower cake -: 2 % .
- Mustard cake -: 3.5 % .
- Salt -: 1.3% .
- Minerals -: 1.2 % .
- Vitamins -: 1 % .

(M)Breeding & breed improvement in Nepal.

- AI (Artificial Insemination) 11.5% get private.
- AI (Artificial Insemination) 78.7% through co-operative
- AI (Artificial Insemination) 9.8 % through Government.

Comparative performance of natural grassland and salve-pastoral system for biomass and animal production. (ICAR,JHANSI). The research has found out and concluded that average daily gain in the body weight of goat was higher in salve -pasture (28.6 g/h/ day) as compared to natural pasture, 10.8 g/h/day Goat grazing in natural pasture were supplemented with 1kg/h/day green leaf fodder (Leucocephala) from february on ward as they started loosing their body weight , thus the gain in weight in salve-pasture was 62.9% higher as compared to nature pasture. Sheep grazing in salve-pasture gained their body weight at the rate of 2.1-g/h/ day in a total grazing period of 24 days where as in natural pasture sheep started loosing their body weight from October itself. This showed that even supplementation of 1.5 kg /h/day green (supplement) Sub

able leaves was not sufficient for the sheep, to maintain their body weight while grazing on natural grassland.

The Leasehold forestry and livestock program has also the responsibility of contributing to reduce poverty which is the goal of country and the rationale of the program are strong technical, social, institutional and economical aspects.(start-up workshops of leasehold forestry and livestock program). The forest resources cover almost 40% of the land resources as one of the landholder of the country with Agrarian economic. Now the government policy documents focus on rehabilitation of degraded lands, environment, conservation and poverty reduction through people's participation.

The rationale of the program

There is a strong technical, social, institutional and economical rationale to continue lease hold forestry and associated livestock activities in the hill of Nepal. Thus program also a community based forest management approach is specially designed to benefit the poorest communities, providing land with degraded forest to poor household on a 40 year renewable lease, provides the poor with security of tenure and confidence to developed the land witch them enables them to generate income and other benefit to more out of poverty trap.

Target group.

The target group will be 44300 poor households characterized as poor and food insecure, living in the hills adjacent to degraded forest in the program area.

- 1) The poorest are food secure for 2-3 months a year..
- 2) The poorer are food secure for 4-5 months a year.
- 3) The poorer are food secure for 6-8 months a year.

Female-headed household with many dependents also lack labor and all poor lack access to off - farm incomes generating opportunities.

The purposes of the program components are -:

- 1) Leasehold plots are managed so as to meet house hold subsistence and incomes need and protect the environment.
- 2) Livestock have contributed to meeting household food incomes need.
- 3) The leasehold groups and the village finance association has becomes sustainable rural financial institution providing financial services to lease holders.

- 4) Government has developed the capacity to implement leasehold forestry as a poverty reduction program in a gender sensitive way. (start-up workshops, of leasehold forestry and livestock program)

Goat and sheep as a porter.

The farmer of the Bajura district, Mr. Bishnu Bahadur Bista has earned Rs. 100000, by transporting the goods through the 50 goats within the 6 months. (Radio Nepal-2063-8-6).

Impact of liberalization on Agriculture and livelihoods of farming communities in Nepal.(Sedhain, G.K & at all) The Authors has suggested that the impact of liberalization on agriculture and livelihoods of farming communities in Nepal are integrated crop - livestock production system in all ecological region of Terai contribute to crop production through draft power and manure . Often are the source of draft power through out the hill region and both buffalo bulls and oxen are extensively use for the cultivating land and for the rural transport in the terai region . More ever , cattle& buffalos manure are the major source of nutrients for crops in hills as the chemical fertilizers cost are much higher in hills due to high transportation cost .

After the deregulation of agriculture input supplies , the cost of chemical fertilizers have been increased considerably and it has been out of reach to the majority of the small and marginal farmers through out the country . There for the important of livestock component s has been further increased to sustain the subsistence farming in Nepal.

The typical Nepalese farmer owns less than one hectare of cultivated land , one or two buffaloes and or cows , a pair of oxen , few goats and or sheep, some poultry birds depending upon the prevailing agro- ecological domain his / her socio- culture and religious tradition . The cereal crops produced by most of the household , particularly in the hill and mountain region , not adequate for the food requirements of the families and they have to earn cash incomes , to buy additional foods and meeting other household necessities for their substance. There for majority of the farmers have been keeping either one or two milking cows or buffaloes, some goats or sheep & poultry and sell some milk , live

goats or sheep,& eggs and live poultry in the local market. The present study has also tried to document the actual situation of livestock production system in the study area and finding of the study have been summarized .

7) Socio economic factors affecting livestock production

A case study was conducted (by Shrestha S.B. & Acharya B.K.) in Chapagaon VDC of Lalitpur District, representing in the mid hill region of Nepal. The main purpose of the study was to investigate the association of livestock production with the socio-economic factors v/s land holding, economic status, family size & education. Data were collected using semi-structure interview schedule, focus group, discussion and field observation. Study indicated that high number of livestock such as cattle, buffalo, sheep & goat, was associated with higher number of uneducated peoples with a holding of higher ropani of non irrigated land. The family size of 5-7 people who owned up to 10 ropany of land raised higher number of livestock with the handsome amount of economic return / year. It was also observed that social status determined livestock production, eg:- The Brahman / chhetri raised higher numbers of livestock than other cast/ ethnic groups. Study was conducted that the socio culture and economic factors were associated with the number of livestock holding in the family.

8) Socio economic study on migratory sheep & goat in relation to the effects of community forestry (Nepali M.B & et al.)

The study on the effects & impact of forestry program and the road transports system on the migratory sheep & goats management system were carried out at Sikles village of Kaski district from June 26th to July second 2003. The participatory rural appraisal (PRA) technique was used to collect the required information besides household survey to collect more information with the sheep & goat owners and the shepherd. This study has revealed that the decline of migratory sheep & goats management system (flock number as well as animals numbers number in a flock) was due to the unavailability of shepherds rather than due to the effects and impact of community forestry programs & the road transport system. The writers has concluded that the community forestry acts implementation Act the local level has little effect on migratory system of sheep & goats decreasing trend of migratory sheep &

goats either on flocks or numbers of animals was due to unavailability of shepherds. Local people told that if present shepherds get related then there will be difficulty to get shepherds ultimately & there may be the recommended that migratory sheep and goats owners have to modify their payment rule to shepherds. Migratory sheep & goats owner should facilities the shepherds so that shepherds may be encouraged for shepherd may be encouraged for shepherding work. The characteristics of small-scale dairy production system. (According to Field survey 2003 AD). Small scale dairy production is most common through out the country. Majority of the farmers in the rural areas have been keeping indigenous breeds of cattle & buffaloes and the milk production from these local breeds of cows and buffaloes is very less compared to improved one.(Annex-1 to 4)

The characteristics of Goat & Sheep production system are very important animal species for the majorities of small & marginal farmers in Nepal. Both in terai & hills region goats are reared for meat production, where as in the high hills & mountain regions both sheep & goats are raised for wool / pasmina & meat. However the study shows that both number of house hold raising sheep & goats and the population of sheep & goats has been declining in the country due to various reasons. The goat production & sales in the study area was 44 % of the households surveyed were keeping 6.91 & 2.95 goats/HH /year (According to Annex-5), The average price for and adult goat was sold at RS 2976 / goat, Each house holds were earning about RS8788/ year by selling goats for meat. The average meat price in the study area was RS 159/ kg in the markets. The price of goats meat was increase 25.87 % over all the past 5 year (5% / year). The free imports of goats from India and strong cartels on live animals trade operative in the country has negatively affected to the consumers as well as producers in the country. Where as the sheep production during the past few years, sheep population has been declining very fast in all three ecological zones of Nepal. The present study shows that on the whole only 1.39 % of house holds are keeping a few number of sheep. The average number of sheep raised was 7.76 and sold 3.33 / HH. The average price for an adult sheep was Rs3367 per sheep and on an average. The sheep raising house holds were earning Rs 11,222. (According to Annex-6,7,& 8).

The characteristics of poultry production systems also was not adopts in all ethnic communities in Nepal. Modern poultry

keeping has been taking momentum due to growing demand for white meat in the urban & city areas of viable incomes earning enterprises for many small as well as medium scale farmers in the rural-urban corridors of most of the districts.(Annex-9). The poultry eggs production play important role in the diet of urban population and demand for poultry eggs has been growing constantly over the past few years in Nepal. The eggs production by local birds is not only less in number the size is also small and hence not possible to fulfill the market demand. There for , egg production from layer has been most popular in the country side. It has been estimated that poultry sectors contributes nearly 2 % in the gross domestic production of the country. Despite growing share of improve poultry , the demand for local poultry has not decreased and considerable house hold in the rural area still keeping some local birds for production of eggs , meat & chicks for domestic purpose because the prices per, egg & meat are high .(According to Annex -9, 10, 11 & 12). 16 % house hold were keeping average 8.84 adult local birds/hh and sell 9,61 bird/ year in the study areas. The average price for local birds sold for meat is 95.07 per bird and has been increased by just 12.04 % over the past five years. Thus farmers were not getting remunerative price from the local birds. This could be one reason that the number of local birds has been decreasing . On the whole about 16 % house hold in the study areas were earning Rs916/ rear by selling local birds.(According to Annex-12). The data shows that among the house hold surveyed 1.38 % were keeping average 1100 birds and selling them in the local market at Rs121.67 per birds. The market price of live broiler in the local markets was Rs 60/kg at the survey. The farmers reported that the price live broilers has been actually decreased over the year, especially in the terai region. The data also supports that in the hill region the average +prices for poultry were constant over the past five years, where as in Terai, the average price for broilers has been decreased by 5.2 % over the last five years. The majority of broiler farmers complained that they were not been able to recovered the cost of production by growing broilers. On the whole , the broiler farmers were earning Rs 133833/ year from broiler production.

