

INVOLVEMENT OF WOMEN IN AGRICULTURAL PRODUCTION:

A Case Study of Satakhani VDC, Surkhet District

A Thesis Submitted to
Central Department of Rural Development,
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In partial fulfillment of the requirements for the
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DECLARATION

I hereby declare that the thesis entitled “**Involvement of Women in Agricultural Production, A Case Study of Satakhani VDC, Sutkhet District**” Submitted to Central Department of Rural Development, Tribhuvan University, is entirely my original work prepared under the guidance and supervision of my supervisor. I have made due acknowledgements to all ideas and information borrowed from different sources in the course of preparing this thesis. The result of this thesis have not been presented or submitted anywhere else for the award of any degree or for any other purposes. I assure that no part of this content of this thesis has been published in any form before.

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Recommendation Letter

This thesis entitled **Involvement Of Women In Agricultural Production, A Case Study of Satakhani VDC, Sutkhet District** has been prepared by **Jeevan Rupakheti Sharma** under my guidance and supervision. I hereby forward this thesis to the evaluation committee for final evaluation and approval.

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Supervisor and
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APPROVAL LETTER

This thesis entitled **Involvement Of Women In Agricultural Production, A Case Study of Satakhani VDC, Sutkhet District** prepared by **Jeevan Rupakheti Sharma** in partial fulfillment of the requirements for the Master's Degree (M.A.) in Rural Development has been approved by the evaluation committee.

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ABSTRACT

The title of thesis is **Involvement Of Women In Agricultural Production, A Case Study of Satakhani VDC, Surkhet District**. The objectives of the study is to objective to assess the socio-economic status of the respondents. To find out the women involvement in agriculture production and to find out the problems of agricultural production in the study area. The study area is Satakhani-5, Surkhet district. The population of the study has been selected as all the women of the study area who are involving in agricultural production. All the women of the study who are involving in agriculture were taken by using census method. The structure interview schedule has been used as the tool for data collection. The interview schedule has been divided into two parts.

The study found that 7.82 percent respondents belonged to the age group less than 20 years and 15.65 percent of them belonged to 36-40 years group in the study area. Similarly, 2.60 percent of respondents had up to three members in their family. In the study area, 66.95 percent of respondents were illiterate whereas 33.5 percent of respondents were literate. In the study, 2.60 percent of the respondents had one child whereas 53.13 percent respondents had three children with them.

Likewise, 54.78 percent respondents were regularly involved in agricultural activities in the study area. All the respondents involved in production in maze, similar number of respondents are involved in paddy, 97.39 percent respondents used to produce white as their income source. In the study area, there were problems like low prices of farm produce, lack of roads, inadequate improved/high yielding seedlings, high cost of fertilizers/late supply, frequent outbreak of pests/diseases, poor productivity of land in the study area.

The study concluded that there were problems like lack of land for fishery, no capital with them to run fishery and problems of low prize of their products (fish) in the study area. The study concluded that the problems were existed in every activities of agricultural production.

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ABBREVIATIONS / ACRONYMS

FAO	:	Food and Agriculture Organization
GIZ	:	Gesellschaft Fur Internationale Zusammenarbeit
GDP	:	Gross Domestic Product
IFAD	:	International Fund for Agriculture Development
INGO	:	International Non Government Organization
NGDS	:	National Geothermal Data System
US	:	United State
UK	:	United Kingdom
USAID	:	United States Agency For International Development
WHO	:	World Health Organization

CHAPTER - I

INTRODUCTION

1.4 Background

Women play a critical role in agricultural production. Particularly in low income countries in which agriculture accounts for an average 32 percent of the growth in gross domestic product (GDP), and in which an average 70 percent of the countries' poor live and work in rural areas of developing countries, women make up a substantial majority of the agricultural workforce and produce most of the food that is consumed locally. The large proportion of agricultural production that is attributable to women makes them important agents of economic development. The vast majority of food production that is attributable to women makes them the principal agents of food security and household welfare in rural areas (IFAD 2014).

Rural women are also engaged in productive tasks such as agricultural work, raising cattle, seed management, planting, as well as the processing and marketing of agricultural products. In livestock farming, women feed the animals, clean the stalls and compost manure. When raising poultry, sheep, goats or rabbits, they are responsible for breeding and tending to the animals. In spite of their important and diverse contributions, women in agriculture and rural areas have less access than men to productive resources. Access to or control over land, financial services, productive resources, and extension or marketing services. Female farmers produce less than male farmers. This situation imposes costs on the agriculture sector, the broader economy and society, as well as on women themselves. Gender inequalities result in less food being grown, less income being earned, and higher levels of poverty and food insecurity (FAO 2011)

Rural women have many roles, and they have responsibilities and knowledge that differ from those of men. As farmers, they plant, weed and harvest food crops and tend livestock. As caretakers, they look after children and relatives, prepare meals and manage the home. Women earn extra income by working as wage laborers, producing and selling vegetables, or engaging in small-scale trading and enterprises. When women are economically and socially empowered, they become a potent force for change. In rural areas of the developing world, women play a key role in running households and make major contributions to agricultural production. But the inequalities that exist between

women and men make it difficult for women to fulfill their potential. In poor and marginal areas and areas affected by climate change, where men have been forced to migrate in search of work, women often have the sole responsibility for farming and raising the children (IFAD 2011).

Women mainly produce food for household consumption and local markets, whereas men more often work in agricultural wage labor and cash crop production. Generally, women are responsible for food selection and preparation, and for the care and feeding of the children, and therefore play a key role in defining the coping strategies of poor households to ensure food security and to reduce risk. Women normally spend a higher share of their income than men on providing food, health and education to the family. Additionally, they expend a lot of time and hard work in procuring water and domestic fuel. For instance, women spend more than twice as much time as men and boys in fetching water and gathering firewood. At least 70 percent of the world's very poor people live in rural areas in developing countries. Their livelihoods usually depend either directly or indirectly on agriculture, with women providing, on average, more than 40 percent of the agricultural labor force (GIZ 2013).

Rural economies, particularly those dependent on agriculture, have been affected by the processes of globalization, leading to the restructuring and decline of the agricultural sector, the growth of the service sector and increased emphasis on technology. In many areas, this has created unprecedented work and employment opportunities, as well as bringing changes in the role and status of women. These changes have also contributed to further shifts in population, with some rural areas close to towns and cities coming under pressure, while many remote areas continue to suffer a decline in population (European Commission 2014).

Age of women farmers was one of the demographic characteristic hypothesized to influence women's participation in agricultural activities. According to Table 2, the age range distribution of the respondents showed that, 42 percent are young (15 to 30) age groups and followed by middle age groups (31 to 50) and old age groups, 32 and 26 percent, respectively showing women participation in agriculture in the study area are in the age of productive labour. Education is believed to affect productivity at least in two ways. First, education increases the ability to use modern (technology) to produce more output. Second, education enhances the ability of farmers to obtain input and analyses

information. Thus, education changes the types and magnitudes of inputs to be used in production (Kasanga, (2014).

Women play a vital role in advancing agricultural development and food security. They participate in many aspects of rural life in paid employment, trade and marketing, as well as many unpaid activities, such as tending to crops and animals, collecting water and wood for fuel, and caring for family members. Women also manage household consumption and food preparation. But women face many constraints in the multiple activities they pursue – less land ownership, access to credit, extension and other services, and ability to hire labor (USAID, 2011).

The role women play in agriculture and the rural society is fundamental to agricultural and rural development in sub-Saharan Africa. The Technical Centre for Agriculture and rural cooperation reported that women in Africa make up more than one -third of the work force. Agricultural development is a complex process and a challenging one as well. Rural women farmers play a vital role in food production and food security. They account for 70 percent of agricultural workers, 80 percent of food producers, 100 percent of those who process basic foodstuffs and they undertake from 60 percent to 90 percent of the marketing. Four of ten agricultural workers in the world are women. Women take part actively in farming activities and in processing farm products, in addition to their domestic and reproductive responsibilities (Danladi, 2007).

Women participate in almost all agricultural activities except felling of trees and spraying of chemicals. They participate mainly in land clearing planting, weeding, harvesting, transporting of produce , processing and marketing. Nearly all the tasks connected with food production are per formed by rural women with the exception of tree felling and other heavy duties. Similar investigation conducted in India showed that more than 60 percent of agricultural operations are performed by women farmers (Shiva, 2011).

Agriculture continues to provide a broad base to the Nepalese economy. Nearly four fifths of all Nepalese households are essentially farm households, who derive nearly half of income from agricultural sources consisting of farm income and agricultural wage income. Engaging two-thirds of labor force, this sector alone contributes some one-third to the GDP. As such, the growth originating in agriculture holds high potential to have relatively wider impact on poverty reduction and inclusiveness. Smallholders and marginal farms predominate Nepalese agriculture with the average holding size of 0.8 ha.

Nearly a half of all farms have less than 0.5 ha of land, while those with less land constitute nearly three-fourths of all holdings (Karkee, 2008).

