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"ACCESS OF FEMALE TO THE VARIOUS AGRICULTURAL INPUTS WITH RESPECT TO MALE AND THEIR LABOUR PATTERN & COMPOSITION IN FAR WESTERN PART OF NEPAL"

(A CASE STUDY OF KANCHANPUR DISTRICT)

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Abstract: Female labor force is as efficient as male population for the sustain and inclusive economic development of the society. Due to the out migration of male members of the family, women have both rsponsibilities as a family caretaker and agricultural labourer in the almost households in Nepal. But women have limited access to the various agricultural inputs in Nepalese society.They are still in traditional pattern of agricultural production system. From the above study and analysis, in the study area of far western part of Nepal, women's access to the various agricultural inputs (Land, Machine & Equipments, Implements, Loan, Livestock and fertilizer and pesticides) is in only 33% of total households where as male have the access to these factors in 67% of total households. In the study area, the women of 69% households are engaged in traditional agricultural production system and only the 31% household's women are applying modern techniques of agriculture production. From the view point of labour composition, the most of labour i.e. 56% is consumed by animal husbandry and dairy production,

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4% of women labour is consumed by cash production and oil & seed production activities respectively. But it is depicted that women are not involved in poultry production in the study area. **Keywords :** Agriculture, Female, Labour, Agricultural Inputs, Access, Pattern, Composition.

1. Introduction

Access is freedom or permission to use resources whereas control is power to decide whether and how a resource is used. In fact decision making and control are synonymous to each other. In reality, person possessing decision-making power have control over resources such as management, buying, selling, etc. Therefore sustainability in agriculture production depends largely on decision-makers. Despite women's important role in agriculture, traditional social norms and customary laws, they are generally biased in favour of men and are barriers to women's equitable access to productive resources (Chaudhary, 2007).

In accordance with the other norms of patriarchal society, women also tend to lag behind men in access to almost all available opportunities and resources (HDR 2009). Although women's labour inputs to agriculture are often greater than men's, they rarely have access to extension services, institutional credit, or production inputs (Shivakoti 2002). In agricultural sector, land, capital, credit, farm machinery tools, technology, and livestock are major resources. Accessibility to these resources and decision-making on it, however, varies with social and ethnic groups, region, and socio-economic status (Bajracharya 1994).

A recent study on gender differences in access to and control over resources in agriculture concluded that there is an overwhelming domination of men in gaining access to agricultural and veterinary services, community activities and training, and finances than women (Devkota 2006). In this research , there included six factors as the agricultural inputs. They are Land, Machine & Equipment, Implements, Livestock, Agriculture loan and Fertilizer & Pesticides.

2. Objective of the study

1. To examine the access to the agricultural inputs of male and female
2. To examine the pattern and composition of woman labour employed in agriculture production

3. Methodology :

This research was applied both quantitative and qualitative methods , consisting of in-depth interviews (IDIs) and surveys. The surveys was conducted through purposive simple random sampling to include the households of different ethnic groups. For this purpose. A total of 75 households in Kanchanpur districts were interviewed through purposefully. The researcher had conducted in-debth interview and filled the related questionaire format. In order to obtain the objectives of the study proposed, following methods, tools and techniques were applied :

3.1 Research Design

This research has attempted to analyse and explore the various works performed by rural women in the agriculture sector and their access to the various factors of agriculture production. Hence descriptive and analytical research design was used in this study to get the desired purpose of the research.

3.2 Nature and sources of data

This study follows descriptive types of research design in nature. For the fulfillment of the objectives of the study, the data was collected from primary sources. The primary data was collected from field research. The collected data is both quantitative and qualitative in nature.

3.3 Sample and sample size

For the proper and justifiable sample and it's size, the study area had taken with conveniently. The study was performed in one VDC of Kanchanpur district which lies in Tarai region of far western part of Nepal. Among the 19 VDCs of Kanchanpur, Pipaladi VDC was selected conveniently. For the fulfillment of the objectives of the study, the number and distribution of samples with respect to district, VDC and total household is presented in following table below :

Table No. 1

Sample of the study with respect to social groups (Kanchanpur)

S.N.	Social Groups	Pipaladi VDC	
		Total Hh %	Sampled Hh
1.	Chhetries	30.7 %	23
2.	Brahmans	24 %	18
3.	Dalits	16 %	12
4.	Janajatis	29.3 %	22
	Total	100 %	75

3.4 Tools of data collection

The questionnaire and In-depth interview were used for data collection. These tools were applied to collect information about women's labour engaged in the agriculture production from different household of various ethnic groups and various size's of land holdings in the selected VDCs. The questionnaire was distributed to the sample respondents who have SLC and above education level. In case of illiterate and under SLC level respondents, the interview schedule was used for data collection, which had conducted by researcher himself.