Agriculture commodities of comparative advantages.(Field survey-2003). The enterprises that contributed to maximum in the commercialization of agriculture included mainly vegetable, followed by other cash crops , cereals and fruits did not bring much

commercialization . It is there for not commercialization in general sense Even through commercialization has taken place mainly in cash crops. Farmers were found to have derived more of their incomes from cereals. About 56 % of farmers expressed that they were earning cash incomes from cereals and 34 % from cash crops . About 10 % farmers were earning cash incomes from both cash crops and cereals crops. In case of livestock , milk was the main products in which commercialization has taken place. This was found to have followed by goats & poultry. The survey has concluded & finalized the solutions that i) Food insufficiently situation, ii) Reasons for food insufficiency, iii) Means for fulfilling the food insufficiency.(Annex-13). The major incomes sources of households. was sale of surplus cereals , cash crops , salaries, business, farm labor. non farm labors livestock etc, were found major sources of cash incomes to the house hold surveyed.(According to Annex-13 ,14 , 15 , 16 , 17 & 18).

9) Livestock Resources - based micro enterprise, development for sustainable livelihood of disadvantaged rural poor peoples of Nepal.(Neupane, P.R. and et al.).

The micro enterprise development program (N EDEP) a joint initiative of Nepal Government and United nation development program (UNDP), started in Nuwakot district in 1998 with an objective of poverty reduction . The goal and objective for livestock based enterprises is to improve the living condition of the low incomes family through the development of livestock based enterprise / industries in the particularly the socio-excluded and socio-economically disadvantage poor castes or untouchable . This was planned to achieve through creation and development of micro entrepreneurs to make their sustainable livelihood through micro-enterprises development (livestock based) in the long run . The project followed the process such as participants identification, screening , for candidate , imparting a number of training such as gender sensitization / awareness, entrepreneurship development (applying S/Y/B/LO model),. Technical skills, marketing linkage, and marketing skills and other business , management training , carrying out appropriate technology and action research for resource utilization / processing , development of mini-credit disbursement and repayment system and supporting institutional development (support to establish business companies , product associations, co-

operative etc). Livestock based entrepreneurs constituted 87 (13.2 %) out of the 656 micro entrepreneurs developed by the project. On other 160 entrepreneurs borrowed loans from ADB/N Trysail for livestock keeping (ADB/N - 2003). Total sales from livestock based micro entrepreneurs valued Rest 13164 , 135, which was 20.98 % of the total earning from the project micro enterprises The total number of 106 farmers got employment from livestock based micro - enterprises . The entrepreneurs who have run enterprises but not registered in micro entrepreneurs groups and do not have taken loan from ADB/N was not included in that report. The writers has given conclusion that the total micro-entrepreneurs (656) development by MEDEP, 87 were livestock based . Total cumulative sales from different enterprises were recorded and livestock sectors contributed 21 % , eg :- NRS ,13164 ,135 . Total loan disbursement for livestock based micro-entrepreneurs was highest in goats trading (RS 353000) followed by poultry (Rs2 , 44,000) and fresh meat shop operation (Rs 1 , 57 ,000) . Ethnicity wise Brahmin & chhetri were found more involve in goat & poultry trading , where as the Newa, Gurung , Tamang , & Sherpa were more involved in fresh meat marketing , Angora rabbit keeping & Durkha making .

Many farmers have been earning significant incomes by selling milk to support households expenses including health & education. Thus dairying has income a popular occupation sin Nepal. In this light Nepal has adopted agriculture led economic growth & poverty alleviation strategy by implementing a 20year Agriculture Perspective plan .Livestock sector has a high priority in the plan . For the next 10 year , the targeted annual growth rate is 6% in the dairy sector. Nepal produced 1.19 million ton of milk in 2001. During the same period , Nepal also imported annual 2400 ton of milk & milk products & exported about 160 ton of milk products . At this level of milk production , the amount of raw milk. being collected & processed by the formal sector does not exceed 12 % of national production , thus rest of milk is home processed into traditional dairy products . On the other hand milk holidays , has becoming a serious concern to the Government dairy (DDC) as well as milk producers for the last ten years or more . This also shows that , Nepal as surplus milk production . Organized dairies are handling only small amount of national productions & also there is a size able import of milk & milk products in the country .There for there is a need to analysis the

reasons & factors affecting to the dairy development ,. For example , the possible areas for support could be determining a concrete national policy. Security , peace & stability , political commitment , trained human resources access to financing etc. Among them availability to trained human resources is quite important , without it the dairy business can not furnished well. In this regards the writers have mainly focused on the human resources need of the dairy sectors in Nepal which has been a much neglected issue so far Socio-Economic study on forage production on and preservation system in Rasuwa district . (Shrestha, H.K . & at all.) . A survey has carried out in Rasuwa district to collect information on the socio- economic status of livestock farmers , existing practices of forage production and constrains in livestock production system The study revealed that average livestock unit per house hold was 13.5 ,27,4.9 in high altitude (>2200masl) mid altitude (1600-2200 m a s l), and low altitude (< 1600-2000 m a s l). respectively .Out of the total cash income of farm household , the livestock component contributed about 53 % in high hill, 6 % in mid hills & 18 % in lower hills as compared to other components like crops ,horticulture , and off farm activities. Yak, chauri, sheep, goats in high hills., cattle & goats in mid hills, & cattle ,buffaloes ,pigs & poultry in lower hills were the important sources of cash incomes. In high hill farmers used to grow traditional radish called Huma or chokta (Brassica tora) in additional to preserving green grass as hay for winter feeding to livestock . Other native herbs locally known as champa Lhamu and Tigary were also fed to livestock in winter after chopping , mixing , & boiling with huma. High hill was most feed district zone where farmers with main livestock holding of 22.44 units had only 37 kg hay / livestock units. for whole winter seasons (Dec- April) . The larger the livestock holding the lower was the hay production per unit livestock in upper belt of Rasuwa . Most of the respondents , ranked the problem of forage scarcity as the most serious one for livestock production , among the other problems, out break of animals diseases and lack of market facility wear the important ones .The writers has concluded that the shortage of feeds and forage for migratory and sedentary livestock during winter months are the major constraints for increase in production of livestock in Rasuwa district . Average land holding / capita was about 2 Ropani (0.05 ha) in high & low hills,2.77 Ropani in mid hill. average livestock unit per house hold was 13.5, 27 , & 4.9 in high , mid , and low hills,

respectively . Yak/Nak , Chauri in high hills , Cattle in mid hills, & cattle, Buffalo in low hills, where the important sources of cash income. In the total cash income of house hold , the livestock contributed about 53%, 61 % & 18 % in high hill , mid & low hills respectively .The study revue that larger the livestock category , the lower was the hay production / unit livestock in high & mid altitude of the district. There was general practice of growing & preserving Brassica tora in high hills in order to feed livestock in winter . High hills farmers to used to harvest , the local herbs named as Champa lamu & Tigiri in summer & preserve it after chipping 7 sun drying for winter . High hills was the most feed deficit area as compared to mid & low hills. Among other problems out break of animals disease & lack of market facilities wear the important ones.

The Scientists has given some suggestion based on the major finding of the study, future strategies for forage research & development are recommended as follows.

1. There should be area area specific research for high yielding forage crops at different altitude domains for effective technology development, Agriculture research station (Pasture) needs partnership with concerned local Go's (eg, Langtang National Park, DLSO, ADO) & NGO's in the district.
2. The nutritive value of local herbs / grass used as hay in high altitude should be tested 7 their use should be promoted.
3. The potential tree fodders / shrubs should be identified & introduced especially in mid & high hill farming systems.

Trails / demonstration of agro- forestry comparing suitable fodder tree & productivities of livestock in Rasuwa district.

They have also recommended that

1. The nutritive value of local herbs / grasses used as hay in altitude should be tested , and their used should be promoted .
2. Species should be conducted in farmers field in the lower belt.
3. Range land at different altitudes should be maintained / improved through better management practices such as sowing high yielding pasture species & controlled grazing with participation of the local herbs.

Socio- Economic Character sticks of the high hill Farmers (According to Annex 19 -30, are Socio- economic character stick ,land resources, land distribution, land holding , livestock type, Incomes,

Forage cultivation & products & feed supplements,) wear concluded that , the shortage of feeds & forage migratory secondary livestock during winter months were the major constants for increasing in production Trails & demonstrations of agro - forestry comprising suitable fodder tree species should be conducted in farmers field in the lower belt. 4) Range lands at different altitude should maintained / improved through better management practices such as sowing high yielding pasture species and controlled with the participation of the local herbs.

10) Study on production parameters of Goat in mid western Terai region of Nepal .(Shrestha, Y.K ,)

Data for production and productivities trails of Tarai & Barberi goat were collected from Regional Agriculture Research station , Nepal gang and around. Least square analysis technique based on Henderson's mixed model methodology was used for estimating the non genetic factors for weight trails, Dam trails, & litters trails . The factors included were sex , breed, year of kidding , season of kidding , & type of birth . The result showed that kid weight was significantly affected by the sex($p < 0.01$), year of the birth ($p < 0.05$) ,& type of birth ($p < 0.001$).

There was non significantly effect of breed & season of birth weight was 1.5 ± 0.045 male were heavier then female. There was non significant effect of breed on birth weight . However Barberi kid were heavier then the Terai kids . (Barberi 1.67 ± 0.075 ,) Terai 1.49 ± 0.074). The average weaning & post weaning weight was 10.7 ± 0.344 & 13.9 ± 0.784 respectively. The age of first service, weight at first service , weight at first kidding , gestation period , and kidding interval of the dams were 254 ± 9.7 days and 17.1 ± 0.45 kg, 20.8 ± 0.5219 , 164 ± 4.42 days & 230 ± 9 days respectively. There was non significant effects of breed on these expect weight at first kidding . $P < 0.05$. The least square means of litter traits, as litter size at birth , at weight weeks , at weaning & corresponding weight was found 1.57 ± 0.80 , 1.52 ± 0.079 , 1.42 ± 0.075 ,& 2.62 ± 0.124 kg, 10.5 ± 0.503 kgkg, 15.1 ± 0.758 kg respectively . Season of birth effected these traits significantly , $P < 0.01$.There was non significantly effects of breed on these traits . The study revealed that productivities of Tarai goat can be increased through selection & improving environment condition . The author has given conclusion which shows the production parameters of Terai goats . Three traits namely weight

traits, Dam traits, & the litters traits were studied. The study were identified several extensive system in which goats were grazed over the large area of forest of pasture land . Khari goat was most common was highly environmental factors , which effects on productivities of goats. The study was given the massage to the goat keeping farmers, that the productivities can improved through selection of sound population within the flock and maintained of congenial environment.

