

研究ノート Research Note

A Comparative Study of the Socioeconomic Status of Women in the Jyapu Community of the Lalitpur and Bhaktapur Districts of Nepal

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Abstract: Nepal is predominantly a patriarchal society; there are high levels of gender disparity, and women lag behind men both socially and economically. The Jyapu people (a sub-caste of the Newar ethnic group) constitute one of the largest ethnic groups in the Kathmandu Valley. This study explores the economic and social status of Jyapu women by examining their productive/economic roles, their social/community engagement, and their involvement in decision-making processes, with a particular focus on water use and the conservation of stone spouts and traditional wells. The study reveals that Jyapu women are not sufficiently empowered economically to play a major role in wider decision-making processes but that their involvement in community-based activities (including water conservation) and economic entrepreneurship is critical at the domestic and community levels. The study demonstrates that Jyapu women are the major users of traditional water resources and play an important role in the conservation process, possessing long-standing knowledge for climate-change adaptation practices.

Key words: Women, economic and social status, Jyapu community, decision making

I. Introduction

Traditionally, women in Nepalese households are responsible for household chores, cooking, child-rearing, and collecting fuel wood and water for the home. In addition, many women are involved in farming and other income generating activities, partly due to the fact that an increasing number of Nepalese men are travelling abroad to find work. However, society and the state have been slow to recognize the contribution made by Nepalese women to the country's economy.

According to the Central Bureau of Statistics (CBS, 2012), the total population of Nepal is 26.5 million, of which, around 49% are women. According to the FAO (2010), around 12.6% more women than men are involved in the agriculture sector, while Action Aid (2013) reports that Nepalese women work an average of 11 hours per day whereas Nepalese men work an average of 8 hours per day. The length of the average woman's working day increased from 10.8 hours in 1981 to 10.9 hours in 1995 (Stree Shakti, 1995). The Resource Centre for Primary Health Care (RCPHC, 2008) reports that rural women work more hours per day (13.2) than urban women (9.7).

In the 2014 Gender Gap Report produced by World Economic Forum (WEF), Nepal ranks 112th among the 142 countries surveyed in gender disparity, revealing high level of gender disparity. Nepalese women are often deprived of their rights in terms of education, health, and economic opportunities. Women are the victims of the centuries-old oppression that manifests itself in customs, social norms, social systems, and discriminatory social practices. According to Ministry of Women, Children and Social Welfare (MoWCSW et al., n.d.), the patriarchal attitudes in Nepalese society have led to a deep rooted stereotyping of women and high levels of discrimination. This can be seen in the high school dropout rates among girls, the disparity in access to education, low literacy rates among women, poor access to basic health care, and high maternal mortality and morbidity rates. UNICEF (2006) states that the low status of women in Nepalese society is primarily due to the lack of educational opportunities for women and girls, and their general absence from decision making processes. As a result, many women do not demand access to healthcare and/or resources, and do not stand up for their

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reproductive rights. The female literacy rate (in the population aged 5 years and above) is only 57.4% compared to a male literacy rate of 75.1% (CBS, 2012). In addition, Nepal has one of the highest maternal mortality ratios in the world with 515 deaths per 100,000 births. Although the Government of Nepal announced a 33% reservation for women at all levels in all government bodies, women's participation continues to be negligible (NWC, 2012). Provisions to allow women to inherit property from their parents have also proven ineffective; only 25% of households are headed by women and nearly 80% of women have no rights to land or to their homes (CBS, 2012). UNICEF (1996) confirms that family decisions are generally made by men, indeed, women are normally discouraged from participating in decision making processes. The Nepal Demographic and Health Survey Report of 2006 highlights the fact that one third of Nepalese women are excluded from all types of decision making process. Women continue to be discriminated against and denied fair and equal access to opportunities and resources (UN Women, and NCCR, 2013). It is clear from the above data that gender discrimination is widely prevalent in Nepalese society.

There are an estimated 125 ethnic groups in Nepal in addition to a plethora of local languages. According to the CBS (2012), the Newars (who are indigenous to the Kathmandu Valley (Gellner, 1986)) are the 6th largest ethnic group, with a population of 1.3 million. 55% percent of Newars live in the Kathmandu Valley. In Kathmandu, Lalitpur, and Bhaktapur districts, Newars form 68.44%, 78.44% and 97.74% of the local population, respectively (CBS, 2012). The Newars are a successful and well-established ethnic group, with a rich cultural heritage. The Newar community boasts the largest number of feasts and festivals of all the ethnic groups of Nepal. A number of authors such as Nepali (1988), Gellner (1986), Toffin (2007), Keshav Lall Maharjan (2007), Vaidya and Maharjan (2012) and Ishii (ed.) (2005) have written about the Newars' unique culture, festivals, rituals, costume and lifestyle. One of the distinctive features of Newar socio-economic organization is *guthi*: a social institution that binds Newars together at different levels of caste, patrilineage, and territory (Bista, 2000; Toffin, 2007; Nepali, 1988). The Sithi Nakha Guthi, is an organisation that manages the cleaning of traditional stone spouts and wells on the day of the Sithi Nakha festival

which is still celebrated each year in the Kathmandu Valley (Nepali, 1988).

