

## **Factors Affecting the Household Income of Petty Traders During COVID-19 Pandemic in Dharan City**

Sita Kumari Khatiwada

Lecturer

Department of Economics, Mahendra Multiple Campus, Dharan, Tribhuvan University, Nepal  
sitakhatiwada111@gmail.com

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### **Abstract**

Petty trading is such a type of economic activity operating abundance of the low-earning population in new urbanizing developing countries like Nepal. The main aim of this study is to explore factors affecting the household income of petty traders during the COVID-19 Pandemic in Dharan city. This investigation had used descriptive analysis, and Pearson correlation test to identify the relationship between dependent and independent variables. There were 48 petty traders conveniently selected for the convenient sampling to collect primary data by survey method. The data were analyzed through descriptive statistics by using SPSS. It is found a significant relationship between daily household income and marital status of petty traders. But there was no significant relationship between the daily household income and the size of the family, investment of capital of the petty traders. Similarly, the above results of this study suggest that this study is helpful to the planners and policymakers in Dharan city to formulate suitable policy and manage the micro-business sector including petty traders. And the government should create programs that preserve and establish the economic rights of petty traders and reduce the various complications and taxes which they usually impose on them. The study concluded that there is a significant difference between the household income of petty traders and the marital status of petty traders. Moreover, it established that there was no relationship between the household income and the family size, the investment of capital, and the income before COVID 19 of petty traders.

*Keywords:* marital status, micro-business, family size, COVID-19, investment, economic

### **Introduction**

COVID- 19 is also known as coronavirus and it brings up the world with huge socio-economic adjustments. It is a new type's virus that is linked to the same as Severe Acute Respiratory Syndrome (SARS). Due to this virus human being life has kept in suspense with "Stay at home". Simple the slogan is "stay at home to save a life". Lin et al. (2020) argued that most of the countries of the world have been blocked by COVID-19.

There is no universally accepted idea about petty trade. In Tanzania, it has been used synonymously with micro-enterprises and micro trade which referred to those economic activities on a small-scale by family members and it also constitutes with 'informal sector or informal economy' (URT, 2003; DCC, 1999). It focused to use a low level of technology, skill, and capital with a simple entrepreneur team and structure of production. From the above concept of the role of petty trade is more especially in developing countries like Nepal.

Such type of business activities may be run by a low amount of capital, the little number of a worker i.e. up to four it may be operated by a family member (URT, 2003). But such type of business activity does not need a fixed place, fixed locations any public plaza or land. Traders frequently use bicycles, heads, baskets, hands, push cards to sell goods without non-fixed quantities (Kazimoto, 2007). These definitions make clear the basic features of petty trade. In this paper, the researcher considers petty trading as such economic activity in which individual sellers with a low amount of capital and different types of buyers are involved.

In developing countries, the importance of activities in petty trading goes on increasing in the urban development process. UN Habitat (2009) argued that petty trading is a product of exceptional urbanization, particularly the failure of the formal sector to provide formal employment and the industrial sector to make a provision for the low-income households. Hence, in developing countries cities petty trading plays a powerful role to provide employment opportunities that cannot be minimized. Nepal also receives several advantages from petty trading to remove the unemployment problem. For e.g. according to the population census 2011, the Kathmandu valley having nearly 1.5 million population. Similarly, according to a report of CBS (2012a) a large portion of the population lives in urban areas, during the last six decades (1952-2011). There is a great transformation that has accrued the pressure of population in the physical area of the Kathmandu valley because of migration into the valley. In the same way, Pradhan (1988), study found that there is an increase in the extensity of different utility facilities in urban areas like government administration functions, health; education, tourism, industries, road, and facilities frequently change in the political system too. There are very few studies performed on this topic for example the literature of the researcher, Sharma and Pradhan (2017) and (Juma, 2014) has focused on employment and their livelihood part in Kathmandu valley and Dar es Salaam, Tanzania. Hence, this study explores and analyzes the impact of COVID -19 and marital status on the household income of petty traders in Dhahran.