11) Study on goat production system in the Far western hills of Nepal (Shrestha, H.R & et al.,)

The house hold survey and PRA were carried out to collect information on goat production system. Its constraints and opportunity in the for western hills of Nepal . The study revealed that the average land holding was 2.42 ha comprising of pasture land, Pakholands, khetlands in proportion of 2.6:2.1. Each household had its own pasturelands in which grazing was restricted during June to October .The grasses were harvested during early winter & early during dry season . The highest number of goats per house was found in Dadeldhura 13.18, followed by Darchula 9.63 , & Baitadi 2.58. Out of the total house holds reared goats under stall feeding and 21 % under sedentary system with limited grazing . About 69 & house holds reared goats under prolific producing about 1.5 kids per kidding & 20 kids in their life time . How ever the mortality rate of kids & adults was high (15-20 %) due to poor health management . Farmers were less aware about improved breeding practices and the chances of negative selection and inbreeding were high . The goat marketing system was poorly developed . As a result, farmer had to sell their goats at cheaper prices with the middle man .Goat development in the far -western hills can be enhanced through proper management of health , housing ,feeding , breeding , & marketing .

The scientists has concluded that the Far- Western hill has the potential belt for goat production because of suitable geo- climatic condition for farming . The local breed of goat is well adopted for high production efficiency. How ever, there was high chance of breeding & negative selection, since farmers were not of improved breeding practices. Improvement in the exiting management system of goat, keeping such as housing, feeding, & breeding is necessary through research & extension, developing market channel & market

infrastructure is equally important to attract farmers toward commercial goats farming. However any program on research and development of goat should be focused on small - scale farmers as they keep the most of the goat population.

12) **Gender issues in livestock Development (Lama, K.V.).**

Currently, women in Nepal are struggling against on the extremely patriarchal system. Indicators can be seen many sectors including education, health, culture, religion, employment & leadership & development programs. Women are the major actors in Agriculture & natural resources management. The interventions made by outside, agencies for development programs have remained only partially successful to main stream, women and their interests & needs which has negatively affected their programs effectiveness & the program sustainability. In Nepal, women under take 70 % of work load related to livestock management. But their role gets systematically marginalized in case of receiving equitable benefits . There is a need to identify the specific role of women & men in livestock management to determine their specific role & their differential assess to and control over resources and benefits . The Agriculture prospective plan endorses that the livestock sectors offers . The single most important opportunity to bring women into the commercial production , system & to raise their incomes .It also recommends that the women farmers should participate in all stages of planning cycle such as , livestock production & marketing & in extension education activities . This paper high lights the issues and makes recommendations for gender equity .

The writer have concluded that the aim of socio- economic development being an equitable social change , justice , & employment in their rhetoric , meeting women need for more radical change should be within the adopted policy approach to gender .

13) **Economics of milk production in high value crop. Based farming system (a case study of Ilam District. , Paudyal , S.P.)**

This study assessed the economic potential of dairy farming in the high value crops based farming systems in the eastern mid - hill of Nepal . Employing stratified sampling technique , six village development committees of Ilam district were selected &

surveyed to collect data using structured questionnaire, of 150 study households, two-thirds were selected from inside the dairy development corporation (DDC) milk collection area & remaining one-third from outside DDC area. Farmers accorded highest priorities to high value crops followed by dairy and lastly to cereal crops in both inside & outside DDC areas. Farmers' order of priorities was consistent to the crops with respect to their contribution to household cash incomes. Livestock contributed nearly 27% & 21% to the total household income inside & outside DDC areas respectively. And the major share of contribution was from milk sale. Farmers' reason for integration of dairy and high value crops was their supplementary relationship to each other. Dairy animals did not compete for land as uncultivated upland was the major source of fodder & animals were completely stall-fed. Significant differences were observed in amount of milk produced, sold & consumed by the farm families between inside & outside DDC areas. Ranking & scoring technique employed to analyze farmers' problems in production and marketing of high value crops & milk showed that although the nature of problems did not vary much across sites but the priorities to the problems was reported to be low milk price, high incidence of diseases & limited market out inside DDC areas, the order of priorities was lack of market access to sell fresh milk of transportation services and high incidence of diseases. The net return per cow per year was significantly higher inside DDC area but return to labor from high value crops was much higher. The finding of the study suggested that unless road access is reliable and farmers have access to sell milk on regular basis crossbred cows are not suitable on economic grounds. But potential to introduce high recovery & long self-life technology in ghee production system is always there.

The author concluded that, that cows were preferred over buffaloes where access to market to sell fresh milk existed, whereas buffalo was found superior to cattle when farmers had to go for ghee making. Contribution to the household incomes from dairy farming was found higher inside DDC area compared to outside DDC area. When farmers had access to market, they employed more inputs and efforts & got better return which was evident from significantly higher amount of milk produced and sold inside DDC area.

The Nepalese Scientists has done in so many Research in different subjects & getting satisfactory results. But no body has done or analyzed about the Socio - Economic comparision within the Back ward women in Goat Raising Program . So that , It will be reasonable & I would like to conduct such type of research in my thesis.

UNIT -: THREE

Research Methodology

3.1 Research Design

The research pattern was Analytical & Descriptive type .

3.2 Selection of study area & its justification

The Study Area was Dharapani & Bangesimal of Birendra Nagar municipalities & Uttarganga VDC of Surkhet District . The study Area was within Municipality under the Surkhet Vally. Because it was nearer & easy to take the data & observation .It was easy to compare before & after of the social & economic condition.

The goat raising groups were the backward women which was organized by District Livestock services Surkhet .The process of group formation was according to norms of Livestock Department .The total number of members were 100 & all were female . A group was formed with 10 members , & five groups were in one committee . Two committee were designed in research block . The following members & groups were as followed.

3.3 Universality & sample selection

The total universe were 100 family within two committee of goat raising back ward women .The goat raising farmers were getting 3 goat with each household

The term & condition was to returned 3 goat after three years . The total number of goats were 150 excluding their own goats .The size of samples were taken 20 % of the total population with randomly . . Samples was taken homogeneity of universe, representation, fact, Adequate, independent far from biased, with scientific processed. The samples was taken with simple random sampling. The total samples were 20 & the initial household survey was taken out with the economic & social questionnaire .

3.4 Types of data & its sources .

The type of data was primary and secondary. The primary data was collected from the field work through questionnaire, interview, observation schedule, group discussion etc. The primary data was

collected through the personal contact with the members of the selected study community. The secondary data was collected from the reports and publications of Central Bureau of Statistics, Latikoili VDC reports, books, articles, journals, annual publications, population census reports etc. The authenticity of the nature and sources of data was maintained very sincerely.

. Experiences of the study

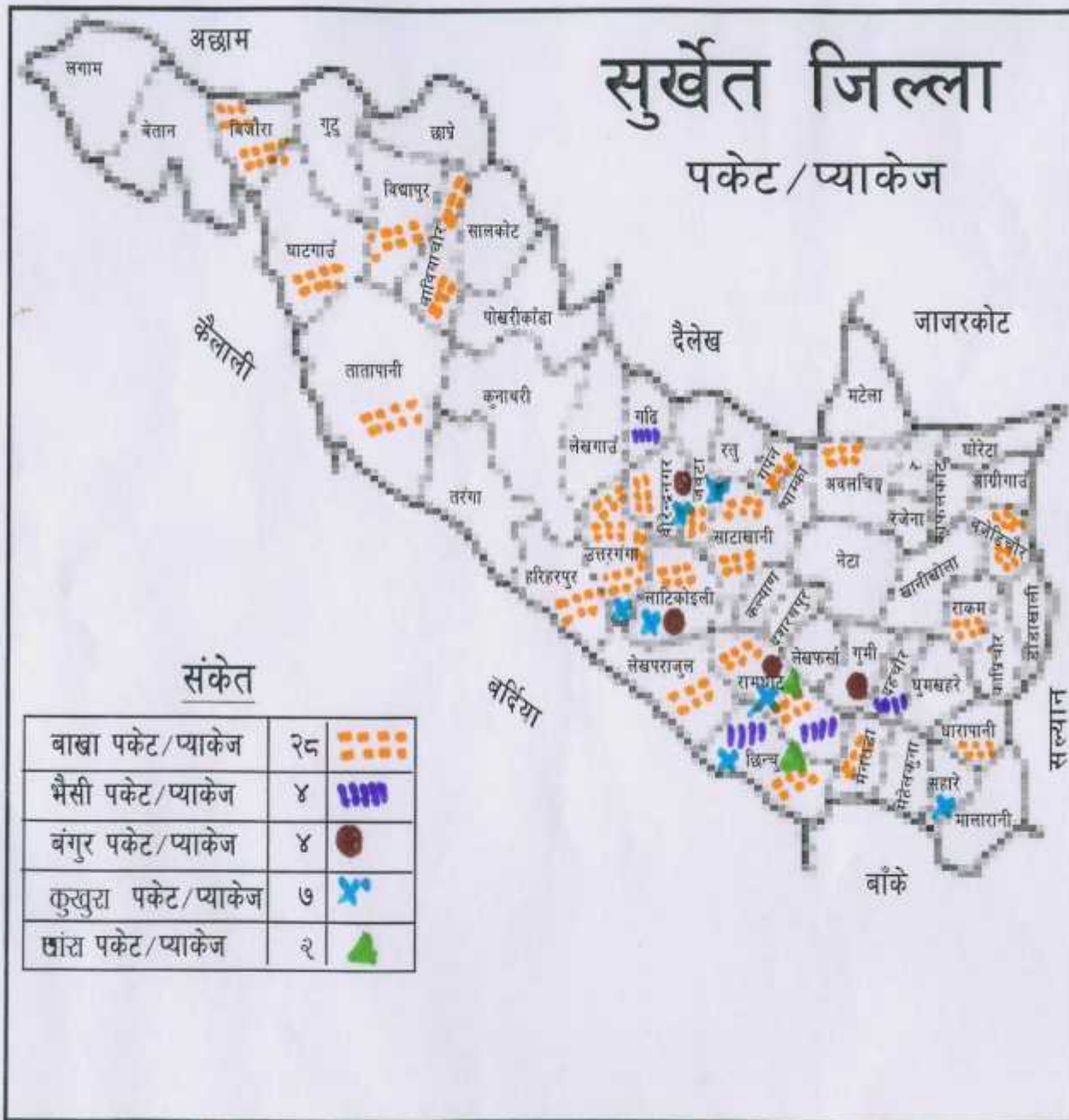
The experiences of the study were followed.