The Jyapu are a sub-group of the Newar community. According to Gellner (1986), the Jyapu do not seem to have myths of origin relating to the Kathmandu Valley. Indeed Toffin (1984) argues that the Jyapu are the ancient tribal substrate on which Newar civilization was built. In the Newar language, Jyapu means 'farmers' or 'those who (used to) work in field. The word Jyapu is a combination of 'jya' (work) and 'pu' (deriving from *puwanka yayimha* - to complete the work one sets out to do). Perhaps the best general translation is 'one who completes the work with responsibility'. The Jyapu community has secured a definite space amongst the many other Newar sub-groups due to their distinct and well-established customs and culture. The majority of Jyapu communities are concentrated in various parts of the Kathmandu Valley. Although their primary occupation is farming, some are masons, potters, musicians, artisans and photographers. In recent years, Jyapu people have also excelled in business and politics. As in other Newar sub-groups, Jyapu women remain busy throughout the year playing both a productive and social role in the family set-up. Jyapu women are easily identified by their traditional dress; *haku patasi* (black sari) with a red border, *putu lan* (blouse), and *tisa* (jewellery) that includes gold earrings and silver necklaces, still common in the rural areas.

Traditional stone spouts and wells are the main sources of water for Newar communities in the Kathmandu Valley (UN Habitat, 2008). Indeed, the Newar communities of Bhaktapur and Lalitpur have relied on such traditional water resources since time immemorial. A stone spout is a traditional stone water tap, commonly known as a '*loan hiti*' in Newar language and a '*dhunge dhara*' in Nepali. During the past few decades, water security has emerged as a major issue in Bhaktapur and Lalitpur districts. Jha (2013) states that the inadequate water supply in the Kathmandu Valley is supplemented by the ground water resources drawn from traditional wells and stone spouts. ICIMOD (2014) observes that many stone spouts are now drying up, leading to a daily struggle to obtain clean water in many places in Nepal's mid-hills. In the Kathmandu Valley, as in many rapidly urbanizing areas around the world, adaptation to climate change impacts on water resources is critical (Jha & Shrestha, 2013). IPCC (2007) states that Nepal's water

supply is expected to decrease due to the increase in the variability of precipitation, the decrease in snowfall, the rapid melting of glaciers in the long term, and reduced groundwater recharge. In addition, demand is likely to outstrip supply. Climate change impacts are likely to affect traditional water resources such as stone spouts and wells. UN Habitat (2008) observes that Newar communities in the Kathmandu Valley are skilled at managing historical water supply systems, and play a key role in meeting increased water demand. Traditional water resource management was also reviewed by Sharma et al. (2009) in their study of Nepal's indigenous knowledge. In Bhaktapur and Lalitpur, this indigenous knowledge is held largely by women and significantly contributes to climate change adaptation and improved water management practices in both the districts.

II. Problem Statement and Rationale

Gender disparity and discrimination against women irrespective of caste or ethnicity has been a feature of Nepal's predominantly patriarchal society for many centuries. Women have less access to education, knowledge, resources and opportunities than men, and lag behind in both the social and economic spheres. Nepal Participatory Action Network (NEPAN, 2001) reports that about 86% of Nepalese women are limited to reproductive roles in the society, leading to their overall lack of confidence. The situation is perpetuated by a number of socio-cultural beliefs and practices. The birth of a baby boy is a cause for celebration in Nepalese society, as he is viewed by the family as an economic asset who will support his parents through old-age, and continues their lineage. The birth of a baby girl, on the other hand, comes as somewhat of a disappointment. As girls are sent to their in-laws' houses following marriage, money spent on their education and healthcare is ultimately viewed as a poor investment. As a result, the overall development of a daughter is accorded less priority than that of a son. Daughters are expected to take on household responsibilities at an early age, often at the cost of their education, health and nutrition. Jyapu women also fall victim to such social and economic obligations and are excluded or discouraged from involvement in household and family decision making processes because of patriarchal values and power structure in the families. Jyapu widows are not permitted to re-marry, nor may

they lead religious rituals or other functions. The oldest male is always the head (*thakali/thakuli*) of a Jyapu family and takes sole responsibility for decision making. However, Jyapu widow cannot be "*thakali/thakuli nakin*" (the eldest female in the Newar household). Although the Jyapus are in many ways more liberal than other Hindu groups, women may not marry a man from a lower Jyapu caste. In general, Jyapus that hold very traditional beliefs tend to be more conservative, while those with more education and better opportunities for social participation and economic engagement tend to be more liberal.

III. Objectives of the Study

The main objective of the study is to analyze the decision making capacity of Jyapu women influenced by their economic and social roles, in particular to their participation in water use and management practices with reference to traditional water resources (stone spouts and wells). The study will compare the decision making roles of Jyapu women in selected Jyapu communities in Lalitpur and Bhaktapur districts.

IV. Study Area

The study was initially carried out in 2010 in the Lalitpur and Bhaktapur districts of the Kathmandu Valley. Study sites were revisited by the researchers in 2013. The Kathmandu Valley comprises the administrative districts of Kathmandu, Lalitpur and Bhaktapur and covers an area of approximately 300km². The valley is completely surrounded by high hills and is positioned at a latitude of 26.533° North, 86.733° East with an average altitude of 1,350 meter above the mean sea level (Nepali, 1988). The valley is home to the largest concentration of domestic migrants in the country due to its comparative advantages in terms of access to political, administrative, economic, education, trade, industrial, and tourism related activities. Kathmandu district is classified as a metropolitan city, whereas both Lalitpur and Bhaktapur districts are classified as sub-metropolitan cities.

1. Lalitpur District

Figure 1 shows the location of Kathmandu, Bhaktapur and Lalitpur districts on the map of Nepal. Lalitpur district covers an area of 385km² and has its headquarters in Patan city (also known as Yala). Patan city is believed to have been built in the 3rd century B.C.

by the Kirat dynasty. It was expanded by Lichhavi kings in the 6th century and again by the Malla kings in medieval period. The Malla kings ruled Patan until the ascension of the Shah dynasty in 1768. The languages spoken in Lalitpur district are Newar (38.2%), Nepali (43.5%), Tamang (11.1%), Magar (1.0%), Maithali (1.1%), Bantawa (0.9%), Gurung (0.6%), and Pahari (0.6%) (MPRC, 2010). According to the CBS (2012), Lalitpur ranks 9th on the women’s empowerment index and 15th on the gender discrimination index. The human development index for Lalitpur district is: poverty deprivation (21), women’s empowerment (9), gender discrimination (15), and overall composite (5).

