CHAPTER-I

INTRODUCTION

1.1 Background of the Study

Agriculture is the science and art of cultivating plants and livestock. Agriculture was the key development in the rise of sedentary human civilization, whereby farming of domesticated species created food surpluses that enabled people to live in cities. Nepal, a small country of this world covering 147181 sq. km is bounded by China and India. According to population census 2021, the total population of Nepal is 2,91,64,578 out of which 1,42,53,551 (48.98) are male and 1,49,11,027(51.02) are female. The population of female is more than male's with 6,57,476 (CBS, 2021).

Agriculture sector is central to the livelihood of Nepalese people, contributing to around 36 percent of the country's GDP and employing 66 percent of its labor force. The importance of agriculture as the single most important provider of livelihood for two-third of Nepal's population implies that the improvement in this sector have a decisive effect on ensuring food security and poverty reduction. It is also the main source of export earnings and income of the poorest households (90 Percent of the bottom consumption quintile).presently, 50.1 percent people of the our country depend on agriculture according to census B.S. 2078. Similarly, according to the annual report of Nepal Rastra Bank 2078/79 the agriculture field has contributed 23.95 percent in total GDP of Nepal. It plays key role for developing national economic growth and well being of people. Agriculture therefore is the main source of national economy and the major engine of pro-poor growth that plays vital role in over all economic development of the nation and also plays crucial role to uplift the lifestyle of people (MoAC, 2007).

Agriculture sector forms the basis for overall development of the country. It has played one of the important role to increase gross national income and also contributed for living standard of people. This agriculture field has greatly contributed in the sector of economy. When economy field becomes strong automatically the nation raises from the all perspectives. To make strong economy of the nation the agricultural field has played pivotal role. So this field should be kept in consideration while planning the development of nation. The agriculture field is like primary field which provides raw materials for well being of a nation. Many countries like China, USA etc. they really have a very

strong foundation of agriculture. It means to say agriculture field significantly helps to increase national GDP. Well developed countries have progressed a lot economically with using the support of agriculture field. As agriculture is main base of all necessary developmental sectors of the nation. Further more, agriculture supplies all necessary raw materials for other sectors. The sector is pivotal to increase income, alleviate poverty and uplift living standard of Nepalese people. Recent evidence consistently shows that agricultural growth is highly effective in reducing poverty and has contributed in national economic growth of the country. Gross Domestic Product (GDP) growth originating in agriculture is about two times more effective in reducing poverty than GDP growth originating outside the sector (WB, 2008). Many countries that have fairly high agricultural growth rates have substantial reductions in rural poverty.

The contribution of agriculture in food, raw materials, and financial surplus (including foreign exchange) to invest is essential for the process of industrialization in its early stages. Agricultural growth was the precursor to the industrial revolutions that spread across the temperate world, from England in the mid-18th century to Japan in the late 19th century. World Bank (2008) reports that more recently rapid agricultural growth in China, India, and Vietnam was the precursor to the rise of industry. Growth in agriculture sector was key to China's massive and unprecedented reduction in rural poverty and also India's slower but still substantial long-term decline in poverty.

The agrarian structures in Nepal are characterized by a very small land holding scattered to different plots, where irrigation is either not available or seasonal. For an agrarian economy such as Nepal, land ownership is the most important source of food security and household income as land being the important economic assets in the rural area.

The food crops particularly the cereals (Paddy, soybean, buck, rice, maize, wheat, millet, barley) are the main source of dietary energy for most people in Nepal which are mainly produced here. Cereal constitutes 36 percent of weight age of the total agro products in Nepal in 2007. Including legumes and potato, about 45 percent of the products are derived from food crops (NPC, 2007). The data of edible food production and national requirement of the foods (estimated from total rough grains by multiplying with the conversion factor of 0.63) indicate that there is only a limited imbalance of food supply in the country at the national level (NPC, 2007).

The most important challenge currently facing by Nepali people is how to ensure food

security and reduce poverty in the context of increasing national and global rise of food price. Food safety is major concern of and the world too. So many methods are being developed and invented for it. Keeping it into mind in our country so many systems of keeping food safety are developed and applied them. In addition, the country has historically low economic growth in the last two years due to low food production. This happened because of drain and lack of adequate rain fall especially in the season of planting different foods.

Our country mostly depends on rain for irrigation which reduces quantity and quality too. Low food production coupled with increasing cost of food production, distribution and marketing has raised the price of foods resulting limited access of foods to poor and vulnerable society. The price of food crops is increasing over the years which have become more visible with the beginning of 2008. This is due to insufficient food production. When farmers product low quantity of food then it may invite various problems like high food price, and high demand etc. Due to depending on just rain farmers can't grow adequate food for people. Low production of food has brought such problems to people. And it also helps to increase the cost of daily served food items. For example, the average market price of rice, the major food staple of the people in Nepal has trebled over the last 16 years. This increase of rice price has very negative consequences to poor farmers and vulnerable people who mainly depend on purchased food grains (NPC, 2007).

Moreover, the third important challenges are how to enhance use of improved seed, fertilizer and other modern technologies to increase agricultural production and productivity. On the other hand, farmers are coping with various problems like harmful germs, insects and many more. But modern technology is trying to beat it with various new inventions. These new inventions and methods are able to beat these prolonged short comes and problems in the of agriculture. And these new inventions in the field of agriculture has given a new hope to all respective farmers. Nowadays agriculture scientists are doing experiment on developing new hybrid seeds, which give more quantity and also has good quality. These technologies and methods have contributed a lot in the field of agriculture. They have contributed in the production of new seeds which are really fruitful for farmers to grow more in comparison to past. New developed modern seeds have good quality and can be product a lot in quantity. When farmers grow more then, chances of improving their economic and life style grows up. As a result the

economic level of the nation raises up. It helps to develop the nation from the all perspectives. So in modern era good quality of seeds should be invented for well being of all stakeholders. It helps to grow the national economy of the nation with great contribution.

Currently, the use of modern technologies and inputs in the country is very low. This is due to pervasive market failures in seeds, lack of pesticides to the farmers, modern useful agricultural instruments, fertilizers and other inputs, which result from high transaction costs, significant risks and the small size of markets. Until now agricultural sector has not been developed as a remunerative market oriented competitive occupation. Due to low productivity, low investment and return from subsistence-oriented farming including unfavorable price regime and low value addition in the agricultural sector, it has become a relatively unrewarding profession. In the recent years, consequently, there is an increasing tendency of rural people abandoning farming and migrating to urban areas and overseas for better opportunities. The situation is likely to be exacerbated in the wake of integration of agricultural trade in the global liberal trading system, unless immediate corrective measures are taken.

Long-term food security and poverty reduction in Nepal remains problematic. Agricultural production has not kept pace with the growth in population, and average yields are low compared to neighboring countries. Low productivity in agriculture is a major contributor to poverty and food insecurity, since 84% of a population with limited education and skills resides in rural areas, with little chance of non-agricultural employment. Farmer's access to technology, technical knowledge and support services for agricultural development are limited, particularly in the poorest and most food-insecure areas in remote hills and mountains. But in comparatively in terai region there is a little bit advanced technologies are used and in the case of seeds and pesticides as well. And in hill and mountain regions if advanced technologies, seeds, and pesticides are used on farming, definitely the nation will be self-reliant in the field of food production. For this the government of Nepal also should bring special package for farmer. So we can meet the goal of producing foods and that can also be import to foreign countries and earn foreign currency. The extent to which Nepal can enhance food security, reduce its poverty level and resolve current economic crisis which leads to a great extent on its ability to promote agricultural growth (NPC, 2007).

In rural Nepal, women play multiple roles in the society. They have to do lots of duties at

home and outside of home. They have to look after their children for education and at the same time they also have to give time to the farming. So they have multiple role on different aspects. However, they are enjoying those roles and responsibilities happily and successfully. They also play an important role to keep their family united. They work like bridge to connect different aspects which has important value in the family. So women should be respected and honoured as well. Their role for family and agriculture is praiseworthy. They owe skilled manpower to uplift the nation regarding to agriculture filed. So they have vital role and responsibility for family and agriculture. So their responsibility of domestic affairs with that of farming works together with their male counterparts. Several studies over the years have clearly indicated that the labour contribution of women in Nepalese agriculture appears to be higher than that of men and most of the agriculture work is done by women. In additional works, they also have to perform many other household works like caring children, food preparation, shopping, housekeeping, and family health care and so on. They are active in farming preparations, compost preparation, land sowing, hoeing, storing, transplanting, weeding, harvesting and storing. Their contribution for our country means a lot. They have multiple role in the society although they've completed it successfully without taking it as burden. Their involvement in farming system is affected by interplay of socio cultural, economic and environment factors.

The participation of women in agriculture is distinctive due to the variety of activities that they perform in a long stretch of time. Women involve in multiple sectors staying at home as they have various roles. And they are successfully completing it though having lots of problems. However, their role and contribution in the field of agriculture is incomparable and keeps deep meaning too. The women are playing exceptional role producing various food items. Women in the remote areas are badly dominated by male partners. And they are also not well educated, due to this reason women become must to follow agriculture profession. Moreover, the Nepali traditional customs and cultures have supported it so deeply. Rural women's agricultural activities are highly influenced by external forces such as temporary out margin of village men and men's involvement in the civil services and other non-agricultural occupations. Women's participation and contribution to farm production system in Nepal is becoming more and more important due to the fact that male members of the family are seasonally or temporarily moving to urban areas for job, and increasing number of males are being absorbed into non-agricultural sectors. Thus,

rural women make up the majority of food producers.

Nepalese farm women can play a very crucial role in determining the future development of agriculture. As their involvement in this field keeps much value and their number is incomparable to men. Male apply different roles for economic activities in the family like going abroad as a labour to earn money to run and rear family members. Many recent studies have revealed that farm women are strong force not only in various agriculture activities but also in agriculture decision-making process. It is mostly the women, decision about the type of crops to be planted, use of improved seeds, use of manure and fertilizers etc. Thus, women can play active roles both as participation and as decision maker in works related to agriculture, particularly in food crop production.

The important means to ensure food security and reduce poverty is by increasing food production and reducing the cost of production of the staple food, thus leading to increased supply and falling prices, as happened elsewhere in South Asia as part of the green revolution. Failure to prioritize and emphasize food production in the past is a major weakness of the country in achieving the targets of food security and aim of poverty reduction. To a large degree, poverty is a product of unproductive agriculture. The consequences of agricultural development for the poor can be direct through improved agricultural incomes, or indirect through the impacts on employment, wages, prices of products, and productivity of non-farm assets (GDPRD, 2005).

Agricultural growth can form a pre-condition for the release of labor from agriculture to the rest of the economy. In addition to this direct transfer of resources away from agriculture, output growth in agriculture is also likely to result in a decrease in the price of food, which is a wage good, and hence induces economic growth (Tiffin and Irz, 2006). Similarly, Stringer (2001) argues that the agricultural sector performs important social welfare functions in developing nations. For example, during an economic downturn or an external income shock or financial crisis, agriculture can act “as a buffer, safety net, and as an economic stabilizer".

1.2 Statement of the Problem

Agriculture sector forms the basis for overall development of the country. The agriculture sector is to increase income, alleviate poverty and uplift living standard of Nepali people. To a large degree, poverty is a product of unproductive agriculture. The consequences of agricultural development for the poor can be direct through improved agricultural

incomes, or indirect through the impacts on employment, wages, prices of products, and productivity of non-farm assets. Recent evidence consistently shows that agricultural growth is highly effective in reducing poverty. Gross Domestic Product (GDP) growth originating in agriculture is about two times more effective in reducing poverty than GDP growth originating outside the sector (World Bank, 2008). Many countries that had fairly high agricultural growth rates saw substantial reductions in rural poverty. Agricultural growth was the precursor to the industrial revolutions that spread across the temperate world, from England in the mid-18th century to Japan in the late 19th century (World Bank, 2008).

In Nepal, rural women face many problems. Due to the constrain of time and resources, this study intends to cover only some problem of rural women as agricultural production. Women are the best heart of agriculture development Nepal because of the critical forces in the society. Agricultural development is not possible without prime involvement of women as they are essential and play vital role in its production. Various studies have shown that women constitute a large portion of agricultural labour. They are often unpaid or paid very low for their effort in it ads their effort is regarded as voluntary support.

Generally, the target group to receive the modern technology in agriculture has been male. Currently there is a significant potential to enhance production, productivity and income of farmers by reducing farm level yield gaps through increasing use of improved technologies, inputs (fertilizers), credits, irrigation facilities and improving rural roads, electricity, communication and marketing facilities. This population is potentially in the position to invest in commercial agriculture. Despite substantial constraints such as a difficult terrain, poor connectivity and landlocked situations, there are opportunities for increased agricultural production and marketing through modernization and commercialization.

