RESEARCH ARTICLE

GENDER ROLE IN COMMERCIAL VEGETABLE FARMING AND HOUSEHOLD INCOME IN BIRENDRANAGAR MUNICIPALITY OF NEPAL

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ABSTRACT

Vegetable production plays an important role in food security, poverty reduction and household income. Although vegetables are an important emerging cash crop for the agricultural sector in Nepal. The study was conducted to examine the contribution of CVF in household income, gender involvement, extension services and problem associated with CVF in Birendranagar Municipality ward number 14 (Gadhi) and 15 (Ratu) Surkhet, Nepal in 2018. The purposive sampling method was followed to select the respondents. A total of 90 respondents were selected from ward number fourteen (n=45) and fifteen (n=45) respectively. A pre-tested and standard interview schedule was employed for household survey to collect primary information. And various available documents of the governmental and non-governmental organizations were used for secondary information. The findings of the study revealed that vegetable farming has major contribution in household income. Joint decision making were done in crop selection and marketing by households. However, technology related and direct money related activities were decided more by male. Most of the activities related to commercial vegetable farming are performed jointly. However, laborious activities like nursery bed preparation, field preparation were done by male and tedious works like manure mixing; intercultural operations were done by female. Female farmers had lesser access to agriculture extension services. Commercial vegetable farming was not new enterprise for them and most of the farmers were highly motivated by their neighbor. Majority of youths were engaged in commercial vegetable farming and all farmers were satisfied with this job. Thus, with commercial vegetable farming, gender role had been changing overtime and it has created a good employment opportunities and aided household income. So, with proper management of the roles of gender, inputs and trainings enhance the commercial vegetable farming in study area.

KEYWORDS

CVF, Vegetable, farming, household.

1. INTRODUCTION

The agricultural sector, which comprises about 33% of GDP and provides livelihood to almost 76% of households grew by an estimated 1.3% in FY 2016, marginally higher than 0.8% in FY 2015 (CBS, 2017). Agricultural sectors are a major supplier of raw materials for industries, and it is generally accepted that the key to economic development is agricultural prosperity. However, crop production, which dominates agricultural production, is largely traditional and subsistence oriented (Bhattarai, 2002).

Gender issues in agricultural development have become a common area of concern at global, regional, and national levels (Bajracharya, 1994). In addition, women's knowledge and skill in relation to agriculture have not been acknowledged in the past. Women in rural areas have traditionally fewer rights and fewer income opportunities than men, often because of patriarchal and conservative thinking, according to which the man is perceived as the main productive working force (Schussler, 2002).

Nepalese society is particularly patriarchal i.e. male dominated society.

Women are major actors in agriculture but their participation is confined to fieldwork and reproductive activities, while men control over decision making and productive activities including marketing (Bhattarai, 2002). In the context of gender, Nepal was ranked 115 out of 130 countries which indicate that status of women in relation to men is one of lowest in the world (Shrestha, 1999). The target group to receive modern technology in agriculture has been male farmers and it has been assumed that through them the female farmers will learn new innovations in agriculture.

2. MATERIALS AND METHOD

2.1 Research design

Mostly quantitative and some qualitative information were collected to observe the situation of CVF in study area. Research design was prepared as case study type because it focuses on a single case rather than dealing with a sample of large population. According to Babbie Earl (2001), case study is an in-depth examination of the single instance of some social phenomenon, such as village, a family, or a juvenile gang. Similarly, Yin (2003) "the distinctive need for case studies arises out of the desire to understand complex social phenomena" because the case study method

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allows investigators to retain the holistic and meaningful characteristics of real-life events. Case study design types are most useful for descriptive or exploratory and copes with the technically inquiry that investigates a contemporary phenomenon within its real-life context. So that the case study design type were conducted to identify specific gender situation at CVF in the study area.

2.2 Selection of study area

The study focused on gender role in CVF and household income at Ward 14 and Ward 15 of Birendranagar municipality. Geographically study area are located at 28° 37' to 28° 43' latitude and between 81° 34' to 81° 38' longitude and elevation varies from 1000 m. to 2200 m. above mean sea level.