3.5 Classification of Data

In the study area researcher classified the people specially in two profession i.e. agricultural profession and non – agriculture (other) profession. Researcher has classified those people in agriculture profession who are purely engaged in agriculture activities or whose prime profession is agri. The people who are engaged in two or more than two profession, they are classified in their prime profession only. The researcher classified in dependent category of those people in study area whose age is under 14 years and above 60 years.The people who are employed in agri. activities at the age of 14 years to 60 years are classified in agri. labourer.The labour composition of women engaged in agri. is classified by following ways. Women are employed in various agri. activities in the study area. The labour composition of women is classified on total labour days worked on the following agri. production.

Composition Base	% of Labour
a) Crop production	%
b) Cash production	%
c) Oil & seed production	%
d) Poultry production	%
e) Animal husbandary & dairy production	%

The researcher want to study how much percentage of women are engaged in traditional agri. pattern and how much are in modern agri. pattern in study area.In this context researcher assumed that the households where traditional agri. methods are used, have been kept in traditional pattern of women labour and the households where modern agri. techniques are used, have been kept in modern pattern of women labour. The following five determinants have been taken to define the traditional and modern pattern of women labour in the study area.

Determents of pattern		No. of Hh
Traditional	Modern	
i) Casual labour	i) Permanent labour	
ii) Without using machine & Equipment	ii) Using machine & equipment	
iii) without using chemical fertilizer & pesticides	iii) Using chemical fertilizer & pesticide	
iv) Have not any training/ education for agri. prod.	iv) Have training education for agri. prod.	
v) Depend on rainfed agriculture	v) Depend on irrigation system agriculture	

4. Results :

4.1 Access to agricultural inputs by male and female in Pipaladi VDC of Kanchanpur district

4.1.1. Access to Land holding in selected household of Pipaladi VDC by gender division

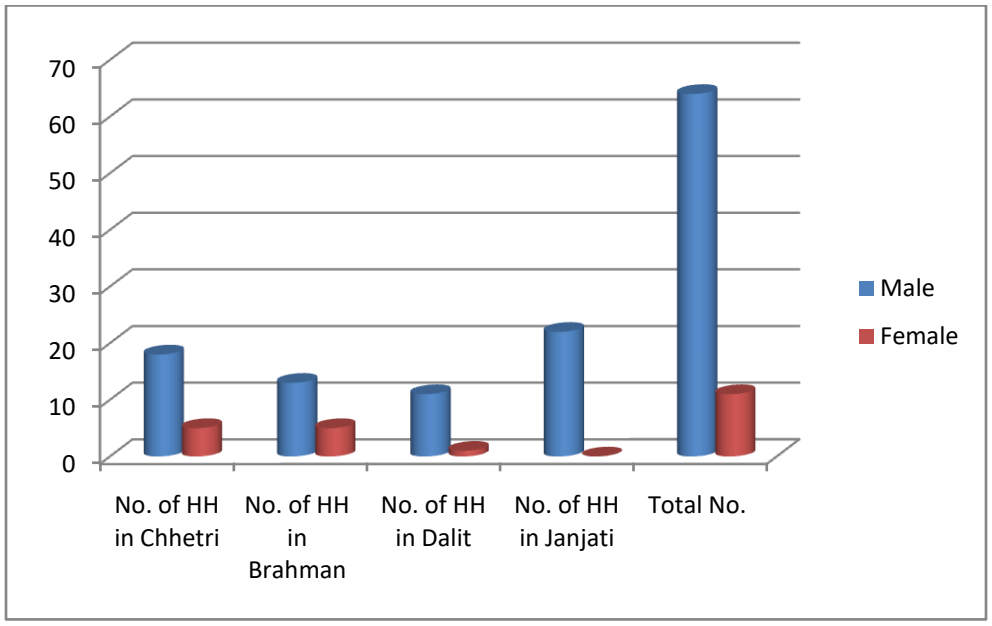
Table No.2

No. of Hh & percentage

Gender	No. of HH in Chhetri	No. of HH in Brahman	No. of HH in Dalit	No. of HH in Janjati	Total No.
Male	18 (78 %)	13 (72 %)	11 (100%)	22 (100%)	64 (85%)
Female	5 (22 %)	5 (28 %)	1 (0%)	0 (0%)	11 (15%)
Total	23	18	12	22	75

Source : Primary Field Survey 2072

Diagrametical representation of above data is shown by following table



From the above table and diagram it is clearly seen that, among the total of 75 household of Pipaladi VDC, male has accessed to land holding in 64 households or 85% of Hh where as female has accessed to only 11 households or 15% of Hh.