Nepal is blessed with a broad range of agro ecological zones and proximity to vast markets in India, Bangladesh, and China. The mountains have a natural advantage in livestock and medicinal herbs, while the hills have comparative advantage in a variety of crops, such as off-season vegetables, temperate and subtropical fruits (citrus), cash crops like, tea, coffee, seed production and spices.

The flat lands of Terai have growth potentials in food production, vegetables, fruits, oilseeds and cash crops. In addition, the country has a significant social capital at the

community level consisting of a culture of active community and farmers groups in forestry, agriculture, irrigation and micro-finance (saving and credits). Mobilization of these community and user groups to manage agricultural growth is essential for inclusive and sustainable economic development (World Bank, 2008).

Development and strengthening of cooperative sectors through institutional arrangements of small-scale farmers, producers and traders are essential to capture economic scale of production and marketing. Agricultural research, which is the main source of modern technologies suited to local context in different ecologies and socioeconomic settings must be effectively funded and research priorities must respond to demand and reflect agriculture's role in poverty reduction. Appropriate credit and insurance policies in agriculture are essential now to modernize and diversify agriculture by enhancing small-farmers' access to institutional credits and reducing the risks of farming from adverse climate, market and pest epidemics. Scientific land reforms and policy revisions in natural resources are required to enhance marginal and landless farmers; access to land, water, and natural resources so that they able to effectively use their human capital to participate in agricultural markets, secure livelihoods in subsistence farming, compete as entrepreneurs in the rural non-farm economy, and find employment in skilled occupations. Therefore, a portfolio of favorable policy and incentives measures coupled with implementable action plans and strong political will and commitment are required to reform structurally weak agricultural sectors towards the development of new, just and prosperous Nepal. Without equal access to technology, girls and women are not able to equally participate in our ever more digital societies. Holding girls and women in this area affects every aspect of their lives, including their ability to speak out and campaign on issues that affect them. Moreover, if girls and women are not involved in creating digital tools and content, they may exacerbate existing inequalities. The gender technology gap also negatively impacts countries potential for economic growth and development. Girls and woman are not involved in policy making so, they do not develop their lifestyle. Maximum women do not know agriculture policy so that they face huge problems of agriculture sector.

Research Questions (??)

(1) What is the role of rural women in agriculture production?

(2) What are the different challenges of agriculture production especially for women?

(3) What are the contributions of rural women in marketing agriculture production?

(4) What are the main obstacles for rural agriculture production for women?

1.3 Objectives of the Study

The general objective of the study is to find out the role of rural women in agriculture production

The specific objectives of the study are as per listed below :

(1) To find out the role of Women in agriculture and in marketing of the agriculture products with their economic status.

(2) To analyze the contribution of women in agriculture production.

1.4 Significance of the Study

It is important because women shouldn't be just limited within the four walls but they hold also be involve in each and every aspect which helped the women to gain various technical, practical ideas. The study made an attempt to study gender discrimination which is one of the major issues in the context of agricultural development. The proposed study aims to highlight the contribution of women in food crop production. To assess the actual contribution of the women in food crop it is necessary to identify and analysis the farm activities and other voluntary activities of rural women. So far, limited studies have been conducted which directly focus on the analysis of women involvement in food crop production.

The study aims to generate information and understanding about the women's role and factor affecting the women in food crop production. Hence, this study can help the planners and policy makers in formulating and implementing realistic and suitable program to improve rural women's productivity employment and income for development in food products.

1.5 Limitation and Scope of the Study

The topic is very vague and it requires various aspects of gender discrimination at national level including different development regions, ecological zones, rural/ urban residence or other sectors. It is not possible to include all the aspects in this study. The research work is completely an academic work and it may not be holistic and detailed one and it is limited only to rural women in activities of agricultural production. Besides, this is the micro level study and has tried to come with fruitful findings and solutions in the related field. It may not cover a broad area and ideas as it is limited to Phalgunanda Rural

Municipality-6, Angsarang, Panchthar, Nepal. Also due to limited time, finance and knowledge, it may not cover the large area.

(1) This study is based on Phalgunanda Rural Municipality-6, Angsarang, Panchthar, Nepal.

(2) It is not covering a broad area and ideas as it is limited to Phalgunanda Rural Municipality-6, Angsarang, Panchthar, Nepal. Because available source is limited like: Time, finance etc.

(3) The study has been conducting among 50 respondents only so findings could not be generalized in large population.

(4) The study is based on certain objectives related to Rural women's role in agriculture production.

(5) This study is only for the partial fulfillment of master's degree of Rural Development.

(6) All the respondents are 15-59 years of age and the sampling method has been including purposive.

(7) This study has mainly focused on contribution of rural women in agriculture production of Phalgunmanda Rural Municipality-6, Angsarang, Panchtahr, Nepal.

1.6 Organizations of the Study

The study in total consists of Five Chapters. The First chapter includes introductory information about study and study objectives i.e. background, statement of the problem, objective of the study, rational and limitation of the study. In second chapter review of literature is included. The third chapter describes the methodology adopted for the study i.e. research design, rational of the study area, sampling procedure, data collection techniques and tools. Data presentation and analysis of the study has been organized in chapter four While discussion on present scenario, role of rural women in agriculture production and their role in marketing of the agricultural products. Major findings, conclusions and recommendation are incorporated in chapter five.

CHAPTER-II

REVIEW OF THE LITERATURE

2.1 Conceptual Overview

Various studies have been conducted on different issues related to women and agriculture from different perspective. This study focuses on rural involvement in food crop farming. Therefore, here an attempt has been mace to review some available which are pertinent to our study area. According to the Central Bureau of Statistics (CBS, 2021). report, female-headed households stood at 31.55 percent in 2021, having increased from 5.82 percent in 2011 mainly due to foreign employment and migration of male youth to the urban areas. On the other hand, 23.8 percent women are owner of land or house according to the census 2021. The policy introduced by the government provided landowners a tax exemption for land registered under the ownership of women. This provision has also contributed to increase women's access to land. In Nepal, a large number of people (especially male) left the villages due to global culture, handsome salaries in national and international employment companies and countries, culture of migration from remote area to urban searching for well being and advanced modern life, which has changed the rural labor dynamics added prominent role to women in agriculture (CBS, 2021).

In Asia women account for approximately 50 percent of the overall food production in the region with considerable variation in the country. For example, women comprise 47 Percent of the agricultural labour force in Philippines, 35 percent in Malaysia, 54 percent in Indonesia and over 60 percent in Thailand. In Southeast Asia women play a major role in rice production particularly in sowing, transplanting, harvesting and processing (Marilee, 1996).

Women have multiple roles within the household, community, and society. Political changes have provided favorable environment to redefine their roles. Participation in social affairs, engagement in specialized platforms like cardamom producers groups, dairy products groups, leadership structures in community associations, access to financial resources and political spaces, enhanced income generation capacities have contributed to women's empowerment in the study areas. However, the situation in the more rural remote areas without cash crops production can be different and therefore the findings of this study cannot be generalized to the whole country. Furthermore, as women had performed diffident roles in their households, community, and society, their

workloads were increased and consequently faced time constraints. Nevertheless, women respondents frequently related they had gained more through their engagement in cash crops than they lost through increased workloads and roles they experienced daily. Women respondents concluded that being members of cooperatives enhanced their position than being individual ginger, dairy, broom and cardamom producers.

Women produce more than 50 percent food grown by worldwide. The gender disaggregated data, together with field studies, participation rural appraisal and gender analysis, make it possible to draw a number of conclusion about the extent nature of women's contribution to farming, foresting, fishing may be underestimated as many surveys and census count only paid labour. Women are active in both the cash and subsistence agricultural sector and much of their work in producing food for household and community consumption (FAO, 1998).

However, women were also facing several challenges and encountered risks while engaging in high-value cash crops. The most noted challenge and risks were related to market volatility and manipulation by Indian traders, lack of opportunity to directly export their products to third countries, severe problems of disease and insects, workloads and difficulties in managing multiple tasks in their households, community, and society. Finally, sustainability of the progress made so far in terms of women's sociopolitical advancement and empowerment is a major challenge (FAO, 1998).

Agricultural sector were regarded as one of the oldest people have chosen as a profession. Since the production from this area was the only medium to solve the problem of hunger among the human entity.

Food security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life" (WFS, 1996).

Production Situation in Nepal Horticultural crops are the major sector of Nepalese agriculture. Horticulture contributes about 14 percent to the total agricultural gross domestic products (AGDP) (Thapa, 1995). The share of horticulture to the AGDP has increased in recent years. By realizing the importance and role of horticulture, the Agriculture Perspective Plan (APP) has targeted the growth rate of horticulture GDP to 5.5 percent per annum by 2014/2015 and growth rate of vegetable GDP in particular to 5.42 percent per annum. Among the horticultural crop, the vegetable sector is has the

most significant contribution to total horticultural GDP.). Economic status of the farmers of the hills, in part by providing regular employment and income to the marginal farmers and his/her family members throughout the year (Panta, 2001).

Season when prices are higher (Prasain, 2011).Farming women in the third world are often invisible or best have low visibility in census figures an employment figures and statistics. Because their work is unpaid and takes place within a traditionally and concerned family framework. It is usually classified as "family labour" and the women themselves as "housewives" or "economically not active". This is a disability which many farming women feel the least but which diminishes awareness of them and their work at planning, policy making and legislative level e.g. in the budget of development programs.

Men and women not only have separate roles for household, food production and cash crops but also differential managerial and financial control over the production, storage and sells of the surplus. Sub-Saharan Africa, women have crucial role in all these aspects of crops production. Men often do the physically demanding work of land clearing, burning and ploughing, planting and fertilizer as well. In some countries the sexual division of labour is according to the type of crops. The agricultural activities of the women and men vary according to the region, the structure of household and productive resources available (FAO, 1996).

Migrant workers provide critical labour and skills to the labour - intensive agricultural sector in higher income countries, filling seasonal jobs that local workers often shun as they prefer higher paying, less grueling, and non-seasonal alternatives. 1. Agricultural producers in countries where farmers rely heavily on foreign workers to meet fluctuating seasonal labour needs, are facing a dramatic shortfall in workers as a consequence of the movement restrictions enacted to fight the pandemic. Timely and agile recruitment procedures are especially important in this sector, where anticipating the exact scope and timing of labor needs during harvest season can be a challenge. Sudden disruptions can have grave ramifications: if workers are not available at the time and place needed to harvest crops, the production, processing and distribution of food is disrupted, leading to lost earnings and rotting food (FAO, 1996). 2. The resulting shortfall in production have an impact on agricultural value chains, with severe consequences for food availability and market prices of agricultural goods worldwide. Farming associations have sounded the alarm about significant labour shortages, highlighting the fact that agricultural production depends to a large extent on migrant workers: Canadian farmers annually rely on

approximately 60,000 foreign workers to harvest their crops, mainly coming from Mexico and Caribbean countries. 3. France has declared that it needs 200,000 additional farm workers this season. In Germany, the current shortfall is estimated to be 280,000 seasonal workers for the entire season, a majority from Central and Eastern European countries. 4. In Spain, a 40 percent drop in agricultural workforce is anticipated, with most seasonal agricultural workers usually coming from Morocco and Tunisia. In Italy, one of the EU countries hardest hit by the pandemic, some 370,000 workers from 155 countries account for 27 percent of the legally employed workforce in Italy's agricultural sector. 5. Spain and Italy are particularly vulnerable to labour disruptions in the agricultural sector as "power houses" for vegetable and fruit production in Europe. Overall, there may be a shortfall of about one million seasonal agricultural workers across Europe. 6. In the United States, foreign seasonal workers make up 10 percent of crop farm workers in the country. 7. In Canada's horticulture production, 50 percent of workers are foreign, and 43 per cent in field fruit and vegetable production. 8. In Australia, an estimated 50 percent of the labour force in vegetable farms and 30 percent in fruit and nut farms are seasonal and temporary migrant workers. 9. Immediate effects will also be felt by migrants families in their countries of origin that rely on seasonal migration to meet basic needs and livelihoods throughout the year. The World Bank projects a 19.7 per cent drop in remittances to low and middle-income countries in 2020. 10. If restrictive measures remain in place and agricultural workers are not allowed to travel, many households are likely to face severe financial hardship. Moreover, given that many workers have been reliant on agricultural employment for years, they are unlikely to have other employment options in their country of origin. For migrant workers themselves, this is exacerbated by the often informal or casual arrangements, under which many work, leaving them vulnerable to exploitation and often with a lack of access to key services, especially health care. Finally, increasing xenophobia and further marginalization may increase migrants' vulnerability, especially for migrant workers who are unable to return home (FAO, 1996).

