Role of Women in Agriculture Related Work Performance in Nepal: A Study of Sunkoshi Rural Municipality of Okhaldhunga

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Abstract

Development of rural areas depends on agricultural industry because it is a main occupation and source of income generation of rural farmers in Nepal. Farming has, however, only given a very small portion of a farmer's income, thus they have added other sources of income. Moreover, half of all economically active people, according to a field survey, work in agriculture. In comparison to the male population, more women work in agriculture. Numerous factors, including family structure, the caste system, educational attainment, farmer age, crop variety, technological level, etc., have an impact on rural women's roles in agricultural production. Women are mostly involved and performed the majority of the labor-intensive tasks including irrigation, harvesting, planting, cultivation of cereal crops and the care of animals. They also have a significant part in the purchase of seeds, fertilizer, and other necessary tools. Rural women also work in a variety of livestock-related tasks, such as grazing, milking cows and buffalo, cleaning sheds, etc. Additionally, they must care for their children and handle household duties with little to no support. So, some recommendations are offered in light of the research's findings, such as raising the overall literacy rate, promoting new idea and technologies like labour-saving devices, and reduction of their drudgeries in household activities are to be introduced in the rural area.

Keywords: agricultural production, labour-intensive tasks, labour saving services, source of income

Introduction

Nepal, a small country with a land area of 147181 km², is bordered by India on three sides and China on the north. According to the 2011 population census, there are 26,49,45,04 people living in Nepal, of which 1, 28, 49,041 (48.50 %) are males and 1, 36, 45463 (51.50 %) are females. There are somewhat more females than males

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in the population. Nepal is primarily an agricultural nation since agriculture plays a significant role in the nation's economy. More than 70% of the population still is dependent on agriculture. More than 80% of the labor force is engaged in agriculture, which also contributes significantly to export revenue. (CBS, 2021)

Women cover more than half of the population in Nepal. The development of nation is not possible without their active involvement. According to numerous studies on the status of women, women in developing nations like Nepal have a different condition than women in other industrialized countries. In Nepal, women are viewed as second-class citizens and are not given opportunity to contribute to growth and the economy because of illiteracy, ignorance, a conservative mindset, poverty, and superstition. Depending on the socioeconomic situation, geographic region, and a variety of other factors imposed by the larger national society in terms of the legislative framework, their position varies from place to place and community to community.

Women in rural Nepal take on a variety of societal tasks. Alongside their male colleagues, they combine their household and agricultural responsibilities. Over the years, numerous studies have made it abundantly evident that women perform the majority of the agricultural work in Nepal, and their labor contribution appears to be higher than that of men. They also have to handle a variety of domestic tasks, including as child care, meal preparation, shopping, housekeeping, and family health care. They are engaged in planting, digging, transplanting, weeding, harvesting, and storing activities related to farming. The interaction of sociocultural, economic, and environmental elements has an impact on their participation in the farming system.

More than 65.6% of all workers in Nepal are employed in the agricultural industry, making it the country's largest employer. About three-quarters of the population in Nepal works in agriculture, which accounts for one-third of the country's GDP. Given that more than 80% of women work in agriculture, the role of women in the sector is vital. But since they are typically employed as subsistence farmers, the working conditions for the majority of rural women are dangerous. Due to the out-migration of rural men for employment, there have been changes in the traditional division of labor, with many women takings on new roles including marketing and plowing. The abandoning of rural agricultural land as a result of the workforce crisis has also led to a decrease in agricultural production. However, the number of women who own land is rising; in 2011, female-headed families made up nearly one-fifth of all agricultural landowners, an increase of 10% from the year before. Land ownership rights continue to be a significant barrier for the majority of women, so this is an important development. Women in rural Nepal take on a variety of societal tasks alongside their male colleagues. (FAO, Nepal, 13 Feb., 2019)

Farm women in Nepal have a significant impact on how agriculture will evolve in the future. Numerous recent studies have shown that farm women play a significant role in agriculture decision-making as well as other agricultural operations. The decision on the sort of crops to be planted, usage of enhanced seeds, use of manure and fertilizers, etc. are typically made by women. Women can therefore actively participate in agricultural activities, particularly in the cultivation of food crops, and make decisions. Due to the wide range of tasks that women execute over an extended period of time, their involvement in agriculture is unique. External factors, such as the temporary absence of village men and men's employment in the civil service and other non-agricultural occupations, have a significant impact on rural women's agricultural activities. Because more and more men are getting hired in non-agricultural industries and traveling to urban areas seasonally or temporarily for work, women's engagement in and contribution to Nepal's farm production system is becoming more and more crucial. As a result, rural women produce the majority of the food.

