

Do Informal Sector Businesses Support Women's Livelihood? A Case of Butwal Sub-metropolitan of Nepal

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Abstract

Informal sector business seems rapidly increasing in Nepal. This paper examines the effect of informal businesses on women's livelihood, which is generally not documented in the literature. This study uses primary data collected from the Butwal sub-metropolitan, Rupandehi District, Province 5 of Nepal. Sample size is 300 women entrepreneurs. There is a positive correlation between income level and married as well as migrated women entrepreneurs. Better educated women entrepreneurs are more likely to earn from their businesses in comparison to the less educated women. Women are learning business skills through businesses. Most important, old aged women (around/over 60 years) should not depend on their son or daughter for their livelihood and for pocket money after starting such businesses.

Key Words: Informal sector business, women entrepreneurs, Nepal

Gender Issues in Nepal

Global Gender Index (GGI) reveals that Nepal ranked 110th out of 144 countries on gender parity. Gender Inequality Index gave Nepal a score of 0.497 in 2015 with 0 representing equality. Females are slightly in greater numbers than males in Nepal. Nepal's population recorded 26,620,809 in 2011, including 12,927,431 males and 13,693,378 females (CBS, 2012). Nepal's Development Index also differs between males and females. Nepal stands on 144th position in terms of HDI rank out of 188 countries in 2016. Males' HDI value is greater (.58) than females (.53). In addition, the United Nations Report 2016 shows that Nepal ranks 110th out of 145 countries in the Global Gender Gap Index (HDR, 2016).

Women's life expectancy is greater (71.5) than men's (68.6). However, mean years of schooling is 5 years for males while it's only 3.2 years for females. In terms of secondary education, aged 25 years and older accounts for 24.1 percent for females while it is 41.2 percent for males. In labor force participation, females of the ages 15 and older participate 79.7 percent and males participate 86.8 percent. In politics, females' share of seats in parliament is only 29.5 percent. Also, males' Gross

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National Income (GNI) per capita is US \$2,718 while females' account for only US \$1,979 (HDR, 2016). The Constitution of Nepal – 2015 has been a huge improvement for gender perspective. Article 43 explains the rights of women that include rights to lineage, rights to safe maternity and reproduction, rights against all forms of exploitation, and equal rights in family matters and property. The government of Nepal is also working to maintain gender equality in all development policies and in yearly budget system. Three women have already held top-level positions in the country-Sushila Karki as a Chief Justice of the Supreme Court, Onsari Gharti Magar as Speaker of the Parliament, and Bidhya Devi Bhandari as the President. A Nepalese social activist Anuradha Koirala has been appointed as a governor of Province No. 3. An inhuman culture that forces upon women to stay outside their homes in unsafe cow sheds during menstruation and childbirth is set to be criminalized in the new legal code. Women are stepping upwards in other sectors too; such as science, financial institutions, media, education, public health, social service and development activities. It can be observed over the years that women are making great progress in almost all fields – science, economics, banking and finance, media, environment, education, public health, social service, and development. However, the reality is women's situation is still weaker than males in Nepal.

Why Research Focusing on Female Entrepreneurs is Important in Nepal?

As stated above, some of the females are improving their life status in recent years, however, when we compare females' aggregate social status with males; females are at a lower position than males. Government policy papers always write for providing jobs for women and also fix quotas in public offices, but growing number of females in the job market and weak industrial base cannot create a stable career, especially for less skilled and less educated women. Therefore, they choose to start a business in the informal sector. Informal businesses are defined as unregistered, unregulated, unrecorded, and untaxed businesses that do not have business licenses or agreement for their business and are frequently operated from a home, on the street pavements, or other informal arrangements (Horn, 2011).

When women start a small business they should not always depend upon the husband's income. This income helps to raise their children in many ways. They can pay school fees, purchase stationery, medicine, and other daily requirements. The husbands' burden decreases when wives support household expenditures. Also, starting a business in the informal sector is a seed for innovation. In recent years, thousands of women are working as an entrepreneur in Nepal; however, there is no micro-level research in this area. This paper primarily concentrates to answer three research questions. First, what are the characteristics of women entrepreneurs and their business types in the informal sector? Second, what factors determine women entrepreneurs' income level? And third, what are the women entrepreneurs' issues while doing commercial activities in informal sector?