2 Bhaktapur District

The district of Bhaktapur is commonly known as Khwopa. Bhaktapur itself is an ancient agrarian town with a predominantly Newar population; the social order in Bhaktapur derives from the Newar caste system. The capital of Nepal during the Malla dynasty until the second half of the 15th century, Bhaktapur is known for its rich culture and tradition. The whole town is listed as a UNESCO World Heritage Site for its fabulously preserved temples and buildings, and the output of its traditional artisans, musicians and artists. The languages spoken in Bhaktapur district are Newar (54.3%), Nepali (37.0%), Tamang (6.4%), Magar (0.3%), Maithali (0.3%), Bantawa (0.2%), Hindi (0.2%), and others (0.5%) (MPRC, 2010). Bhaktapur ranks 13th on the women’s empowerment index and 16th on the gender discrimination index. The human development index for Bhaktapur district is: poverty deprivation (12), women’s empowerment (13), gender discrimination (16), and overall composite (4).



Figure 1 Location of Kathmandu, Lalitpur and Bhaktapur Districts

Sources: Base map commons.wikimedia.org

V. Methodology

The study used the qualitative inquiry method to inductively generate data from fieldwork through interviews. As the study targeted Jyapu women, respondents and locations were selected using purposive sampling (the snowballing technique). As a result, the selection of respondents and locations varied during the data collection. Lalitpur and Bhaktapur districts were selected based on the high concentration of Newars. Similarly wards (administrative areas) with a high concentration of Jyapu communities were selected. Authors used the general interview guide approach which involves outlining a set of issues to explore with each respondent prior to the start of the interview. The interview guide also served as a basic checklist during the interview to ensure that all the relevant data was collected. The issue of examining the role of women in decision making was a sensitive one, particularly in conservative Newar society where the majority of household decision makers are men. Questionnaires were tested before the actual field work started in order to avoid redundancy, and to eliminate elements that caused female respondents to feel uneasy.

The study was carried out in two wards of Lalitpur Municipality (Patan city) and three Village Development Committees (VDCs), together six wards Lalitpur and two municipalities, together 11 wards Bhaktapur districts (Table 1). Women from a variety of age groups were interviewed to ensure a broad spectrum of experience. The research team interviewed a total of 130 respondents, however information gathered from 11 respondents were discarded due to data inconsistency, using snowballing sampling method through chain referral process; resulting 60 in Bhaktapur and 59 in Lalitpur. The data collection process discontinued when the repeated nature of responses was received. In Lalitpur, the highest number of interviews took place in Subahal (15), while the lowest number took place in Thecho (9). In Bhaktapur, the most interviews were carried out in Chapacho (16) and the least in Sanothimi (4). The snowballing sampling is a non-probability sampling technique that helped in identifying information-rich key informants and people with a similar trait of interest.

Interviewers used semi-structured questionnaires to collect both qualitative and quantitative data. Interviews were complemented by direct observation in order to

Table 1 Wards of VDCs and Municipalities Selected for the Study

District	Study Areas	No. of respondents
Bhaktapur	Nagadesh - Madhyapur Thimi Municipality (wards 4, 5, and 6)	15
	Golmadhi - Bhaktapur Municipality (ward 7)	10
	Itachhen - Bhaktapur Municipality (ward 15)	8
	Chapancho - Madhyapur Thimi Municipality (ward 8, 9 and 10)	16
	Sanothimi - Madhyapur Thimi Municipality (ward 17)	4
	Lokanthali - Madhyapur Thimi Municipality (ward 15 and 16)	7
Lalitpur	Bungmati - VDC (ward 4, 5 and 6)	14
	Pilanchhen - Lalitpur Municipality (ward 7)	11
	Subahal - Lalitpur Municipality (ward 8)	15
	Thencho - VDC (ward 3)	9
	Chapagaun - VDC (ward 1 and 3)	10
Total		119

Source: Authors Field Survey, 2013

better understand the context in which the respondents were interacting. Secondary data was taken from reports and studies published by the Government of Nepal and by other organizations. Secondary data was triangulated with primary data and data obtained from observations.

VI. Key Findings

Interviews were conducted with varied age groups to get different perspectives on the research questions. Figure 2 shows the number of respondents by age in both Lalitpur and Bhaktapur districts. In Lalitpur district, 35 year-olds were the best represented age group among respondents. There were also a higher number of respondents aged between 31 and 40 in Lalitpur. In Bhaktapur, the best represented age group was 41-50 year-olds. The oldest respondents interviewed came from Lalitpur

district.

Indeed in general, respondents from Bhaktapur were younger. The oldest respondent was 80 while the youngest respondent was 20. Most respondents were between 31 and 40 years old.