1.5 Statement of the Problem

In [Nepal](#), the economy is dominated by agriculture. In the late 1980s, it was the livelihood for more than 90 percent of the population, although only approximately 20 percent of the total land area was cultivable, it accounted for, on average, about 60 percent of the GDP and approximately 75 percent of exports. Since the formulation of the Fifth Five-Year Plan (1975–80), agriculture has been the highest priority because economic growth was dependent on both increasing the productivity of existing crops and diversifying the agricultural base for use as industrial inputs. According to the World Bank, agriculture is the main source of food, income, and employment for the majority. In trying to increase agricultural production and diversify the agricultural base, the government focused on irrigation, the use of [fertilizers](#) and [insecticides](#), the introduction of new implements and new seeds of high-yield varieties, and the provision of credit. The lack of distribution of these inputs, as well as problems in obtaining supplies, however, inhibited progress. Although land reclamation and settlement were occurring in the Terai Region, environmental degradation and ecological imbalance resulting from deforestation also prevented progress.

Women play a significant role in agriculture production. Women can take part in agricultural workers, food producers, and other development works. It is estimated that higher proportion of women take part in rural marketing. So it is essential to participate women in development in the rural area. In the study area majority of the women take part in labour force in all trade. Yet, the role of women in these activities, so important economically, has remained obscure for long because women seldom played any major roles in political activities or decision making processes. Despite the fact that women produce much of the food in the developing world, they also remain more malnourished than most men are. In many rural societies, women eat less food than men do, especially when the food is scarce, such as just before the harvest, or when the workload increases without a corresponding increase in the food intake.

This study will contribute to the small, but growing body of knowledge on women participation in rural development by examining the differential participation some of the prevailing assumptions in this regard. This is of significance particularly in the cause of

study area where no research has been conducted on the similar topic. Similarly, it would also be of interest to compare the finding of the study with that of the study conducted in other parts of country on similar content. Hence, the topic has been chosen as " Involvement of women in agricultural production ".

1.6 Objectives of the Study

The main objective of this study was to find out the involvement of women in agricultural production. However, the specific objectives of this study were as follows:

- i. To assess the socio-economic status of the respondents.
- ii. To find out the women involvement in agriculture production.
- iii. To find out the problems of agricultural production in the study area.

1.7 Organization of the Study

The study on "Involvement of women in agricultural production" was carried out in five chapters. First chapter deals with the introduction of the study. It included background of the study, statement of the problems, objective of the study, organization of the study, significance of the study and limitations of the study. Similarly, 2nd chapter reveals the existing literature on the related topic and it also includes the conceptual framework of the study. Third chapter expressed the research design, nature and sources of data, universe and sampling, data collection tools and techniques, data processing and analysis. It also contains reliability and validity of data. Fourth chapter included the analysis and interpretation of the data which were collected from primary as well as secondary sources. The analysis and interpretation conducted using different tools and fifth chapter included the finding derived from the study. After expressing the finding of the study, the researcher concluded and recommended for the improvement of and further study to new researchers.

1.8 Significance of the study

Significances of the study were as follows.

- The study has useful to assess the status of rural women.
- This study has useful by giving the information about the involvement of women in agricultural production in the study area.

- It would be significant in finding the problem of women while involving in agriculture production in the rural area.
- It would be useful to the policy makers of NGDS/INGO and local area researcher as civil society.
- This study might be helpful for the further researchers in similar field.

1.9 Limitation of the Study

The study would be delimited within the following points:

- i. The study was based on involvement of women in agricultural production.
- ii. Only women who are living in Satakhani-5, Surkhet were taken as the population of the study and census method was taken to select the respondents for the study.
- iii. Simple random sampling method was adopted to draw the sample size for the study.
- iv. Structured interview schedule was used as the main tool for the study.

CHAPTER - II

REVIEW OF RELATED LITERATURE

This chapter deals with the review of the related literatures and conceptual framework of the study which are presented as follows:

2.1 Literature Review

IFAD (2011) stated that women make essential contributions to the agricultural and rural economies. In all developing countries, their roles vary considerably between and within regions and are changing rapidly in many parts of the world, where economic and social forces are transforming the agricultural sector. Rural women often manage complex households and pursue multiple livelihood strategies. Their activities typically include producing agricultural crops, tending animals, processing and preparing food, working for wages in agricultural or other rural enterprises, collecting fuel and water, engaging in trade and marketing, caring for family members and maintaining their homes. Many of these activities are not defined as “economically active employment” in national accounts but they are essential to the wellbeing of rural households.

Okorji, (2008) mentioned that rural development is the process of improving the [quality of life](#) and economic well-being of people living in relatively isolated and sparsely populated areas. Rural development has traditionally centered on the exploitation of land-intensive natural resources such as agriculture and forestry. However, changes in global production networks and increased urbanization have changed the character of rural areas. Increasingly tourism, niche manufacturers, and recreation have replaced resource extraction and agriculture as dominant economic drivers. Education, entrepreneurship, physical infrastructure, and social infrastructure all play an important role in developing rural regions. Rural development, is a process of not only increasing the level of per capita income in the rural areas but also of the standard of living of the rural area. The role of women in the household and strategies for sustaining women's contribution in rural development. Household income distribution is skewed in favor of men; hence, men are erroneously believed to play a more dominant role in rural development than women.

Tyobeka, (2012) mentioned that Women need to be able to use and/or own land and other productive resources in order to secure livelihoods and food security of their families. Women as farmers, workers, and entrepreneurs face more constraints than men in

accessing productive resources, markets and services. It is important to improve women's access to financial, technological and extension services, as well as to markets. Giving women an equal say in decision-making processes in rural development institutions improves their access to resources, factors of production such as land and capital, and to markets. Due to their frequently lower standard of education, women are generally less likely than men to know and understand their statutory rights. Only a few countries systematically integrate gender-sensitive information on agriculture and rural development into their national or regional statistics.

GIZ (2013) highlights some of the key issues that concern rural women and affect their participation in rural development. It takes a look at the new policy context and at some examples of good practice. The aim is to encourage and inspire those responsible for rural development programmes and projects to take into account the needs and interests of women in rural areas.

FAO (2012) stated that agriculture is important to women, but female farmers have less access to the productive resources and services, such as land, livestock, human capital, extension services, financial services and new technology, required by agricultural producers. Improving women's access to land and security of tenure has direct impacts on farm productivity, but, through strengthening women's status and influence in the household, has implications for improving household welfare as well. For example, strengthening land ownership by women in Nepal is linked with better health outcomes for children. Women across all developing regions are consistently less likely to own or operate land.

Sharma, (2015) mentioned that women represent 49 percent of the farmers in the irrigated sector and 57 percent in the rained traditional sector. Women in the rained sector are primarily subsistence farmers but they also work as seasonal wage labourers in the rained mechanized sector, and as hired or unpaid family labourers in the irrigated sector. Although women play a crucial role in agriculture, contributing to both the GDP and to household food security, their contribution to agriculture and the overall economic development process continues to be undervalued.

Harun, (2014) estimated that there are numerous cultural, social, political, and legal factors that influence women's lack of property and inheritance rights, and specific patterns of ownership and disenfranchisement vary widely. Lack of control over both

productive and non-productive resources in both rural and urban settings places women at a strong disadvantage in terms of securing a place to live, maintaining a basis for survival, and accessing economic opportunities. For instance, the widespread lack of official title to land and property among women means that, they have virtually no collateral with which to obtain loans and credit. These factors exacerbate women's generally low status and high levels of poverty when compared to men. Furthermore, women's lack of property and inheritance rights has been increasingly linked to development-related problems faced by countries across the globe, including low levels of education, hunger, and poor health.

Kotey, (2008) mentioned that agricultural activities women participated are identified and average total hours allocated for agricultural production is estimated women participation in agriculture was measured as a continuous variable where respondents were asked to individually indicate how much hours were allotted for agricultural production. Lack of understanding about the roles that women and men play, activities performed by each and workload of women in a sector as fundamental as agriculture will result in programs falling short of their potential and development. Gender integration is the process by which gender analysis is applied to all steps of development programs and projects. Without proper targeting policies and programs, it may not reach or impact those drivers of agricultural productivity and development. Therefore, the objective of this study was to quantify the level of women participation per each agricultural activity, to identify factors affecting level of women's participation in agricultural production and to investigate women and female-headed households' access to and control over agricultural land.

Kasanga, (2014) stated that women, despite having key role in advancing agricultural development and food security, their contribution is undervalued and they have been neglected in the making of agricultural policies. With the aim of tackling gender issues in agricultural production this study estimated total hours spent in farm associated tasks, identified activities performed by women and examined the influence of selected socio-economic characteristics of women on their participation in agricultural production. A two-stage random sampling technique was used to select 180 respondents for this study. The research was carried out by the use of well-structured questionnaires to obtain the necessary data. The relationship between selected socio-economic characteristics of the respondents and their total hours spent on agricultural activity was determined using ordinary least square (OLS) regression. The findings reveal that, while women are found

with less agricultural resources and low decision making power, they spent 26 h per week in farm activities showing high rate of involvement in agricultural production. It was also found that marital status, income and age had significant impact on women participation in agricultural production. It is recommended that women agricultural productivity should be enhanced by improving their access to agricultural resources and developing policies and technologies targeting women related agricultural activities.

USAID, (2011) mentioned that increasing opportunities for women can have a powerful impact on productivity and agriculture-led growth. Women are just as efficient agricultural producers as men and can achieve similar yields when given equal access to resources, including training and services. Women could increase their crop yields by approximately 20 percent if given the same access to the same resources as men. It was estimated that if women had the same access to productive resources as men, they could increase yields on their farms by 20–30 percent. This increase could raise total agricultural output in developing countries by 2.5–4 percent and reduce the number of hungry people in the world by 12–17 percent, up to 150 million people.