Review of Literature

Kasseeah and Tandrayen-Ragoobur (2014) analyzed the characteristics of women entrepreneurs operating in the informal sector in Mauritius and noted that the impact of women entrepreneurship is positive on their livelihoods and that of their families. Otoo et

al., (2009) assessed women entrepreneurship behavior in West Africa. This study found that women entrepreneurship in the informal sector such as street food vending is important for poverty alleviation. The street food business makes women employed while such businesses also provide cheap and nutritious food for the urban poor people.

Kapunda and Mmolawa (2007) found that informal sector business activities helped people to come out of the poverty line. Njoku et al., (2014) studied women entrepreneurs involving in informal cross-border trade in Botswana. They found that young, less educated, and unemployed women traded agricultural goods and industrial products. They were able to increase their income significantly. Enriquez (2015) viewed that informal economy exists even in the highly developed country the USA, where many childcare centers pay workers in cash and do not record it to evade tax payment. Fruit picking industries also do not record their wage pay. About 12 million illegal immigrants in the USA always engage in some sort of informal activity countrywide.

As for Nepalese context, Thapa (2014) investigated the degree of wage discrimination in formal and informal sectors using country representative labor force survey-based cross-section data and inspected that the gender, geography, educational status, marital status, age of the employee and ethnicity of the employee matter whether an individual works in the informal or formal sector. Moreover, wages for relatively educated workers are significantly low in informal sector than the formal one.

Xheneti and Karki (2016) adopted a qualitative approach. They figured that although many respondents (39%) engaged in informal entrepreneurial activities for lack of other alternatives, large numbers (37%) were attracted by a desire to be active and financially independent rather than staying at home. Business skills and experience also supported them in gaining their family's trust, market reputation, and community recognition. Many respondents mentioned that having to deal with discouragement from their households and wider communities as articulated in an emphasis on their lack of basic skills; the perceived suitability of certain activities for women; or the acceptability of women engaging with any membership organizations that would support entrepreneurship due to gender prejudices. However, their persistence and their ability to 'earn a living' not only helped in improving attitudes towards them, but also in becoming more resilient to the constraints of their environment.

Peterson (2013) argues that informal sector is not problematic in the short-run as it tends to be the base of livelihood and sustenance for the poor. However, in the long-run it will create adverse effect on a country's economy. Author argues that if informal sector covers significant portion of the economy, regulatory agency cannot provide the required protections to the workers so they will continue to have lower level living standards in comparison to the formal sector workers. Based on Colombian economy she views that informal sector workers do not get even minimum wage, lack health and safety facilities, have irregular working days, and cannot enforce the contractual arrangement.

Adhikari (2011) studied about street market businesses in Kathmandu valley and the author found that street vending is important to generate income and reduce the poverty level for some people of Nepal. The street trade provides employment and income generation for the rural poor who migrate in the urban areas. And not only rural poor are getting earning

opportunities in the unofficial economy; this has been providing goods at cheaper prices to urban poor people. However, there is a gap in the existing academic literature to see the importance of informal sector business from a gender perspective focusing the ButwalSub-metropolitan. This study fulfills this gap.

Methodology

The study uses micro-level analysis based on primary data collected from the ButwalSub-metropolitan City, Rupandehi District, Province No. 5 of Nepal. This area is selected by a judgmental sampling method because people are rapidly moving to this area from the rural hilly region. The sample units are 300 women entrepreneurs were selected randomly. The questionnaire is both close and open-ended. The survey was conducted by personal interviews meeting women entrepreneurs who are doing businesses in the informal sector. The unit of analysis is an individual woman (a woman entrepreneur). Income that they earn is determined by several factors so the questionnaire covers their age, education level, migration status, previous work experience, household characteristics, and information about doing the business. The livelihood of women entrepreneurs is analyzed via Logistic Regression Techniques. The equation is made as follows:

$$YE = \beta_0 + \beta_1 \text{Mrd} + \beta_2 \text{UMrd} + \beta_3 \text{BEdu} + \beta_4 \text{SEdu} + \beta_5 \text{SDec} + \beta_6 \text{HDec} + \beta_7 \text{Mig} + \beta_8 \text{NMig} + \beta_9 \text{NBus} + \beta_{10} \text{OBus} + \beta_{11} \text{LInv} + \beta_{12} \text{HInv} + \varepsilon$$