- The committees were helped me , to take the initial & final survey .
- The District Livestock development services office , Surkhet , was support to movelized the groups & committees as well as collection of data from initial to final survey .
- The back ward women of goat raising program were co-operating heartily to completed the data & information about the economical & social Aspects .
- The political condition, remour of different groups & the illiterate people of the society were consider & criticized about the development .
- The initial data were not completed about the socio development which have been difficult to compared the socio - economic development .

UNIT - FOUR
General introduction of study area

According to Surkhet chinari 2058 B.S. published from DDC Surkhet, Annual report 2062 B.S. of district agriculture development office and district livestock office Surkhet general introduction of study area has presented.

Surkhet District



4.1. Geographical area

4.1.1 Geographical situation of Surkhet District

Country - Nepal
Region - Mid west ,
Anchal - Bheri
District - Surkhet,
Borderline- Bardiya, kailali, Doti, Achham, Dailekh, Jajharkote & Salyan.
Total Areas -: 2,451 square meter .

4.1.2 Administrative Division

Number of V D C -: 50,
Number of Municipality -: 1
Number of Area -: 11
Number of Parliament election Area -: 3

4.1.3 Description of Demography (2058)

Total Population -: 2,88,527 ,
Female -: 1,45,710,
Male -: 1,42,817,
Population under 5 years -: 37,019 ,
Population above 75 years -: 1,991 ,
Total numbers of house hold -: 54,047 ,
Average number of family -: 5.34 ,
Population density (/ Square k m) -: 118 ,
Total growth rate of population -: 2.45 %
Urban population % -; 1.63
Ratio of male & female -: 1:0.98
Percentage of district population compared with country 1.25
Dependable population % -: 86.82,
Children 0-14 years % -: 78.18 ,

4.1.4 Literacy Percentage (Above 6 years) -: 62.7 ,

Female -: 51.7 ,
Male -: 73.9
Academic year (2059/60) -:
Number of school -: 446

Number of students -:	84,637
Number of teachers -:	2,142

4.1.5 Health (2058)

Total number of health institution -:	52
Population/ institution	5549 ,
Use of family planning -:	39.50 %
radio -:	70.2 ,
Use of solid fuel for food cooking -:	70.7 ,

4.1.6 Religious population percentage (2058)

Hindu -:	91.20
Buddhist -:	7.53 Children ratio with female -:1;0.553
Average age for first marriage -:	
Male -:	21.83 ,
Female -:	18.75 ,
Marriage population within 10-14 years -:	1.69 % .

4.1.7 Percentage of facilities used Family (2058)

Use of toilet -:	52.3 ,
Drinking water with improve source -:	71.5
Use of electricity -:	48.2 ,
Use of television -:	19.1 ,
Use of ,	
Christian -:	0.75 ,
Muslim -:	0.43 ,
Kirat -;	0.00 ,
Others -:	0.10 ,

4.1.8 Casts system (2058) .

On the basis of main five casts -:	
Kshetri -:	27.73
Magar -:	20.63
Kami -:	14.96
Brahman -:	12.33
Thakuri -:	4.55

4.1.9 Mother language (2058)

On the basis of speaking main five language .

Nepali	-:	91.02
Magar	-:	5.78
Tharu	-:	1.86
Ragi	-:	0.22
Maithali	-:	0.15

4.1.10 Economic activities (2058)

On the basis of economic activities , above 10 year

Total percentage	-:	54.38
Female	-:	45.15
Male	-:	45.43

4.1.11 Main occupation (2058)

Agriculture	-:	54.57
Non Agriculture	-:	45.43

4.1.12 Description about Agriculture (2058/59)

Total agriculture lands -:24,704.8 hector .

Irrigated land among total Agriculture -:60.92 % .

4.1.13 Main crops production areas & crop production

Crops	Area (ha)	Production (M ton)
Paddy	12,425	33,300
Maize	15,325	28,397
Wheat	15,560	27,837
Millet	1,400	1,925
Barley	925	1,172
Potato	717	8 ,040

4.1.14 Livestock population (2058/59)

Number of Cattle & Buffaloes	-:	1,81,443
Number of sheep & goats	-:	1,39,317
Number of Duck & Poultry	-:	3,46,510

4.1.15 Road facility (2059)

Total length of Road (k m)	-:	330
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4.1.16 Post office (2060)

Number of post office	-:	51
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4.1.17 Industries (2059)

Number of big industry	-:	9
Number of employment	-:	162

4.1.18 Other information.(Through out the country)

Highest number of dalit (Kami)	-:	40,382
Goldsmith (Sonar)	-:	8,702
Badi	-:	879

Highest number of agriculture land among the hill area

Within the Mid - Western region -: 24,704.8

-Birendranagar Municipality ward 1& 2, Dharapani, Surkhet

- Altitude -: 28'22" to 28'58"

- Longitude - 80'59" to 82'2"

South- Churehill,Forest & Mahabharat.

North -: Lekh gaun VDC with mountain .

East -:Birendra Nagar ward No 1&2 and Latikoili VDC.

West -: Bange simal , chure hill with forests. .

4.1.19 Natural Resources

1. Forests 2) Gravels, sands, stones 3) Fertile lands & waters.

4.1.20 Ethnological description of study area

- Back ward family	%=	22.40
- Dalits	%=	25.59
- Higher .casts	% =	46.08
- Others casts	% =	3.84

4.2 Location of the study area.

The study area of Birendranagar – 1and 2 Dharapani and Uttarganga V.D.C. 1, 2 are within Surkhet Valley. It is 4 kilometers far from Birendranagar Main City, which are north and south belts from Dhuliabit to Bangesimal highway.

4.2.1. Developmental infra structure on study area

High School	1
Primary school	4
Hospital -: Regional Hospital	- 1

Government Offices - Health post, Agriculture. & Livestock services center. Others - VDC office

4.2.2 Climate

Sub tropical /Temperate type

Average Temperature-/ year _ Max-.33degree C.

_Min-10 degree .

Average Rain falls - 1500 .to 1800 mm/ year.

4.2.3. Occupation

Agriculture % =	58.8
Business % =	11.2
Services % =	11.2
Labor % =	18.
Others % =	0.2

4.2.4 Religion

Hindus %	74 .
Buddhist %	22.4 Christian . % <1
Others %	<1

4.2.5 Possibilities on economics development the studies are ultra -poor families, so that the economic status are less than Rs-4444/ annum/families.

4.2.6 Demographic composition

- Total population =	6156
- Male =	2970
- Female =	3187.
Average family size =	5.08
Density =	4.81/km
Population increased % =	2.1

Utterganga V D C.

Total population -:	1,880
Male -:	894
Female -:	986
N G O -:	2
Agro -VET -:	1
Poultry Farm -:	3
Boarding school -:	2 (Private)
Monthly meeting -:	First day of the month .

UNIT - FIVE

Presentation and Analysis of data

5.1 Analysis of final survey data

5.1.1 Demographic characteristics of the Respondents:-

The total populations of the 20 HH were 92 in fiscal year 2060/061. The population was increased up to 108. (17.39 %). The number of increased population was 5.2 % /year, or 0.8 % /HH.

5.1.2 Geographical Distributions

Geographical distribution were similar. (All farmers were within Surkhet vally).

5.1.3 Ethnicity /caste of the Respondents

Out of total, 60% were Dalit, 20% Chaudhari & 20% Magar, (Janajati). All are backward women.

5.1.4. Educational level of the Respondents

The Goat raising women were backward & illiterate .Only 10.8 % (10 out of 92)Parent& 38 (26.31) children were literate in initial survey where as in final survey the school going children were 38 (Male 24, Female 14) 35.18 % Literacy , (Male 64.16% & Female 36.84%) .

5.1.5 Socio -economic characteristics of the Respondents

1. Food for own land -: Average food were sufficient only for 3 month.
2. Literacy 48% .
3. Decision Power -: Female -5 % , & Both -95 % .
4. Birth Rate -: Male -31 (62.26 % ,) Female -18 (36.73 %)
5. Death Rate -: Male -4 (80 %) , Female -1 (20 %) .The average death rate was 10-20% out new born child .
6. School going students -: Male -24 (64.16 %) & Female -14 (36 .84 %).
7. Condition of houses -: Thatch -12 (60 %) Tin -8 (40 %) .
8. Sanitation condition -: Ranking was done. Good -10 (50%), Fair -7 (35%) & Careless 3 (15%). The sanitation of houses was satisfactory.

9. Drinking water -: The drinking water facility were reached 35 % households. (7 out of 20)
10. Discrimination of Male & Female -: There was no discrimination between Male & female. Only 5 % was discrimination. Perhaps the goat raising women were 60% Dalit & 40% Janajati.

5.1.6. Land holding size

The land holding size in initial & final survey were as follow.