Level of education may influence values and views about the socio-economic issues. There is an attempt to disaggregate the data on educational attainment of the interview participants. Figure 3 shows the education level of respondents from both the districts. Around 20% of respondents were illiterate while 10% were just literate; knowing basic alphabets and numbers, able to read and write names, and able to put signature in official documents. Few respondents (less than 5%) had completed intermediate (year 12) education, while about 5% had completed primary education. Fewer than 5% of

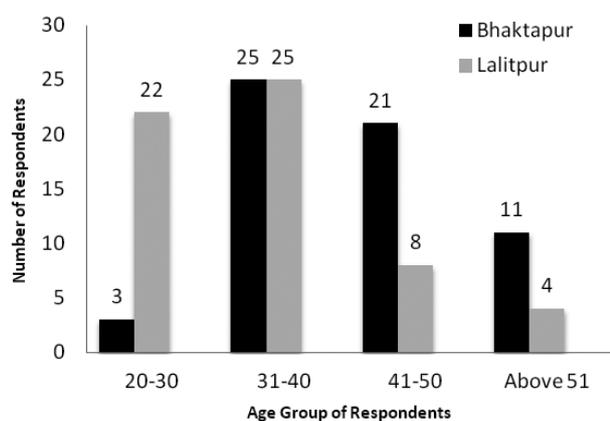


Figure 2 Respondents by Age

Source: Authors Field Survey, 2013

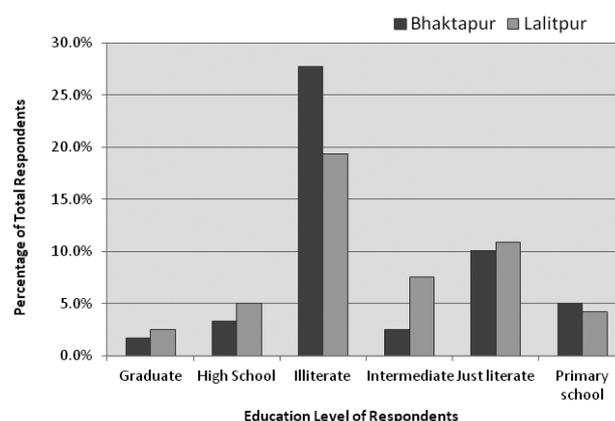


Figure 3 Education Level of Respondents

Source: Authors Field Survey, 2013

respondents were graduates. In Bhaktapur, around 28% of women are illiterate and 5% have completed primary schooling. The figures for Lalitpur are around 20% and around 4%, respectively. Other figures for women in Lalitpur include graduate level (3%), intermediate level (7%), high school level (5%) and just literate (11%). For Bhaktapur the figures are 1%, 2%, 3% and 10%, respectively.

There are different types of daily activity performed by Jyapu women in both the districts (Figure 4). Cooking and feeding are the major activities for women followed by washing dishes. The Frequency of work in Lalitpur include sweeping and cleaning, cooking and feeding, washing dishes, daily prayers, child care, and care of the family. Women in Bhaktapur are also engaged in similar work, except they tend to engage relatively more in household shopping, organizing religious functions and

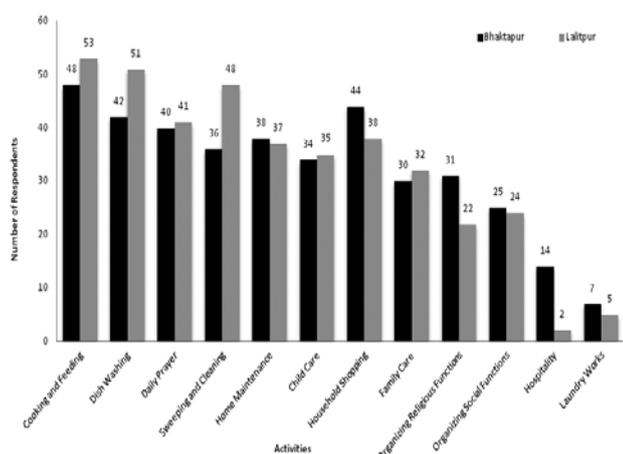


Figure 4 Daily Activity Performed

Source: Authors Field Survey, 2013

hospitality. Women in Lalitpur are more engaged in activities inside the home while women in Bhaktapur are more active in activities outside the home.

1. Involvement in Income Generating Activities

The study indicates that more than half of the respondents (54.6%) were involved in income generating activities. In Bhaktapur, about 65.0% of the respondents were involved in income generating activities whereas the figure for Lalitpur was only 44.1%. The chi-square test of independence suggests that involvement in various income generating activities is quite similar in both districts ($\chi^2 = 5.26, p\text{-value} > 0.05$). Table 2 shows the involvement of Jyapu women in income generating activities.

In Bhaktapur, agriculture is the major activity, followed by self-employment. Women in Bhaktapur are also involved in other income generating activities in both the public and private sectors. Few Jyapu women in Bhaktapur are involved in daily wage labouring. In Lalitpur district, more women are involved in daily wage labouring; many are also in government service. None of the women interviewed in Lalitpur district were involved in the public service sector (Figure 5).

The study compares the education level of the respondents and their corresponding involvement in different types of employment or productive activity (Figure 6). The majority of illiterate respondents are involved in agriculture, self-employment or the private sector. This is similar for those who are just literate. Those with higher levels of education tend to move away from

Table 2 Involvement in Income Generating Activities

District		Are you involved in various income generating activities other than household chores?		Total
		Yes	No	
Lalitpur	N	26	33	59
	%	44.1	55.9	100.0
Bhaktapur	N	39	21	60
	%	65.0	35.0	100.0
Total	N	65	54	119
	%	54.6	45.4	100.0
Chi-Square Tests		Value	Df	Asymp. Sig. (2-sided)
Pearson's Chi-Square		5.26	1	0.022