Objectives of the Study

The general objective of the study is to cope the role of women in agriculture production. The specific objectives are as listed below:

- To find out the role of women in agriculture production and marketing in the study area.
- To analyze the socio-economic impact of women in the study area.

Methods

The study is structured to analyze the role of rural women in agricultural productivity in the study region in descriptive framework. It is also descriptive since it describes and then concludes all of the socioeconomic and agricultural activities that take place in the studied area. Likewise, 10 percent of total houses were chosen at random as the study's population, using judgment or purposeful sampling. A sort of non-probability sampling known as a "purposive sample" is one in which the subject is chosen so that it appears to fit the needs of the study for the sampling purpose.

In addition to being primary and secondary, the data was also qualitative and quantitative. The respondents are directly interviewed, and the research area is directly observed, to get primary data. The secondary data was also gathered from other journals, publications, newspapers.

Short Description of Study Area

Ward No. 1 of Sunkoshu Rural Municipality of Okhaldhyunga has been selected as a study area. It is also called Balakhu Village which is located 3 kilometers south from Madhyapahadi Highway. Sunkoshi Rural Municipality in Okhaldhunga District was formed in March 2017, by merging 5 former Village Development Committees (VDCs) of Katunje, Chyanam, Mulkharka, Sisneri and Balakhu. The center of this rural municipality is located at Mulkharka.

According to 2021 Nepal census, Sunkoshi Rural Municipality has a population of 18,550 when Ward No 1, Balakhu has a population of 2097. It has a household of 448 where 400 households are actively participated in agriculture and rest of them are involved for different businesses and services. It has been chosen 10 percent households (e.g. 40 sample out of 400) of Ward No. 1 for the study which are actively involved in agriculture.

Data Analysis and Discussion

Analysis of Agro-economic Profiles

A total of 400 out of 448 families were directly involved in agriculture; 10 percent of 400 houses were randomly chosen as the research sample's population, and both males and female respondents were given structured questionnaires to complete. Religion, caste, ethnicity, age, sex, family structure, education, employment, land ownership, and food security were among the factors taken into account. These sample household size parameters explain and interpret the frequency and percentage distribution.

Family members, whether young or old, are dependent on one another. Women's participation in various agricultural and domestic tasks depends on the number and nature of their families. Certain women handle domestic duties and agricultural labour in big joint families, while in small/nuclear families, some women must assume responsibility for a constrained range of household and agricultural duties.

Sex Ratio

The gender ratio, which is calculated as the proportion of men to women in the population is a crucial sociological indicator for assessing the level of equality between men and women in a given culture at any given period. Thus, gender is one of the most important personal characteristics. Given this, the gender composition of the sample household's population has been considered

Table 1Distribution of Population by Gender

| Gender | No. of Population | Percentage (%) |
|--------|-------------------|----------------|
| Male | 90 | 45 |
| Female | 110 | 55 |
| Total | 200 | 100 |

Source: Field Survey 2022

As shown in table no. 1, out of 400 people in total from 40 families, roughly half, or 45 percent, are men, with the remaining 55% being women. According to the above statistics, men make up a smaller percentage of the population than women.

Agriculture Activities and Pattern

Agricultural land is defined as the land area that is either arable, under permanent crops, or permanent pastures. Arable land includes land under temporary crops such as cereals, temporary meadows for mowing or pasture, land under market or kitchen gardens, and land temporarily fallow. In measuring the land holding size all types such as agricultural form land, homestead land, pasture, etc. of land owned by the family were included. The land was measured in units of Ropani and then households were classified on the basis of size of the sample household.