- I) Initial survey -: The total land was 152 kaththa of 20 farmers . The land holding size was < 1kaththa =
 - a) 1-2 kaththa =11HH (55%) & the total land was 13 kaththa (8.55 %).
 - b) 2 - 4 kaththa = 5HH (25 %) & the total lands was 16 " (10.52 %).
 - c) >5 "" = 4HH (20%) & the total lands was 123" (80.92%) .
- d) Final survey -: <1 kaththa = 3 HH (15%) & the total lands was 1.10 " (2.28 %) .
- e) 1-2"" = 7 HH (35%) & the total lands was 10.10"(20.99%)
- f) 2-4 " " = 8HH (40%) & the total lands was 25.10 kaththa (52.18 %)
- g) >5"" = 1 HH (5%) & the total lands was 11.0" " (22.86%) .

5.1.7 Land ownership patterns

- 1) Land less were 3 % .
- 2.) Mostly all have 1- 2 kaththa lands for Ghaderi .
- 3) Average 45% HH have 1-2 kaththa land .
- 4) More than 5 kaththa were 4 in initial &1 in final survey. It has been indicated that farmers were selling their lands for daily subsistence (Hand to mouth) for their life.

5.1.8 Reason for holding lands title

Land holding pattern was Patriarchal Family .

5.1.9 Major occupations

The major occupation was labor. (Either agriculture labor or non-agriculture labor. The total earning was 72.63 % from agriculture &

non-agriculture labor. The total 80 % HH were involved in labor work (16 out of 20).

5.1.10 Agriculture Production system

- i) Cereal crops were doing 10% HH% & Earning 2.075% (Rs 9000) out of total Rs 433700 .
- ii) Vegetables (cash crops) were doing 10 % HH & earning 0.91 % (30,000) out of total earned .
- iii) Livestock -: All household have at least three goats which was provided by community livestock development project on the " passing out each other " scheme . Mostly all were returned the 3 goats, which they were getting within scheme. Six farmers (30 %) were doing pure livestock & they earned Rs 36,700 (8.46 %) out of total earned .
- iv) Business -: 15 % HH were doing business & earned Rs 23,000 (5.30 %) out of total earned .
- v) 5% hh or one women was doing service & she was earning Rs 20,000.(4.61%) money out of total earned.

The average earning of the goat raising women were getting ,

From Initial survey	from final survey
Total expenditure for foods-	Rs 1
Total incomes -	Total incomes -
Rs 26469.5	26,685
Total expenditure -	Rs 31,706.3

5.1.11 Characteristics of cereal crops production systems

The cropping pattern of cereal crops was mostly grown paddy-wheat in low area, (Khet) & maize - millets & some pulses in high land (Pakho bari). The production and productivities were uncountable. Where as the vegetables (Cash crops) were grown generally season/off seasons potato, Onion, Garlic 's, for their own consumption. The production & productivities were uncountable.

5.1.12 Livestock & poultry production systems

The initial survey was shown the goat & Sheep 23 (21+2) , cow 5 & hen was 50. Where as the final survey was shown, Buffaloes -3, cattle -29(ox -22), Goats -62, (After returning 150 goats), Sheep -5, pig -2, Hen 34 & Breed able animals -4.

The livestock raising system was better & increased. The farmers were domesticated the bull 22 out of 20 farmers. In initial survey they were not keeping ox & their mode of earning from labor was non-agriculture labor. But at final they were convert into agriculture labor (keeping ox) & the chances of earning in non agriculture labor was going competent. The earning incomes from livestock was increased in final survey, eg - the incomes from livestock in initial stage was Rs 2722/HH/year but it was increased Rs 6117/ HH/year. The total incomes in final were increased 3,395 more/HH/year in livestock.

5.1. 13 Agriculture commodities of comparative Advantages

- 1 Food sufficiency situation -:
2. Only 5-10 % of HH were getting sufficient food.
3. 90% HH or 18 out of 20, were in food insufficient due to Agriculture land.
- 4 Only 3 month, they were getting food from their own land.

The incomes earning trends were increasing in livestock. The goat-raising program might be good & sustainable incomes sources for back ward women.

5.2 Social descriptions.

5.2.1 Food for own land.

Total number of farmers -: 12 (60 %)
 Food for own land -: 3 month .

1. Food for own land	Duration	% of farmers	Remark
Farmers/HH	3 month	60 %	

Only 60% of average goat raising farmers were getting food from their own land . Rest of month they have to depend through purchud .

5.2.2 . Literacy

Average -: 3 month .
 Literacy -: Male - 3 (30 %) , Female -7 (70 %) .

School children	going	Literacy % of male	Literacy % Female
		30	70

--	--	--

The literacy % was increased in female than male . The school going children were increased .

5.2.3 . Decision

Decision - : Female -1 (5 %) , Both - : 19 (95 %)

Decision making	% of male	% of female	Remark
	-	5	95

The daily household decision were decided 95 % from combine . (both male & female) .

5.2.4. condition of houses

Condition of houses - : Thatch - 12 (60 %) . Tin - 8 (40 %)

Description of house	% of household	Remark
Thatch	60	
Khapada / Tile	-	
Tin / Pakka	40	

The farmers were lived 100 % in thatch houses before goat raising program . After three year, They make 40 % Pakka building .

5.2.5 . Sanitation & housing condition

Sanitation condition- : Good -10 (50%) , Fair -7 (35%) , Careless -3 (15%)

Housing condition	Good	Fair	Care less
Household	50 %	35 %	15 %

Almost 50 % Farmers were maintaining good sanitation better than starting stage .

5.2.6. Drinking water & toilet facility

Drinking water - : Yes -7 (35 %) , No -13 (65 %)

Toilet - : Yes -9 (45 %) , No -11 (55 %)

Facilitation	% of yes	% of No	Remark
Drinking water	35	65	
Toilet	45	55	

Untill now most of farmers were not getting drinking & not maintaining the toilet.

5.2.7 Discrimination of cast & sex

Discrimination of male & female -: Yes -1 (5 %) , No -19 (95 %)

Discrimination of casts -: No -20 , (100 %)

Discrimination	% of yes	% of no
Cast	-	100 %
Sex	5 %	95 %

There was no any Discrimination about cast & sex (Male/Female)

5.2.8 Birth rate & death rate:

During Period of Experiment the death rate was 20% in Female & 80% in male, likewise the birth % of male was 63& female was 37 .The birth of male was 2/3 more than female. Where as the male death rate was more then male.

Annual incomes / year .

1.From labor (Agriculture labor & non Agriculture labor)

Total Rs 3,15,000. (16 %) .Average, Rs , 19,687.5

Earning % from labor -: 72.63 % ,Out of 20 , 16 were doing labor . (80 %) .

2. Services - Total Rs 20,000 , (4.61 %) , Number of services doing - 1 (10 %) .

3. Vegetable (cash crops) -: Total Rs -30,000 out of 4,33,700 .which was 6.91 % , Number of farmers were -2 or (10 %)

4 .Livestock -: Total Rs was 36,700 out of 4,33,700 .(8.46 %)

Number of farmers were 6 (30 %) out of 20 .

5.Cereal crops -: Total Rs was 9,000, out of 4,33,700 (2.075 %)

Number of farmers were 2 out of the 20 (10 %) .

6 . Business -: Total Rs was 23,000 out of 4,33,700. (5.30 %) .& the number of farmers were 3 out of 20 (15 %)

Incomes sources .

i) Labor -16 ,(pure10.) out of 20 (80 %) ,where as pure labor were 10 out of total 16. (62.5 %) .The mix labor were 6 out of 16 , (37.5 %) .

ii) Service -1 (pure)out of 20 , (5 %)

iii) cash crops -1 (pure) 5 % & other were mixed with labor & livestock.

- Iv) Livestock -6 (All were mixed with labor).
 V) Cereal crops -2 (Mixed with business & livestock).
 Vi) Business -3 (pure -1, 2.30 % out of total incomes) & one was mixed with crops .

5.2.9 Economical Aspects

Incomes series	% of earning	% of HH involved	Average Rs.
1.Labor (Agri.% Non Ag.)	73	80	19,688.00
2. Services	4.61	5	20,000.00
3. Vegetable	6.91	10	15,000.00
4. Livestock	8.46	30	6,117.00
5.Cerial crops	2.075	10	4500.00
6. Business	5.30	15	7667.00

The agriculture & non agriculture labor were earning 73 % of total earning (Rs. 31,500.00 / year / HH) . Where as the service holder was only 5 % of house hold. Among the labor , the Agriculture labor were 34 % out of 100.

5.2.10 Description of income series

Income series	Pure occupation %	Mix occupation %	Remarks
Labor	66	34	Agriculture
Cash crop (Vegetable)	50	50	Vegetable with labor + Livestock
Cereal	50	50	Mix with business & Livestock
Business	33	67	Mix with crop & Livestock
Livestock	-	100	Pure

5.2.11 The calculation of income series

SN	Incomes sources	Average	SD	SE	Max	Mini
----	-----------------	---------	----	----	-----	------

1.	Cereal crops	4,500			8,000	1,000
2.	Cash crops	15,000			25,000	5,000
3.	20,000				20,000	
4	Business	7667			10,000	5,000
5	Agriculture labor	4,922			10,000	250
6	Non Agri, labor	14,766			30,000	750
7	Livestock	6,117			12,000	1,000
Total		72,971				
Average		12,162				

5.3 Initial survey data of goat raising back ward women

1. Gross incomes/year - : Rs 27,576/8 =Rs3,447/capita/year .
- 2 Asset cost - :
- 3 Agriculture - Rs 2,75,400 /20 =Rs 13,770.00 /HH
Livestock - Rs 30,900 /11 = Rs 2,809.90 / HH
4. Sell of last year -3,100 /1 = Rs 3,100
5. Average gross incomes- Rs 3,48,770/11=Rs 31,706.30/HH
6. Average expenditure for foods -Rs 3,48,438/18 =Rs 19,357.66/HH
7. Average incomes from agriculture -Rs 59,900/10=Rs 5,990.00/ HH
8. Average incomes from livestock = Rs 16,330 /6 = Rs 2,721,66 /HH
9. Average total gross earning =Rs 3,72,150 /12 = Rs 31,012.50/HH
10. Loan payable Rs 21,600 /6 =Rs 3,600
- 11.Total expenditure Rs 5,10,919 /17 =Rs 30,054.05 /HH

5.3.1 Standard Deviation of different incomes sources

SN	Incomes source	Incomes series (x)	(x-x)=d (10519)	(d ²)
1.	Cereal crops	4,500	-6019	36228361
2.	Cash crops	15,000	4481	20079361
3	Salary	20,000	9481	89889361
4	Business	7,667	-2853	8139609
5.	Agriculture, labor	4922	-5597	31326409
6.	Non Agriculture labor	14766	4247	18037009
7.	Livestock	6776	-6174	38118276
Total		73631.00	10519	241818386.000
		10518.71		

$$SD X \sqrt{\frac{d^2}{N} \mid \frac{(Z d)^2}{N}}$$

$$SD = \sqrt{\frac{241818386.000}{7} - (-\frac{10519}{7})^2}$$

$$Sd = \sqrt{34545483.7143 - (1502.714)^2}$$

$$SD = \sqrt{34545484 - 2258149}$$

$$SD = \sqrt{32287335}$$

$$SD = 5682.20$$

The standard deviations of different income sources are the Rs. 5682. The average income shows 10519 per year per household, but the standard income is Rs. 5682.