2.3 Sample size and sampling procedure

A total of 90 households were interviewed as a sample size out of 1018 households and it comprise about 10 percent of total household. Two wards of Birendranagar municipalities namely ward 14 (Gadi) and ward 15 (Ratu) were selected as study area. Equal number of respondents were taken from Gadi ward (n=45) and Ratu ward (n=45).

The purposive sampling was used to generate data for CVF. Purposive sampling was adopted because of unavailability of all required information of commercial vegetable farmers. In addition to this, cost-effective and time-effective were other driving forces to adopt purposive sampling. However, proper care and precaution had been followed to make the study valid.

2.4 Tools and technique of data collection

Both the primary and secondary data were used. The pre-tested interview schedule was administered to the selected farmers to collect primary data.

The secondary information was obtained through reviewing different publication mainly produced by MOAC, CBS, DADO, books, and journals.

2.5 Data Processing and techniques of analysis

The quantitative information collected from the field was coded first and entered into the computer and analysis was done by using computer software package, which were Statistical Package for Social Science (SPSS) and Microsoft Excel.

3. RESULTS

Table 1: Gender and ethnicity of respondents of two ward of Birendranagar Municipality				
Socio-demographic categories		Ward 14 (Gadi)	Ward 15 (Ratu)	Total
Gender	Male	34(37.8)	31(34.4)	65(72.2)
	Female	11(12.2)	14(15.5)	25(27.8)
Ethnicity	BCTS	29(32.2)	34(37.8)	63(70.0)
	Janajati	13(14.5)	9(10.0)	22(24.5)
	Dalit	3(3.3)	2(2.2)	5(5.5)

Figure in parenthesis indicates percentage Source: Field survey, 2018

a = significantly different at 5 percent level of significance.

Table 2: Ward number wise age category of the respondents			
Age category*	Ward 14 (Gadi)	Ward 15 (Ratu)	Total
Youths (18-35 years)	32(35.6)	29(32.2)	61(67.7)
Adults (above 35 years)	13(14.4)	16(17.7)	29(32.2)
Total	45(50.0)	45(50.0)	90(100.0)

Figure in parenthesis indicates percentage Source: Field survey, 2018

Table 3: Family size of the respondents in two wards of Birendranagar municipalities			
Family size*	Ward 14 (Gadi)	Ward 15 (Ratu)	Total
<5 (small)	13(14.5)	17(18.9)	30(33.4)
5-7 (medium)	28(31.1)	24(26.7)	52(57.8)
>7 (large)	4(4.4)	4(4.4)	8(8.8)
Total	45(50.0)	45(50.0)	90(100.0)

* mean 5.21, sd 7.12 Figure in parenthesis indicates percentage

Table 4: Family structure and house head in two wards of Birendranagar			
Household heads	Ward 14 (Gadi)	Ward 15 (Ratu)	Total
Male headed	42(46.6)	44(48.8)	86(95.4)
Female headed	3(3.3)	1(1.1)	4(4.4)
Total	45(50.0)	45(50.0)	90(100.0)

Figure in parenthesis indicates percentage Source: Field survey, 2018

Table 5: Family structure of respondents in two wards of Birendranagar municipalities			
Family structure	Ward 14 (Gadi)	Ward 15 (Ratu)	Total
Joint	32(35.5)	26(28.8)	58(64.4)
Nuclear	13(14.4)	19(21.1)	32(35.6)
Total	45(50.0)	45(50.0)	90(100.0)

Figure in parenthesis indicates percentage Source: Field survey, 2018

Table 6: Educational attainment of respondents in two wards of Birendranagar				
Education level	Ward 14 (Gadi)	Ward 15 (Ratu)	Total	χ^2 at 3 df
Illiterate	6(6.6)	8(8.8)	14(15.5)	36.583 ^a
Primary	26(28.8)	27(30.0)	53(58.8)	
Secondary	9(10.0)	7(7.7)	16(17.7)	
Above secondary	4(4.4)	3(3.3)	7(7.7)	
Total	45(50.0)	45(50.0)	90(100.0)	