Source: Authors Field Survey, 2013

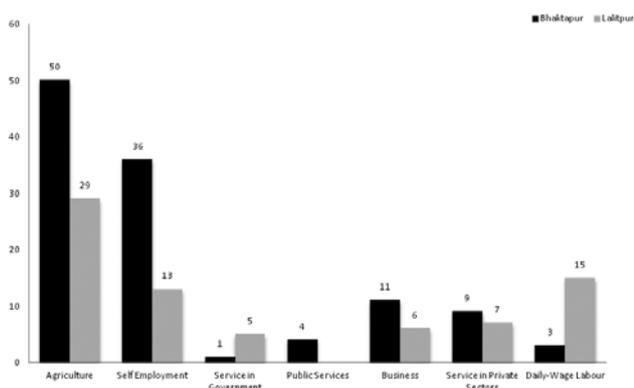
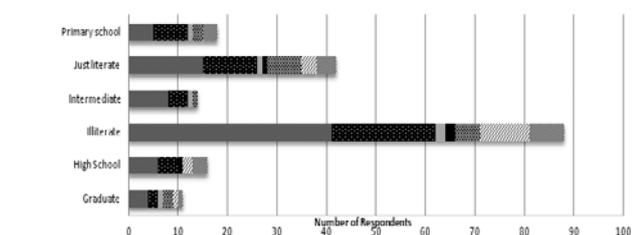


Figure 5 Involvement in Income Generating Activities
 Source: Authors Field Survey, 2013



	Graduate	High School	Illiterate	Intermediate	Just literate	Primary school
Agriculture	4	6	41	8	15	5
Self Employment	2	4	21	4	11	7
Service in Government	1		2	1	1	1
Public Services		1	2		1	
Business	2		5	1	7	2
Service in Private Sectors	1	2	10		3	
Daily-Wage Labor	1	3	7		4	3

Figure 6 Education Level and their Corresponding Involvement

Source: Authors Field Survey, 2013

agriculture and self-employment. Graduate respondents reported the lowest levels of involvement in these activities.

2. Categories of Income Generating Activity

There are different types of income generating

activities in both the districts (Table 3). It shows that 75.4% of Jyapu women are self employed while 24.6% work for private businesses. The self-employed category denotes women that generate income from home. Activities include sewing, weaving, pottery, candle making, making incense burners, running small shops and making masks and other handicrafts. The split between self-employment and employment in small businesses is equal in Lalitpur district (50% each) while in Bhaktapur, the majority of women interviewed were self-employed (92.3%). The chi-square test of independence infers that there is a sufficient evidence to conclude that there is a significant difference in the involvement of women in income generating activities (self-employed or employed in others' firms) in both districts ($\chi^2 = 15.05$, p -value < 0.000).

3. Family Income Sources

Women are involved in different types of profession by age group (Figure 7). Across the two districts, 50.0% of women aged between 20 and 30, and 50% of women aged between 41 and 50 are involved in government service. Conversely, none of the women aged between 31 and 40 and none of the women above 50 are involved in government service. The majority (51%) of those in the 31-40 age group are self employed. 75% of women aged between 41 and 50 are involved in public service. Many of those above 50 (18.7%) work in the private sector. Although women above the age of 50 are approaching retirement age, many are still economically active with 15.2% involved in agriculture, 17.7% in business-related activities and 8.2% self-employed. Of

Table 3 Income Generating Category

District		What are the various income generating activities you are involved in?		Total
		Self-employed	Employed	
Lalitpur	N	13	13	26
	%	50.0	50.0	100.0
Bhaktapur	N	36	3	39
	%	92.3	7.7	100.0
Total	N	49	16	65
	%	75.4	24.6	100.0
Chi-Square Tests		Value	Df	Asymp. Sig. (2-sided)
Pearson's Chi-Square		15.05	1	0

Source: Authors Field Survey, 2013

the women aged between 31 and 40, 44.4% are wage laborers while 35.4% are involved in agriculture. Similarly, 37.5% work in the private sector while 29.4% have small businesses. In the 41-50 age group, 41.2% work for private businesses while 29.1% are self-employed. Daily wage labourers account for 11.1%. Women in this last age group are the most economically active while only 27.8% in the 20-30 age group are involved in income generation activities.

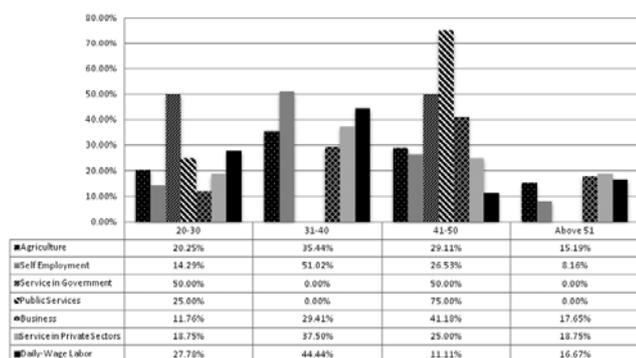


Figure 7 Involvement in Different Types of Profession by Age Group

Source: Authors Field Survey, 2013

It shows that women in Bhaktapur district working in agriculture contribute the largest share to overall family income (Figure 8). This is followed by those who are self-employed, those working for local businesses, and those working in the government service and private sectors. More women in Lalitpur are daily wage labourers or work in government service than in Bhaktapur.

Figure 9 shows percentages of women involved in various lines of work. As can be seen, agriculture is the dominant source of income (36.6%) in the Jyapu

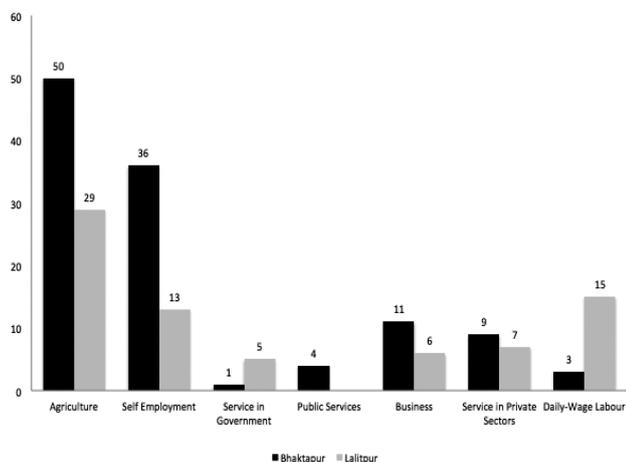


Figure 8 Contribution to Overall Family Income

Source: Authors Field Survey, 2013

community followed by self-employment (18.3%). Few women derive income from government (3.3%) or public (1.9%) service. Some 8.0% of women work in the private sector while 8.5% are involved in small-business related activities. More than 9.4% of Jyapu women are daily wage laborers. The study found that the low levels of education among Jyapu women preclude their greater involvement in the government and public service sectors.