5.3.2 Co-efficient of co-relation & Regression .

SN	Incomes (x)	(x-x) = x(-7576)	X2	Incomes (y)	(y-y)	Y2	Xy
1-Cereal	4500	-3076	9461776	4100	-2970	8820900	9135720
2Agriculture labor	4922	-2654	7043716	5629	-1442	2079364	3827068
3-Non agri labor	14766	7190	51696100	16928	9858	97180164	70879020
4-Livestock	6117	-1459	2128681	2722	-4348	18905104	6343732
Total	30305/4=-7576		70330273	28278/4=7070		206373632	90185540

There for $\frac{\sum xy}{\sqrt{\sum x^2 \sum y^2}}$

$$r = \frac{90185540}{\sqrt{206373632 \times 70330273}}$$

$$r = \frac{90185540}{14365.711 \times 8386.314}$$

$$r = \frac{90185540}{120475363.279}$$

$$r = 0.748$$

$$r = 0.748$$

$$r = 0.748$$

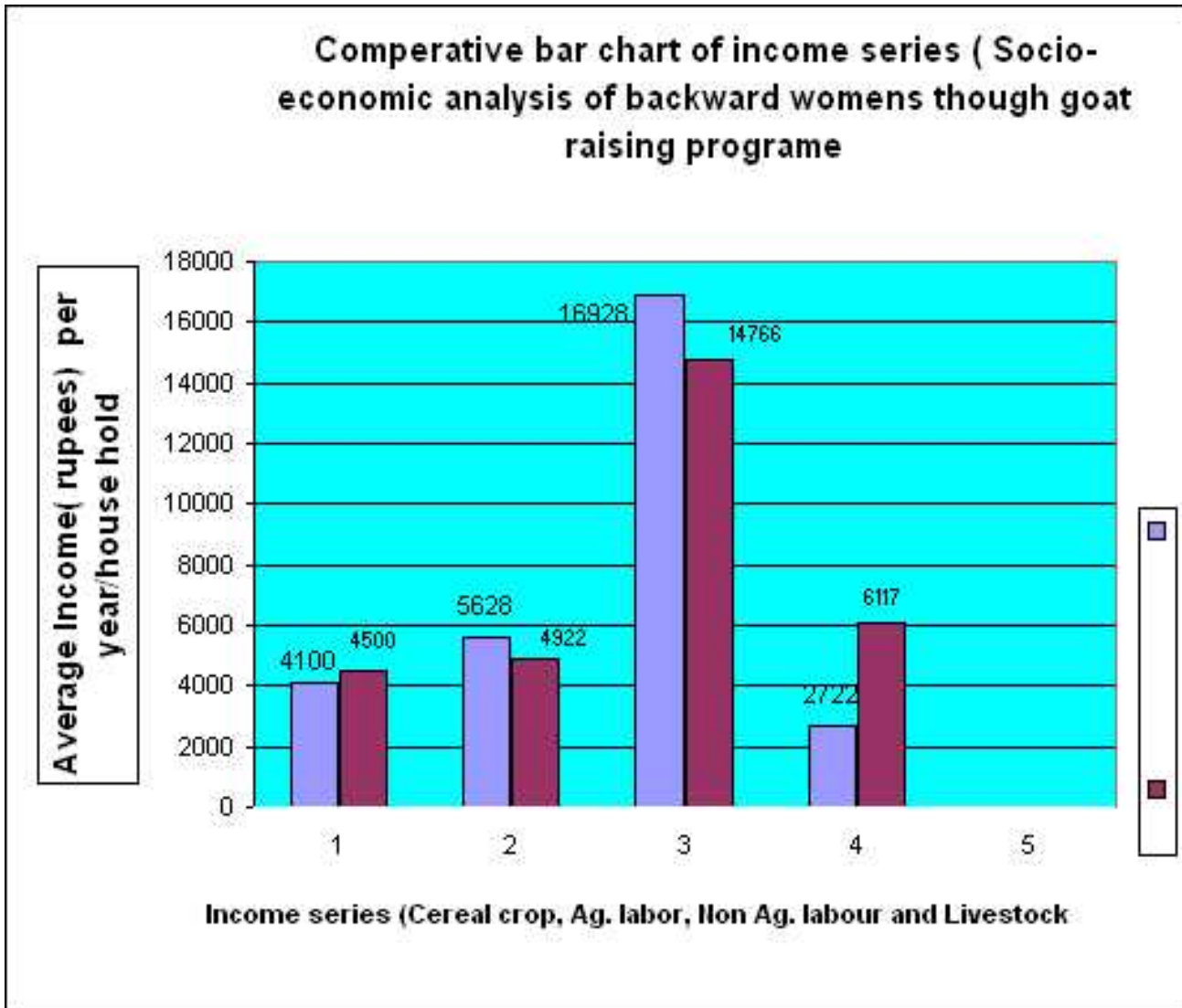
$$r = 0.748$$

The co-efficient of co- relation & regression between two Initial & Final incomes Seri (Cereal crops, Agriculture Labor, Non agriculture labor & Livestock)

Where +ve co-relation with different variables of incomes series .The Regression = 0.748 was nearer to 1 .So the correlation of co-efficient between the initial incomes & final survey incomes were +ve significant. It means the incomes of cereals, Livestock. Agriculture Labor, Non Agriculture Labor were +ve significant to increased the total incomes of the farmers.

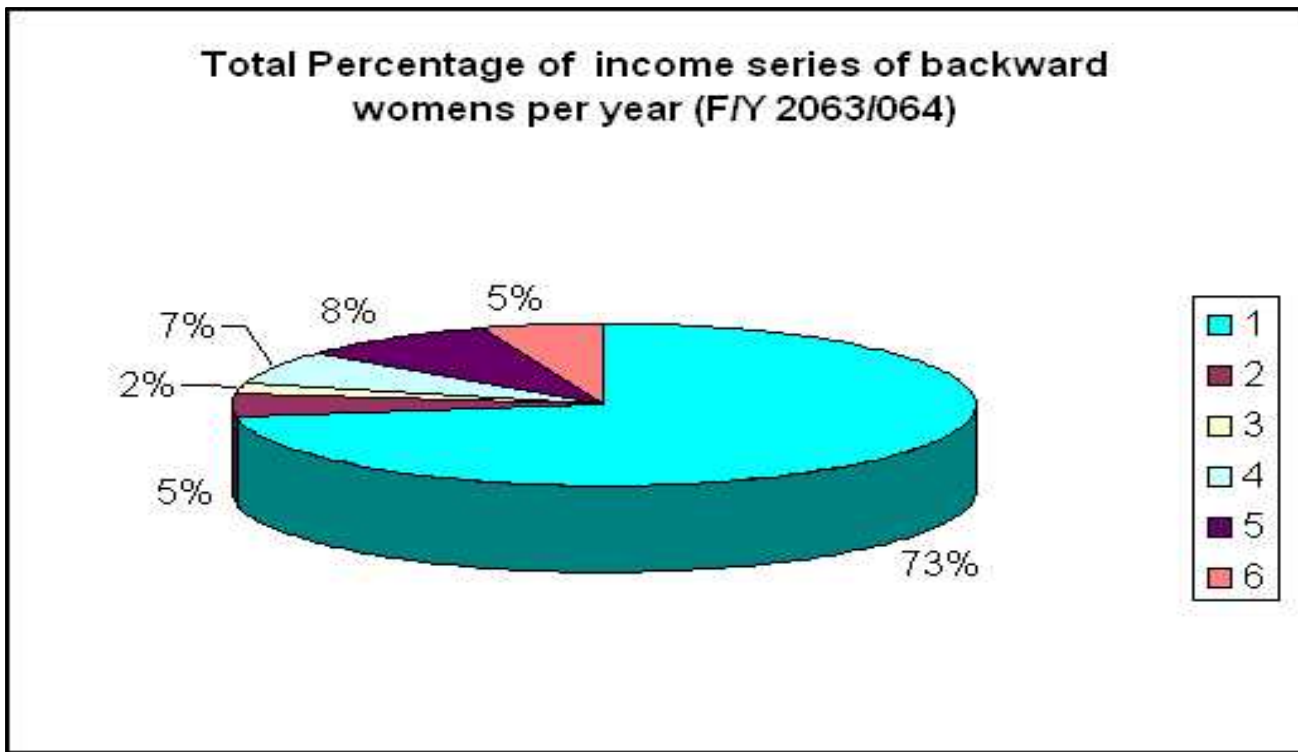
Comparison of income series (Socio- economic analysis of backward women though goat raising program 2060/2063 in different components

	Initial Data 2060	Final Data 2063
Cereal Crops	4100	4500
Agriculture labor	5628	4922
Non Agriculture labor	16928	14766
Livestock	2722	6117



Total Percentage of incomes series in different component /year (Back ward women in goat Raising program, physical year 2063/064)

Income Series	Total incomes	Total %
Agriculture and non agriculture labor	315000	72.63%
Service	20000	4.61%
cereal crop	9000	2.07%
cash crop(vegetable)	30000	6.91%
Livestock (goat)	36700	8.46%
Business	23000	5.30%
	433700	99.98%



UNIT-SIX

Conclusion and Recommendations

Conclusion .