Almost one in four people in sub-Saharan Africa (SSA) were estimated to be undernourished in 2017, representing about one-third of the 821 million people suffering from chronic hunger globally (FAO et al. 2018). Food and nutrition security is typically assessed over short time scales (e.g. 24 h or weekly recalls) where as farm production and consumption of agricultural produce are typically estimated at annual or seasonal time

scales (Herrera). Using the annual timescales commonly found in agricultural surveys can create problems because diets of rural households are often highly variable throughout the year (Sibhatu and Qaim, 2017). Recent work has suggested that global chronic hunger can be brought to an end by 2030 with an additional annual investment of $11 bn (Fan et al., 2018).

Agriculture continues to be the mainstay of the economy, providing livelihoods for over 80 percent of the population and generating around one-third of GDP. Nepal's landscape and agricultural production is defined by three contrasting climatic zones, running in parallel east to west. The sub-tropical lowlands of the terai, bordering India, have the best agricultural potential. Rice is the main crop but pulses, wheat, barley and oilseeds are also grown, as well as some jute, tobacco, indigo and opium.

In the densely populated temperate hill regions, rice and maize are grown in the summer season, with wheat, barley in winter. Mustard, grown for its oil and used in cooking, is another important crop. Higher still, in the mountains of the sparsely populated north, crops are limited to potatoes, barley and buckwheat, with yaks providing meat, milk and wool.

Despite the agricultural potential of the terai and the mid-hills, population growth has outstripped agricultural output in recent years. With changes in the climate and the impact of the recent food and financial crises, aid agencies warn that much of the population is food insecure. Chronic malnutrition in children is estimated to be almost 50 percent, worse in mountain regions, and is amongst the highest in Asia. The worst winter drought for 40 years in 2008/009 has exacerbated the plight of rural households, with many forced to sell land to survive (Georgina Smith, 2009).

Whilst Nepal does not significantly contribute to global CO_2 emissions, its fragile ecosystems are suffering the consequences of climate change. Environmentalists warn that accelerating glacier melt in mountainous regions could lead to increased flooding and that reduce the seasonal supply of water to rivers as glaciers shrink. This could have grave consequences for the estimated 1.5 billion people dependent on water resources from the Himalayas, including many beyond Nepal's borders in Pakistan, Myanmar, India and China. Greater monitoring of Nepal's glaciers, say experts would allow for improved early warning systems and would alert policy-makers to the vulnerabilities of people living in mountainous regions.

Deforestation is another major challenge for Nepal. Over the last fifty years, Nepal's natural forest cover has been halved as its population has doubled. Erosion of topsoil and damage to watersheds has also impacted on crop yields. Despite this, Nepal's forest, if properly managed, represents one of its most important natural resources, both for timber and other forest products. Community forest management has proved a successful way of helping local people derive income from the forest, whilst preventing further deforestation. Around 13,000 community groups now collectively manage over 1.6 million hectares of forest across the country (Smith, 2009).

Nepal's abundant water resources are home to over 180 fish species, which are an important source of income and protein for some 400,000 fisher folk However, despite the abundance of water, Nepal's irrigation systems have traditionally been plagued by poor service and performance. Support of community-based water user associations has helped to improve agricultural production in some areas but many poor farmers remain dependant on rainfall, which is becoming increasingly irregular and unpredictable.

With warmer winters and erratic rains, some farmers have switched from growing wheat and rice to vegetables, which can be grown in less time than traditional grain crops, allowing two or three crops each year and generating more income. Cultivation of fruit such as bananas, is another alternative. Greater support of these efforts in the form of loans, access to seeds, and technical advice on crop management and water harvesting, would allow more rural people to adapt to changing climatic conditions.

However, government ministries lack both resources and technical capacity. A National Adaptation Programmed for climate change has been started, including a youth summit in Kathmandu, but the potential impact of climate change on agriculture and the poor is not well understood, particularly at district level. And, despite the success of some small initiatives, Nepal's government has a steep hill to climb if poverty is not to increase further, particularly for the poor living in the remotest and most vulnerable areas

(Smith, 2009).

It has been a general mention that the farmers, especially vegetable growers, are fetching reasonable price. However, on the ground of higher visible prices in retail markets and without considering farm investments on production processes and intermediaries' costs on commodity transfer at various levels, the farmers claim that they are not sharing fairly on the consumers' prices. The prices available to the farmers could be genuine, when

considered low storability, fresh consumption-pattern and high-volume and sophisticated transportation need of vegetable produces that render vegetable marketing a complex business incurring higher costs and risks at traders level as well (Pokhrel, 2005).

Elsewhere, studies on agriculture marketing systems revealed several problems to influence farm income and production and marketing decision reached by farmers, which were broadly associated with fragmented and imperfect marketing situations and policy matters. Imperfect marketing refers to non-competitive situation of price formation. Many socio-economic conditions in part of farmers and overall marketing structure contribute to creating such situation. For example, farmers are generally poor, less educated and socially powerless. Such situations of farmers coupled with seasonal shortfall of cash, non-storability of vegetables at farm condition and poor availability of price information render them weak in market competition. Based on such reasoning and visualizing limited number of middlemen paying low to farm produces, some literatures have mentioned that intermediaries were exploiting farmers (Pradhan,1998; Shrestha and Shrestha,2000). Regarding agriculture marketing in Nepal, a general remark had been such that the traders usually tried transferring all sort of price risks to farmers and offered low prices to them by creating monopsonistic situation, debt-ties and cartel (Thapa et al. 1995). However, such things are not studied in view of agriculture production and marketing in Nepal.

The traders might have been doing good jobs, they should not be observed as exploiting farmers just by comparing farmers and consumer's prices, and merely based on study of a component in the system. Many components of a marketing system like production and intermediation are equally responsible for a reduction in farm income. Therefore, studying farm performance of agriculture production and marketing from system perspective is very important to know how different components in the system affected it. Therefore, different aspects of market oriented production and market operation for vegetable crops need to be identified precisely to improve smallholder farm economy. Unless the associated problems are identified and abated, alleviating poverty in the farming communities as envisaged by national development goal would not be possible. Real problems in the system can only be described, when the economy of production mechanism and marketing system for major vegetable products operating in a particular area is evaluated. On such ground, an evaluation of agriculture production and marketing was carried out in selected pockets in jhapa, morang, sunsari, saptari, siraha, districts along Mahendra Highway and Jhapa district to analyze Rice production and marketing

system with major focus on cost-benefit and mechanisms of commodity production and transfer, where farmers are, with a fetch of good income from agriculture production reported improving socio-economic condition in the recent years (DADO, 2006: DADO, 2007a and DADO, 2007b).

The farmers in the localities have been growing many vegetables commercially. The details such as how the farmers are successful in commercial vegetable production and how are they disposing the produces and fetching prices are little known to the societies beyond the farming community. Production, in any agribusiness, is a process of creating a commodity (mainly primary product), which is subject to marketing. Marketing, in general, refers to the process of price-decision for a good by seller and buyer together, and market to the place where such decision takes place (Ellis, 1996). Marketing as a process involves many operations in price formation of a commodity such as transfer, value addition and intermediation. A market can be nearly perfect to imperfect depending on buyers and sellers' influence on price formation, and integrated or fragmented depending on availability of transport and communication among the market participants. Marketing system refers to the channel along which commodity passes through a sequence of stages or events, and it varies with commodity and other factors such as distance, infrastructure and producer's awareness (Ellis F, 1996).

Price signal transmission and physical transmission of the commodities are major functions of marketing; carrying out such by a market depends on number and size of participants, information system and the physical infrastructure. The physical transmission function can further be differentiated in terms of time, space and form dimensions. For an analysis of an agricultural production-marketing system, different approaches such as structure-conduct-performance, marketing system, institutional, functional, demand projection, marketing mix, value chain and sub sector analysis have been discussed in literatures. Though termed differently, the approaches, to assess efficiency of commodity and information flow along marketing channel, describe market structure, its quality of operation and factors to influence its operation. Literatures on system-based analysis of agricultural production and marketing, especially at micro level, are very rare. Mechanism of production and marketing varies with commodity and locations including other factors as well (Pokhrel, 2005). Farms, through investment of scarce resources on various inputs and production processes, produce crops of their choice and supply the produces to market. Such actions by farmers for a commodity

depend on price signal (demand chain) and physical transmission (supply chain) functions of marketing systems (Ellis, 1996). In a production integrated marketing, such a process of two way transfer is efficient rendering the production system demand responsive as determined by a number of factors, broadly associated with infrastructure, socioeconomic attributes, policies and institutions (Pokhrel, 2005). Influenced by such factors, the system's operation consequently affects the production and marketing decisions reached by market participants including farmers. Most important, it determines economic benefit (margin) accrued to farmers as an incentive for cultivation of a crop.

A fair and high price available to farmer has positive impact on farm production decision, which leads to an expansion of the production program and its improvement at farm level. In contrast, an unfair and low price available to farmer affects farm production decision negatively, and renders him/her reluctant in continuing the production program (Pokhrel, 2005). Therefore, The Journal of Agriculture and Environment Vol:11, Jun.2010 Technical Paper 13 evaluating farm level production expenses and relative profits and prices is very important. A detail analysis of such things involves evaluation of marketing channel and the functions carried out by different components in the production-marketing system. A wider coverage of value-chain and/or marketing components such as intermediation, distribution, storage, processing, consumption and marketing support services, though would be much relevant, was not possible due to time and resource limitations (Pokhrel, 2005).

Vegetable production and marketing is valued on account of its growing contribution to the national GDP and expanding areas with potentials to export earning, rural employment and poverty reduction. Such potentials of vegetable farming especially in smallholders could be harnessed only through improved performance of production and marketing systems. Conscious of market demands for the local produces and possible price risks and added costs while selling products at market centers, the farmers strategically managed crop production in time of high demand, performed scale production of the crops saleable at farm gate and disposed them at farm gate to collectors in contact. Besides small quantity of farm produces disposed beyond road-head via farmer-collectors on commission basis, the farmers, in major, transacted the produces directly to private traders at road-head through price-negotiation (Pokhrel, 2005).

Local cooperatives and the cooperative-run collection-centers facilitated only in the transaction process. Because of perish ability of the produces and lack of proper storage,

the farmers have weaker position in price negotiation. Even then the marketing system is observed to perform well as the farms on an average were observed sharing 75 percent on wholesale prices, considered reasonable based on their feelings and costs involved. On such ground, vegetable farming can be good source of income to reduce farm poverty especially in small holders. Despite the facts, farm supplies are irregular and below quantity demand leaving sufficient rooms for promotion of scale production and marketing improvements. Because of harsh bargain on price and delay on payment by traders, disposing farm produces in wholesale market centers is a matter of price risks to the farmers. In addition to proper addresses of the marketing weaknesses, relevant policies and programs are essential regarding research and development on emerging pest control, suitable crop variety and seed and fertilizer quality control (Pokhrel, 2005).

Contrasting to the costs incurred in vegetable forcing, the costs due to pesticides is high that would contribute to deterioration of product quality, environment and public health. A high residue of agro-chemical in the produces is likely to hamper their marketability especially when they are to be exported. Use of various agrochemicals such as insecticides, fungicides, hormones and growth regulators in vegetable production is also crucial to maintain high productivity and reduce production risks. On the other hand, promotion of trans-border marketing of vegetables to Tibet would increase prices available to the farmers in Kabhrepalanchok and Sindhupalchok due to proximity. 'Why vegetables produced there are hindered from transferring across the border but a big volume of Chinese products finding easy way to Kathmandu' is not much clear. Such a dilemma in vegetable-based agribusiness promotion in the country calls for appropriate and timely concerns by the policy level.

Some of the genuine problems related to production system such as diseases and pests severities, deteriorating soil environment, lack of year-round irrigation and poor quality of seed and fertilizer materials in the input market hinder vegetable farmers from realizing optimum crop productivity. Likewise, marketing related problems such as fluctuating prices due mainly to frequent band has in the recent context, a high weight margin for containers in market centers and poor availability of price information to farmers compared to traders contribute to market imperfectness. Both the types of problems justified areas of future efforts by the state and other agencies working there in production and marketing promotion of vegetables. The most important challenge currently facing by Nepali people is how to ensure food security and reduce poverty in

the context of increasing national and global rise of food price. In addition, the country has historically low economic growth in the last two years due to low food production. Low food production coupled with increasing cost of food production, distribution and marketing has raised the price of foods resulting limited access of foods to poor and vulnerable society.