Samanta, (2008) mentioned that women are a significant portion of the agricultural labor force, constituting an average of 43 percent in developing countries, with ranges from about 20 percent in other parts of world. Women are the majority of the agricultural labor force in over 30 countries. They are critical to building strong agriculture sectors that can serve as the foundation for long-term food security, poverty reduction, and economic growth.

Mijindadi (2013) estimated that women are responsible for 70 percent of actual farm work and constitute up to 60 percent of the farming population. Similarly, 76 percent of women are actively involved in farming activities or are engaged in their husband's farms. Women supply most of the needed labour in agricultural activities and this is the most important factor of production to farmers, as it is needed at the stages of agricultural production. Even women in seclusion generate substantial income through food crop processing. Women generally achieved farming objectives through collective work.

Shiva, (2011) stated that women were involved in land clearing 58 percent, in planting 72 percent, in weeding 80 percent, trans porting of products 82 percent, in harvesting 93 percent, in processing 93 percent, in marketing 88 percent. Women who had their

personal farms, plant mainly groundnut (62 percent), rice (40 percent), cowpea (28 percent) maize (25 percent) and vegetables (10 percent). They also keep livestock such as pigs (48 percent), goats (23 percent), sheep (17 percent) and poultry 3 percent. Women's methods of acquiring land for farming. None of them had land by inheritance, 50 percent had by husband and relatives, 32 percent by hiring, while others paid for land for farming. Table 5 shows sources of income for farming for women, only 13 percent were able to obtain Bank loan, 21 percent used their salaries, 23 percent farm output, 33 percent obtain financial help from their cooperative societies, while others borrowed money either from friends or relatives. Lack of credit facilities ranked first (88 percent), land problem (83 percent) second, late farm input deli very ranked third (50 percent) while other constraints were less than 50 percent. These and many other constraints limit the performance of women in food production

Karkee, (2008) mentioned that Nepal's agriculture is overwhelmed by subsistence family farms. Seventy-eight percent farm holdings have been reported to be producing mainly for consumption. The proportion of holdings that produce mainly for sale is not even 1 percent, while little over 21 percent farm families use their farm produce almost equally for both sale and home consumption. Ironically, these subsistence farms are not capable of supporting the adequate subsistence of the farm families. For 60 percent holdings the annual farm production was not sufficient to feed their household until the next harvest; 40 percent holdings were deficient for up to 6 months while 20 percent holdings were deficient for more than half a year

World Bank, (2009) stated that demand for agricultural commodities is changing rapidly, generating new opportunities for both men and women producers. Increasing demand for higher value products and advances in agricultural technology are changing what is produced, how it is produced, and by whom. The failure of past breakthroughs and innovations to benefit men and women proportionately has left many development practitioners with a profound sense of opportunities missed, and a resolve that the opportunities implicit in technologies and market trends today be capitalized upon to redress that legacy. These opportunities may well represent new entry points from which to address gender disparities and to empower women. However, for these entry points to be exploited, careful gender analysis is required to give us as complete a picture as possible of the practical realities that women face.

Mahabub and Manik (2004) conducted a study on “Nature and impact of women’s participation in economic activities”. The study found that women working hours in economic activities were low due to their substantial involvement in non-economic household works as only 6 percent of the women worked for more than six hours a day in economic activities: livestock rearing and homestead gardening and cottage industries, which are significantly higher than that of men while men have allocated more time to non-agricultural activities in which earnings are higher as a result influence women’s participation in agricultural activities and recommended that the women empowerment and their economic participation in the labor force are extremely depended on their education and outward mobility in an established liberal society.

Kishor, (1999) discovered three categories of women farmers as primary farmers (involved in the production aspect), secondary farmers (involved in the processing), and tertiary farmers (involved in rendering services: marketing, conveying, etc). They concluded that women farmers are heavily involved in agriculture and the level of their participation in farm management decision making are quite low attributable to their age, education, land tenancy, and the wealth status. Majority of the women interviewed were however found not to be formally educated and are of the low income group. Their study thus recommended policy interventions to enhance women access to basic farm inputs including finance in order to boost their participation in agriculture and its various decision making processes.

Fabiyi, (2007) in his study of the Role of Women in Agricultural Development stated that the social demographic of women cut across all sphere of human endeavour in which majority (72 percent) of the respondents were small-scale farmers having 0.1 – 3.0 hectares of farmland for cultivation of food crops. Many of these women acquired land for farming from their husbands and relations (freehold), while others hired land for farming. The respondents sources of income for farming were through cooperative society (33 percent) and previous farm output (23 percent) only few (13 percent) were able to secure Bank loan, while others borrowed money from friends.

Chayal, Dhaka, and Suwalka (2010) in their study of the analysis of role performed by women in agriculture found that there is greater involvement of women in various agricultural operations. They concluded that policy intervention could enhance women participation in actual farm work to as high as 70 percent. In addition, they found landholding, age, and family income greatly influence women participation in agriculture

and recommended for effective policy intervention in order to boost women socio – economic structure.

Butt, (2010) conducted a study on the role of rural women in agricultural development and their constraints. The study found women playing crucial role in food security and stability of rural areas due to keeping crop production, livestock production as well as cottage industry alive. They also found women having incomplete access to farm input/resources, agricultural extension education services, and newest technical knowledge and information sources. They recommended that serious attention be given to eliminating constraints faced by women because they hold the backbone of agricultural development and food security in many part of the world.

CHAPTER - III

METHODOLOGY

This chapter deals with the methodologies to be applied to carry out this study which includes design and method, population, sample and sampling strategy, study area, data collection tools and techniques, data collection procedure and data analysis and interpretation procedure which are presented below.

3.1 Study Area

The study area was Sathakhani, 5 Surkhet district. The study area is nearly 13 K.M. far from the district headquarter. In the East there is Kalyan VDC, in the West there is Birendranagar Municipality, in the North there is Garpan VDC and there is Bheriganga Municipality, in the South part of the study area.

3.2 Research Design

The research design for this study is based on both exploratory & descriptive types. Descriptive research design has been used to gather qualitative information about the research area & exploratory research design has been used to collect information about the possibilities of particular research for study of Involvement Of Women In Agricultural Production. Both primary and secondary data were collected from the Division Co-operatives Office and Different Reports of VDC. Primary data are collected in the field by using various tools such as questionnaire survey and key informant interviews.

3.3 Nature and Source of Data

The data in this study were qualitative & quantitative in Nature. Both primary & secondary source were collected to fulfill the objectives of this study. But the study is mostly based on the primary data collected through field survey through different techniques such as interview with the respondent, some case observations, focus group discussion and other informal discussions. The secondary data were collected from necessary books, research papers & reports, informative articles, various individual information, published documents & unpublished information sources.

3.4 Population, Sample Size and Sampling Procedure

The population of the study were all the women of Sathakani vdc, 5, Surkhet who are involving in agricultural production. There are 115 women in the study area (VDC profile, 2073) and all of them were taken by using census method.

3.5 Data Collection Tools and Techniques

The structure interview schedule was used as the tool for data collection. The interview schedule was divided into two parts. The first part of the interview schedule was related to the socio-economic characteristics of the respondents, the second part of the schedule included the participation of women in rural development.

3.6 Data Collection Procedures

The researcher applied following procedure to collect the required data from the study area:

- ▶ First of all, a letter from the Central Department of Rural Development, University Campus Kirtipur Kathmandu was taken for data collection.
- ▶ Then, the researcher visited the respondents and will mention the purpose of the visit.
- ▶ Before starting the interview with the respondents, the researcher mentioned the purpose of the study and establish a good relationship with them.
- ▶ Then, the researcher had take the interview door to door visit and face to face interview by the help of structured interview schedule.
- ▶ After the completion of the interview, the researcher thanked the respondents for their help and co-operation.

3.7 Method of Analysis and Interpretation of Data

After collecting the data from interview schedule, it was carefully checked to remove the possible errors. The collected information was tabulated in the master tables. Then the data was classified and tabulated mainly under different headings and sub-headings by using mathematical and numerical procedure. Finally, the data were interpreted comparing it with national data and was compared with parts of Nepal.

CHAPTER - IV

ANALYSIS AND INTERPRETATION OF RESULTS

This chapter deals with analysis and interpretation of the data collected from the respondents of the study area. Collected data were presented as follows:

- Socio-economic features
- Involvement and problems of agricultural production

4.1 Socio-economic Status

This sub section of the study was concerned with the analysis and interpretation of household information and socio-economic features of the respondents which include number of family size, education, marital status, etc. of the respondents.

4.1.1 Age structure

Age is the duration of time that a person or thing has existed. In the study, respondents with different age groups were found which has been presented in the following table.

Table 1.1 : Distribution of the respondents by age group

Age group	No. of respondents	Percent
Less than 20	9	7.82
20-25	16	13.91
26-30	28	24.34
31-35	21	18.26
36-40	18	15.65
Above 40	23	20.00
Total	115	100.00

Source : Field survey, 2016

Table shows that 7.82 percent respondents belonged to the age group less than 20 years, 13.91 percent of respondents belonged to 20-25 years, 24.34 percent of respondents belonged to the age group 26-30 years and 18.26 percent of respondents belonged to the age group 31-35 years. Similarly, 15.65 percent of them belonged to 36-40 years group and 20 percent of the total respondents belonged to above 40 years in the study area.