Lack of agriculture land was the major certage of crop production & the land holding size was average (1-2 katha) or 55%.The land holding size was going decreasing order .The incomes from livestock sector was increased 55 % due to goat keeping program in research area . The backward women were all under the below poverty line . The initial survey was indicated that the average incomes was Rs, 28,278 & final incomes was Rs, 30,305 / year / HH .But all incomes were used in their foods consumption .The incomes series were not deviated . They were +ve significant to increased the local incomes of the backward women.The system of Adhiya were decreased . The non agriculture labor were shifted into agriculture labor due to more competition & un employment problems . The human developments aspects for examples - : Life expectancy rate , Literacy rate , Sanitation & decision making capacity was increased & satisfactory . The gross incomes of backward women were increased due to goat raising program. The literacy % (School going children) of chaudhary community was not increased & not satisfactory .

Recommendations

1. The goat raising program should increased with maintain the fodder & pasture lands
2. The local breed Khari goat should maintain with exchanging the khari buck within 18th months.
3. The potential tree fodders/ shrubs should be identified and introduced especially in mid hill farming systems.
4. The farmers should be maintained / improved through better management practices such as sowing high yielding pasture/fodder grass species & controlled grazing with participation of local herders
- 5 Stall feeding practices should be adopted due to Forest policies.

Questionnaires

A. Name of Farmers (Group established Date)

1. Group name .
2. Family owner name. (VDC, Ward, Tole)
3. Family No. (Male, Female, Children)

B. Economic (description) data.

1. Land (Ropani/katha)
2. Cropping system
3. Pasture & Forage
4. Production
5. Consumption/year

C. Livestock

1. Cattle,
2. Buffalo
3. Goat/Sheep
4. Swine
5. Poultry

D. Income distribution/year

1. From labor
2. Services
3. Agriculture
4. Crop, Vegetable & fruits
5. From Livestock - a) Animal & bird
b) Animal bi-product
6. Other Incomes. Total Incomes per year a) Gross b) Net

E. Social Description

1. Food sufficient on his own land (month)
2. Literacy rate on his family (Male/Female)
3. Who is decision maker (M & F)
4. Number of child born & death (M & F)
5. No. of school going children (M &F)
6. Type of houses (thatch, tin, cemented)
7. Clean condition of house (well, right & bad)
8. System of drinking water (yes or no)
9. Toilet system (yes or no)
10. Conflict with male & female (yes or no)
11. Conflict with cast (yes or no). The economical & social information & data were getting which made easy to compared the economic & social aspects before & after the research has been conducted

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Nepal Poverty at the term of twenty first century

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Annex I

Poverty measurement indicators :

SN.	Geographical Areas	Population % under poverty	Poverty % under absolute	Poverty % under deeply
1	Himali	56	18.5	8.2
2	Mountain	41	13.6	6.1
3	Terai	42	9.9	3.4
	<u>Rural/Urban</u>			
4	Urban	23	60	2.8
5	Rural	44	12.5	5.1
	TOTAL	42	12.1	5

Source :- World Bank (1999) Nepal Poverty at the turn Twenty First Century.

1. Religion Belief – Population Under Surv. 30 %
2. Illiterate 2058 – 53.7 Fewer 28 %
3. Marriage Under Age (15-44) Years.
4. Birth rate (2058) 32.5 crude birth rate & 9.3 death/1000.
5. Lack of conscious ness.
6. Lack of Good Family Planning.
7. Male Dominated Society.

Annex-2

UNDP 1998 Report (Human development).

Kathmandu Human development status (Indicators) > 0.6
District 1.

Lalitpur	0.6 – 0.5 (in between)	1
	0.5 – 0.4	4.
	0.4 – 0.3	45
	< 0.2	21
		72
Proudh Literacy		63.3%
< 40 year death		22.53%
Drinking water getting		33.2%
Human Poverty Indicator		49.66

Annex -3

Goat meat (Chevon) Production (1998/ 1999)

Region	Region (under part)	Production (M ton)	Productivities (individual) kg/goat	Livestock population	Slag out	Remark
Midwest		8899	19.563	114669	454882.9	
" "	Mountain	608/731	21.35	179144		-
" "	Hill	1468/3251	17.08	594630	-	-
" "	Terai	1519 /4917	21.35	272917	-	-
Nepal	1867998 NO	36235	19.39	6204616	-	-

Annex - 4

Milk Production & Productivities & Milking cattle & Buffalo Numbers (1998/99)

Region	Within Region	No. of Cattle	Milk production of cattle	Productivities /animal (milk production/ lactation/animal)	No. of buffaloes	Milk prod. of buffaloes	Milk production /lactation /animal
Midwest	Mountain	32,629	9,212	282.325	6645	3939	592.776

"	Hill	50,638	20,237	399.620	60,998	46,121	756.106
'	Terai	53,085	17,008	320.391	32,089	30,749	958.241
"	Midwest	1,44,160	44,004	305.244	99,732	80,809	810.261
Nepal	-	8,40,548	3,59,004	427.107	8,69,415	7,44,121	830.107

Annex -5 ,

Fodder yield in T D N (M ton) from Barron land & grazing land (1999)

Mid -west ,Region	Area	Grazing land	T D N production
Mountain	30,919	5,88,058	43,286.6
Hills	1,19,146	89,118	1,66,804.6
Terai	26,980	67,717	37,772
Mid-west region	1,77045	6,77,176	2,47,863
Nepal	11,08,518	13,92,407	15,51,925.2

Mountain	30,919	5,88,058	43,286.6
Hills	1,19,146	89,118	1,66,804.6
Terai	26,980	67,717	37,772
Mid-west region	1,77045	6,77,176	2,47,863
Nepal	11,08,518	13,92,407	15,51,925.2

Region	With in R.Region	No. of Cattle	Milk production of cattle	Productivities/animal (milk production/ lactation /animal)	No. of buffaloes	Milk production of buffaloes	Milk production / lactation /animal
Mid - west	Mou ntain	32,629	9,212	282.325	6645	3939	592.776

"	Hill	50,638	20,237	399.620	60,998	46,121	756.106
'	Terai	53,085	17,008	320.391	32,089	30,749	958.241
"	Mid - west	1,44,160	44,004	305.244	99,732	80,809	810.261
Nepal	-	8,40,548	3,59,004	427.107	8,69,415	7,44,121	830.107

Annex - 6

Milk production from local cows .

1. Number of cattle /HH
 - i) Number /HH - 3.4
 - ii) Percentage in milk - 38.51
 - iii) Number of milking -1.31
2. Milk yield (liter/cow/day) -2.74
3. Milk production and sale (Liter /day) .
 - a) Production liter / day - 3.60
 - b) Sale liter /day - 1.46
4. Milk price Rs / liter - 16.41
5. Price change (%) - 22.64

Over all more than 50 % of the house hold keeping 3.4 cattle
(Source :- Field survey -2 from local buffalo and sale .

1. Number of local buffaloes /hh .
 - i) Number / hh 2.75 .
 - ii) 003 .)

Annex -7 .

- | | | |
|--|---------------------------|---------|
| Milk production | i) Number of milking | 1.23 |
| | ii) Percentage in milking | 44.83 |
| | | |
| 2. Milk yield (L /B /d) | | 5.6 |
| 3 . Milk production \$ sales (Liter / day) | | |
| a) Production | | 6.72 , |
| b) Sale | | 2.82 , |
| 4 . Milk price (Rs / liter) | | 18.36 , |
| 5. Percentage of price change over 5 years | | 31.44 , |

Annex - 8

Milk production from improve cows and sale

1. Number of improve cows/HH .		
i) Number /HH	4.59 .	
ii) Percentage in milk		40.32
iii) Number of milking		1.85
2. Milk yield liter / cows /day		1`2.92
3. Milk production & sale ((Liter /day /HH)		23.9
a) Production	23.90 .	
b) Sell	-9.91	
4 .Milk price Rs / liter		15.63 .
5. Percentage of price change over 5 years		25.56 .
6 . Total cows	4.05 .	

Annex - 9

Milk production from improve buffaloes & sale .

1 .Average numbers of buffaloes /HH		4.11
i) Number of milking		1.64 ,
ii) . Percentage in milk		39.92
2 . Milk yield l/b/d		10.81 ,
3 . Production l/d/HH		17.74 ,
a) Sale liter /day /HH		7.80 ,
b) Milk price Rs / liter		18.29 ,
c) Percentage price change over 5 year		18.08 ,
d) Total buffaloes	3.0	

Annex -10

Goat production & sale in the study area

1. Number of goat /HH	2.95	
2. Average number of goat sold /HH		295
3.Price of live goat		2976
4. Incomes Rs /HH		8,788
5 . Meat price (Rs / kg)		
i) Now		158.55
ii) 5 year before		125 .97 .
6 . Price change (%)	25.87 %	

Annex -11

Sheep production & sale in the study area

	Percentage of household	Over all average
1. Number of sheep /hh - 1 38		7.67

2 -Number of sheep sold /hh	1.38.		3.33
3 .Price of live sheep	- 1.38		33.67
4 .Incomes Rs /hh	- 1.38		11,222 ,
5. Meat price Rs / kg			
Now			155 ,
5 years before	1.38	-125 ,	
6. Price change (%)	1.38	-24	

Annex - 12

Pig production & sale in the study area .

	over all average	% of house hold	
1. Number of pigs /hh	6.5		2.30
2. Number of pigs sold /hh	2.43		1.61
3 .Price of live pigs	4,900		1.61
4. Incomes Rs /hh	11,900		12.59
Average meat price (Rs / kg)			
Now	66.43		1.61
5 years before	46.43		1.61
5. Price change %	43.08		1.38

Annex - 13

Poultry production in the study area .