The price of food crops is increasing over the years which have become more visible with the beginning of 2008. For example, the average market price of rice, the major food staple of the people in Nepal has trebled over the last 16 years. This increase of rice price has very negative consequences to poor farmers and vulnerable people who mainly depend on purchased food grains.

Similarly, the other important challenges are how to enhance use of improved seed, fertilizer and other modern technologies to increase agricultural production and productivity. Currently, the use of modern technologies and inputs in the country is very low. This is due to pervasive market failures in seeds, fertilizers and other inputs, which result from high transaction costs, significant risks and the small size of markets. Until now agricultural sector has not been developed as a remunerative market oriented competitive occupation. Due to low productivity, low investment and return from subsistence-oriented farming including unfavorable price regime and low value addition in the agricultural sector, it has become a relatively unrewarding profession. In the recent years, consequently, there is an increasing tendency of rural people abandoning farming and migrating to urban areas and overseas for better opportunities. The situation is likely to be exacerbated in the wake of integration of agricultural trade in the global liberal trading system, unless immediate corrective measures are taken.

There are many causes of the fall in agriculture. Nepalese farmers depend on monsoon for irrigation and planting their crops. The heavy rain washes the top level and sometimes farmers have to face deep drought. Farmers have no ideas on how to get rid of them. The problems of irrigation are great. There is not enough water for irrigation in need in the season of planting different crops, which lacks agricultural products. Poor transportation facilities are one of the major problems for agriculture marketing in Nepal. Nepal is a hilly country. There lacks efficient transportation facilities throughout the country so it is difficult to transport agricultural product and inputs from one place to another place. They use unscientific and traditional tools that don’t help to product more. Most farmers are untrained and do follow ancient methods to grow agricultural items. The farmers do not have

the proper knowledge and skills about how to protect the fields from the drought and lack of modern concept of technology on protecting the fields appropriately, it additionally upgrades that the mindfulness about the horticulture must be important where the monetary issues endured them back so the land residency is exceptionally disputable.

The government should provide the importance of agriculture in our life's to all the public. And the government also should bring scientific policies and plans to grow more which helps to increase national GDP too. Many attractive packages should be brought to the farmers so that they can be befitted and can continue their profession energetically. The farmers also should be provided cheap loan to invest in agriculture field, so that they can get more benefit from it. Reservoirs should be built to continue irrigation even in dry season. An irrigation system should be improved and must be updated each new cycle of thoughts begins. Modern tools and technologies should be applied, that's why farmers can increase their product in advanced way. Pesticides and compost manure should be provided to the farmers in order to increase agricultural products. The government should provide the methods for scientific farming on how to care the farming in the worst condition on supporting them also by providing the compensations to the farmers on losing economically.

CHAPTER- III

RESEARCH METHODOLOGY

3.1 Selection of the Study Area

The most important part of any research depends on the selection of the study area which appropriately matches the area according to the research type. So, with the same concept the study area has been selected at the Phalgunanda Rural Municipality-6, Angsarang, Panchthar, Nepal where a number of family incomes are based on the agricultural production. Angsarang is one of the agro based place of Panchthar district is highly influenced with the agricultural family living. Moreover, most of this particular area, most of women totally take agriculture as living life. And agriculture is the main medium to run their family fulfilling their basic needs and education of children. As their husband are mainly in aboard for employment to earn money, women in this area, the head of house to look it after and agriculture is essential part of their life .

3.2 Research Design

The study is based on role of rural women in agriculture production and their contribution and designed in an exploratory as well as descriptive framework to analyse the rural women's in agricultural production in the study area. This study covered age between 15-59 years. It is exploratory because the study attempts to explore and investigate the socio-economic and agricultural issues of the study areas and the respondent about the responsibility of the marketing and storage of the production that more than half percent of the women respondents are participation in marketing activities. It is also descriptive because all the socio economic and agricultural activities of the study area have been described and then inferred.

3.3 Universe and Sampling Procedure

The selected area of Panchthar is becoming the universe of the study. The Phalgunanda Rural Municipality-6, Angsarang, Panchthar, Nepal is being selected for the study area. Out of 500 households 50 ie 10 Percent of respondents are selected randomly for the study. Focus group discussion is being held on adolescent girls and women. Percent respondents were selected to collect relevant information for the study. The proposed study comprises all the households of the Phalgunanda Rural Municipality-6, Angsarang, Panchthar, Nepal. In the study, simple random sampling is being adopted. A purposive

sampling is a form of non- probability sampling in which the subject was selected to meet the study's need for the sampling purpose.

The study is extremely focused on the issues of the agriculture production. The purpose of the study is useful for further research or formulating policies for the welfare of the agriculture based workers. This report is useful for the students of population studies, sociology or Anthropology and other related subjects. This report is generating useful information for the policy makers, project planners, administrators and implementers.

3.4 Nature and Sources of Data

This study is use in both primary and secondary data for the information. Primary data was collected through Survey, Field visit, interviews, group meeting, seminars, questionnaire, survey, site observation, focus group discussions and case study. Similarly, secondary data was collected from both published and unpublished documents, records, books, articles, magazines, brochures, official records, journals, Google search, related different browsers, viber, what's app, references, anecdotes, online sources, webinars', different online chats and relevant materials related to the subject matter.

3.5 Tools and Techniques of Data Collection

Data was collected from the field survey for this study. The study of primarily was based on primary data. The study was conducted through the formal method of interview, observation, structured questionnaire. Furthermore, secondary data was also collected by field survey text books, statistical reports and previous research studies.

3.5.1 Primary Data Collection

The primary data were collected from the field survey through various techniques i.e. questionnaire, interview with key informants and observation method. Following this step, the structured questions were asked to the women to get information about the agriculture production and contribution.

3.5.1.1 Structured Questionnaire

The structured questionnaire was used in interviewing the sampled women about their role in agriculture. It is not always possible to restrict one's analysis to quantitative economic parameters only. The process of economic development is complex and depends on political, sociological and institutional factors so; we say that, on availability of capital for increasingly higher rates of investments. Modern credit, marketing and

supply systems are yet to be developed to meet the needs of farmers. In the densely populated temperate hill regions, paddy and maize are grown in the summer season, with wheat, barley, millet and vegetables in winter. Mustard is grown for its oil and used in cooking different food items, is another important crop.

3.5.1.2 Interview with Key Informants

The present study is also focusing on conducting for discussion with some knowledgeable of agriculture production with contribution and their problem of this field with the selected information who are currently engaged in agriculture production.

3.5.1.3 Observation and Checklist

At the time of collecting information emphasis were given to "participant observation" method. The researcher involved in close observation on the activities of the study site. The observation technique was used for observing agriculture related cases, remedy process awareness process and their view about it.

3.5.1.4 Interview

Semi-structures, structures and key informant interview were conducted whenever necessary depending upon the situation. Interview was conducted to get information about the agriculture and their poor condition, contribution etc.

3.5.2 Secondary Data Collection

The secondary data collection was collected from various published and unpublished materials by related organizations Mahendra Ratna Multiple campus library, Panchthar Multiple Campus Phidim, office of Phalgunanda Rural Municipality, office of Phalgunanda Rural Muncipality-6, Agriculture sector office of Panchthar, different Organization, different Journals, Newspaper, Magazine, Brochures, Internet Search, Different articles, YouTube, Podcasts, Webinars, Online Source, NGOs and INGOs. And a Published and Unpublished Material was used in this Study.

3.6 Methods of Data Presentation and Analysis

Surveyed primary as well as secondary data has been compiled systematically. The data was presented in the form of table, graph, chart or diagram. questionnaire filled by various respondents, secondary data obtained was studied in depth. This section put up an attempt to study the methodology aspects in brief. In other words, in general approach to the research progression was offered in this thesis.

CHAPTER-IV

DATA PRESENTATION AND ANALYSIS

4.1 Introduction of Phalgunanda Rural Municipality

The study area is Phalgunanda Rural Municipality-6, Angsarang, Panchthar, Nepal of the Koshi province. The total population of Phalgunanda Rural Municipality Panchthar is 21,289 populations with 10407 male and 10882 female are respectively. Out of total wards, ward number 3 occupies the largest population with 4,127, while ward number 2 is the least number of populations with 1910. As illustrated in the pie-chart, overall ratio of male to female population in Phalgunanda Rural Municipality as per 2021 population census was 0.86 with 48.88% (10407) of males and 51.12% (10882) of females (CBS, 2021).

Phalgunanda Rural Municipality is a one of the Seven Rural Municipality in Nepal. The Rural Municipality is coined as Gaunpalika in Nepali. The merging of Phaktep, Aangsarang, Chilingdin, PauwaSartap, Imbung, and Nawamidanda leads to the formation of this rural municipality. The main attractions of this rural Municipality are Silauti, Lohakil hill, Sukepokhari, Kuhibir, Battise waterfall, Ranke Bazar, Sumhalung, Namsami-Kesami, Chhalasukwa etc. There are 7 wards in this rural municipality. Phalgunanda Rural Municipality lies in Panchthar District of Koshi province connected boarder with West Bengal India in the east. Phalgunanda Rural Municipality was established in 10 March 2017. Due to its elevation in the mid-hill area, one can experience temperate climate year-round. The sole urban Municipality in Panchthar district the Phidim Municpality. The seven Rural Municipality are Hilihang, Kummayak, Miklajung, Phalelung, Tumbewa, Yangawarak, and Phalgunanda. The administrative headquarter of this Rural Municipality is Phaktep (Ghurbise panchami). Phalgunanda rural municipality can be venture throughout the year. This is due to its elevation in the mid-hill area. This rural municipality has mild moderate climate which is good for human health. This Rural Municipality is well connected to the road network and can be accessed by driving. The three domestic airports located in proximity to this Rural Municipality are Sukilumba, Suketatr and Ranitar.

The total area of Phalgunanda rural municipality is 107.5 square kilometers or 41.52 square miles. The population density of the Phalgunanda Rural Municipality is 198 individuals per Kilometer Square. The elevation range of the Panchthar district is from

383 to 4,575 meters above sea level. Bhadaure Narkate Pine Jungle, Kummayak-Kussayak (holy place) HewaKhola, Mikwa waterfall, Tamor, Kabeli, and others are some of the places of interest around this Rural Municipality. Some of the hotels adjoining the Mechi highway are Hotel Chamu, Sd Grand, Hotel Lali and Lodge, Limbuwan Hotel, and others. Phalgunanda Rural municipality is a beautiful Rural Municipality located in the Panchthar District. This Rural Municipality is easy to access and has ample places to venture around (Phalgunanda Rural Municipality, 2021).

This Phalgunanda Rural Municipality dominates with Limbu ethnic group. Nearly 70% of population belong to limbu ethnic group. On the other hand, this is mixed society of Chhetri, Brahmin, Rai, Tamang, Kami, Damai, Sarki, Gurung, Sherpa, Sunuwar, Magar etc. And Dashain, Tihar, Udhauli- Ubhauli, Gurupurnima, Lhosar, Holi, Janaipurnima, Maghesakranti are major festivals to be celebrated are celebrated here. And this Rural Municipality can be taken as an exemplary model of religious and racial harmony. People of this Rural Municipality have close brotherhood to each other. This rural municipality consists of many languages. Limbu is the main language of this area. On the other hand, Nepali language is major and official language of this municipality. However, the local government has applied three main languages while running offices, they are Nepali, Limbu and English. And the local government seems to promote all ethics languages, customs, traditions, etc.

4.2 Family Structure of the Households

Family structure is a term that describes the members of a household who are linked by marriage or bloodline and is typically used in reference to at least one child residing in the home under the age of 18. Today these structures are identified as two-parent, one-parent, and “living with neither parent” (e.g., adoptive families, grandparent families or other relatives, foster care families, institutionalized children). Family structure reflects relationships at the juncture of biological relatedness, marital and partnership status, and living arrangements. So, size and type of the family have been taken into consideration.

Table No. 4.1 Distribution of HHs by Family Type

S. N.	Types of Family	No. of Household	Percent
1	Joint family	15	30
2	Nuclear Family	35	70
	Total	50	100.00

Source: Field Survey, 2023

As Shown in the table No. 4.1 about 30% household had joint family and remaining about 70% household had nuclear family. There are several sources of data available that provide information on family structure.In a large joint family some women perform the household activity reality to agricultural farming but in a small/nuclear family, some women have to take the responsibility of doing the household and agricultural work in limited range.