Where, YE = Income earned, a dependent variable which is income range taking a value of 1 if income is equals to and more than Rs. (Nepalese Rupee) 30,000 and 0, otherwise. Among 12 independent variables, Mrd = Married, that means a married woman entrepreneur and UMrd = unmarried, which means an unmarried woman entrepreneur. BEdu = Basic education, that means woman entrepreneur attending a primary school maximum of five years of schooling and SEdu = Secondary education, that means women attending secondary school maximum of 10 years of schooling. SDec = Self-decision, that indicates woman herself took decision to start the business while HDec = husband decision, that indicates not the woman herself but her husband decided to establish the existing business. Mig = Migrant, that indicates an entrepreneur who migrated from other places to the current address to do the existing business and NMig = Non-migrant that indicates entrepreneurs did not move to a new place for starting her business. NBus = New business if the business age is less than or equal to 3 years while OBus = Old business if the business exceeds 3 years or more. LInv = Low investment, that means initial business investment is up to Rs. 20,000 and HInv = High investment that means the start-up business investment amount is more than Rs. 20,000. Similarly, ε = Error term, β_0 = Constant value, and $\beta_1 \dots \beta_{12}$ = Parameters.

Why Business Start in Informal Sector?

Getting a stable job is always difficult in any developing economies. In our study area Rupandehi district, there is rapid inflow of migrants from hilly districts but this area has limited work places providing them jobs. Therefore instead of passing days in leisure, people choose to do their own styles' commercial activities. Another reason is that anybody can initiate a business in informal sector with minimal resource allocation. It can be shown with the help of given table.

Table 1: Reasons to Start Business in the Informal Sector

S.N.	Reasons	Frequency	Percent
1	Difficult to find a job	24	8.00
2	Less income to maintain living expenses	76	25.33
3	Family reasons	157	52.33
4	Others	43	14.33
	Total	300	100.00

Source: Field survey, 2017.

Table 1 exhibits the reason for starting a business in the informal sector. Eight percent of the total respondents said they could not find any jobs in their community. About 25 percent of the sample responded they didn't have sufficient income to maintain their living expenses. Other 52 percent of women are engaging in informal sector due to several family reasons such as their husbands are alcoholics so they cannot survive without doing some income generating activities. Some of the respondents went abroad for work but returned back to their homecountry since the work was too difficult and now they are doing such business easily. Some women got divorced, so they are doing such commercial activities to stand on their own legs. 14 percent of respondents started such business by others' motivation to utilize free time, and to support children's educational expenses.

Businesses by Sector

Agriculture goods transaction is the leading sector of Nepalese economy as well as in our study area, however, market structure and consumer behavior have changed over the years. So entrepreneurs are also selling manufacturing goods in recent years. Some entrepreneurs are also doing tertiary sector businesses. It can be shown with the help of given table.

Table 2: Business Types by Sector

S.N.	Sectors	Frequency	Percent
1	Agriculture	49	16.33
2	Manufacturing industry	18	6
3	Building/road construction	2	0.67
4	Wholesale and retail store	78	26
5	Transport	4	1.33
6	Information and Communication Technology	2	0.67
7	Hotel and Restaurant	27	9
8	Street vendor	120	40
9	Education service	0	0
10	Others	12	4
	Total	300	

Source: Field survey (2017).

Table 2 shows the business sectors female entrepreneurs are engaged in. Most of the respondents, 40 percent are found as street vendors who sell variety of goods but in small quantities such as hair clips, crafts, religious goods, dolls, watches, socks, caps, toys, made in China clothes, books, electrical goods like radios, clocks, kitchen goods, basic needs goods-nail cutters, and shoe polish. Wholesale and retail stores come in the second rank which is found 26 percent. Majority of them sell kitchen goods, household needs goods and clothing (shoes, slippers, belts, trousers and so on). Relating to the agriculture sector, they sell meat, food grains, spices, vegetables, sugarcane juice, fruits which accounts 16 percent. Hotel and restaurant sector is nine percent. They sell cooked meat, milk tea, coffee, sweets, candies, noodles, juice, cold drinks, mineral water bottles, and so forth. Small furniture shops are also found under the manufacturing sector. Under ICT, mobile phone sets, mobile phone money transfer cards, computer software CDs, and movie DVDs are observed. Some entrepreneurs are also selling services by keeping a weight measuring scale at the bank of the road.