4.1.2. Access to Machine & equipment in selected household of Pipaladi VDC

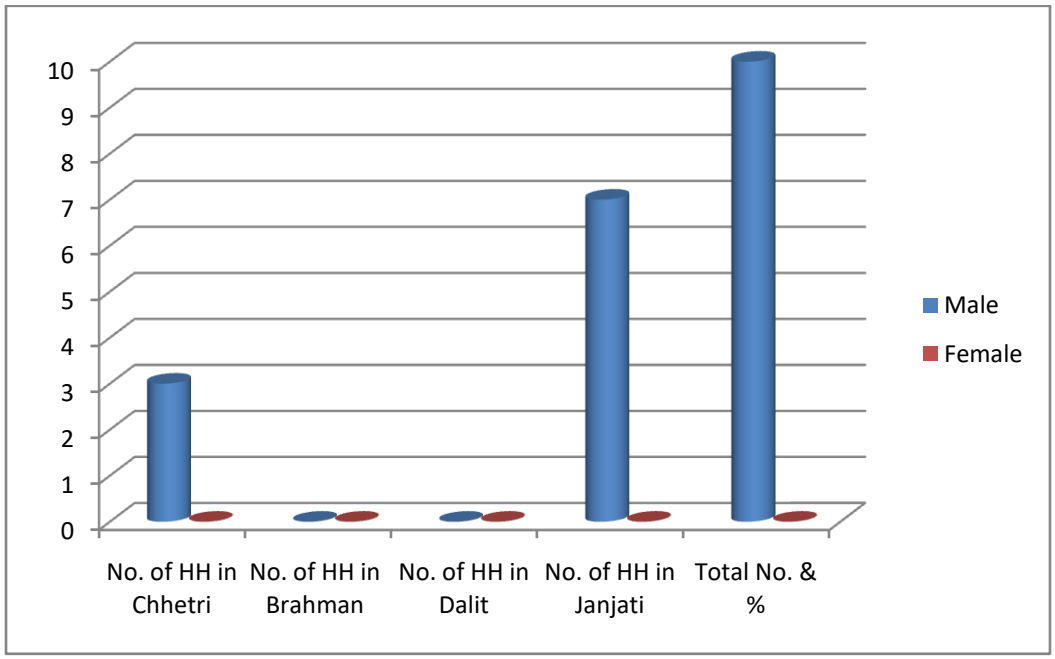
Table No.3

No. of Hh & percentage

Gender	No. of HH in Chhetri	No. of HH in Brahman	No. of HH in Dalit	No. of HH in Janjati	Total No.
Male	3 (13 %)	0 (0%)	0 (0%)	7 (32%)	10 (16%)
Female	0 (0 %)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Total	23	18	12	22	75

Source : Primary Field Survey 2072

Diagrametical representation of above statistics is presented below in the form of circular bar



From the above table and diagram it is clearly seen that, among the total of 75 household of Pipaladi VDC, male has accessed to machine & equipment in 10 households i.e.16% of Hh and female has no access to machine & equipment.

4.1.3. Access to Implement in selected household of Pipaladi VDC by gender division

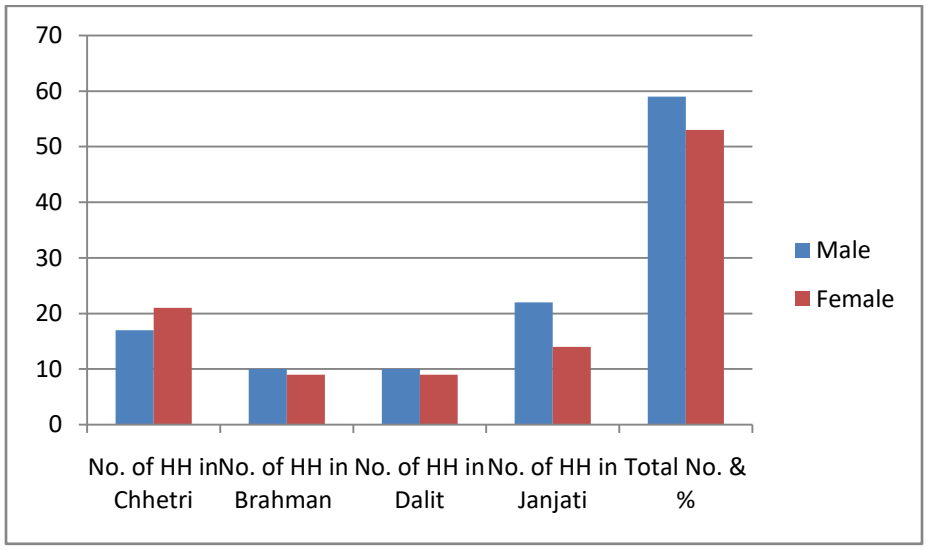
Table No.4

No. of Hh & percentage

Gender	No. of HH in Chhetri	No. of HH in Brahman	No. of HH in Dalit	No. of HH in Janjati	Total No.
Male	17 (74 %)	10 (56%)	10 (83%)	22 (100%)	59 (79%)
Female	21 (91 %)	9 (50%)	9 (75%)	14 (64%)	53 (71%)
Total	23	18	12	22	75

Source : Primary Field Survey 2072

Diagrametical representation of above statistics is presented below in the form of multiple bar diagram



From the above table and diagram it is clearly seen that, among the total of 75 household of Pipaladi VDC, male has accessed to agriculture implements in 59 households i.e. 79% of Hh where as female has accessed to 53 households i.e. 71% of Hh.