Figure in parenthesis indicates percentage Source: Field survey, 2018

Table 7: Respondents' occupation in two wards of Birendranagar Municipalities			
Respondent occupation	Ward 14 (Gadi)	Ward 15 (Ratu)	Total
Agriculture only	24(26.6)	26(28.8)	50(55.4)
Agriculture and service	12(13.3)	9(10.0)	21(23.3)
Agriculture and business	7(7.7)	6(6.6)	13 (14.3)
Agriculture and foreign employment	2(2.2)	4(4.4)	6 (6.6)
Total	45(50.0)	45(50.0)	90(100.0)

Figure in parenthesis indicates percentage Source: Field survey, 2018

Table 8: Contribution of vegetable farming to household income		
Household income category (NRs.)	Average income from vegetable (NRs.)	Contribution of vegetable in total income
Low (<NRs. 50000)	27861.01	21.31
Medium (NRs. 50001-250000)	187963.83	53.91
High (>NRs. 250000)	246392.79	69.59
Average	154072.89	48.67

Source: Field survey, 2018

Table 9: Gender wise decision making in different farming activities				
Decision making	Male Percent (%)	Female Percent	Both Percent	Total Percent
Crop and variety selection	47.2	22.7	30.1	100.0
Input purchase	57.3	15.8	26.9	100.0
Loan withdrawal	53.4	12.3	34.3	100.0
Input application	49.7	13.5	36.8	100.0
Marketing of commodity	38.8	32.4	28.8	100.0

Source: Field survey, 2018

Table 10: Gender control over household resources for CVF				
Control	Male Percent (%)	Female Percent (%)	Both Percent (%)	Total Percent (%)
Land	61.1	10.3	28.6	100.0
Capital	57.4	18.3	24.3	100.0
Skills	23.3	35.7	41.1	100.0
Physical Labor	49.7	12.4	37.9	100.0

Source: Field survey, 2018

Table 11: Gender involvement in different activities

Activities	Labor contribution (in percent)			
	Male Percent (%)	Female Percent (%)	Both Percent (%)	Total (%)
Nursery bed preparation	32.3	29.7	38.0	100.0
Main field preparation	51.9	7.6	40.5	100.0
Manure mixing	18.2	27.8	54.0	100.0
Seedling transplantation	20.3	41.2	38.5	100.0
Irrigation	41.7	18.9	39.4	100.0
Intercultural operations	14.3	32.8	52.9	100.0
Spraying insecticide	42.9	13.7	43.4	100.0
Harvesting	28.3	21.6	50.1	100.0
Post harvest	32.7	13.8	53.5	100.0

Source: Field survey, 2018

Table 12: Satisfaction level of the respondents from CVF

Satisfaction level	Male Percent (%)	Female Percent (%)	Total Percent (%)
Highly satisfied	4 (2.2)	3 (1.1)	7 (7.7)
Satisfied	54 (60.0)	26 (28.8)	80 (88.8)
Dissatisfied	1 (1.1)	2 (2.2)	3 (3.3)
Total	59 (65.5)	31 (34.4)	90 (100.0)

Figures in parenthesis are in percentage Source: Field survey, 2018

4. DISCUSSION

The study showed two third (66.1 percent) of the respondents were male and only one third (33.9 percent) of respondents were female. Majority of the respondents (70.0 percent) were BCTS caste groups, whereas majority of the respondents (67.7 percent) were youths (18 to 35 years age) age groups. The core reason for the higher male respondents is the build up of society which is patriarchal. But slowly things are improving because of the multiple factors like education, awareness etc.

5. CONCLUSION

Based on the findings following conclusions were drawn:

Male have more decision making power in direct money related and technology related activities. Both genders have joint involvement for the activities related to CVF rather than just one gender. Laborious activities and more power requiring activities like nursery bed preparation, main field preparation, irrigation, and post harvesting were performed mainly by male while female were involved more to the tedious works like manure mixing, intercultural operation and harvesting activities.

Household resources like land, capital and saving/credit were controlled by male members. Again, male respondents have higher access to agricultural information materials and training activities. Commercial vegetable farming was not new enterprise to them. Farmers have started growing vegetable commercially as soon as the highway and feeder roads were made. Vegetable production have major share in household income in comparison to other components like livestock, cereal crops, and fruits. Commercial vegetable farming created a good income for youths. Majority of youths are engaged in this practice. Almost all the respondents were satisfied with CVF because of good income and majority of respondents had very good attitude towards CVF.

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