What Contributes by Such Businesses?

Role of entrepreneurship in economic development is recognized everywhere. In our study area, informal type commercial activities is contributing to generate income at least to maintain daily expenditure, support for school education, and also inspiring to practice saving, particularly for less low skilled and less educated female entrepreneurs.

Table 3: How Business Helps Entrepreneurs' Livelihood

S.N.	Categories	Frequency	Percent
1	To maintain living expenses	49	16.33
2	To pay children's school fee	61	20.33
3	To save for future purpose	189	63
4	Others	1	0.33
	Total	300	

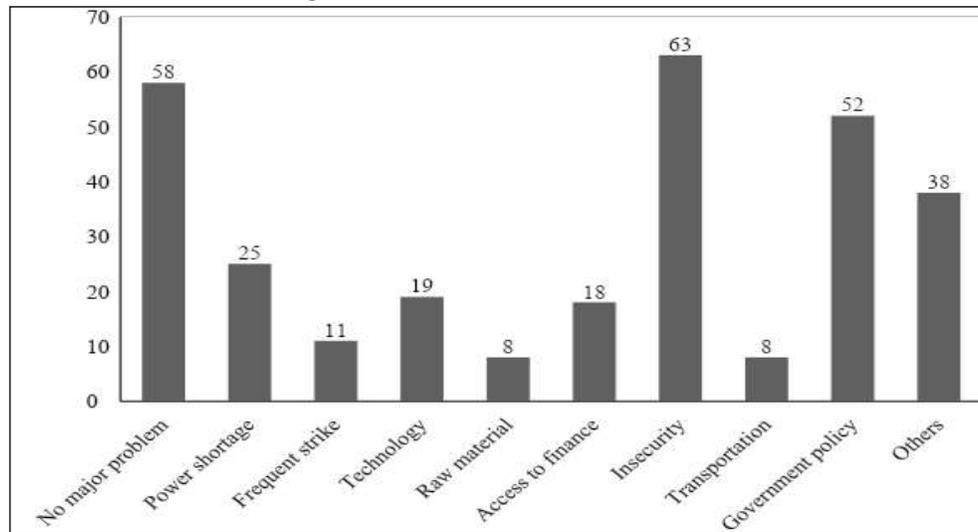
Source: Field survey (2017).

Table 3 shows that maximum respondents said their businesses are helping to save money for future purpose. It's noted 63 percent-the highest. Another majority of respondents said that it is helping to pay for their kids' school fees and purchase stationery items which are noted at 20 percent. Next contributing category is found to maintain their consumption expenditure or to maintain their livelihoods. One of the best aspects of doing small business in the informal sector is many old aged women (around/ over 60 years) should not depend on their son or daughter for their livelihood and also pocket money after starting such businesses.

Business Barriers in Informal Sector

Women entrepreneurs face several challenges while running their business. Major problems faced by women in informal sector business are insecurity. Several women come from outside Butwal (market place) to sell their products then return home in the evening. They feel unsecured, basically sexual harassment in the evening hours as shown in given figure 1.

Figure 1: Current Business Barrier



Source: Field survey (2017).

Figure 1 shows that 58 respondents said such businesses are helping to generate income so there is no major problem. 52 respondents said municipal/local government policy is a business barrier. There is not a specific place or marketplace to sell/put their goods. Road expansion project is a burden. Road expansion and construction work is rapid in urban areas, so they cannot put their stall easily as in previous years. Road construction work is also producing dust and destroying their goods' quality. Moreover, it is also found that a lack of access to capital and financial support, or under-capitalization, was among the key barriers reported by most female entrepreneurs. They said that rich people get loans easily from the financial institutions but they don't since they are relatively poor or cannot show collateral. Some respondents also said that there is a competition in recent days among informal sector entrepreneurs. However, the availability of raw material or products they sell and transportation is not being a major problem for them.