 Table 2

 Distribution by Land Holding Size

| Landowner Status | Number of Households | Percentage (%) |
|-------------------------|----------------------|----------------|
| No land | 5 | 12.5 |
| Less than 1 Ropani | 8 | 20 |
| 1 Ropani to 10 Ropani | 10 | 25 |
| 10 Ropani to 20 ropani | 8 | 20 |
| 20 ropani to 30 ropani | 5 | 12.5 |
| Above 30 ropani | 4 | 10 |
| Total | 40 | 100 |

Source: Field Survey: 2022

The table mentioned above represents the land holding size of people in the study area. The table shows 25 percent people hold 1 ropani to 10 ropani land which is majority among them. Likewise, 10 percent people have more than 30 ropani land which is the least number of the respondents.

Crop Types

Every crop has particular requirements for growing environments, harvesting times, and care. Farmers in Nepal often use a few different farming methods. They include digging, using machines, fertilizers, using different kinds of seeds, etc. In the research region, paddy, wheat, maize, etc. were the principal crops planted. Wheat was planted in the winter, while maize and paddy were grown in the summer.

Table 3Distribution of Crops

| Crops | Household No. | In Percent (%) |
|-----------|---------------|----------------|
| Paddy | 20 | 50 |
| Wheat | 30 | 75 |
| Maize | 40 | 100 |
| Vegetable | 30 | 75 |
| Others | 20 | 50 |

Source: Field Survey: 2022

The type of land has a significant impact on the present cropping pattern, according to the response from the respondent. The practice of integrated farming systems is now widespread. In order to create work all year long as well as additional income, crops can be linked with cattle, poultry, and fish that are kept at the same location. Examples include cultivating crops and vegetables, raising grass and aquatic plants, and raising fish. A table showing the number of families cultivating crops is provided.

Agricultural Process

The agricultural process and the use of tools, seeds, fertilizer, and other agricultural inputs all affect how much food is produced. The farmer can boost yield by using contemporary agricultural technology. Table 4 displays the distribution of

the sample households by the use of technology in agriculture, the use of agricultural equipment, and the participation of women in purchasing agricultural inputs.

Table 4Use of Different Agricultural Tools

| Agricultural instruments | Household No. | In Percent (%) | |
|--------------------------|---------------|----------------|--|
| Traditional Tools | 30 | 75 | |
| Modern Tools | 5 | 12.5 | |
| Both | 5 | 12.5 | |
| Total | 40 | 100 | |

Source: Field Survey: 2022

The table above demonstrates that traditional instruments were still used by 75 percent of survey families. Due to a lack of resources, only 12.5 % of households used modern instruments when 12.5 percent of households utilize both traditional and modern instruments.

Role of Women in Agriculture

Producing agricultural crops, caring for livestock, processing and cooking food, working for salaries in agricultural or other rural enterprises, collecting fuel and water, engaging in commerce and marketing, caring for family members, and maintaining their residences are typical activities. Women perform the majority of the planting, weeding, processing, cooking, caring livestock and harvesting, while men perform the majority of mechanized and chemical spraying duties. In post-harvest activities, including threshing, processing, and selling, women play a significant role. Considering that over 80% of women work in labour intensive agriculture, women's contributions to the sector are significant. However, as they mostly labor as subsistence agricultural producers, the majority of rural women's working conditions are dangerous.

Buying the Necessary Tools, Seeds, Fertilizers, etc.

The respondents in the study region have the greatest influence on the purchases of the equipment, seeds, and fertilizer required for the expansion of agriculture. According to a field survey, the following study findings of respondents are displayed in the table below:

Table 5 *Buying the necessary tools, seeds, fertilizers, etc.*

| Member of Household | Household No. | In Percent (%) |
|---------------------|---------------|----------------|
| Male | 13 | 33 |
| Female | 21 | 53 |
| Both | 6 | 14 |
| Total | 40 | 100 |

Source: Field Survey 2022)

According to table 5 above, out of 40 households, 53% of the women are primarily responsible for acquiring the tools, seeds, fertilizer, etc. needed for agricultural output. Only 33% of homes had a man in charge of making the necessary purchases for agricultural supplies. In 14% of families, men and women shared equally in the cost of acquiring agricultural inputs. It also makes one thing clearer the part that women play in agricultural output.