4.1.2 Family Size

Family size is a fundamental social group in society typically consisting of one or two parents and their children. Respondents were asked about the number of their family members and the response obtained from them has been shown in the table no. 1.

Table 1.2: Distribution of the respondents by size of family

Size of family	No. of respondents	Percent
Up to Three	3	2.60
Four	27	23.47
Five	39	33.91
More than five	46	40.00
Total	115	100.00

Source : Field survey, 2016

Table 1 reveals that 2.60 percent of respondents had up to three members in their family. Similarly, 23.47 percent of respondents had four members, 33.91 percent of respondents had five members and 40 percent of respondents had more than five members in their home. The median family size is 5 members in the study area.

CBS (2011) shows that the average family size of the Nepalese people is 4.88 members whereas nearly half (46 percent) of respondents had average family size as compared to the national data.

4.1.3 Educational status

Respondents were asked about their educational status. The following table first of all identify the literacy status and then among the literate primary include 1 - 8, higher education include up to 12 and above, no schooling literate means adult literacy or

informal education. The response obtained from the respondents has been shown in table no. 2.

Table 1.3: Distribution of the respondents by educational status

Educational status	No. of respondents	Percent
Illiterate	77	66.95
Literate	38	33.05
Total	115	100.00
Among literate,		
Non schooling literate	38	49.36
Primary	17	22.07
Lower secondary	15	19.48
Higher Secondary	6	7.79
Higher education	1	1.29
Total	77	100.00

Source : Field survey, 2016

The table above presents that 66.95 percent of respondents were illiterate whereas 33.5 percent of respondents were literate. Among the literate, 49.36 percent of respondents had got primary level of education. Similarly, 22.07 percent of respondents belonged to secondary level of education and 7.79 of the respondents belonged to higher education.

CBS (2011) mentioned that 56 percent women are literate in Nepal whereas 66.95 percent of respondents were literate in the study area. The data shows that the literacy rate was very higher than the national literacy rate.

4.1.4 Household facilities

Respondents were asked whether they have the given facilities in their house or not. The response obtained from the respondents has been shown in the following table.

Table 1.4: Distribution of the respondents by household facilities

Household facilities	No. of respondents *	Percent
Solar	80	69.56
Radio	112	97.39
TV	5	4.34
Mobile	113	98.26
Bicycle	-	-

Source : Field survey, 2016

* Multiple responses

The above table reveals that 69.56 percent respondents had solar, 97.39 percent of respondents had radio, 4.34 percent of respondents had TV in their home. Similarly, almost all (98.26 percent) of respondents had mobile and none of them had bicycle in their home. Hence, it can be concluded that higher number of respondents had sufficient household facilities.

MOHP, New ERA, & ICF International, (2012) mentioned that 38 percent of households have an improved toilet facility that is not shared with other households and 76 percent of households have electricity. While comparing the national data with the study area, the availability of electricity and other facilities are better in the study area.

4.1.5 Religious composition

In Nepal, there are 10 identified religious groups (CBS, 2011). In the study area, different religions were found too which has been shown in the following table:

Table 1.5: Distribution of the respondents by religion

Religion	No. of respondents	Percent
Hindu	115	100.00
Buddha	-	-
Muslim	-	-
Christian	-	-
Total	115	100.00

Source : Field survey, 2016

The above table presents that almost all (115 respondents) belonged to Hindu religion.

In Nepal, 81 percent people belonged to Hindu (CBS 2011). It can be concluded that the number of respondents belonged to Hindu religion were very high than the national data

4.1.6 Age at marriage

Age at marriage differs in the individual's religion, caste, community or family. The minimum legal age for marriage in Nepal is 21 for men and 18 for women. Men and women under these ages can only marry with the consent of their parents, providing the man is at least 18 and the woman is at least 16 years of age. Researcher intended to identify the age of the respondent at the time of marriage and the response obtained from the respondents has been shown in the table 5.

Table 1.6: Distribution of the respondents by their age at marriage

Age of marriage	No. of respondents	Percent
13- 18 year	17	14.78
18 - 23 years	58	50.43
23 - 28 year	36	31.30
28 - 33 year	4	3.48
Total	115	100.00

Source : Field survey, 2016

The table above shows 14.78 percent of respondents married at the age group 13 – 18 years, 50.43 percent of respondents replied that they had married at the age of 18 – 23 years, 31.30 percent of respondents had married at the age of 23 – 28 years and 3 percent of respondents had married at the age group 28 – 33 years.

It can be concluded that the yearly marriage practice is existing in the study area.

4.1.7 Number of children

Respondents were asked about the number of their children under the age of five years.

The responses obtained from them are shown below:

Table 1.7: Distribution of the respondents by number of children

Number of children	No. of respondents	Percent
One	3	2.60
Two	22	19.13
Three	61	53.05
Four	16	13.91
More than four	13	11.30
Total	115	100.00

The above table shows that 2.60 percent of the respondents had one child, 19.13 percent respondents had two children, 53.13 percent respondents had three children, 13.91 percent of the total respondents had four children, 11.30 percent of them had more than four children. It can be generalized that higher number of respondents had three children.

4.1.8 Occupational status

Occupation is a person's daily work or business, especially as a means of earning a living. Therefore the study tries to reveal the occupational of the respondents. Their occupational background has been shown in table 7.

Table 1.8: Distribution of the respondents by their occupational status

Occupation	No. of respondents	Percent
Agriculture	115	100.00
Government job	-	-
Non-government job	-	-
Daily wage labour	-	-
Business	-	-
Trade	-	-
Total	115	100.00

Source : Field survey, 2016

The table 7 showed that all the respondents were involved in agriculture as their occupation in the study area.

CBS (2011) showed that 65 percent people were involved in agriculture in Nepal whereas all (100 percent) the respondents were involved in agriculture. It indicates that the involvement in agriculture of the respondents was very high as compared in national data.

4.1.9 Cash earning of the respondents

Respondents were asked whether they earn cash from their work and the response obtained from them has been presented in table 8.

Table 1.9: Distribution of the respondents by their cash earning

Response	No. of respondents	Percent
Yes	115	100.00
No	-	-
Total	115	100.00
Earning (Monthly)		
Below Rs. 5,000	48	41.73
Rs. 5,001-Rs. 10,000	31	26.95
Rs. 10,001-Rs. 15,000	21	18.26
Rs. 15,001 and above	15	13.04
Total	115	100.00

Source : Field survey, 2016

The table 8 shows that all the respondents had cash earning from their work. Among them, 41.73 percent of respondents earn below RS. 5,000 per month, 26.95 percent of respondents earn Rs. 5,001 to 10,000. Similarly, 18.26 percent of respondents earn Rs. 10,000 to 15,000 and 13.04 percent of respondents earn above Rs. 15, 000 from their occupation.

4.1.10 Land ownership

The respondent's response on their land ownership is as follows:

Table 1.10: Distribution of the respondents by land ownership

Land ownership	No. of respondents	Percent
Yes	115	100.00
No	-	-
Total	115	100.00
Among the 'Yes' responses		
Less than 5 Ropani	26	22.60
6-10 Ropani	51	44.34
10-13 Ropani	23	20.00
More than 1 Bigha	15	13.05
Total	115	100.00

Source : Field survey, 2016

Above table shows that all the respondents had no land. In the study area, 22.60 percent of respondents less than 5 Ropani of land, 44.34 percent of respondents had 6-10 Ropani of land, 20 percent of respondents had 10-13 Ropani and 13.05 percent of them had more than one Bigha of land for cultivation.

4.1.11 Ownership in House

Respondents were asked about their own house and the response obtained from them has been shown in the following table:

Table 1.11: Distribution of Respondents by their own House

Response	No. of respondents	Percent
Yes	115	100.00
No	-	-
Total	115	100.00
Among the 'Yes' responses,		
Kachi	98	85.22
Ardha pakki	17	14.78
Pakki	-	-
Total	115	100.00

Source : Field survey, 2016

Above table presents that all the respondents (115 respondents) had ownership in house. Among the respondents who had ownership in house, 85.22 percent of respondents had Kachhi type of house whereas 14.78 percent of respondents had Ardhapakki types of house and none of them had Pakki types of house in the study area.

4.1.12 Facility of toilet

It was intended to identify the facility of toilet at the house of respondents. So, they were asked about the facility of toilet in their home. The response obtained from them has been shown in the following table.

Table 1.12: Distribution of respondents by facility of toilet

Response	No. of respondents	Percent
Yes	115	100.00
No	-	-
Total	115	100.00
Among the 'Yes' responses,		
Water seal toilet	46	40.00
Pit toilet	24	20.86
Traditional pit	45	39.14
Total	115	100.00

Source : Field survey, 2016

The table shows that all the respondents had ownership in toilet. Among the respondents who had toilet, 40.00 percent of respondents had pit toilet, 20.86 percent of respondents had water seal toilet and 39.14 percent of respondents had traditional pit types of toilet at their home.

4.2 Involvement and problems of agricultural

This sub section of the study was concerned with the analysis and interpretation of women's involvement in agricultural production in the study area, which has been shown in the following sub sections:

4.2.1 Time spent in agricultural activities

It was intended to identify the involvement of women in agricultural labour force in the study area. The data provide a complete account of time use by women for agricultural production. For this purpose, the respondents were asked about the time spent by them in agricultural activities.