Empirical Analysis and Results

Descriptive Statistics

Descriptive statistics is the term that helps to organize, summarize, display and describe the collected data and information in a meaningful way. It allows presenting a large amount of raw data applying to the entire sample or population. There are two important concepts to

understand descriptive statistics that are the nature of variables and distributions. It helps to develop a better understanding of the nature and interpretation of data. Basically, descriptive statistics describe the ‘Measures of Spread’ and ‘Central Position or Tendency’ of a frequency distribution for a large amount of collected raw data. It includes to measure mean value, standard deviation, maximum and minimum variation etc. in a given set of data. But it does not allow to conclusion beyond the data. In order to understand the behavior of data series of given dependent and independent variables; mean, standard deviation, minimum, and maximum variation are measured. The statistics are based on the 300 observations of sample households as shown in the given Table 4.

Table 4: Descriptive Statistics of Women Entrepreneurs in Informal Sector

S.No.	Variables	Mean	Std. Dev.	Min.	Max.
1.	Low income ($\leq 30,000$ Rs.)	0.14	0.3475	0	1
2.	High income ($> 30,000$ Rs.)	0.86	0.3475	0	1
3.	Married	0.89	0.3092	0	1
4.	Unmarried	0.11	0.3092	0	1
5.	Basic Education	0.44	0.4772	0	1
6.	Secondary Education (\geq SLC)	0.56	0.4972	0	1
7.	Self-decision in Business	0.68	0.6766	0	1
8.	Husband Decision Business	0.32	0.3233	0	1
9.	Migrant	0.50	0.5000	0	1
10.	Non-migrant	0.50	0.5000	0	1
11.	New Business (≤ 3 years)	0.86	0.3475	0	1
12.	Old Business (>3 years)	0.66	0.4733	0	1
13.	Low Investment ($\leq 20,000$)	0.42	0.4943	0	1
14.	High Investment ($>20,000$)	0.58	0.4943	0	1
	Total Observation	300			

Source: Author’s calculation based on field survey data (2017).

Table 4 shows that the high-income entrepreneurs are observed 86 percent while low-income entrepreneurs are accounted for 14 percent. Most respondents are married women but only 11 percent are found unmarried. Less than ‘School Level Certificate (SLC)’ level educated women are seen 44 percent while 56 percent are SLC or higher class educated. This means not only illiterate women but also literate ones are doing start-up businesses in the informal sector. Most women decided to start their business themselves but some husbands also cooperated to initiate their wives’ businesses. Half of the total respondents are found migrants. 66 percent entrepreneurs started their businesses less than three years ago while others started more than three years ago. 42 percent of the total entrepreneurs invested only amount up to Rs. 20, 000 as an initial investment but other invested greater amount than Rs. 20,000.

Correlation Analysis

Correlation is a quantitative assessment that measures both the direction and strength of a linear relationship between two or more variables. This study uses Pearson's Correlation Coefficient as a test statistic that is to analyze the degree of relationship of income earned (YE) of individual entrepreneurs in the study area with its 12 independent variables like married (Mrd), unmarried (UMrd), Secondary education (SEdu) and others. Correlation coefficient values are presented in the Table 5.

Table 5: Correlation Matrix of YE with Entrepreneurs' Characteristics

Variables	YE	Mrd	UMrd	BEdu	SEdu	SDec	HDec	Mig	NMig	NBus	OBus	LInv	HInv
YE	1												
Mrd	.04	1											
UMrd	-.04	-1.0	1										
BEdu	-.04	-.10	.10	1									
SEdu	.04	.10	-.10	-.10	1								
SDec	.02	-.19	.19	.03	-.03	1							
HDec	-.02	.19	-.19	-.03	.03	-1.0	1						
Mig	.07	.04	-.04	.03	-.03	-.15	.15	1					
NMig	-.07	-.04	.04	-.03	.03	.15	-.15	-1.0	1				
NBus	.02	-.06	.06	-.20	.20	.20	-.07	.07	-.01	1			
OBus	-.02	-.06	.06	-.06	.20	-.20	-.07	.07	-.01	.01	1		
LInv	-.14	-.20	.20	.36	-.36	.28	-.28	-.00	.00	-.20	.20	1	
HInv	.14	.20	-.20	-.36	.36	-.28	.28	.00	.00	.20	-.20	-1.0	1

Source: Author's Calculation

Table 5 shows the correlation between income of the women entrepreneurs and their characteristics. There is a positive correlation between income and married women entrepreneurs, income and more educated entrepreneurs, income and migrated entrepreneurs. Next, income level and higher-level business start-up investment also depicts a positive relationship. Old business variables show negative values with income level which is an unexpected result. Generally, older business owners have more business experience so they must have earned a higher income than newer business owners.