	Average no, of birds	% of house hold	
Local.	8.84		20.46
Layers	837.15		2.99
Broilers	1,100		1.38
Totals	116 .70		22.99

Annex - 14

Eggs production from local poultry & sale .

	Over all average	% of house hold	
1. Birds /hh	8.84		20.46
2 . Production eggs /hh	160		
1.15			
3 . Price Rs /eggs now	3.60		1.15
4 . Price Rs / eggs before 5 year	2.62		
1.15			

5. Price change %	37.40	1.15
6 . Annual incomes /hh	557	1.15

Annex -15

Eggs production from improve layers & sales (Source -: Field survey 2003) .

	Over all average	% of house
hold		
1. Layer /hh	8.37	2.99
2. Production eggs / hh	63,233	2.99
3. Price / egg		
Now	3.22	2.99
5 year before	2.76	2.99
4. Price change in 5 years	16.73	2.99
5 . Annual incomes (Rs / hh)	2,03,850	2.99

Annex -16

Meat production from local poultry & sale .

Over all average Percentage of household

1. Number of bird /HH	884	20.46
2. Number of birds sold/HH	9.61	16.09
3. Number of live birds sold price (Rs/bird)		
i) Now Rs / bird	95.07	
16.09		
ii) 5 years ago (Rs / bird)	84.86	
16.09		
4. Percentage of change price (Rs /bird)	12.04	16.09
5 Annual incomes	914	
16.09		

Annex - 17

Broiler production & sale . (Districts :-5 , Terai ,3 & hill, 2)

Over all Average, % of house hold

1. Broiler / house hold	1,100	1.38
2 . Numbers of bird sold	1,100	1.38
3. Price / bird /kg		
i) Rs, / bird	121.67	1.38
ii) Live weight Rs / kg at present	64.17	1.38
iii) 5 year before Rs / kg	60.63	1.38
4 . Price change	5.19	38 5
5. Annual Incomes	1,33,833	1.38

Annex- 18

Major Incomes sources of the house hold for purchasing foods

Average cross annual house hold (Rs)

S. N .	Income source	Average	S D	S E	Max	Min
1.	Cereal crops	24,383	24,251	3,500	88,000	2,000
2.	Cash crops	62,047	78,248	5,769	5,00,000	1,000
3	Salary	55,630	33,284	5,018	2,00,000	4,000
4	Business	60,720	54,012	10,802	2,00,000	4,000
5	Agriculture labor	9,434	13,114	2,572	40,000	300
6	Non agriculture labor	31,529	47,445	8,020	2,00,000	1,000
7	Livestock	50,142	51,156	7,989	2,30,000	1,000
	Average	86,844	87,102	5,756	24,500	2,000

Source -: Field survey -2003 .

Annex - 19

Milk Production Of Local Cow & buffaloes / Improve Cow & buffaloes

Animal class	Number of animals /HH			Milk yield L/D/A	Milk production & sale liter/day		Price	Annual	% of price
1. Local cows , over all	Total number of milk /hh 3.40	% in milk ,38.51	No. of milking ,1.31	2.74	Production 3.6	sales 1.46	16.41	6,468.82	22.46
Improve cow	2.75	40.32	1.85	12.92	23.9	9.91	15.63	46,468	25.56
Local buffaloes	2.74	44.43	1.23	5.62	6.72	2.82	18.36	13,979.30	31.44
Improve buffaloes	4.11	39.92	1.64	10.81	17.74	7.8	18.29	42,798.60	18.08

Source -: Field survey -2003(, AD)

Annex -20

Goat meat production & sales

Region, wise , goat production	Average number of animals /HH	Average number of sold /live animals	Annual incomes Rs/HH	Average price / live animals	At present	5 years before	Price changes within 5 years
Region wise, Goat production	6.91	2.95	8,788	2,976	158.55	125.97	25.87
Sheep production	7.67	3.33	11,200	3,367	155	125	24
Pig production	6.50	2.43	11,900	4,900	66.43	48.43	43.08

Annex 21

Poultry production & sales by ecological region

Eggs production / region	Numbers of local birds/HH	Annual eggs production & sale /HH	Eggs price (Rs / egg) Now	Eggs price(Rs /egg) before 5 year .	Annual incomes Rs /HH	% of price change over 5 years
1.Local birds	8.84	160	360	2.62	576.00	37.40
Overall average % of hh	20.46	1.15	1.15	1.15	1.15	1.15
2. Layer , over all % of hh	8.37	63,323	3.22	2.76	20,03,850	16.73
	2.99	2.99	2.99	2.99	2.99	2.99
3 . Local bird meat, over all average % of hh	8.84	9.61	95.07	84.86	914.00	12.04
	20.46	16.09	16.09	16.09	16.09	16.09
Broiler meat , over all average % of hh	1,100.0	1,100.00	60.83	64.17	1,33,833	-5.19
	1.38	1.38	1.38	1.38	1.38	1.38

Source :- Field survey 2003 AD

Annex -22

Incomes utilization patterns of the house hold (Rank order wise)

Area of incomes use	Cumulative score % priority order			Difference in priory scores Change in priority rank order
	Now	5 year before		
	Scores rank order	Scores rank order		

1. Education for children	1,330	1	1,148	1	182	Its
2. Agriculture production	995	11	1,010	11	-15	IV
Health care services	941	111	856	1V	85	II
Food items purchase	939	1V	1,006	111	-67	V
Socials & Religious Functions	454	V	448	V	6	III

Source -: Field survey 2003AD .

Annex -23

Incomes utilization priority of the respondents .

Investment priority area.	Priorities									
	First		Second		Third		Forth		Fifth	
	No w	5 year before	No w	5 year before	No w	5 year before	No w	5 year before	No w	5 year before
Food grains	109	157	44	20	38	16	22	23	60	47
Education	155	85	104	116	38	69	8	20	9	12
Agriculture production	42	47	85	103	92	85	78	48	13	13
Health care	14	15	80	56	121	106	92	117	4	5
Social/.,Religious/Function,	1	5	4	8	24	24	96	74	169	171

Source -: Field survey 2003 AD .

Annex -24

Socio -Economic characteristics of the high hill farmers land categories

Feature	Small	Medium	Large	Mean
Respondents age	31	36	45.5	37.6
Literacy (percentage)	21	14	14	18
Family size(number)	5.6	7.14	5.25	6
Dependants	1.87	1.71	1.25	1.61
Economically active members (number)	3.73	5.42	4	4.38
Land man ratio (ropani / capita)	0.39	1.26	4.43	2.03

Annex -25
Land distribution .

Land category	Land (ropani)	% of total farm house	Average farm size (ropani)	C V %
Small	0.5 -< 5	58	2.36	52
Medium	5 - 15	27	9	38
Large	>15 - 30	15	23.25	23

Annex - 26
Livestock holding

Livestock category	Livestock unit	% of total farm house holds.	C V %
Small	5.98	30	25
Medium	12.16	46	20.6
Large	22,14	24	44.8

Annex - 27
Livestock type

Livestock category	Livestock units	Cattle	Sheep	Goat	Yak /Nak	Chauri
Small	5.98	0.5	0.08	0	3.5	1.9
Medium	12.16	1.7	0.76	0	4	5.7
Large	22.44	2.2	0.44	0.42	8.3	11.7
Mean	13.5	1.5	0.42	0.08	5.3	6.4

Annex -28**Incomes (cash incomes of various sources (per house hold)**

Livestock categories	Livestock (Rs)	Crops (Rs)	Horticulture (Rs)	Off - Farm (Rs)	Total (Rs)	C V %
Small	8,325	Nil	41	19,708	27,780	76
Medium	9,682	312.5	Nil	11,750	20,535	42
Large	36,999	2,517	100	14,166	54,283	90
Mean	18,335	943	47	15,208	34,199	

Annex -29**Forage cultivation .(Hay production in different Farm categories)**

Livestock category	Livestock unit (I U)	Hay production (kg)	Hay L U (kg)	C V %
Small	5.98	421	50.5	8
Medium	12.16	600	47.6	45
Large	22.44	828	37	147
Mean	13.5	616	51.7	

Annex - 30**Land distribution in low hill.**

Land categories	Farm size (Ropani)	Average farm size (Ropani)	C V %
Small	< 10	6.5	30
Medium	10-20	12	18
Large	>20	32.7	27

1 Ropani =0.05 hectare

Annex 31**Livestock holding**

Livestock categories	Livestock Unit	% of farm holding	Average number	S D	C V %
Small	2.08	50	3.9	1.23	31

Medium	2.22	43	7.17	0.96	13
Large	10.4	7	17	4.55	27

Annex -32
Livestock type

Livestock categories	Livestock Unit	Cattle	Buffaloes	Goats
Small	2.08	0.9	1,35	0.42
Medium	2.22	0.8	1.2	0.48
Large	10.4	4	6	2.4
Mean	4.9	1.9	2.8	1.1

Annex -33
Incomes (cash incomes from various sources .)

Livestock categories	Livestock (Rs)	Crops (Rs)	Horticulture (Rs)	Off Farm (Rs)	Totals (Rs)	S D	C V %
Small	3,435	295.7	814	41,829	48,810	66,623	136
Medium	2,430	1,197	2,111	25,628	14,700	14,506	98
Large	10,823	1600	200	0	12,623	14,719	116
Means	5,565	1,918	1,041	22,485	2,577		

Annex -34
Forage production in different farm category .

Livestock categories	Livestock Unit	Hay production (kg)	Hay /LU (kg	S D	C V %
Small	2.08	314	80	251	79
Medium	2.22	458	63	438	95
Large	10.44	620	36	540	87
Means	4.9	464	60		

Annex -35
Problem ranking in livestock production .

Problems	High	Mid	low hill
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	hill	hill	
Forage scarcity	1	1	1
Out break of animals diseases	3	2	2
Lack of market facilities	2	4	5
Lack of extension services	4	3	3
Lack of technical know how ,	5	5	4

Note -: Problem ranking is in Ascending order ; I , is most important problem.