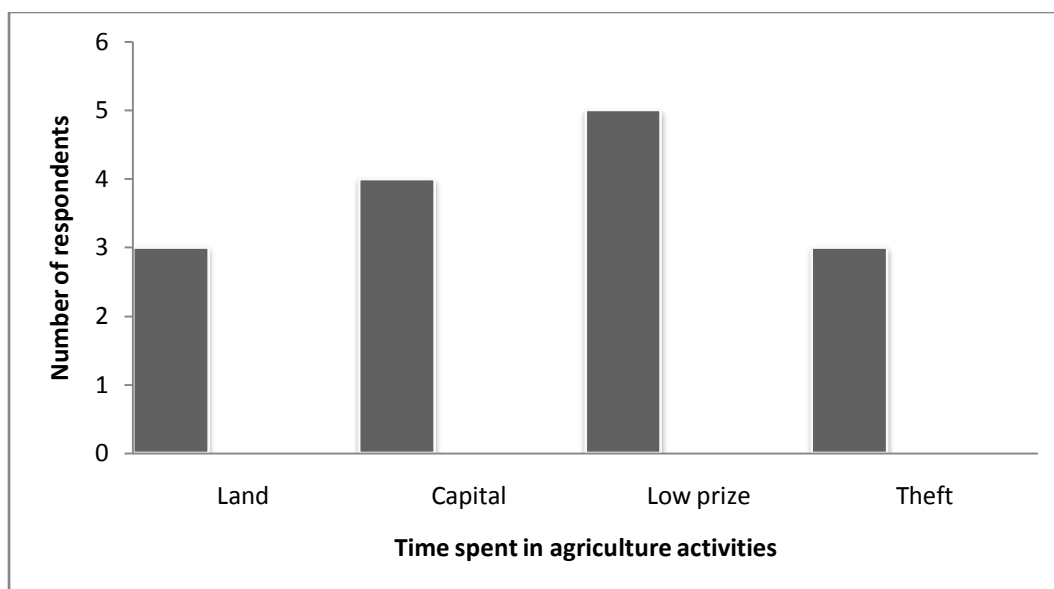
Table 2.1: Distribution of respondents by their time spent on agricultural activities

Time spent	No of respondents	Percentage
Regularly	63	54.78
Sometimes	40	34.78
When required	12	10.43
Total	115	100.00

Source : Field survey, 2016

The data shown in the above table has been presented in the figure below:

Figure 2.1: Distribution of respondents by their time spent on agricultural activities



From table No: 2.1

The above table and figure show that 54.78 percent respondents were regularly involved in agricultural activities, 34.78 percent respondents had involvement only sometimes and 10.43 percent respondent used to involve in agricultural activities only when required.

4.2.2 Types of crops

It was found that the important crops in the study area are rice. Fluctuation in rice production was very common because of changes in rainfall; overall, however, rice production had increased following the introduction of new cultivation techniques as well as increases in cultivated land. The types of crops found in the study area had been shown in the following table.

Table 2.2: Distribution of respondents by types of crops they produce in their farm

Selected crops	No of respondents *	Percentage
Maize	115	100.00
Paddy	115	100.00
White	112	97.39
Millate	39	33.91
Vegetable	78	67.82
Fruits	19	16.52
Other crops	15	13.04

Source : Field survey, 2016

* Multi response

In the above table, all the respondents involved in production in maize, similar number of respondents are involved in paddy, 97.39 percent respondents used to produce white, 33.91 percent respondents are involved in production of millet, 67.82 percent respondents are involved in production of vegetable, 16.52 percent respondents are involved in production of fruits and only 13.04 percent respondents are involved in production of other crops in the study area.

4.2.3 Problems of Agriculture production

In this section, issues impinging on women effective participation in agricultural production and activities were investigated so as to enable policy and approaches towards

better women farmers' welfare in the study area and the nation at large. In assessing the accessibility of women farmers to basic farm inputs as an independent problem (land, capital, fertilizers, chemicals, and machineries among others), responses from the sampled women is presented in following table:

Table 2.3: Distribution of respondents by problems in crops production

Problems in crops production	No of respondents*	Percentage
Land	12	10.43
Capital	71	61.73
Fertilizers	23	20.00
Chemicals	27	23.47
Machineries	81	70.43
low prices of farm produce	112	97.39
lack of roads	98	85.21
inadequate improved seedlings	78	67.82
high cost of fertilizers / late supply	63	54.78
frequent outbreak of pests/diseases	53	46.08
poor productivity of land	111	96.52
poor access to efficient market	83	72.17

Source : Field survey, 2016

* Multi response

As shown in table above, women face certain difficulties in accessing basic farm inputs: 10.43 percent in land, 61.73 percent each in capital, 20 percent fertilizer, and 23.47 percent chemical; and about 70.43 percent in farm machineries.s

Similarly, other problems faced by women include low prices of farm produce (97.39 percent), lack of roads (85.21 percent), inadequate improved/high yielding seedlings (63.83 percent), high cost of fertilizers/late supply (54.78 percent), frequent outbreak of pests/diseases (46.08 percent), poor productivity of land (96.52 percent) , and poor access to efficient market (72.17 percent) nearby villages.

4.2.4 Women in fisheries and aquaculture:

Nearly 45 million people world-wide were directly engaged, full-time or part-time, in the fishery primary sector (FAO fishery database). In addition, about 135 million people are estimated to be employed in the secondary sector, including post-harvest activities. Similarly, women may comprise up to 30 percent of the total employment in fisheries as agricultural activities.

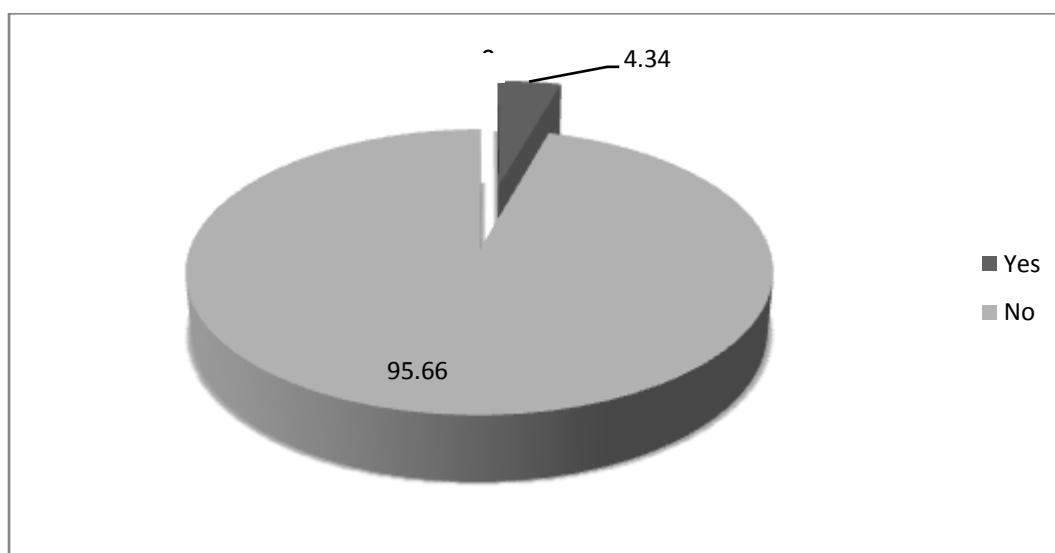
Table 2.4: Distribution of respondents by their involvement in fisheries

Involvement in fisheries	No of respondents	Percentage
Yes	5	4.34
No	110	95.66
Total	115	100.00

Source : Field survey, 2016

The above table has been presented in the following figure (pie-chart).

Figure2.2: Distribution of respondents by their involvement in fisheries



From table No: 2.4

Above table and pie-chart shows that only about four percent of the respondents were involved in fisheries whereas most (96 percent) of them were not involved on it.

4.2.5 Problems for fisheries

It was intended to identify the problems while keeping fish in the study area. The response obtained from them has been shown in the following table.

Table 2.5: Distribution of respondents on problems for fisheries

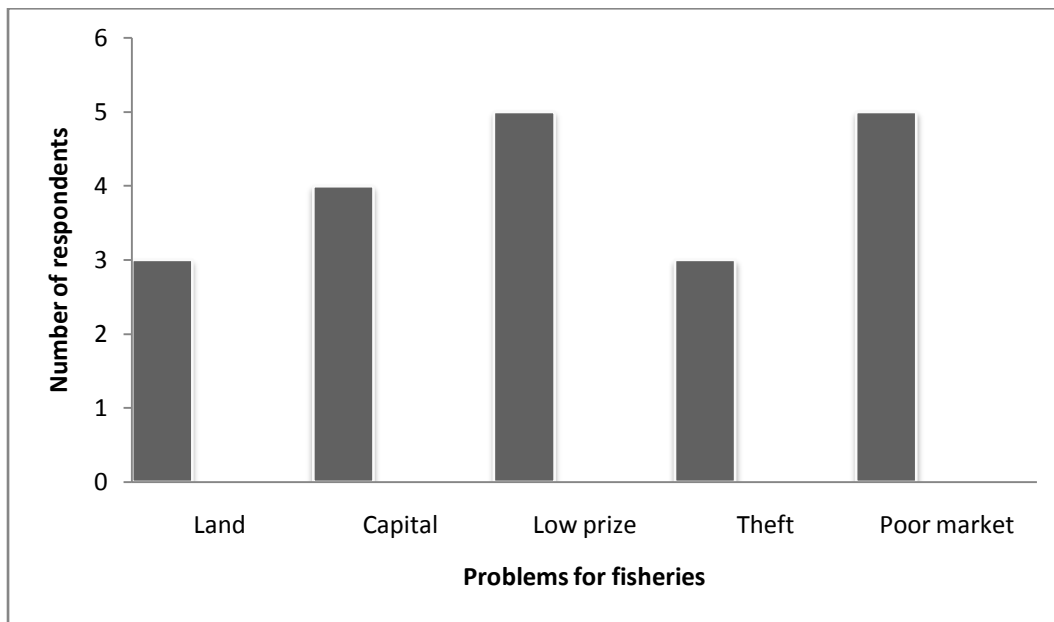
Problems for fisheries	No of respondents*	Percentage
Land	3	60.00
Capital	4	80.00
low prices of farm produce	5	100.00
Theft	3	60.00
poor access to efficient market	5	100.00

Source : Field survey, 2016

* Multi response

The data shown in the above table has been presented in the following figure also.