Regression Analysis

The regression analysis shows the role of independent variables to the given dependent variable. In this study, the income earned (YE) is taken as the dependent (response) variable whereas married (Mrd), unmarried (UMrd), Secondary education (SEdu) and other are taken as independent (explanatory) variables. Therefore, a logistic regression model is

drawn in order to examine the changes in given independent (explanatory) variables to the change in given dependent variable (YE) as shown in given Table 6.

Table 6: Women Entrepreneur and Their Income (Marginal Effects)

Variables	Marginal Coefficients
Marital status (reference: unmarried)	
Married	0.245 (-0.514)
Education level (reference: basic education)	
Secondary education (\geq SLC)	0.322** (.336)
Business decision (reference: husband decision)	
Business decision-self	0.638 (-.391)
Migration status (reference: non-migrant)	
Migrant	0.552 (0.349)
Business age (reference: new business \leq 3 years)	
Old business ($>$ 3 years)	0.293* (3.391)
Investment amount(Reference: low investment \leq 20,000)	
High investment ($>$ 20,000)	0.334*** (3.417)
Constant	0.398* (.323)
Pseudo R-Squared	0.273
Total observation	300

Note: ***Significant at 1% level, ** 5%, and * 10% level.

Source: Author's calculation based on field survey data (2017).

Table 6 presents the results of Logistic Regression Model. It is noted that women entrepreneurs in the informal sector who are more educated are more likely to earn in comparison to the less educated women (reference category). The marginal coefficient is significant at the 1 percent level. So, our first hypothesis is accepted because I claimed that more educated entrepreneurs will have a greater chance to earn more income than less educated entrepreneurs. However, the marginal coefficient value of the migrant female entrepreneurs is insignificant to the income. A possible reason is newly migrant females are not confident to invest a big amount in new places; they initiate their business with a very small amount. That is why income/profit earned from small investment results in less income. Therefore, the second hypothesis is rejected because we claimed that migrant entrepreneurs earn a higher income than non-migrant ones. In addition, old business is significant to the income level. Hence the third hypothesis is accepted, greater business investment in the informal sector generates higher income in comparison to the less investment. Pseudo R-Squared appears 0.273 in our result, which means the proportion of the variance in the dependent variable (income) to the independent variables is 27 percent³.

3 Pseudo R-Squared which is used to assess goodness of fit as it represents the proportion of variance in the criterion that is explained by the predictors.

Conclusion

This study concentrated to explore the characteristics of women entrepreneurs and their business types, factors which determine women entrepreneurs' income level and their business barriers. We did both quantitative and qualitative analysis. A survey was conducted in Butwal Sub-metropolitan, Province 5 of Nepal. In total 300 women entrepreneurs in the informal sector were interviewed. We argued that more educated entrepreneurs will have a greater chance to earn more income than less educated entrepreneurs, migrant entrepreneurs earn a higher income than non-migrant, and old businesses have higher income levels than newer ones.

Correlation result shows that there is a positive correlation between income level and married women entrepreneurs, income level and more educated entrepreneurs, income level and migrated entrepreneurs. Next, income range from the business and higher-level business start-up investment also depicts a positive relationship. The Logistic Regression result shows that women entrepreneurs in the informal sector who are more educated in comparison to the less educated women are more likely to earn from their businesses. Entrepreneurs who started the businesses more than three years ago are more likely to earn than newly established entrepreneurs. Informal sector businesses are playing a positive role in generating income and as a seed of entrepreneurship. The government must provide start-up business training for women entrepreneurs. All informal sector businesses must be brought into the tax bracket and gradually transfer them from informal to formal sector. How can the local bodies in Nepal transfer the informal sector businesses into formal businesses? Also how the COVID-19 Pandemic is affecting the informal sector business activities can be suitable for further research.

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