4.1.4. Access to Livestock in selected household of Pipaladi VDC by gender division

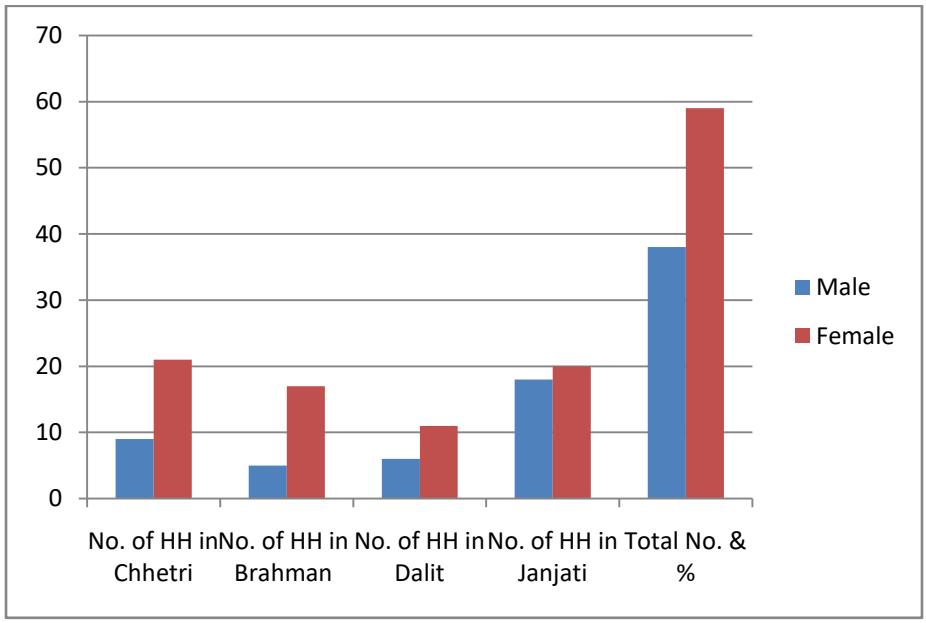
Table No.5

No. of Hh & percentage

Gender	No. of HH in Chhetri	No. of HH in Brahman	No. of HH in Dalit	No. of HH in Janjati	Total No.
Male	9 (39 %)	5 (28%)	6 (50%)	18 (82%)	38 (51%)
Female	21 (9 %)	17 (94%)	11 (92%)	20 (91%)	59 (79%)
Total	23	18	12	22	75

Source : Primary Field Survey 2072

Diagrametical representation of above data is presented below by the help of multiple bar diagram



From the above table and diagram it is clearly seen that, among the total of 75 household of Pipaladi VDC, male has accessed to livestock in 38 households or 51% of Hh where as female has accessed to livestock in 59 households i.e. 79% of Hh.

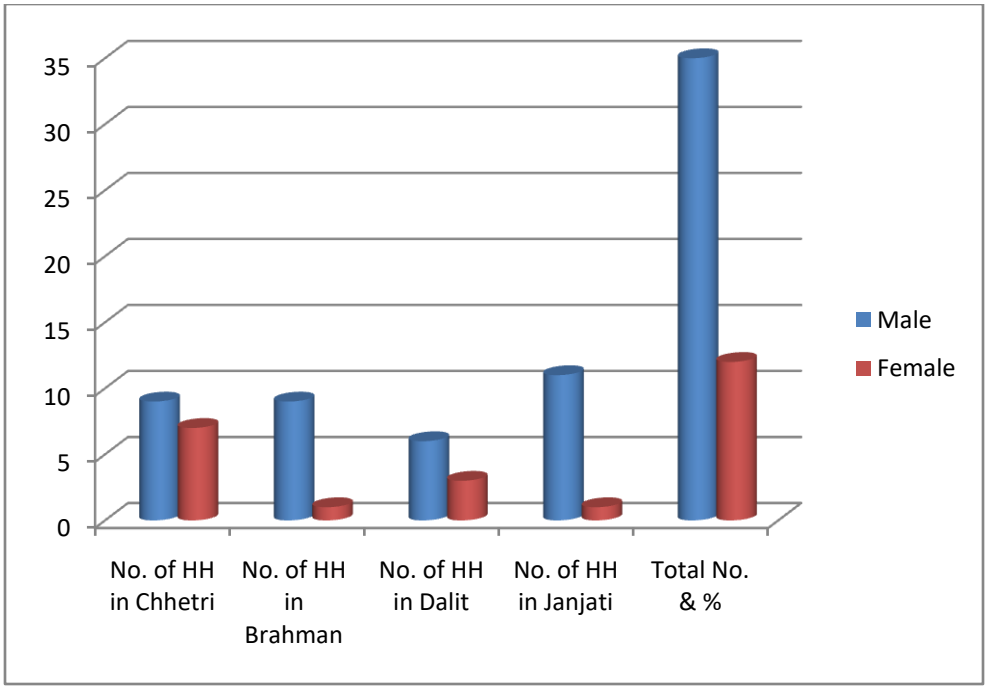
4.1.5. Access to Agricultural loan in selected household of Pipaladi VDC by gender division