Figure No 2.3: Distribution of respondents by problems for fisheries



Above table and figure shows the problems seen in fisheries in the study area. It shows that 60 percent had the problem of not having appropriate land for fishery, 80 percent of them had no capital with them to run fishery, all the respondents had faced the problems of low prize of their products (fish) in the study area. On the other hand, 60 percent of the total respondents had the problem theft and all of them had the problem of poor access to sufficient market.

4.2.6 Engagement in additional activities

Women are generally less able than men to participate in economic opportunities because they face a work burden that men do not. In the study area, women are responsible for most of the household and child-rearing activities as well rearing of small livestock, although norms differ by culture and over time. This additional work burden is unpaid and limits women's capacity to engage in income-earning activities, which often require a minimum fixed time before being profitable. However, respondents (women) were asked about their involvement in such activities.

Table 2.6: Distribution of respondents by their engagement in additional activities

Engagement in additional activities	No of respondents*	Percentage
Only household works	36	31.30
Start-up cottage industries	5	4.34
Fuel and water collection	59	51.30
Food preparation	115	100.00
Working in their husbands' gardens	112	97.39

Source : Field survey, 2016

* Multi response

In the stud area, 31 percent of the total respondents spent their time on household works (looking after their families), 4,4 spent their time in their cottage industries like handicrafts and traditinal works, 51.30 percent them spent their time in collecting fuel and water for cooking. Similarly, all teh women involve in preparation of food in their house and 97.39 percent of them were engaged in helping their husbend in farming.

4.2.7 Cattle ownership

A large number of [farmers](#) in Nepal depend on [animal husbandry](#) for their livelihood. In addition to supplying [milk](#), [meat](#), [eggs](#), wool and [hides](#), [animals](#), mainly [bullocks](#), are the major source of power for both farmers and drayers. Thus, animal husbandry plays an important role in the agriculture production. Respondents were asked whether they had kept cattle farm or not. The response obtained from them has been shown in the following table.

Table 2.7: Distribution of respondents by their ownership in cattle

Cattle ownership	No of respondents	Percentage
Yes	115	100.00
No	-	-
Total	115	100.00

Source : Field survey, 2016

It was found that the local tradition of equating wealth with the number of animals one has, many farmers keep animals that are less than productive - despite the obvious cost implications of taking care of them.

4.2.8 Products from cattle

An animal product is any material derived from the body of an [animal](#). Examples are fat, flesh, blood, milk, eggs, and lesser known products, such as [isinglass](#) and [rennet](#). Animal by-products are [carcasses](#) and parts of carcasses from slaughterhouses, animal shelters, and veterinarians, and products of animal origin not intended for human consumption, including catering waste (all waste food from restaurants, catering facilities, central kitchens, slaughterhouses and household kitchens). These products may go through a process known as [rendering](#) to be made into human and non-human foodstuffs, fats, and other material that can be sold to make commercial products such as cosmetics, paint, cleaners, polishes, glue, soap and ink. The sale of animal by-products allows the [meat industry](#) to compete economically with industries selling sources of vegetable protein. Respondents were asked about the animal products they obtain from their farms. The response obtained from them has been shown in the following table.

Table 2.8: Distribution of respondents by products from cattle

Products from cattle	No of respondents	Percentage
Cultivation (Ox)	111	96.52
<u>Milk</u> (Cow, Buffalo)	98	85.21
<u>meat</u> (Goat, pig)	108	93.91
<u>eggs</u> (Hen, Duck)	105	91.30
Wool (Sheep)	-	-

Source : Field survey, 2016

The above table shows that 96 percent of the total respondents had kept the cattle for the purpose of cultivation, 85 percent of them had kept cattle for the purpose of milk, 93.91 percent of the total respondents had kept cattle for the purpose of meat and about similar number of them had kept cattle for the purpose of eggs. Similarly, it was identified that none of them had kept the cattle for wool purpose.

4.2.9 Problems for animal farm

In the study area, access to health services for animals remains a major problem for farmers and animal disease has resulted in millions of dollars of economic losses in recent years. It was intended to identify the problems while keeping animal farms in the study area.

Table 2.9: Distribution of respondents by problems for animal farming

Problems for animal farm	No of respondents	Percentage
Capital	68	59.13
Machineries	75	65.21
low prices of farm produce	66	57.39
frequent outbreak of pests/diseases	86	74.78
poor access to efficient market	65	56.52
inadequate access of vets	45	39.13
poor productivity from local animals	36	31.30

Source : Field survey, 2016

The table above shows that 59.13 percent of the total respondents had the problem of capital while keeping animal farm, 65.21 percent of them had the problem of machineries used in animal farming, 57.39 percent of them replied that there is the problem of low prices of farm products, there is the problem of frequent occurrence of pests or diseases according to 74 percent respondents, 56.52 percent of them had the problem of poor access of vets, 31.30 percent of them had the problem of poor productivity from local animals in the study area.

Hence, as a result of poor productivity from local animals, each year Nepal imports thousands of stronger breeds from Other countries i.e. India.

4.2.10 Involvement in beekeeping

Beekeeping is a part of the Nepalese tradition and is carried out by both rural and urban communities for hundreds of years. Rural communities are more involved in this enterprise because of the more favorable environment there. Beekeeping today has become a very scientific management practice, which involves the proper management of honeybee colony. In Nepal it has been successful in occupying an important place in agriculture and as a cottage industry. The honeybee due to its unique character has become an object of immense interest to mankind. Respondents were asked about the

involvement in beekeeping and the response obtained from them has been shown in the following table.

Table 2.10: Distribution of respondents by involvement in beekeeping

Involvement in beekeeping	No of respondents	Percentage
Yes	18	15.65
No	97	84.35
Total	115	100.00

Source : Field survey, 2016

The above table shows that 15.65 percent respondents were involved in beekeeping whereas rest of them were not involved on it.

4.2.11 Purpose of beekeeping

Generally, the purpose of beekeeping is mainly for honey production. However, respondents were asked about their other purposes of beekeeping. The response obtained from them has been shown in the following table.

Table 2.11: Distribution of respondents by purpose of beekeeping

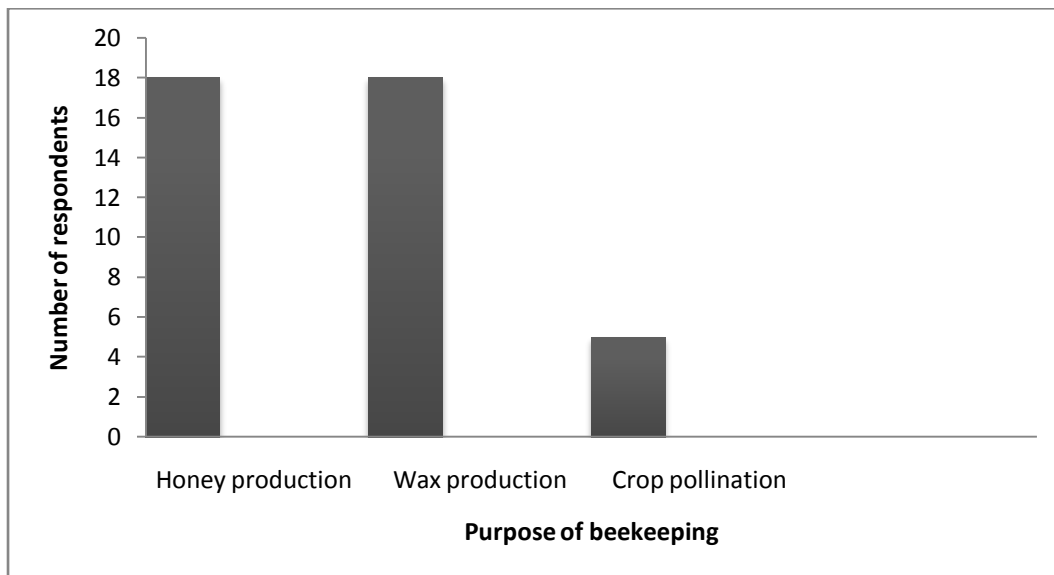
Purpose of beekeeping	No of respondents*	Percentage
Honey production	18	100.00
Wax production	18	100.00
Crop pollination	5	27.77

Source : Field survey, 2016

* Multi response

The data presented in the above table shows the purpose of beekeeping of the women in the study area, it has been shown in the following figure also.