4.3 Sex Composition of Population of Sample Household

This entry includes the number of males for each female in five age groups - at birth, less than 15 years, 15-64 years, 65 years and over, and for the total population. Sex ratio at birth has recently emerged as an indicator of certain kinds of sex discrimination in some countries. For instance, high sex ratio's at birth in some Asian countries are now attributed to sex-selective abortion and infanticide due to a strong preference for sons. This affect future marriage patterns and fertility patterns. Eventually, it could cause unrest among young adult males who are unable to find partners.

Table No. 4.2 Sex Composition of Population of Sample Households

S. N.	Sex	Number	Percent
1.	Male	1179	47.22
2.	Female	1318	52.78
	Total	2497	100

Source: Field Survey, 2023

As table illustrates that among total of 2497 populations from 50 households nearly half that is 47.22 percent are male population and remaining 52.78 percent were females. Sex refers to the biological differences that are universal and unchanging. Sex is one of the most important personal characteristics. In the view of this, sex composition of the population of the sample of the sample household has been taken into consideration.

4.4 Occupation and Source of Income

Income is money (or some equivalent value) that an individual or business receives, usually in exchange for providing a good or service or through investing capital. Income is used to fund day-to-day expenditures. Investments, pensions, and social security are primary sources of income for retirees. For individuals, income is most often received in the form of wages or salary.

Business income can refer to a company's remaining revenues after paying all expenses and taxes. In this case, income is referred to as "earnings." Most forms of income are subject to taxation. The economy of Nepal is largely dependent on Agriculture and remittance. agriculture remains Nepal's principal economic activity, employing about 65 Percent of the population and providing 31.7 Percent of GDP. Only about 20 Percent of the total area is cultivable; another 40.7 Percent is forested (i.e., covered by shrubs, pastureland and forest); most of the rest is mountainous. Fruits and vegetables (apples, pears, tomatoes, various salads, peach, pear, guava, pomegranate, orange, lemon, nectarine, potatoes etc.), as well as rice and wheat are the main food crops.

The lowland Terai region produces an agricultural surplus, part of which supplies the food-deficient hill areas (CBS, 2021).Occupation and source of income represent the economic status of the people. The given table 3 represents the occupation and source of income of the respondent.

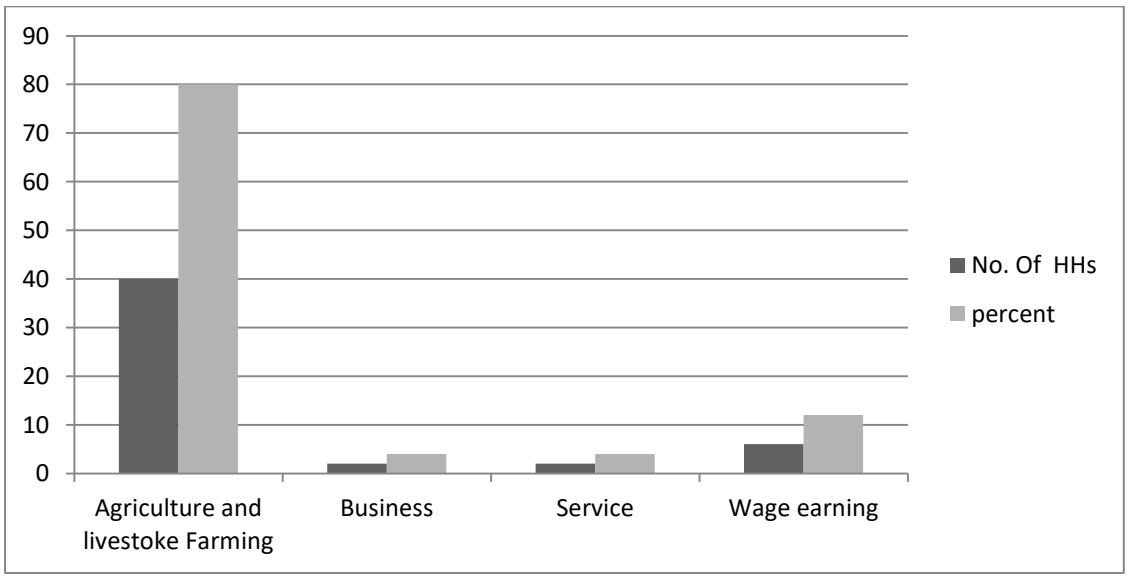
Table No. 4.3 Distribution of HHs by Occupation and Source of Income

S. N.	Occupation	No. of Households	Percent
1.	Agriculture and livestock farming	40	80
2.	Business	2	4
3.	Services	2	4
4.	Wages earning	6	12
	Total	50	100

Source: Field Survey, 2023

As the above table clearly demonstrate that most of the respondents were involved in agricultural and livestock farming that was 80 percent. Further it is followed by wages earning which is just above 12 percent of the total respondent are dependent on it. In addition, less percent of the respondents was involved in business and service

Fig.No. 4.1 Distribution of HHs by Occupation and Source of Income



Various combinations of income sources can be used to derive this classification. For example, at the most detailed level, the income sources are combined into five components: wages and salaries, self-employment income (farm and non-farm), government transfer payments, investment income and other income. Now a day's

agriculture and livestock farming, business, service and wages earning are the main income source of farmers etc.

4.5 Household Worker

The population of working-age females in the country is higher than that of males, females still lag far behind when it comes to employment and the pay gap between the genders is also huge. With the majority of women involved in non-profit making and non-wage earning works, the employment ratio of women is very low, with a large number of males migrating to foreign countries for jobs, women's employment in the formal industrial sector was expected to go up. Women have not been able to find an appropriate environment to work in the formal sector due to their social responsibilities at home, and low access to higher quality education. she told the Post. Lack of day care centers in the workplace and women-friendly environment is yet another factor for not man and women being in the formal jobs. In Nepal, most of the females is engaged in household works and agricultural activities. Most of the respondents were found to have lower educational qualification which made them away to work in other economic earning sector. Due to the reason most of the females were found to be stuck in the household activities.

Table No. 4.4 Distribution of Household by Main H.H. Worker

S. N.	Member of Household	No. of HHs	Percent
1.	Male	18	36
2.	Females	36	72
3.	Others	6	12
	Total	50	100.00

Source: Field Survey, 2023

According the table no. 4.4 more than three fourth of the female population 72 of housewives are involved in household work whereas only 36 percent of male are engaged in household activities. In addition, 12 percent of both husband and wife showed combined participation in household stuffs.

4.6 Decision Making in Household Work

The household decision making involves more than one person on the purchasing process. As men and women move away from traditional roles toward more modern ones, household decision making roles become less predetermined than in the past; therefore, examination of the roles men and women assume within household consumer decision-making is vital.

Table No. 4.5 Distribution of Household by Decision Making in Household Work

S. N.	Member of Household	No. of HHs	Percent
1.	Male(Husbands)	35	70
2.	Females(wives)	10	20
3.	Others	5	10
	Total	50	100.00

Source: Field Survey, 2023

The table shows clearly and illustrates that highest percent of the male or husbands i.e. 70 percent are found to take major role in household decision making. In contrast only 20 percent of female from total respondents seems to have active participation in decision making. Although certain percent i.e. 20 percent from total respondent are found to have decision with mutual understanding and very low 10 percent of other member from family takes decision.

4.7 Agricultural Land and Cropping Pattern

Agricultural land is typically land devoted to agriculture, the systematic and controlled use of other forms of life particularly the rearing of livestock and production of crops to produce food for humans. It is thus generally synonymous with farmland or cropland, as well as pasture or rangeland. Agricultural land refers to the share of land area that is arable, under permanent crops, and under permanent pastures. Arable land includes land defined by the FAO as land under temporary crops (double-cropped areas are counted once), temporary meadows for mowing or for pasture, land under market or kitchen gardens, and land temporarily fallow. Land abandoned as a result of shifting cultivation is excluded. Land under permanent crops is land cultivated with crops that occupy the land for long periods and need not be replanted after each harvest, such as cocoa, coffee, and

rubber. This category includes land under flowering shrubs, fruit trees, nut trees, and vines, but excludes land under trees grown for wood or timber. Permanent pasture is land used for five or more years for forage, including natural and cultivated crops.

Table No. 4.6 Distribution of Sample HHs Table by Landing Size

S. N.	Land Owner Status	Number of HHs	Percent
1.	5 to 10 Ropani	16	32
2.	10 to 15 Ropani	20	40
3.	15 to 25 Ropani	10	20
4.	Above 25	4	8
	Total	50	100.00

Source: Field Survey, 2023

The table No.4.6 shows that 16 household owned 32 percent including 5 to 10 ropani of land. Similarly, 20 household owned 40 percent including 10 to 15 ropani of land. On the other hand, 10 household owned 20 percent including 15 to 25 ropani of land. And 4 household owned 8 percent including above 25 ropani of land. Land is one of the main factors of production where different crops are producted. In measuring the land holding size all types such as agricultural form land, homestead land, pasture etc. of land owned by family were included. The land is measured in unites of Ropani and then households are classified on the basis of the size of the sample household is presented.

4.8 Cropping Pattern

Cropping pattern refers to the proportion of land under cultivation of different crops at different points of time. This indicates the time and arrangement of crops in a particular land area change in the proportion of land under different crops. Change in space sequence and time of crops. The main crops grown in the study area were paddy, wheat, maize, millet etc. Maize and paddy were grown in summer season and wheat was grown in winter season the data were taken from 50 households. According to the respondent, existing cropping pattern was largely determined by the type of land. The crop cycle involved paddy followed by wheat and then maize. Number of crop growing households is presented.

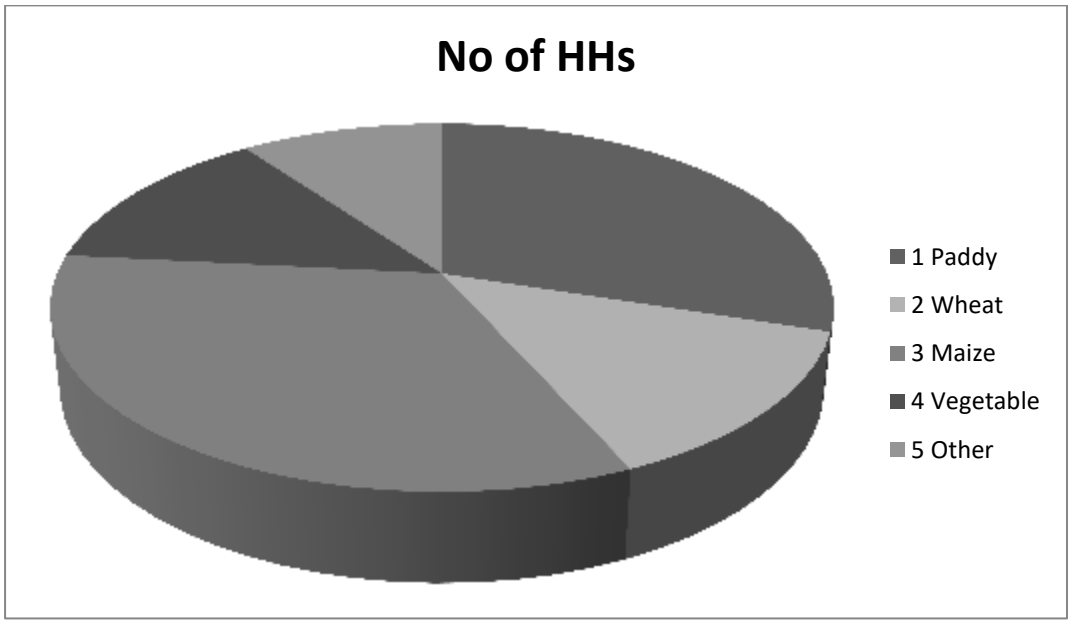
Table No. 4.7 Distribution of Number of Households by Type of Crop

S. N.	Crop	No. of Households	Percents
1.	Paddy	45	90
2.	Wheat	20	40
3.	Maize	50	100
4.	Vegetable	20	40
5.	Other	15	30

Source: Field Survey, 2023

As Table No 4.7 shows, in terms of the number of crop growing households. Paddy 90% were the most commonly grown crops, followed by wheat 40%, maize 100%, other 30% and vegetable 40%.

Fig.No. 4.2 Distribution of Number of Households by Type of Crop



The important food crops of Phalgunanda Rural Municipality-6 Angsarang, Panchthar, Nepal are paddy, maize, wheat, millets, and barley. Among them, the most important is paddy which occupies 90% of the total land devoted to food crops. About 40% of vegetable is produced in the Phalgunanda rural Municipality Ward no.6 Angsarang

Panchthar region. Maize, millet, buckwheat and potato are basically hill crops as they need mild moderate climate to grow them.