Table No.6

No. of Hh & percentage

Gender	No. of HH in Chhetri	No. of HH in Brahman	No. of HH in Dalit	No. of HH in Janjati	Total No.
Male	9 (39 %)	9 (50%)	6 (50%)	11 (50%)	35 (47%)
Female	7 (30 %)	1 (5%)	3 (25%)	1 (4%)	12 (16%)
Total	23	18	12	22	75

Graphical representation of above statistics is presented by the help of following multiple bar diagram



From the above table and diagram it is clearly seen that, among the total of 75 household of Pipaladi VDC, male has accessed to agricultural loan in 35 households i.e. 47% of Hh where as female has accessed to 12 households i.e. 16% of Hh.

4.1.6. Access to Fertilizer & pesticide in selected household of Pipaladi VDC by gender division

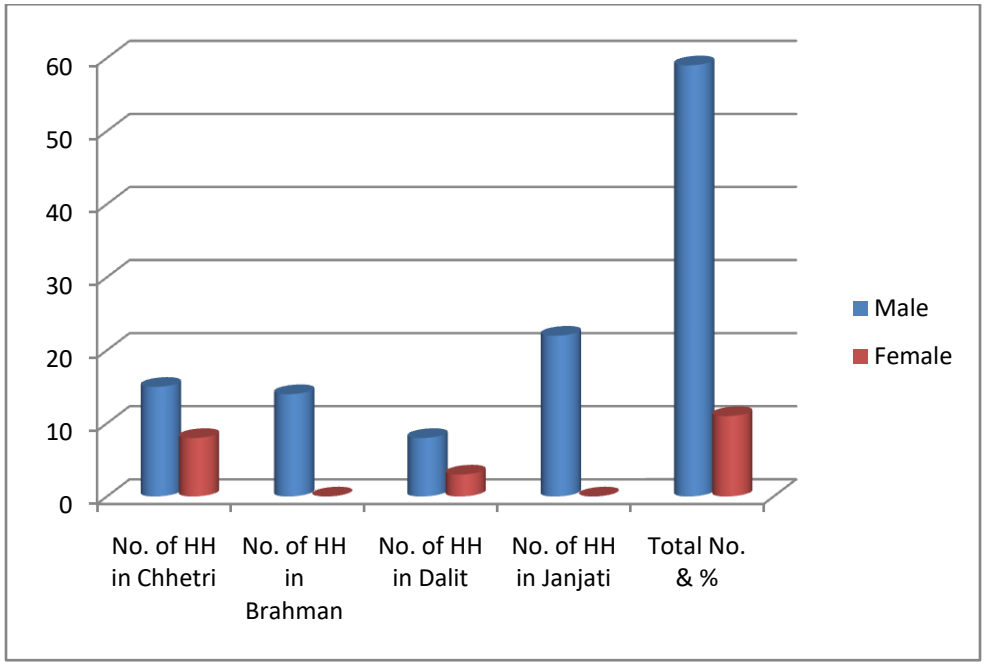
Table No.7

No. of Hh & percentage

Gender	No. of HH in Chhetri	No. of HH in Brahman	No. of HH in Dalit	No. of HH in Janjati	Total No.
Male	15 (65 %)	14 (78 %)	8 (67%)	22 (100%)	59 (79%)
Female	8 (35 %)	0 (0 %)	3 (25%)	0 (0%)	11 (15%)
Total	23	18	12	22	75

Source : Primary Field Survey 2072

Graphical representation of above statistics is presented by the help of following multiple bar diagram



From the above table and diagram it is clearly seen that, among the total of 75 household of Pipaladi VDC, male has accessed to fertilizer & pesticides in 59 households i.e. 79% of Hh where as female has accessed to only 11 households i.e.15% of Hh.