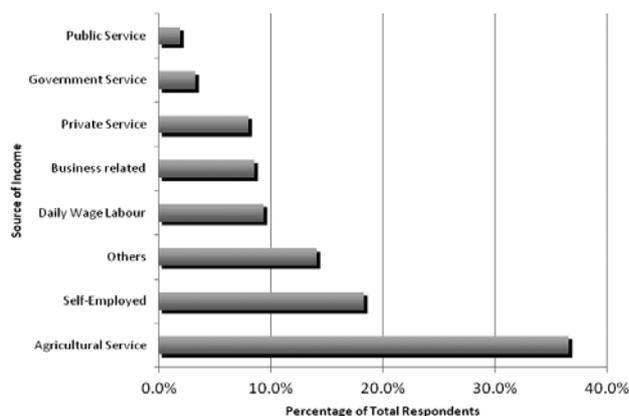


Figure 9 Percentages of Involvement in Various Lines of Work

Source: Authors Field Survey, 2013

4. Involvement of Women in Social Activities

Jyapu women are involved in a variety of social activities across the two districts (Figure 10). More women from Bhaktapur district are involved in cultural activities than women from Lalitpur. The same is true for involvement in savings schemes and cooperatives, and community based social service. Women in Bhaktapur are not only more economically active, but they are also more active in work related to their local communities. Conversely, women in Lalitpur are more active in *guthi*

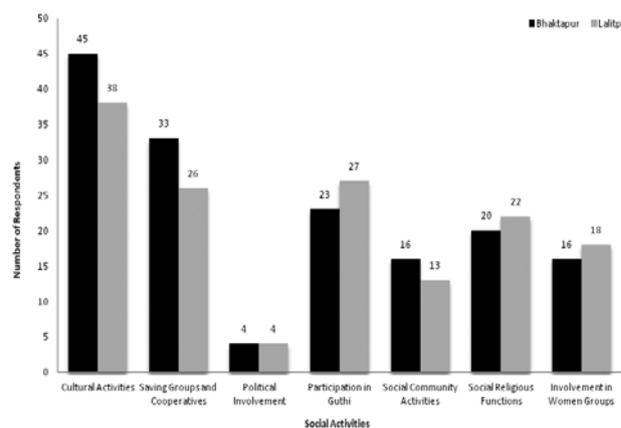


Figure 10 Involvement in Social Activities

Source: Authors Field Survey, 2013

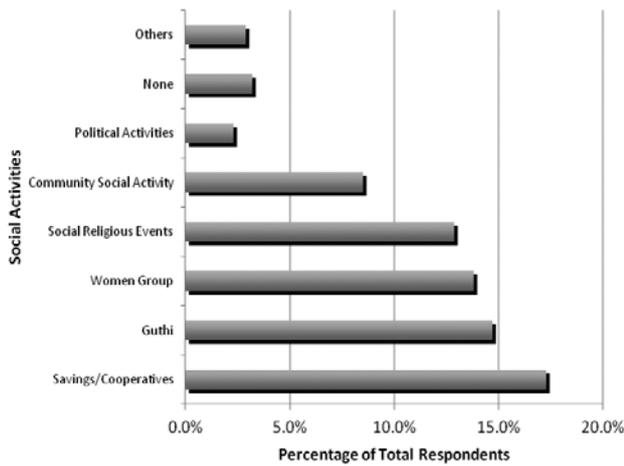


Figure 11 Percentage of Involvement in Social Activities
 Source: Authors Field Survey, 2013

related activities, and in participation in religious functions and women’s groups than their Bhaktapur counterparts. Very small numbers of women from both the districts participate in politics.

Figure 11 shows women’s involvement in social activities. 17.3% are involved in savings groups and cooperatives while around 14.7% are involved in guthis. 13.8% are involved in women’s groups. A significant number of women (12.9%) are involved in social and religious activities which include the cleaning of stone spouts and traditional wells, particularly on the day of the Sithi Nakha festival. 8.5% of women participate in community based social activities while only 2.3% are involved in politics.

5. Participation in Household Decision Making Processes

Decision making process is very complex in Nepali society. It is influenced by social norms, patriarchal values as well as socio-economic empowerment. Table 4 shows the main decision makers in Jyapu households. Overall it is men who are the decision makers in the Jyapu communities in both districts although there is some variation. In Bhaktapur, decisions are made by in-laws in 10% of families while in Lalitpur such decisions are made only in 5.1% families. In 18.6% of families in Lalitpur, decisions are made by the family collectively; the figure for Bhaktapur is 8.3%. The number of women who make family decisions in Bhaktapur (6.7%) is nearly double the number of women who make family decisions in Lalitpur (3.4%). Some 54.2% of families in the Lalitpur sample make joint decisions (i.e. women are included in the process) while for Bhaktapur the figure is 55%. Male heads of household make decisions in 19.3% of the families surveyed, while males in the household make decisions collectively in 13% of the families. Only about 5% of the women interviewed make family related decisions alone, while 7.6% stated that decisions were made by their in-laws. The chi-square test of independence suggests that the number of women involved in decision making about family matters is similar in both districts ($\chi^2 = 3.967, p\text{-value} < 0.05$).