4.9 Agricultural Inputs

A crop is a plant or animal product that can be grown and harvested extensively for profit or subsistence. Crops may refer either to the harvested parts or to the harvest in a more refined state. Most crops are cultivated in agriculture or aquaculture. A crop may include macroscopic fungus e.g. mushrooms, or alga.In the present study, agricultural inputs have been analysed in term of seed management use of manure, use of pesticides and use of wage labour. Seed management is one of the most important activities in agricultural production. Distribution of sample household by made of seed management of various crop is presented.

Table No. 4.8 Distribution of HHs Mode of Seed Management and Type of Crop

S. N.	Crop	Household Growing Crop	Using own Production	Percent
1.	Paddy	45	45	100
2.	Wheat	20	20	100
3.	Maize	50	50	100
4.	Vegetable	20	20	100

Source: Field Survey, 2023

Table No.4.8 shows that most of the all sample households used seed from their own production. All of these women are considered part of the agricultural labor force Agricultural labour is the most important agricultural output. The most common form of agricultural labour in the study area was reported to be "Parma" system. "Parma" is the reciprocal of exchange of family labour. Women labour were generally high for transplanting, weeding, applying manure and harvesting. Male labours were mainly for ploughing, digging and threshing.

Table No. 4.9 Distribution Household by Use of Insecticide and Pesticide

S.N.	Crop	Crop Growing HHs	Number	Percent
1.	Paddy	45	45	100
2.	Wheat	20	0	00
3.	Maize	50	40	80
4.	Vegetable	20	15	75

Source: Field Survey,2023

As shown in the table above, the population of farmers using insecticides and pesticides were highest among the paddy producers. In contrast, zero percent of the insecticides and pesticides were used by the farmer involved in wheat production.

Women work in agriculture as farmers on their own account, as unpaid workers on family farms and as paid or unpaid laborers on other farms and agricultural enterprises. They are involved in both crop and livestock production at subsistence and commercial levels. They produce food and cash crops and manage mixed agricultural operations often involving crops, livestock and fish farming.

4.10 Food Self-Sufficiency

Land distribution and food self-sufficiency the prevailing low productivity situation prevented required volume of production of cereals to feed the population, showing a deficit of food requirement in the country. Regionally, more of the households in the mountain are less self-sufficient as compared to the hill and the Terai. Terai is most fertile productive land and has given great contribution in growing different crops, so it called granary of Nepal. And the hill is the second highest food producer in comparison to all these three regions. This food self-sufficiency is directly related to the distribution of the land resource. Food sufficiency is in itself a great problem for the low income groups in Nepal. Family faces food deficit, its member may feel insecure and their entire activities revolve around the struggle for two meals a day.

Table No. 4.10 Distribution of the Sample Household by Period of Food Self-Sufficiency

S. N.	Sufficient Food	Number of HHs	Percent
1.	less than 4 months	20	40
2.	4 to 8 month	15	30
3.	8 to 12 month	10	20
4.	Surplus	5	10
	Total	50	100

Source: Field Survey, 2023

The distribution presented in table 4.10 shows that households reporting the production of food gains sufficient to meet the household requirement of less than 4 month constitute 40 percent. Those producing gains sufficient for 4 to 8 month were 30 percent. Another 20 percent reported that they product the food grains which were only sufficient to meet the requirement of 8 to 12 months. Similarly, only 10 percent of household reported that their production exceeded the food requirements of the household.

4.11 Distribution Source for Managing Food

Social norms that confine women to certain sectors or phases of the supply chain can further limit their opportunities for career growth and reinforce these sectors as low-pay and low-status occupations. Similarly, rural wage-earning women are more likely than men to hold low-wage jobs defined as paying less than the median agricultural wage. Average male wages are higher than average female wages in rural and urban areas. They are involved in labor intensive and natural resources based farming system.

Table No. 4.11 Distribution Source for Managing Food

S. N.	Occupation	No. of Households	Percent
1.	Agriculture and livestock farming	35	70
2.	Business	3	6
3.	Services	2	4
4.	Wages earning	10	20
	Total	50	100

Source: Field Survey, 2023

As table No. 4.11 shows of the households reporting food deficit, 70 percent managed the deficit by Agriculture and livestock farming sale. About 20 percent respondent spent their income which they earned by Wages earning. Similarly, 6 percent respondents managing their income source business and 4 percent respondents managing their service respectively.

4.12 Technology in Agriculture

In Nepal, modern farming has been implemented for the development of agriculture. Previously, the farmers used to labor hard but they were not able to improve their quality of living and were compelled to lead miserable lives. For the last 35 years, Nepali farmers have started using chemical fertilizers and pesticides for producing more crops. However, still there are various places in Nepal which are beyond the reach of these chemical inputs due to lack of transportation facility. Today, farming system, modern technology and information are used for the production of the crops and vegetables. Modern technology has played vital role in production of a large number of food and has also helped to save crops from insects attack. In modern farming, farmers have more central roles. Modern day farming has increased the productivity of the cultivable land. Modern day farming helps to maintain the fertility of soil by using machines and technology to create soil conditions appropriate for plant growth with minimal soil loss, drought, insects, diseases and other threats. The use of improved modern genetics for crops and livestock enhances yields, quality and reliability. attributes of modern day farming are access to effective irrigation, harvesting, handling of storage equipments and techniques to prevent losses. In today's world, agriculture is a concerned topic not just because it is an inevitable part of living but also because of its vital role on sustainability. The quantity is one concern where as quality of new agricultural production is another issue. The use of science and modern technology to produce hybrid seeds, pesticides and fertilizers have increased the agricultural productivity, which is a good aspect, however, the nutrition value of such food has decreased compared to the traditionally grown crops. The major problems are created by fertilizers and pesticides which have long term effects on fertility of soil and consumers health. Many fertilizers create disturbance in eco-system as well. Also, the production of crops like corn, rice and wheat has increased by the introduction of bio-technological advancement in seed production and growth.

As thousands of Nepalese working abroad prepare to return home due to the Covid-19 pandemic, Nepal faces the challenge of providing jobs to them. The country, which is dependent on agriculture, could attract young people, especially those returning home, to farming, experts say. However, it is necessary to bring in technological advances to the sector so that young people are attracted to it. While Nepal has been focusing on mechanization and reforms in agriculture with the aim of doubling its productivity in 10 years, these measures will not be adequate to meet its goals. The agricultural production also depends upon the process of agriculture and use of agricultural instrument, seeds fertilizer etc. By applying the modern technology of agriculture, the farmer can increase the production rate. The distribution of sample households by the use of technology in agriculture and use of agricultural instruments in agriculture and role of women in buying agricultural inputs are shown in.

Table No. 4.12 Use of Different Types in Agriculture Technology

S. N	Technology	Number of HHs	Percent
1	Traditional	35	70
2	Modern	15	30
	Total	50	100

Source: Field Survey, 2023

Table No 4.12 shows that the 70 percent of sample households used a traditional type of instruments, traditional and few modern as well. But only 30 percent used modern technology of households to increase their products. Due to lack of proper irrigation facilities, annually tons of crops die of drought. Though the government is continuously working on increasing irrigation facility, farmers themselves can use modern methods such as Treadle pump and Drip Irrigation Technology to water their crops.

4.13 Role of Rural Women in Agriculture production

Women have played and continue to play a vital role in every sphere of agricultural activity. Operations that involve less physical labor and more drudgery, such as weeding, are left to women, and women undertake these tasks in addition to their primary function

as housekeepers and home makers. Women work harder and for longer hours than men. Most importantly, they also work on more tasks than men. Therefore, for an economically viable and ecologically sustainable agriculture, the involvement of women in the process of modernization of farming practices is a must and has great value in Nepalese tradition.

4.14 Role of Women in Worker's Management

The challenges women face have a tremendous impact on their children, their communities, and national economies. Recently, new advocacy efforts have begun to relate gender equality with macroeconomic development indicators. Hence, the proportion of women in the agricultural labor force has increased in the decade and still majority of Nepalese women are engaged in agriculture.

Table No. 4.13 Distribution of HHs by Role of Women in Worker Management

S. N	Members of HHs	Number of HHs	Percent
1	Male	35	70
2	Female	15	30
	Total	50	100

Source: Field Survey, 2023

Table No. 4.13 illustrates that the role of male is very high in case of worker management. While in some households female participate to manage the worker to complete the task on time. The family members are only not enough for the completion of all the agricultural activities. Hence an individual household requires other human resource to complete the task on time. In regard to it the findings can be observed.

4.15 Budget Management for Agricultural Activities

Women’s paid and unpaid work may be the most significant poverty-reducing factor in developing countries. Women who have control over their earnings and income are also more likely to invest in their children and communities, potentially opening new opportunities for education. Companies that include women on management boards are also more likely to be successful.

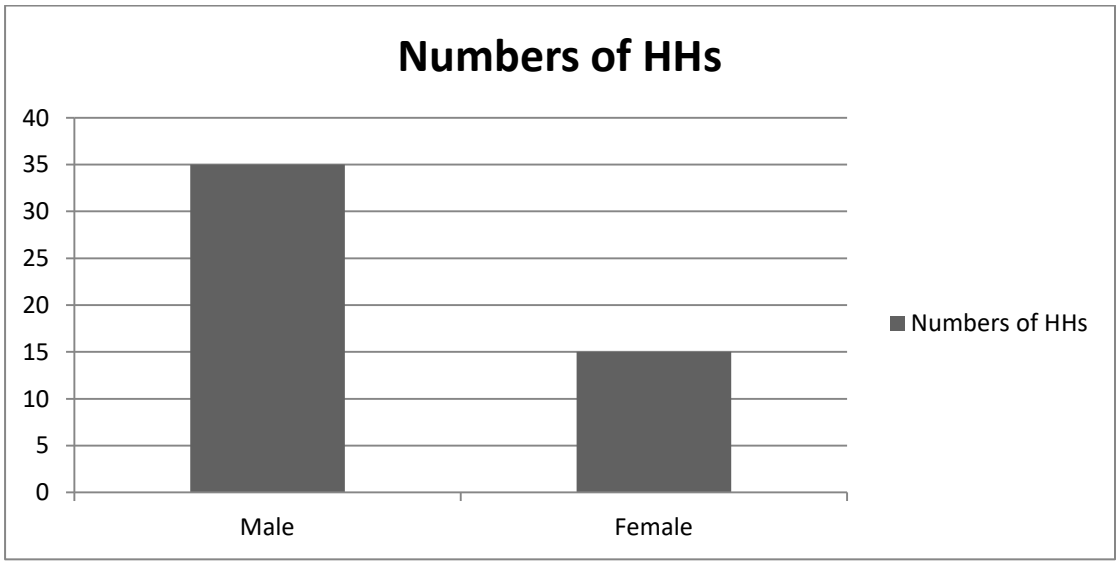
Table No. 14 Distribution of HHs by Role of Women in Budget Management in Agricultural Activity

S. N.	Sex	Number of HHs	Percent
1.	Male	35	70
2.	Female	15	30
	Total	50	100

Source: Field Survey, 2023

Money is required matter to complete the different agriculture activities. According to the table below it can be easily evaluated that 70 percent of the total respondent from male population takes the responsibility of budget management. On the other side only 30 percent of the respondents say that female manages the budget they won't give the opportunity for budget management.

Fig.4.3 Distribution of HHs by role of women in Budget Management in Agriculture Activities.



4.16 Storage of Agricultural Products

After harvesting the agricultural products some of the household sell it in the market where as some of them store it in their residence for their own use in future. They also do wait for price increase of food so that they can sell it in high price to earn more money. When market of food raise high then maximum farmers sell their production. In regard to

this the question was asked to the respondent about the responsibility of the storage of the products. In response to it, the given table clearly elaborate that more than half percent of the respondents agree that the responsibility of products storage is of males rather than that of females. Also participation of both male and female is even lesser than that of male participation in storing activities.

4.17 Use of Different Transportation

Transport or transportation is the movement of humans, animals and goods from one location to another In other words the action of transportation is defined as a particular movement of an organism or thing from one place to another place.The transportation of the agricultural production up to the nearest market is not so easy task for some of the respondent household. Due to poor economic condition and lack of road facilities some of the farmers are still in the problem. The related survey data is enlisted in the table below.