4.1.7. Average access to Agricultural inputs by male and female in selected household of Pipaladi VDC

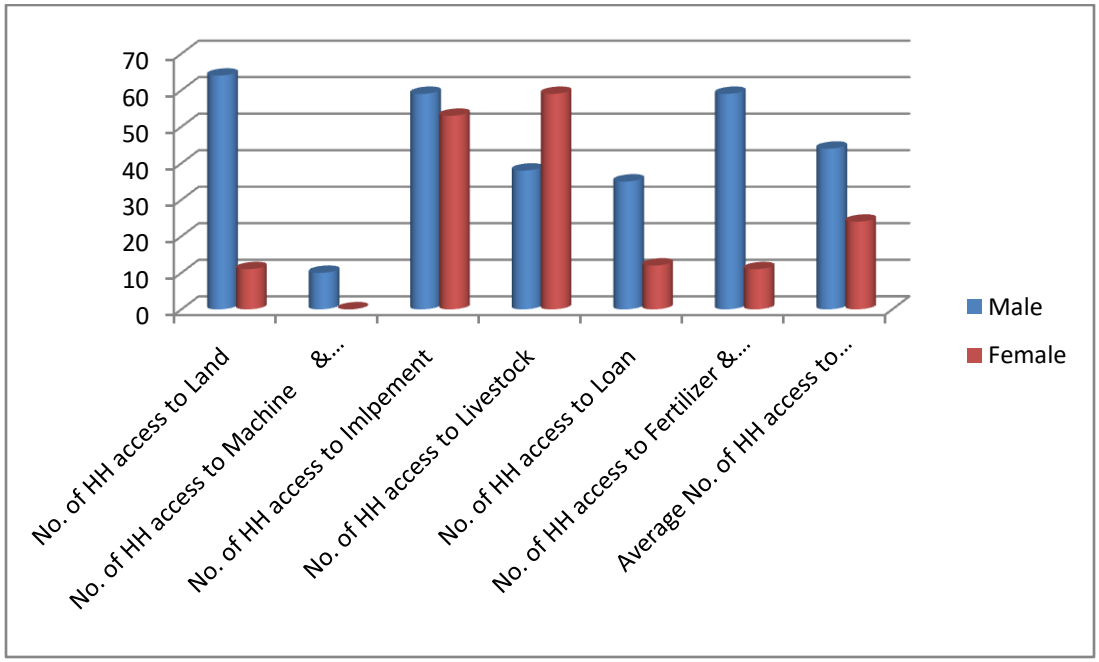
Table No.8

No. of Hh & percentage

Gender	No. of HH access to Land	No. of HH access to Machine & equipment	No. of HH access to Imlpement	No. of HH access to Livestock	No. of HH access to Loan	No. of HH access to Fertilizer & pesticide	Average No. of HH access to Agricultural Inputs
Male	64 (85%)	10 (16%)	59 (79%)	38 (51%)	35 (47%)	59 (79%)	44 (59%)
Female	11 (15%)	0 (0 %)	53 (71%)	59 (79%)	12 (16%)	11 (15%)	24 (32%)
Total	75	75	75	75	75	75	75

Source : Primary Field Survey 2072

Diagrametical representation of above data is presented below in form of multiple bar diagram



From the above table and diagram it is depicted that, among in the total of 75 households of Pipaladi VDC, the average access of male to the agricultural inputs is 44 households i.e.59%

ofHh where as the average access of female to the agricultural inputs is 24 households i.e.32% of Hh.