Various Farming Works

During crop production, the farmers have a variety of tasks to complete on the agricultural farm. The table below lists some of the major tasks that must be completed from among them along with their key personnel.

 Table 6

 Distribution of Key Workers

| Various | Key workers | | | |
|---------------|-------------|----------------|------|----------------|
| activities | Female | In Percent (%) | Male | In Percent (%) |
| Transplanting | 40 | 100 | - | - |
| Harvesting | 30 | 75 | 10 | 25 |
| Ploughing | 10 | 25 | 30 | 75 |
| Irrigation | 20 | 50 | 20 | 50 |

Source: Field Survey: 2022

Table 6 above demonstrates that the majority of transplantation and harvesting tasks are carried out by women in the home. While the majority of the sample families' male residents work at irrigation and ploughing, respectively.

Role of Women in Worker's Management

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 in the following table.

 Table 7

 Role of Women in Worker Management

| Members of Household | Number | In percent (%) |
|----------------------|--------|----------------|
| Male | 16 | 40 |
| Female | 20 | 50 |
| Both | 4 | 10 |
| Total | 40 | 100 |

Source: Field Survey: 2022

Table no. 6 illustrates that the role of women is very high in case of worker management. While in some households both male and female participate to manage the worker to complete the task on time.

Budget Management for Agricultural Activities

Budget management is an essential activity for completing a variety of agricultural activities. Budgeting is a method of reviewing plans for the use of agricultural resources under the supervision of the decision maker. A farm plan is a pre-planned timetable of all of a farmer's farm operations.

 Table 8

 Role of Women in Budget Management

| Members of HH | Household No. | In Percent (%) |
|---------------|---------------|----------------|
| Male | 20 | 50 |
| Female | 12 | 30 |
| Both | 8 | 20 |
| Total | 40 | 100 |

Source: Field Survey: 2022

According to the findings of the field survey, out of 40 homes, men had a larger role in money arrangement or had a higher level of involvement in budget management for agricultural operations than women. In budget formation, women trail 12 households while both males and females trail 8 households.

Marketing Responsibility

Rural men and women work as farmers, wage workers, processors, or merchants along various value chains, adding value to the items they trade in local and global marketplaces. They challenge to enter markets and compete there, too. Due to limited transportation options and mobility restrictions, rural women sometimes lack timely market information, have trouble arranging price with buyers, and have difficult to reach market physically. Women played a crucial role in creating the connections between increased agricultural productivity and trade policies in the market. But in the case of study area both of them male and female are active.

Table 9 *Marketing Responsibility*

| Members of HH | Household No. | In Percent (%) |
|---------------|---------------|----------------|
| Male | 8 | 20 |
| Female | 16 | 40 |
| Both | 16 | 40 |
| Total | 40 | 100 |

Source: Field Survey: 2022

The male member of the household appears to be less responsible in terms of selling agricultural products. Females, on the other hand, are observed to be more involved in marketing activities. However, the majority of respondents from the household appear to be cooperating in the marketing purpose, whose family's entire income is based on agriculture. Vegetables, fruits, food grains, and other agricultural items are commonly sold in markets.

Miscellaneous

The respondents were asked what they thought about women's property rights, women's access to education, the state of family life, the underlying factors

that contribute to family backwardness, and the power of women in decision-making. The majority of the traditional and cultural elements in Nepalese society contribute significantly to raising the status of women in the community. Women lack the ability to own property or participate in the economy. They are expected to support the man and must obey their male counterparts. In every aspect of her life, the wife must respect her husband because he is thought to be good for her. It is ridiculous in today's culture where men and women are on an equal footing and have same rights and obligations. Despite the fact that males and females are viewed as being equal, women still lack access to education and lack the rights to property and authority, and they also have low social status. In today's society, there is still evidence of gender discrimination in socioeconomic status and in positions of decision-making.