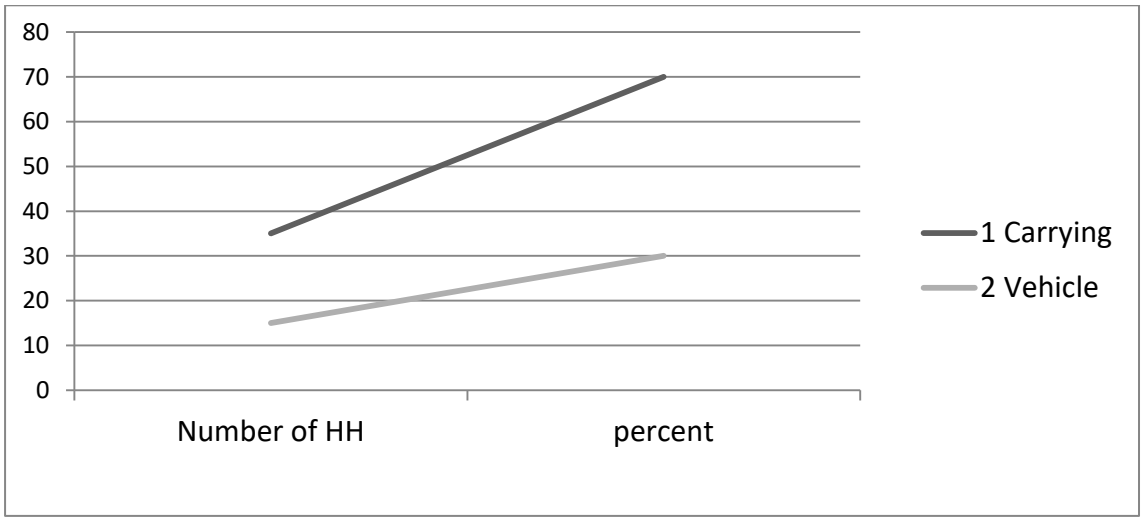
Table No. 4.15 Uses of Different Transportation

S. N.	Different Transportation	No. of Household	Percent
1.	Carrying	35	70
2.	Vehicle	15	30
	Total	50	100

Source: Field Survey, 2023

The table No.4.15 states that among the total households, only 70 percent have to carry the product themselves up to the market and then 30 percent of them transport the agricultural production via vehicles. The male member from the family seems to have less responsible in selling the agricultural products. Instead, female is found to be more participated in the marketing activities too.

Fig.No. 4.4 Uses of Different Transportation



Mostly respondent from the household seems to be engaged cooperatively in the marketing purpose whose family whole income is dependent on agriculture. Also usually those agriculture products sold in the market include vegetables, fruits, food grains etc.

4.18 Education for Female

Education plays a vital role in the development of human society. Moreover, it perhaps plays the most important role in a woman' life. Basically, in the case of male dominated society, a woman can live a dignified life, if she is well educated. Female play an important role to run the house smoothly if they are provided proper quality education. Education is indispensable for women as it supports them to choose the way of life she wants to lead. And educations helps women to move strongly and successfully in their life. The importance of education in women can be compared with blood in human body.Views of respondents towards education for female had been recorded. Most of the respondents realized that education is the main factor which keeps the females to raise their status in the society. They are in favour of women's education. Few are against it.

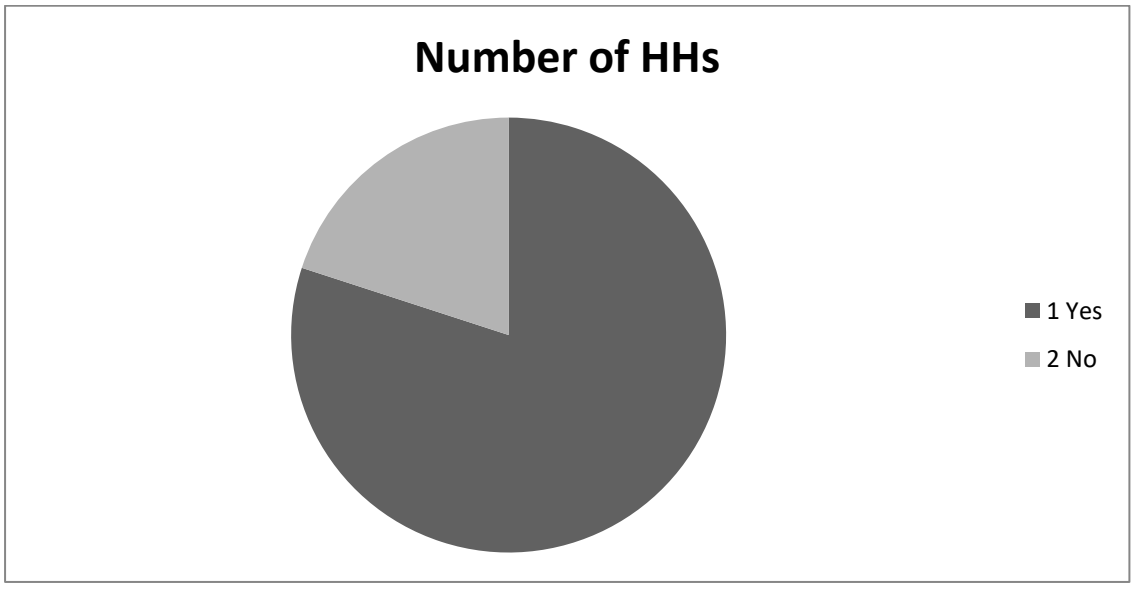
Table No. 4.16 View of Women on Education

S.N.	Respondents view	Number of HHs	Percent
1.	Yes	40	80
2.	No	10	20
	Total	50	100

Source: Field Survey, 2023

Out of 50 HHs 40 HHs or 80 percent agreed with importance of women education and remaining 10 HHs or 20 percent disagreed with the importance of women education.

Fig.No. 4.5 View of Women on Education



4.19 Different Faces of Women's Backwardness

Nepali society has been a patriarchal society for decades where it is about the dominance of men and the subordination of women. This dominance has given rise to several factors that have led to backwardness of women in Nepal and different parts of the world. Women are not focused on education so that their social status not so good and pleasant. The first and foremost reason is lack of proper education, women are not given proper education not only in academics but also about their rights and this makes them dependent on their Male counterparts. Due to not concerning women in education they've low standard life and has poor social status in the society. Other reasons may include discrimination that is faced by women based on genders, that is they are not given an equal share of property which makes them dependent. Concerning property women are not given ancient property though the present constitution has managed their right as basic right. Women are taken as secondary thing in comparison to male and get always just optional priority. As a result they can't grow and fertile properly. Several other social evils are prevalent in the country like the killing of female fetus and female infants, also crimes related to dowry and domestic violence, sexual abuse etc. that makes them far most back warded.

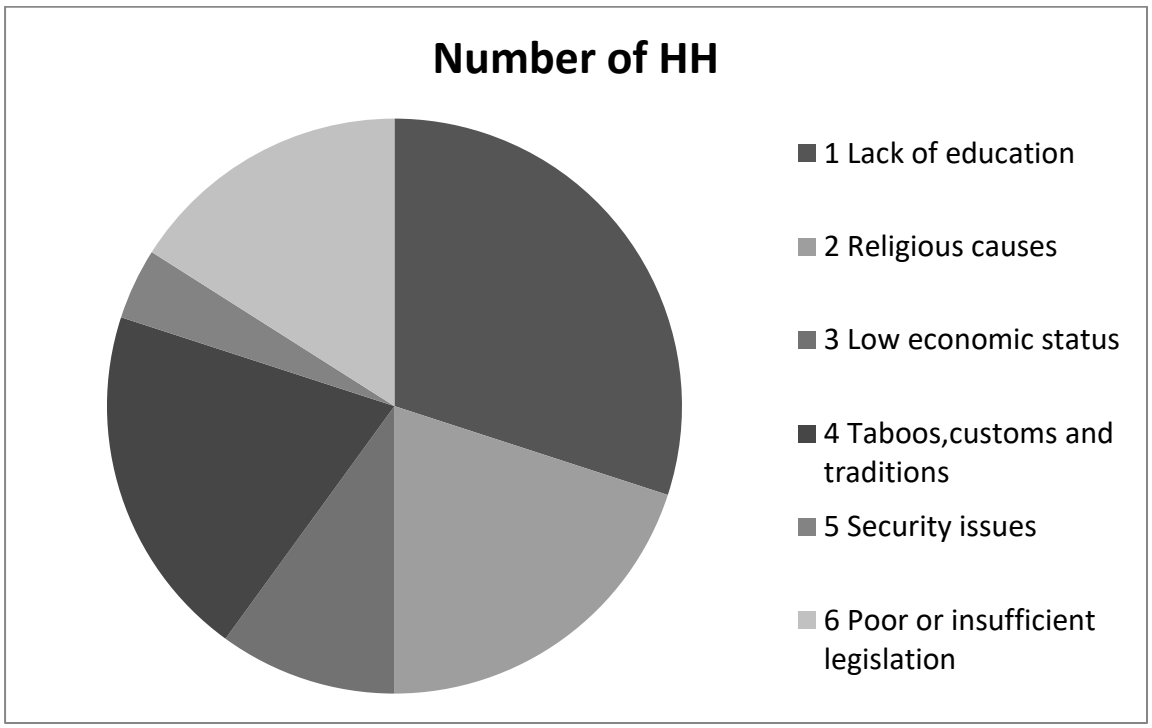
Table No. 4.17 Reason of Backward Females

S.N	Reasons by Respondents	Number of HHs	Percent
1.	Lack of education	15	30
2.	Religious causes	10	20
3.	Low economic status	5	10
4.	Taboos, customs and traditions	10	20
5.	Security issues	2	4
6.	Poor or insufficient legislation	8	16
	Total	50	100.00

Source: Field Survey, 2023

According the information, the table, most of female respondents agree that the backward status of the female in the society is due to lack of education. It is followed by lack of Taboos, customs and traditions, poor or insufficient legislation, religious causes to the females come in the second, third and forth respectively. And the sixth reason behind the status of women in society is because of the low economic status. In addition, security issues also create the problem of female backward state in the society.

Fig.No. 4.6 Reason of Backward Females



Several factors have led to the backwardness of women and some of these are Lack of proper education, social, political and economic discrimination based on gender, several social evils which are prevalent in the society like female feticide and female infanticide.

4.20 Monthly Incomes of Households

Monthly income is the amount of income you earn in one month, before taxes or deductions are taken out. Our monthly income is helpful to know when applying for a loan. Now monthly income is to calculate it based on your annual or hourly pay, and when it's helpful to understand.

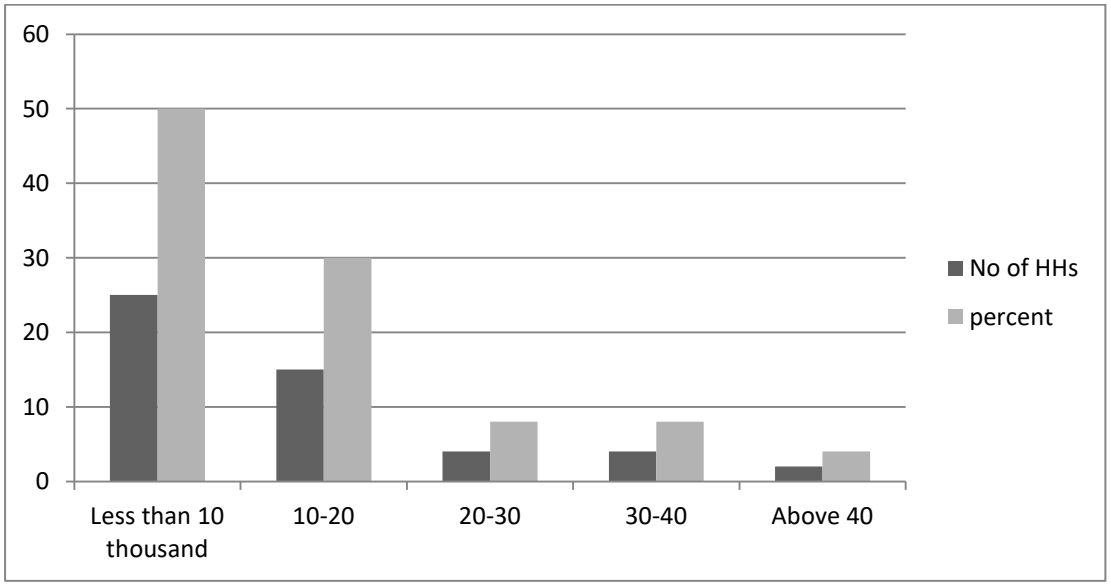
Table No. 4.18 Monthly Incomes of Households

S.N	Income (in Thousand NPR)	No. of HHs	Percent
1.	Less than 10 thousand	25	50
2.	10- 20	15	30
3.	20-30	4	8
4.	30-40	4	8
5.	Above 40	2	4
	Total	50	100

Source: Field Survey, 2023

The above table shows that several females have low access in economic status but little females have high economic status than other female's similarly, only 3 respondents are powerful in economically, their monthly income is above 40 thousand and 6 respondents earns 30-40 thousand and 4,15,25 respondents earn 20-30, 10-20, less than 10 thousand respectively.