4.2 Labour composition of women in the various agricultural activities in Pipaladi VDC

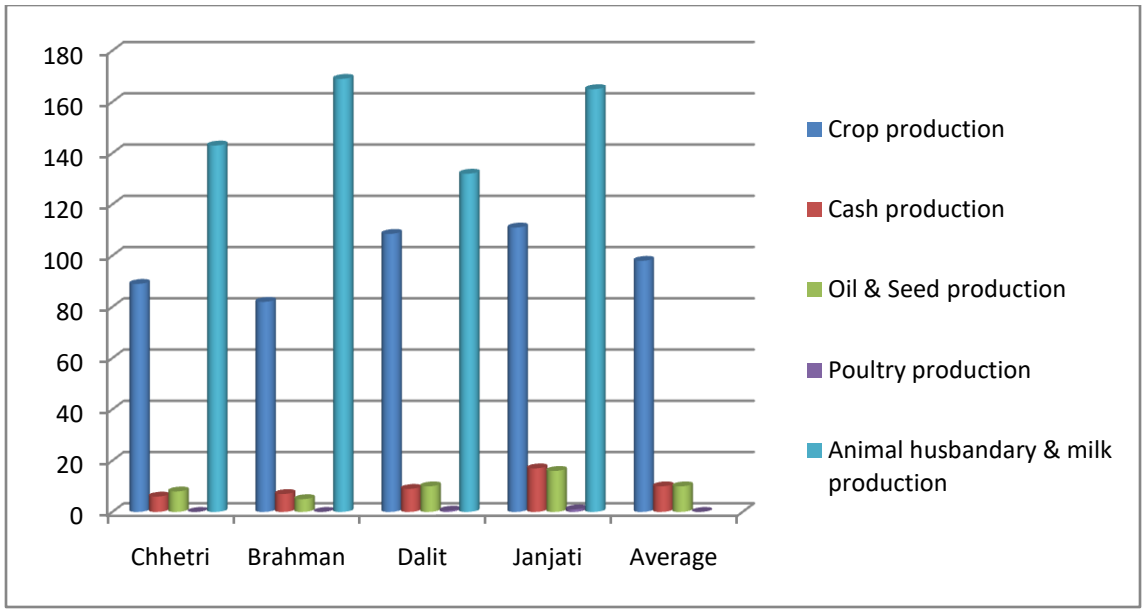
Table No.9

Labour days & Percentage

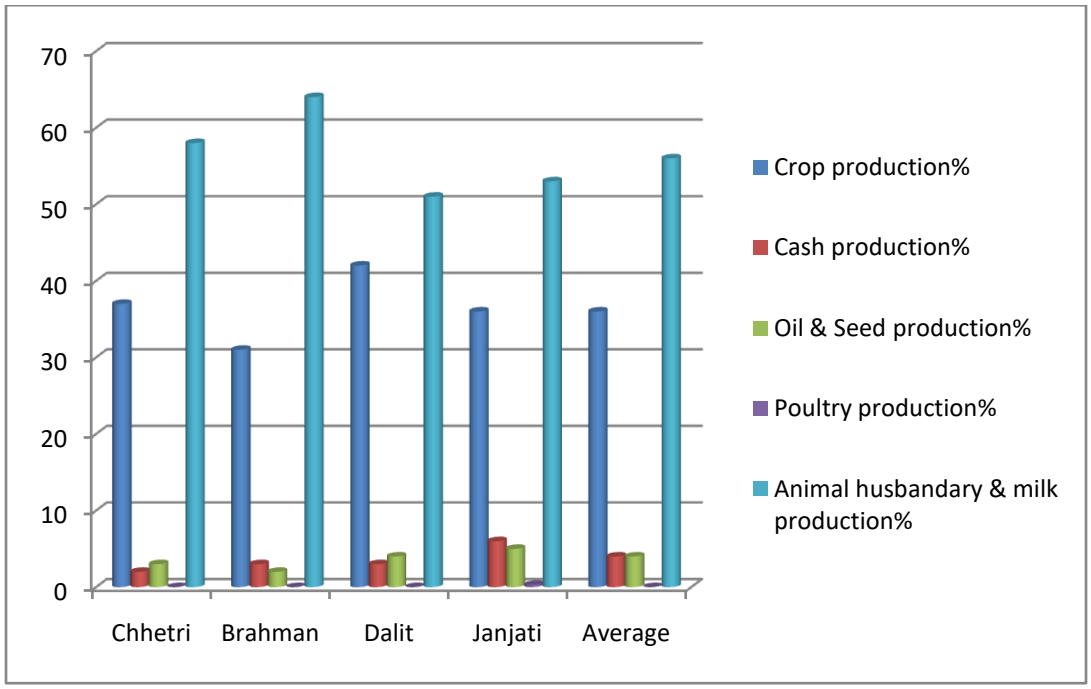
Composition	Chhetri	Brahman	Dalit	Janjati	Average
Crop production	89 (37 %)	82 (31%)	108.5 (42%)	111 (36%)	98 (36%)
Cash production	6 (2 %)	7 (3 %)	9 (3%)	17 (6%)	10 (4%)
Oil & Seed production	8 (3 %)	5 (2 %)	10 (4%)	16 (5%)	10 (4%)
Poultry production	0 (0 %)	0 (0 %)	0.5 (0%)	1 (0.3%)	0 (0%)
Animal husbandary & milk production	143 (58 %)	169 (64 %)	132 (51%)	165 (53%)	152 (56%)
Total	246 (100 %)	263 (100 %)	260 (100%)	310 (100%)	270 (100%)

Source : Primary Field Survey 2072

Graphical representation of above statistics with respect to labour day is presented below in the form of multiple bar diagram



Graphical representation of above statistics with respect to percentage is presented below in the form of multiple bar diagram



From the above table and figure it is depicted that, in the 75 household of Pipaladi VDC, total labour per woman employed in agricultural activities is 270 days in the last year in which 36%

labour engaged in crop production, 4% in cash production, 4% in oil & seed production, 0% in poultry production and 56% labour engaged in animal husbandry & milk production.