6. The Influence of Social Activities on Decision Making

It shows that there is influence of women’s

Table 4 Decision Maker in the Family

District		Who is the predominant decision maker in your family					Total
		In laws	Jointly including women	Husband	Male family members collectively	Myself	
Lalitpur	N	3	32	11	11	2	59
	%	5.1	54.2	18.6	18.6	3.4	100
Bhaktapur	N	6	33	12	5	4	60
	%	10	55	20	8.3	6.7	100
Total	N	9	65	23	16	6	119
	%	7.6	54	19.3	13.4	5.0	100
Chi-Square Tests			Value	Df	Asymp. Sig. (2-sided)		
Pearson’s Chi-Square			3.967	4	0.410		

Source: Authors Field Survey, 2013

Table 5 Participation in Social Activities and Decision Making

District		Do you think that your involvement in social activities help you participating in family decision making?			Total
		Yes	No	Don't know	
Lalitpur	N	47	5	7	59
	%	79.7	8.5	11.9	100.0
Bhaktapur	N	51	4	5	60
	%	85.0	6.7	8.3	100.0
Total	N	98	9	12	119
	%	82.4	7.6	10.1	100.0

Source: Authors Field Survey, 2013

participation in social activities on Jyapu family decision making processes (Table 5). The majority of respondents (82.4%) felt that their participation in social activities had had positive effects. The involvement of Jyapu women in social activities (mainly related to the cleaning and maintenance of traditional stone spouts and wells) and their subsequent interaction with members of the community has boosted their confidence levels and made them better able to influence family decision making processes. Some 10% of respondents were not sure whether their involvement in social activities had had a positive impact in their ability to influence household decision making.

7. The Influence of Economic Activities on Decision Making

The influence of economic activities on decision making has been analyzed. Figure 12 shows how women’s involvement in economic activities influences their levels of participation in family decision making processes.

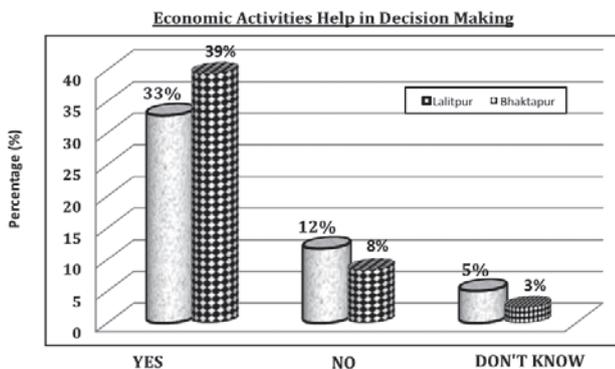


Figure 12 Involvement in Economic Activities and its Influences on Decision Making

Source: Authors Field Survey, 2013

Some 39% of Jyapu women in Bhaktapur and 33% of Jyapu women in Lalitpur express that their involvement in economic activities helps them to participate in decision making processes in their families. Women that responded “I don’t know” when asked if their involvement in economic activities positively influenced their involvement in family decision making were mostly older than 50. Women in Bhaktapur are more aware of the ways in which economic empowerment can positively influence their participation in household decision making.

8. Use of Traditional Water Resources

The use of traditional water resources has been explored in the districts. Figure 13 shows the percentages of respondents who use water from traditional water resources such as stone spouts and wells in Bhaktapur and Lalitpur districts. Approximately 74.8% of women still use water from these sources although their homes are connected to water pipe networks. The main reasons

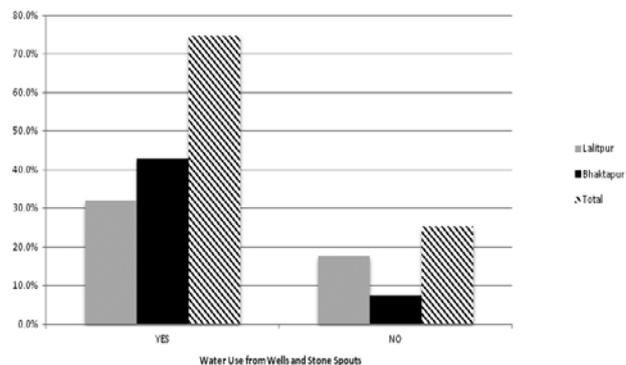


Figure 13 Percentages of Respondents Using Water from Traditional Water Resources

Source: Authors Field Survey, 2013

for this are that the water supply from traditional sources is reliable and free of cost whereas the supply of tap water is very limited and irregular. More women in Bhaktapur (85%) use traditional water resources than women in Lalitpur (64.4%).

9. Participation in the Maintenance of Traditional Water Resources

Figure 14 shows levels of participation of Jyapu women in community activities (mainly the cleaning and maintenance of traditional stone spouts and wells). Of the 60% of respondents that participate in such activities, 33% were from Bhaktapur and 27% were from Lalitpur.