Fig.No. 4.7 Monthly income of Households



CHAPTER - V

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

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 all essential to the well-being of rural households.

Women often face gender-specific challenges to full participation in the labour force, which may require policy interventions beyond those aimed at promoting economic growth and the efficiency of rural labour markets. Policies can influence the economic incentives and social norms that determine whether women work, the types of work they perform and whether it is considered an economic activity, the stock of human capital they accumulate and the levels of pay they receive. Increasing female participation in the labour force has a positive impact on economic growth.

The total population of Phalgunanda Rural Municipality-6 Angsarang is 2,497. This population occupies 500 households, supposing it 100%, 10% households i.e. 50 households were selected where 46.73 percent are male population and remaining 53.26 percent are females and included the purposive sampling method. About 30% household had joint family and remaining about 70% household had nuclear family most of the respondents were involved in agricultural and livestock farming that was 80 percent.

Further it is followed by wages earning which is just above 15 percent of the total respondent are dependent on it. In addition, less percent of the respondents was involved in business and services and the production of food gains sufficient to meet the household requirement of less than 4 month constitute 40 percent. Those producing gains sufficient for 4 to 8 month were 30 percent. Another 20 percent reported that they product the food grains which were only sufficient to meet the requirement of 8 to 12 months. Similarly, only 10 percent of household reported that their production exceeded the food requirements of the households.

5.1 **Conclusion**

Women are the best heart of agriculture development Nepal because of the multiple roles of women. It is also the acceptable fact that women are the critical forces in the society. Development is not possible without the involvement of the women in the developmental activities. They play crucial role to enhance such activities in the society. Women have contributed importantly to maintain outdoors and indoors works of household. Various studies have shown that women constitute a large portion of agricultural labour. They are often unpaid or paid very low for their effort in it as their effort is regarded as voluntary support. The wage between male and female is not equal. It means to say women are paid low wage in comparison to male for the same work. Generally, the target group to receive the modern technology in agriculture has been male.

Women are clearly an important part of the agricultural labour force, but agriculture and agricultural value chains are equally important to women as a source of employment. Commercial value chains for high-value products such as fresh fruit, vegetables, flowers and livestock products are growing rapidly to supply urban supermarkets and export markets.

The growth of modern value chains and the broader structural transformation of the agriculture sector in many developing countries have major implications for women's employment, but the impact of these trends for women has received relatively little analytical attention. Women dominate employment in many of the high-value agricultural commodity Agriculture is the most important source of employment for women in rural areas in most developing country regions, but this varies widely by region.

Contribution of women in agriculture is a lot as most of them are doing this profession. They have to handle various responsibilities inside the home and outside although their dedication and success in this field is praiseworthy. Women have contributed so fairly in agriculture field growing many kinds of crops which helps them to manage their expenditure of family. On the other hand, this profession has helped to continue their children's education. Women who are going through with this profession also have contributed in national GDP. Their agricultural products made bring foreign currency to our country. It means export of goods have increased these days and this helped out going money to abroad.

Men are more likely than men to hold low-wage, part-time, seasonal employment and they tend to be paid less even when their qualifications are higher than men's, but new jobs in high-value, export-oriented agro-industries offer much better opportunities for women than traditional agricultural work. The Nepalese society is traditional and most of the traditional and cultural aspects play effective role to enhance the status of women in the society. Females have no property rights and how to access to education and economic activity. They are not compelled to claim property even though present constitution has clearly given them right for it. Male are unwilling to distribute ancestral property to female.

They are considered as the supporter to the male and have to follow the male counter parts. Husband is considered as good for wife and she has to respect in every step of her life. Indeed, it is ridiculous in the modern society where both male and females are equal having equal rights and responsibilities. Though males and females are considered equal, even today females are away from the education right to power and property as well they have low status in the society too. However, nowadays educating women trend is rapidly increasing day by day. There is still the evidence of gender discrimination in socio economic status and also in decision making power in the modern society.

5.3 Recommendations

Women's rights and equality should be discussed and there is a need to raise awareness on the benefits for families and societies when women are able to work freely, in safe environments, and under fair conditions. Women's involvement in agricultural production, sharing the agriculture benefits and decision making if very important in each and every sector by the present women participation is for behind as they are not given the equal opportunities as men. Hence, gender discrimination is the main issue for development in Nepal.

Government should give opportunities for government offices, police stations, military barracks, decision making places etc. should lead by example and implement provisions for gender sensitive and segregated facilities where required, provide for child care and maternity leave, and ensure that women have independent reporting structures to report instances of harassment.

(1) The government should focus low socio-economic status of women to increase their economic status. As well as their education work orientated training.

(2) Stakeholder should provide new ideas technologies (labour saving devices like smokeless stove in kitchen. etc.) that increase women working efficiency and the same time reduce their drudgeries are to be introduced in the rural area.

(3) The stakeholder provides agriculture oriented loans and credits are not directly available to women.

(4) Stakeholder should give treated rural women as a separate group.

(5) Agricultural development office should focus on increasing women's participation in training, focus group discussion etc.

(6) Similarly government should be reducing gender gap in every sector. The mobility and freedom of women in economic, social and public life should be enhanced.

(7) The policy maker make policy should be focus reducing the gender discrimination and other unequal distribution

(8) Women also should focus on case crop production instead of working as labour in another field. Utilization of the modern technology in the agricultural farm would be an effective way of working.

(9) Central, province and local government should invest for well being of women bringing locally useful plan and policies.

(10) All stakeholders should focus on quality education for women to empower them so that their role can be vital for well being of society and nation as well. .

(11) In addition, women also should equally participate in decision making.

(12) There is low social -economic status of women in Phalgunanda Municipality -6 Angsarang, Panchthar different types of programs like non-formal education, adult education etc should be introduced within the village for importing basic education to women. The education instruction contributes to bring about quick change in the attitude of society for raising their condition.

There must be an improvement in land tenure. Farmers should have awareness about their farming. Agronomists should have to send in villages. Especially the local government should cooperative to farmers by providing them soft loan, modern equipments, seeds, pesticides and market to sell their products in time. To supply their products, the road should be constructed and maintain properly. The local government should bring special plans and policies so that the farmers will continue their profession and also be benefited. Cold stores should be built in proper place to restore different seasonal products. That's

why farmers will be benefited and earn lots of profit. And local seeds also should be protected to maintain fertility of the land. Women should be helped and cooperated with them for betterment of agriculture. The development of the nation depends on agriculture. If agriculture is growing in good condition without any obstacles then the life status of farmers and the nations can be well improved. With this, women who are engage in agriculture profession can be benefited and their status moves upwards.

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Annex- 1

Questionnaire

Role of Rural women in Agriculture Production

A Case Study of Phalgunanda Rural Municipality-6, Angsarang, Panchthar, Nepal

This Questionnaire has been designed to explore the information purly academic purpose. This is to enable the researcher to collection in formations This thesis on the topic Role of Rural Women in Agriculture Production: in pursuance of master of Arts in Rural Development Degree .

Household No: ……..

District:…….

Rural Municipality: …….

Name of Respondent:……

No Of Respondent :……

Total Family No:……

Male : ……

Female:……

1. What is the main occupation ?
   a. Agriculture b. Business c. Service d. Other
2. How do you do the Agriculture Production ?
   a. Scientifically b. Conventional method c. Both
3. Who plays the main role in the Agricultural Production in your family?
   a. Male b. Female c. Both
4. What about the Wedge in Agricultural Work for male and female ?
   a. Equal b. Unequal c. Other
5. What types of agricultural instrument do you use ?
   a. Modern b. Conventional c. Both
6. Did you take any counseling from source?
   a. Yes b. No
7. If you took, From whom ?
   a. Agricultural Specialist b. Family c. Neighbour d. Other
8. How do you manage the required seed?
   a. Own production b. From market c. AO d. Other

9. Who buys the necessary things like as agricultural instrument, seeds and fertilizer ?

a. Male b. Female c. Both

10. How do you store agricultural products ?

a. Modern method b. Conventional method c. Other

11. Averagely, who spends much time for agricultural work?

a. Male b. Female c. Both d. Other

12. For how much time, the produced crop sufficient for your family?

a. 3 month b. 3-6 month c. 6-9 month d. 9-12 month

13. Do you sell the agricultural products in the market?

a. Yes b. No

14. What do you sell in the market?

a. Rice b. Cereal crops c. Other

14. Who Sells the agricultural products?

a. Female b. Male c. Both

15. How much far is the market from your field?

a. 0-4 km b. 4-8 km c. 8-16 km d. much far

16. How do you bring the agricultural products up to the market ?

a. By Carrying b. By Vehicle

17. What types of crop and production produce in your field?

a. Paddy b. Maize c. Other

18. Who does the household work?

a. Female b. Male c. Both

20. Who is the ownership of land and house?

a. Male b. Female c. Both

21. How does the local government help you to promote your agricultural production?

a. By granting money b. By distributing instruments

c. By distributing seeds, pesticides

22. Is your Production enough to run your family during the year ?

a. Yes b. No

23 Do you have savings from your agricultural Production?

a. Yes b. No

Annex-II

Checklist

1. Full Name ……

2. Age ……..

3. Cast ……..

4. Birth of Place ……

5. Religious

a. Hindu b. Buddha c. Kirat d. Other

6. Marital Status

a. Married b. Unmarried c. Widow

7. Education

a. Illiterate b. literate c. Basic level d. Secondary level e. Campus level

8 Occupation

a. Agriculture b. Wage labour c. Service d. Business

9 Generally, how many hours do you work in a day?

a. up to 3 hrs b. 3-6 hrs c. 6-9 hrs d. 9-12 hrs

10 How much money do you earn from this work in a month?

a. Up to Rs. 6000 b. Rs. 6000-12000 c. Rs. 12000-18000 d. Rs. 18000-24000

11. How do you spend the money you earn?

a.Save b.Buy food Items c.Give to the family d.spend for the children's education

12. Do you save money?

a. Yes b. No

13. Do your husband or other male counterpart assists you in your work ?

a. Yes b. No

14. Do you enjoy freedom at home?

a. Not at all b. Little freedom c. Complete freedom

15. Who decides in buying or selling cattle in your family ?

a. Myself b. Husband c. Jointly d. Father /Mother law

16. Who decides in buying clothes in your family?

a. Myself b. Husband c. Jointly d. Father/ mother e. Whole family

17. Who decides celebrating festivals in your family?

a. Myself b. Husband c. whole family d. Jointly e. Father/ Mother in low

18. Who decides arranging marriage in your family?

a. Whole family b. Father/ Mother c. Father/Mother in law d. jointly e. Myself

19. Who decides investment activities in your family ?

a. Husband b. jointly c. Myself d. Whole family

20. Who decides the cropping pattern in your family ?

a. Whole family b. Father/ Mother c. Father/Mother in law d. jointly e. Myself

21. Have you ever fallen sick?

a. Yes b. No

22. Where do you go for treatment when you fall sick?

a. Doctor b. Herbalist c. fortune taller d. Other

23. How many times do you go to medical for check-up?

a. Once in a year b. Once in a month c. Only in the period of sickness d. Never

24. Have you ever used any contraceptive?

a. Yes b. No

25. If yes, who have used this contraceptive?

a. Myself b. Husband

26. Who decides to use this contraceptive ?

a. Husband b. Me c. Jointly

27. Do you have children?

a. Yes b. No

28. If yes, how many children do you have?

a. One b. Two c. Three d. More than three

29. Who decides for the child?

a. Me b. Jointly c. Husband

30. Who is preferred as your first child in your family?

a. Son b. Daughter c. Both

Annex- III

Research Related Photographs

This is the place (Phalgunanda-6, Angsarang, Panchthar,Nepal) where primary data was collected (research field).

Planted food crops i.e. maize by farmers.

Data being collected by the researcher from ward chairperson of Phalgunanda-6, Angsarang.

The researcher, interviewing farmers who are busy planting paddy in the field.

Women Farmers, busy in Rice Cultivation.

Riped Paddy about to be harvested

A woman farmer, preparing seed of millet for plantation.

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