4.3 Labour Pattern of women in agriculture production in Pipaladi VDC

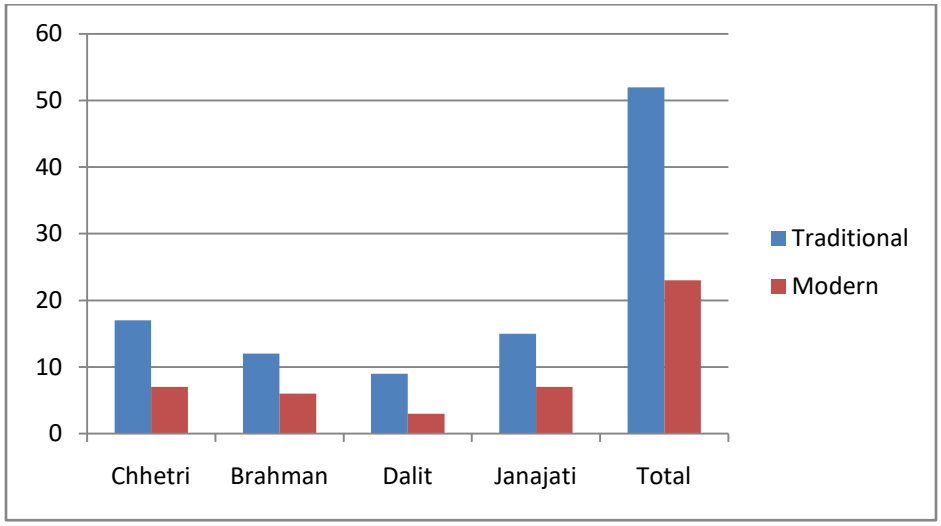
Table No.10

In Percentage of Hh

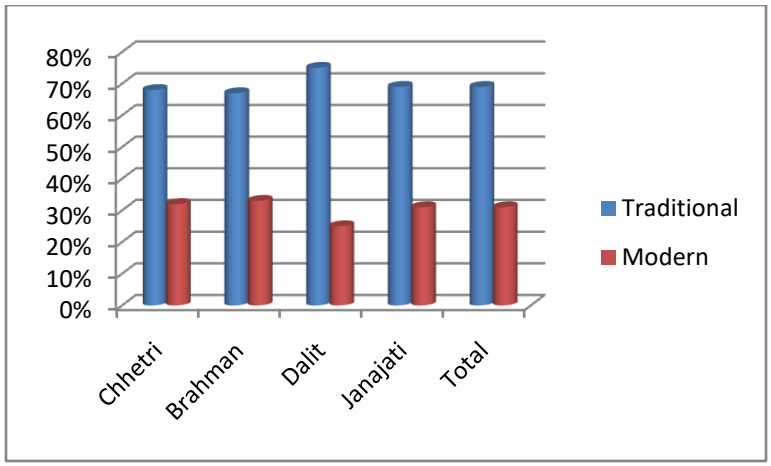
Pattern	Chhetri	Brahman	Dalit	Janajati	Total
Traditional	16 (68 %)	12 (67%)	9 (75%)	15 (69%)	52 (69%)
Modern	7 (32%)	6 (33%)	3 (25%)	7 (31%)	23 (31%)
Total Hh	23	18	12	22	75 (100%)

Source : Primary Field Survey 2072

Graphical representation of above statistics with respect to labour day is presented below in the form of multiple bar diagram



Graphical representation of above statistics with respect to percentage is presented below in the form of multiple bar diagram



From the above table and figure, the working pattern of women in 75 household of Pipaladi VDC is depicted. In the total of 75 household of Pipaladi VDC, it is clearly seen that the women labourer of 52 household i.e. 69% are engaged in traditional pattern where as women labourer of 23 household i.e. 31% are engaged in modern pattern of agricultural activities.

5. Conclusion and Suggestions

For the rapid and sustain and inclusive development, it is need of the time to realize the importance of female in agriculture and give them reorganization which is lacking in their work and sacrifice. Female labor force is as efficient as male population. They perform household duties which are considered as part of their life and inborn duty. These works consume a lot of efforts and time in their daily life but all this hardship is unrecognized. This is not enough for a rural women‟s life she is as active as a man in agriculture but also in agro-based activates. But instead of that much contribution in the economy she is dominated by male population, she is less paid; her hardships are under sated not only in the society but also in the statistics of the Government. Women participation is understated most of the times which is not healthy for the state of economy because women are the majority of population especially in rural areas of the country where agricultural activities are conducted. Reorganization of resources in such a way that female also gets credit, access to the market and knowledge of work. All works done by rural women — agriculture, livestock and traditional crafts making — should be recorded to ensure their access to resources, to open bank accounts and to borrow money and buy agriculture inputs like fertilizers and seeds. The government should offer agricultural subsidies to women farmers in order to utilize the immense and talented gender. There is a need for revising agricultural policy and making reforms keeping insight women‟s problem in playing an

important and significant role in economy. It should eliminate gender biasness, provide quality education, and give them latest technology which is the need of time to stand in the line with developed countries. Following are the recommendations which the Govt. should made to enhance and stabilize the female participation according to capacity and need of the development in agriculture sector:

1. Improve Health facilities and provide hygienic nutrition
2. Provide basic education
3. Made familiar with Latest Means of Agriculture
4. Provide Land Ownership and Access to Credit Facilities
5. Make economic policy & reforms
6. Teach techniques and skills
7. Land tenure policy need to be urgently formulated to ensure equal land rights to men and women. Provision should be made in agricultural services to provide certain number of appointments to female in decision making level.
8. Women agricultural agents should be appointed with a special focus on rural females and to bridge the information gap between applied research and rural women.
9. Facilitate access to all forms of resources: credit, property, training and information.
10. Establish and promote women's groups for collective action.

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