Figure 2.4: Distribution of respondents by purpose of beekeeping



From table No: 2.11

Above table as well as figure are showing the purpose of respondents about their beekeeping in their farm. Among the respondents who had kept bees, all of them had kept the bees for the purpose of honey production and similar number of respondents had kept bees for the purpose of wax production. Similarly, 27.77 percent of them had kept the bee farm for the purpose of crop pollination in the study area.

4.2.12 Problem association with beekeeping

There are different problems related to beekeeping. So respondents were asked about the problems and different types of problems were found like lack of co-ordination between beekeepers, lack of organizational development, and crop growers on pasture use, traffic problem, etc. The responses obtained from them have been shown in the following table.

Table 2.12: Distribution of respondents by problem association with beekeeping

Problems related to beekeeping	No of respondents*	Percentage
Capital	5	27.77
Lack of modern technology	12	66.66
low prices of wax and honey	8	44.44
frequent outbreak of pests/diseases	11	61.11
Poor productivity from local bee	13	72.22
Theft	5	27.77
Lack of national policy	7	38.88
Lack of co-ordination	12	66.66
Traffic problem / Noise	3	16.66

Source : Field survey, 2016

* Multi response

In the above table, 27.77 percent of the total respondents had the problem of capital while establishing the beekeeping, 66.66 percent of them had the problems of modern technologies, 44.44 percent of them had the problems of low prize of the products, 61.11 percent of them had the problems of diseases and pet attacks, 72.22 percent of them had the problem of poor productivity of local bees, 27.77 percent of the total respondent were facing the problems of theft, 38.88 percent of them had the problems of national policy on it. Similarly, 66.66 percent of them had the problems of co-ordination between the farmers and only 16.66 percent of them were suffering from noise in the bee farm.

4.2.13 Poultry farming

It is the practice of raising poultry, such as chickens, turkeys, ducks, and geese, as a subcategory of animal husbandry, for the purpose of farming meat or eggs for food. Chickens farmed for meat are called broilers, whilst those farmed for eggs are called egg laying hens. After 12 months, the hen's productivity will start to decline. Respondents were asked about their engagement in poultry farming and the response obtained from them has been shown in the following table.

Table 2.13: Distribution of respondents by involvement in Poultry farming

Involvement in Poultry farming	No of respondents	Percentage
Yes	78	67.82
No	37	32.18
Total	115	100.00

Source : Field survey, 2016

In the above table, 67.82 percent of the total respondents had kept poultry farm whereas rest of them had not kept the poultry farm.

4.2.14 Types of poultry animals

The types of poultry products has been shown in the following table.

Table 2.14: Distribution of respondents by types of poultry animals

types of poultry products	No of respondents	Percentage
Hen	78	100.00
turkeys,	-	-
Ducks	-	-
Total	78	100.00

Source : Field survey, 2016

Among the respondents who had were involved in poultry farming, all of them had kept hen with them for the purpose of eggs and meat.

4.2.15 Purpose of keeping poultry animals

The purpose of keeping poultry animals has been shown in the following table.

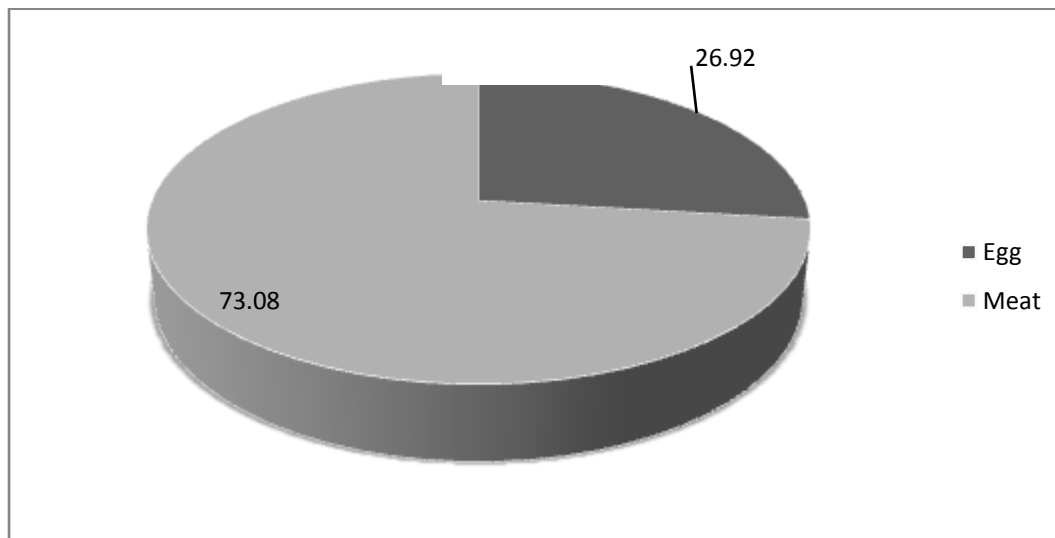
Table 2.15: Distribution of respondents by purpose of keeping poultry animals

Purpose of keeping poultry animals	No of respondents	Percentage
Eggs	21	26.92
Meat	57	73.08
Total	78	100.00

Source : Field survey, 2016

The table above shows the purpose of beekeeping of the respondents in the study area. The data presented in the above table has been shown in the following figure also.

Figure 2.5: Distribution of respondents by purpose of keeping poultry animals



From table No: 2.15 study

Above table and figure show the purpose area. In the table and figure, 26.92 percent of the total respondents had kept hen for the purpose of eggs whereas rest of them had kept them for the purpose of meat in the study area.

4.2.16 Problems related Poultry farming

Poultry diseases are the major cause for undeveloped poultry farming. The farmers are not aware regarding various diseases and the way to overcome it. Similarly, due to the lack of adequate manpower peoples of the northern belt are abandoning to rear large herds of animals. Lastly to increase the per capita consumption of eggs and meat up to the level of world average, it is required to develop the sustainable strategy, which should follow by all sectors of production, distribution, marketing, etc.

Table 2.16: Distribution of respondents by problems related poultry farming

Problems related Poultry farming	No of respondents*	Percentage
Small farm	45	57.69
Capital	17	21.79
Lack of manpower	21	26.92
Poultry diseases	63	80.78
Machineries	31	39.74
low prices of farm produce	18	23.07
lack of roads	75	96.15
Lack of medicine / late supply	71	91.02
poor access to sufficient market	53	67.94

Source : Field survey, 2016

* Multi response

The above table shows that problems related to the poultry farming in the study area. In the table, 57.69 percent of the total respondents who had kept poultry farm replied that there was the problem of small farm, 21.79 percent of them replied that there was the problem of capital with them, 26.92 percent of them replied that there was the problem of manpower, 8078 percent of them replied that there was the problem of poultry diseases,

39.74 percent of them replied that there was the problem of machineries, 23.07 percent of them replied that there was the problem of low price of products, 96.15 percent of them replied that there was the problem of roads, 91.02 percent of them replied that there was the problem of medicine supply in time, 67.94 percent of them had the problems of market in the study area.

CHAPTER - V

SUMMARY, FINDINGS, CONCLUSION AND RECOMMENDATIONS

Summary, findings, conclusion and recommendations of the study has been shown as follows:

5.1 Summary

This thesis entitled “Involvement of women in agricultural production” has been carried out with the main objective to assess the socio-economic status of the respondents, to find out the women involvement in agriculture production and to find out the problems of agricultural production in the study area. The population of the study were all the women of Satakhani-5, Surkhet who are involving in agricultural production. Similarly, the study area was taken as Satakhani-5, Surkhet district. The structure interview schedule was used as the tool for data collection. The interview schedule was divided into two parts. The first part of the interview schedule will be related to the socio-economic characteristics of the respondents, the second part of the schedule included the participation of women in rural development and their problem while involving in different types of agricultural activities.

In the study area, only 7.82 percent respondents belonged to the age group less than 20 years and higher number of respondents had more than five members in their home. The literacy rate in the study area was sufficient. Among the respondents, 97.39 percent of respondents had radio and almost all (98.26 percent) of respondents had mobile and none of them. In the study area, almost all (115 respondents) belonged to Hindu religion.

More than half (53.13 percent) of respondents had three children with them and all the respondents were involved in agriculture as their occupation in the study area. The study found that all the respondents had cash earning from their work. Among them, 41.73 percent of respondents earn below RS. 5,000 per month with their agricultural activities. In the stud area, all the respondents had land.

The study found that all the respondents (115 respondents) had ownership in house and all the respondents had ownership in toilet. Among the total respondents, 54.78 percent respondents were regularly involved in agricultural activities. All the respondents

involved in production in maize, similar number of respondents are involved in paddy. In the study area, only 15.65 percent respondents were involved in beekeeping whereas rest of them were not involved on it and 27.77 percent of them had kept the bee farm for the purpose of crop pollination. All of them had kept hen with them for the purpose of eggs and meat.