Reason for Women Backwardness

In the research area, it was discovered that women were not given their rights and obligations. Their access to employment, education, and decision-making is limited. In every aspect of their lives, men have dominance over them. The primary causes of women's social disadvantage are as follows.

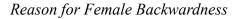
Table 10Reason for Female Backwardness

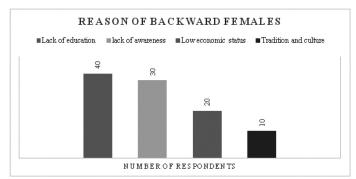
| Reasons by Respondent | No. of Respondents | In Percent (%) |
|-----------------------|--------------------|----------------|
| Lack of education | 16 | 40 |
| Lack of awareness | 12 | 30 |
| Low economic status | 8 | 20 |
| Tradition and culture | 4 | 10 |
| Total | 40 | 100 |

Source: Field Survey: 2022

The majority of female respondents, as shown in the information in the table, concur that women's social status as backward is a result of their lack of education. Lack of awareness of women follows it. The third factor influencing women's status in society is their low economic standing. Tradition and culture also contribute to the issue of women living in a backward status in society.

Figure 1





The graph above shows the causes of backwardness of women in the study area. 40 % women are back warded due to a lack of education and 30 % are back warded because of lacking of awareness, while 20 % and 10 % female respondents from houses were behind due to low economic status, tradition, and culture.

Major Findings

The analysis of women's contributions to agricultural growth can take many different forms. Women perform the majority of the labour-intensive tasks in agriculture, including planting, harvesting, irrigation, etc. Additionally, women are often responsible for buying seeds, fertilizer and other necessary tools. Contrarily, the majority of men are observed to be employed in business and other professions to earn a living. The main sources of income for households are the production of cereal crops and the care of livestock. About half of the sample household's annual income is equal to its annual expenses, while the remaining households have surpluses or deficits. Borrowing is mostly used to reduce the deficit. The surplus is primarily used for ceremonials, festivals, and other non-productive activities.

The Major findings derived from the analysis and women role in agricultural production are as follows:

- The majority of the respondents are Chhetri, Tamang, Rai, Newar, Kami, Damai, Brahmin and Dalit, and the majority of the respondents are female.
- In total, there were 400 households in the sample families, of which 55% were women and 45% were men.
- The majority of respondents work in one of the following industries: agriculture and animal farming (62%), wage-earning (10%), services (12%), or business (5 percent).

- Concerning the size of respondents' landholdings, 12.5 % of households have no land and 10 % people have more than 30 ropani.
- Due to a lack of resources, only 12.5 % of households used modern instruments when 12.5 percent of households utilize both traditional and modern instruments.
- Males made only about 30% of decisions on domestic tasks and women made decision more than 50 % of total tasks.
- The male member of the household appears to be less responsible in terms of selling agricultural products
- The role of women is very high in case of worker management for agriculture production
- In approximately half of the sample households (53 %), women are generally responsible for making the necessary purchases of tools, seeds, fertilizer, etc.
- In nearly every household in the sample, women are the primary workers for planting, irrigating, and harvesting, whereas men are the primary workers for ploughing, and 50% of them reported managing labourers for agricultural operations.

Conclusion

The present research shows that rural women actively take part in the various food crop producing operations. Their involvement in activities varies, though. The only activity in which women do not actively participate is ploughing. Women are mostly involved in irrigation, harvesting, and planting. Females also have a significant part in the purchase of seeds, fertilizer, seeds, and other necessary tools. Rural women also work in a variety of livestock-related tasks, such as grazing, milking cows and buffalo, cleaning sheds, etc. Additionally, they must care for their children and manage household duties with little to no help. Males typically handle household tasks, though it might vary depending on the circumstance. It only occurs in challenging circumstances. The study also makes clear that education, in addition to culture and religion, is a significant factor in the involvement of the female group in agricultural operations. Without education, women are unable to obtain any jobs, other from those related to household duties. They must so participate in agriculture and domestic chores.

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