More women in Bhaktapur (66.7%) were involved in maintenance activities than in Lalitpur (54.2%). This is due to the increasing scarcity of piped water in Bhaktapur district and the fact that the water supply from stone spouts and wells is free of cost and more reliable. In

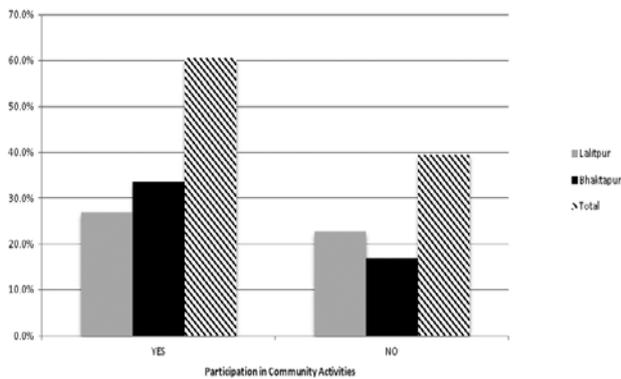


Figure 14 Levels of Participation in Community Activities
 Source: Authors Field Survey, 2013

addition, there is a higher concentration of Newars in Bhaktapur whose traditional culture supports the continuation of traditional practices. An additional factor is the level of education of respondents - Bhaktapur has a higher percentage of illiterate women who are more likely to stick to traditional ways of doing things. The chi-square test of independence shows that the practice of cleaning and maintaining traditional water resources is similar in the two districts ($\chi^2 = 1.923, p\text{-value} > .05$).

VII. Conclusion

The Kathmandu Valley comprises the three ancient cities of Kathmandu, Lalitpur and Bhaktapur. The valley is a cultural and political hub of Nepal. Bhaktapur was the largest of the three Newar kingdoms of the Kathmandu Valley, and was the capital of Nepal during the great “Malla” Kingdom until the second half of the 15th century. Today, it is 3rd largest city in the Kathmandu Valley, with a population of more than 300,000, of which the vast majority are Newars. Historically, more isolated than the other two kingdoms, Kathmandu and Lalitpur. Bhaktapur has the best preserved palace courtyards and old city centre in Nepal, and is listed as a World Heritage Site by UNESCO for its rich culture, temples, and wood, metal and stone artworks. Cities of Lalitpur district have adequate education facilities in comparison to other districts. Lalitpur is a unique amalgamation of culture, history and agro-based economy. It has a mixed demography with Newars comprising 40% of the total.

Jyapu women in Lalitpur and Bhaktapur districts

Table 6 Involvement in Maintenance Activities of Water Resources

District		Do you Involve Yourself in Cleaning of Water Resources in your Community		Total
		Yes	No	
Lalitpur	N	32	27	59
	%	54.2	45.8	100.0
Bhaktapur	N	40	20	60
	%	66.7	33.3	100.0
Total	N	72	47	119
	%	60.5	39.5	100.0
Chi-Square Tests		Value	Df	Asymp. Sig. (2-sided)
Pearson’s Chi-Square		1.923	1	0.166

Source: Authors Field Survey, 2013

are involved in a range of different daily activities. Although many women remain busy with household chores (cooking / feeding, washing dishes, sweeping and cleaning, family prayers, child care, hospitality, household maintenance, shopping and so on), many also find time to participate in the organization of religious functions inside the home, and social and religious functions outside the home. Jyapu women are both religious and social.

In terms of income generating activities, agriculture dominates, followed by self-employment. These choices are largely governed by the women's literacy levels. Women who are better educated tend to be less involved in agriculture and self-employment. More women in Bhaktapur are involved in agriculture and small businesses than in Lalitpur district, due mainly to Bhaktapur's higher illiteracy rate. Very few women from either district participate in politics; again this is due to low levels of education.

In order to reduce discrimination and violence against women in Nepal's largely patriarchal and male dominated society, it is important that women play a greater economic role. However, economic empowerment alone will not bring women to the forefront of decision making processes in the household and the community unless it is combined with social empowerment and community engagement. The Jyapu women interviewed for this study firmly believe that their engagement in economic activities and with their local communities has improved their ability to take part in household and community decision making. More Jyapu women in Bhaktapur are involved in income generating activities than women in Lalitpur.

With education, social participation and economic engagements, the horizons of the people widen due to contact with various different means of achieving the same thing in different ways, according to different people that they come into contact, some of which could be otherwise a simple taboo and non religious way in their own culture and daily life. Education also makes people more pragmatic, hence liberal and modern in value perceptions.

Of the Jyapu women that took part in this study, the highest number engaged with savings groups and cooperatives. High levels of participation can also be seen in women's groups while a significant number of women participate in social and community activities such as the

cleaning of traditional water spouts and wells. This social and economic engagement has provided women with the opportunity to interact with others in the community and thus build levels of confidence so that they may share their opinions and demonstrate leadership both inside and outside the household. These findings are more evident in Bhaktapur than in Lalitpur, particularly in terms of entrepreneurship and the management of traditional water supply systems.

Newars have been the largest ethnic group in Bhaktapur since ancient times and Jyapu women are the foremost holders of the local indigenous knowledge about traditional water systems. Jyapu women participate actively in their communities, particularly in the cleaning and maintenance of stone spouts and traditional wells. This is most pronounced in Bhaktapur district due to the long established *guthis* which play a key role in preserving the traditional Newar way of life. Low literacy rates in Bhaktapur district are also a factor. The increasing water scarcity in Bhaktapur, and the unreliable and limited supply of piped water, has provided a further push to give continuity to traditional practices. The cleaning and timely maintenance of traditional spouts and wells also contributes significantly to the conservation of traditional water resources. Jyapu women are well placed to lead conservation efforts and pass their unique indigenous knowledge down to the next generation.

Although the majority of Jyapu women are illiterate agricultural workers, more and more are becoming aware of the importance of their economic roles in increasing their participation in decision making processes. We consider this economic role combined with social activities and community participation can provide women with more say in community and household decisions. In order for this to happen, we suggest gender equity policies must give due priority to women's participation in community affairs, while traditional water resource management policies should focus on local indigenous knowledge and practices as an important source of information for climate change adaptation practices in Nepal.

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(2014年11月6日受付)

(2015年1月23日受理)