5.2 Findings

Finding of the study has been presented as follows:

5.2.1 Socio-economic Status

- ▶ Among the total respondents, 24.34 percent of respondents belonged to the age group 26-30 years whereas 7.82 percent respondents belonged to the age group less than 20 years.
- ▶ In the study, 40 percent of respondents had more than five members in their home whereas 2.60 percent of respondents had up to three members in their family.
- ▶ Out of the total respondents, 66.95 percent of respondents were illiterate whereas 33.5 percent of respondents were literate.
- ▶ Among the literate, very less (7.79 percent) of the respondents belonged to higher education.
- ▶ The study found that 97.39 percent of respondents had radio 4.34 percent of respondents had TV in their home.
- ▶ all (115 respondents) belonged to Hindu religion.
- ▶ Only 3 percent of respondents had married at the age group 28 – 33 years.
- ▶ Among the total respondents, 53.13 percent respondents had three children,
- ▶ all the respondents were involved in agriculture as their occupation in the study area.
- ▶ all the respondents had cash earning from their work.
- ▶ Among the respondents who were involved in earning, 41.73 percent of respondents earn below RS. 5,000 per month,
- ▶ all the respondents had no land. In the study area,
- ▶ In the study, all the respondents (115 respondents) had ownership in house.

- ▶ all the respondents had ownership in toilet.

5.2.2 Involvement and problems of agricultural

- ▶ Out of the total respondents, 54.78 percent respondents were regularly involved in agricultural activities, all the respondents involved in production in maize, similar number of respondents are involved in paddy, 97.39 percent respondents used to produce white,
- ▶ It shows that 60 percent had the problem of not having appropriate land for fishery, 80 percent of them had no capital with them to run fishery, all the respondents had faced the problems of low price of their products (fish) in the study area.
- ▶ Among the total respondents, 31 percent of the total respondents spent their time on household works (looking after their families) and all the women involve in preparation of food in their house.
- ▶ In the study, 96 percent of the total respondents had kept the cattle for the purpose of cultivation, 85 percent of them had kept cattle for the purpose of milk, 93.91 percent of the total respondents had kept cattle for the purpose of meat
- ▶ Out of the total respondents, 59.13 percent of the total respondents had the problem of capital while keeping animal farm,
- ▶ Among the total respondents, 15.65 percent respondents were involved in beekeeping whereas rest of them were not involved on it.
- ▶ The study found that 27.77 percent of them had kept the bee farm for the purpose of crop pollination in the study area.
- ▶ Out of the total respondents, 66.66 percent of them had the problems of modern technologies while establishing the beekeeping
- ▶ In the study, 26.92 percent of the total respondents had kept hen for the purpose of eggs whereas rest of them had kept them for the purpose of meat.
- ▶ Among the total respondents, 57.69 percent of the total respondents who had kept poultry farm replied that there was the problem of small farm

5.3 Conclusion

After the findings, the study concluded that very less of the total respondents belonged to the age group less than 20 years in the study area and similar number of respondents had up to three members in their family. In the study area, 66.95 percent of respondents were illiterate whereas 33.5 percent of respondents were literate. Among them only 7.79 of the respondents belonged to higher education. The study concluded that respondents had the facilities like solar, TV in their home, mobile, etc.

Almost all (115 respondents) belonged to Hindu religion and only 3 percent of respondents had married at the age group 28 – 33 years. More than half 53.13 percent respondents had three children. All the respondents were involved in agriculture as their occupation in the study area and they had cash earning from their work. All the respondents had land and they had ownership in house. Among the respondents who had ownership in house, 85.22 percent of respondents had Kachhi type of house in the study area.

In the study area more than half of respondents were regularly involved in agricultural activities and they involved in production in maize, similar number of respondents are involved in paddy, wheat, millet, vegetable, fruits and other crops in the study area. Problems faced in production were low prices of farm produce, lack of roads, inadequate improved/high yielding seedlings, high cost of fertilizers/late supply, frequent outbreak of pests/diseases, poor productivity of land and poor access to efficient market nearby villages. These problems were also existed in fishery, poultry farming, beekeeping in the study area.

5.4 Recommendations

On the basis of the finding and conclusion of the study, the following recommendations have been given as follows:

- Right to get proper knowledge on agricultural production should be provided from government for the women who want to involve in farming.
- Strict rules and regulation should be made by the government to promote the agricultural production.
- Government should implement the diseases control programs in the agricultural sector.
- People should be provided with the facility of fertilizers, modern machines, seedlings, men powers, capital and land.
- Awareness programs should be launched in the study area for the well management of agriculture production.
- NGOs, INGOs and GOs who are working in the field of agriculture should participate in the awareness programs in the village to promote the life style of women farmers.
- This study was quantitative in nature. Qualitative studies should also be conducted on the similar topic.
- The study is necessary to research separately on different community in remote area of Nepal.
- The scope of this study is very narrow. Therefore intensive studies should be conducted in this topic.

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APPENDIX
QUESTIONNAIRE

Personal information:

Name of Respondents :-

Age :-

Caste :-

Number of Family Member:-

Male,

Female

A. Socio-economic status

S N	Questions	Answers	Please tick
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1	What is your age group?	Less than 20	<input type="checkbox"/>
		20-25	<input type="checkbox"/>
		26-30	<input type="checkbox"/>
		31-35	<input type="checkbox"/>
		36-40	<input type="checkbox"/>
		Above 40	<input type="checkbox"/>

2	What is your educational status?	Literate	<input type="checkbox"/>
		Illiterate	<input type="checkbox"/>

3	If literate, what is your qualification?	Non schooling literate	<input type="checkbox"/>
		Primary	<input type="checkbox"/>
		Lower secondary	<input type="checkbox"/>
		Higher Secondary	<input type="checkbox"/>
		Higher education	<input type="checkbox"/>

4	What are the household facilities in your house?	Solar	
		Radio	
		TV	
		Mobile	
		Bicycle	

5	What is your religion?	Hindu	
		Buddha	
		Muslim	
		Christian	

6	What was your age at the time of marriage?	13- 18 year	
		18 - 23 years	
		23 - 28 year	
		28 - 33 year	

7	How many children do you have?	One	
		Two	
		Three	
		Four	
		More than four	

8	What is your occupational status?	<i>Agriculture</i>	
		<i>Government job</i>	
		<i>Non-government job</i>	
		<i>Daily wage labour</i>	
		<i>Business</i>	
9	Do you have cash earning ?	<i>Yes</i>	
		<i>No</i>	

	If yes, what is your monthly income?	Below Rs. 5,000	
		Rs. 5,001-Rs. 10,000	
		Rs. 10,001-Rs. 15,000	
		Rs. 15,001 and above	

	Do you have your own land?	Yes	
		No	

	If yes, mention the area of your land?	Less than 5 Ropani	
		6-10 Ropani	
		10-13 Ropani	
		More than 1 Bigha	

	Do you have your own toilet?	Yes	
		No	

	If yes, mention the type of your toilet.	Water seal toilet	
		Pit toilet	
		Traditional pit	

	Do you have your own home ?	Yes	
		No	

10	If yes, mention the type of your house.	Kachi	
		Ardha pakki	
		Pakki	

B. Involvement in agricultural production and problems

	How many time do you spent on	Regularly	
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	agricultural activities?	Sometimes	
		When required	

	What types of crops do you produce in your farm ?	Maize	
		Paddy	
		White	
		Millate	
		Vegetable	
		Fruits	
		Other crops	

	What kinds of problems have you faced in crops production ?	Lack of land	
		Lack of capital	
		Lack of fertilizers	
		Lack of chemicals	
		Lack of machineries	
		Low prices of farm produce	
		lack of roads	
		inadequate improved seedlings	
		high cost of fertilizers / late supply	
		frequent outbreak of pests/diseases	
		poor productivity of land	
		poor access to efficient market	

11	Are you involved in fisheries?	Yes	
		No	

	What kinds of problems have you	Lack of land	
--	---------------------------------	--------------	--

	faced in fisheries ?	Lack of capital	
		Low prices of farm produce	
		Theft	
		Poor access of market	

	What types of additional activities are you engaged in ?	Only household works	
		Start-up cottage industries	
		Fuel and water collection	
		Food preparation	
		Working in their husbands' gardens	

	Are involved in cattle farming?	Yes	
		No	

	If yes, what is the purpose of keeping cattle?	Milk	
		Meat	
		Wool	
		Other	
	What kinds of problems have you faced in animal farming?	Lack of capital	
		Machineries	
		Low prices of farm produce	
		Frequent outbreak of pests/diseases	
		Poor access to efficient market	
		Inadequate access of vets	
	Poor productivity from local animals		

	Are involved in beekeeping?	Yes	
--	-----------------------------	-----	--

		No	
--	--	----	--

	If yes, what is the purpose of beekeeping ?	Honey production	
		Wax production	
		Crop pollination	

12	What are the problems association with beekeeping ?	Capital	
		Lack of modern	
		low prices of wax and honey	
		frequent outbreak of pests/diseases	
		Poor productivity from local bee	
		Theft	
		Lack of national policy	

		Lack of co-ordination	
		Traffic problem / Noise	

13	Are involved in poultry farming?	Yes	
		No	

14	What kinds of poultry animals have you kept?	Hen	
		turkeys,	
		ducks	
		Others	

15	What is the purpose of poultry farming ?	Eggs	
		Meat	

16	What are the problems related	Small farm	
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poultry farming?	capital	
	Lack of manpower	
	Poultry diseases	
	machineries	
	low prices of farm produce	
	lack of roads	
	Lack of medicine / late supply	
	poor access to sufficient market	