### **Literature Review**

Some business is independently driven, not dominant in its field also not generally influenced by any innovative practice (Carland, et al. 1984). This concept about business is almost related to petty trade. Lewis's theory of economic development with an unlimited supply of labor also suggested that there is a dual economic system in developing countries like the agriculture/

subsistence sector and urban/ industrial sector. The rural sector is suffering from the problem of overpopulation that's why surplus labor of rural sector migrates towards the urban sector to search for better employment opportunities. The finding of different studies shows that when migrated populations do not get better employment opportunities in the urban sector than they have engaged in petty trade which is possible by limited capital investment, manpower and not influenced by innovative work and with loans from social networks, friends, and family in the absence of formal loan (Cichello, 2005). Thus large numbers of the citizen of cities in developing countries are engaged in street vendors.

In Ethiopia, the petty trade is being a major source of many people in urban and rural areas. This type of profession provides employment opportunities to a large number of poor and unemployed persons in Jimma town. In the study of getting going the person operates petty trade to search for job opportunities, less capital, and family problems. Financial institutions were not providing adequate capital for investment due to lack of guarantee, license requirements, bureaucratic process, and less awareness of petty traders and high-interest rates, etc. (Giref, 2019). With the solution of these above problems related to petty trade, obviously petty traders are benefited.

Similarly, it has been concluded by Makorere and Kitila, there are petty traders face a multiplicity of obstacles like lack of suitable business sites, lack of business training to traders, etc. in Tanzania. This study found that there is a positive relationship between age and business experience and knowledge. Then earn more income by using experience and knowledge. Likewise, the education of petty traders positively influences the income of petty traders. And also found that the unsuitable socio-economic factor is related to high business cost, which reduces the income of traders. But there are very few empirical pieces of evidence regarding the impact of marital status and COVID – 19 on household income petty traders. Hence, this study focused on this topic. The study by Pradhan and Sharma (2017), on-topic 'The petty street vendors and their livelihoods of the Kathmandu valley cities, Nepal' found that the income is a little bit different among petty traders according to types, movement of trade, festival seasons, family size and so on.

Khawwaja (2021) found that in her study on 'Impact of demographic factors of petty trade on a household income during COVID – 19'. There is a significant difference between the household income during COVID – 19 periods between and within groups. But there is no relationship between the household income and age, gender, and education of petty traders. Finally, based on the above dialogue, it can be assumed that reviewed literature admits that it is essential to study the impact of COVID – 19 and marital status on the household income of petty traders. According to the argument of Khawwaja (2021) is that there are very few studies done on this topic during COVID – 19 period. Hence, further study should focus on this related topic by including sufficient variables. Similarly, according to Rahman, S.H. et al.,

bring out the study about the impact of COVID – 19 is one of the challenges because of the inadequacy of adequate and suitable data. Reviewed literature makes clear that the problem of COVID – 19 and the situation of lock down harms to free movement of goods, people and run economic activities. As a result, the poor people of developing countries are badly affected. Therefore, the researcher aims to study this topic.

### **Statement of Problems**

Petty trade is a major source of employment in developing countries like Nepal. Those people who engaged in petty trade play an important role to supply goods and services to required persons at a suitable time with the right time, place, and quantities. Mostly, these traders are crucial to the middle-income group and low-income group of people. These types of activities are fall within a group of the informal trade sector. A live review of literature cannot define how is the relationship between household income and marital status, size of family, investment of capital, and income before the COVID 19 period of petty traders. The above variables are important factors to determine the household income of petty traders. Hence, it is an important matter to investigate on this topic.

Though, there is a flood of migration from remote rural areas to urban areas and engaged in petty trade due to the lack of better employment opportunities. So, the offering of petty trade on household income residue is amazing. Hence, this study aims to find the answer to the questions. Some major research questions are:

### **Research Questions**

- i) What is the relationship between the household income of petty traders and the marital status of petty traders?
- ii) What is the relationship between household income and the size of the family of petty traders?
- iii) What is the relationship between household income and investment of capital?
- iv) What is the relationship between household income and income before the COVID-19 period?

### **Objectives of the Study**

- i) To identify the relationship between the household income of petty traders and the marital status of petty traders.
- ii) To investigate the relationship between the household income of petty traders and the size of the family of petty traders.
- iii) To find out the relationship between the household income of petty traders and the investment of capital of petty traders.

- iv) To explore the relationship between the household income of petty traders and income before the COVID-19 period.

### **Hypothesis**

H<sub>1</sub>: There is a significant relationship between the household income of petty traders and the marital status of petty traders.

H<sub>2</sub>: There is a significant relationship between the household income of petty traders and the size of the family of petty traders.

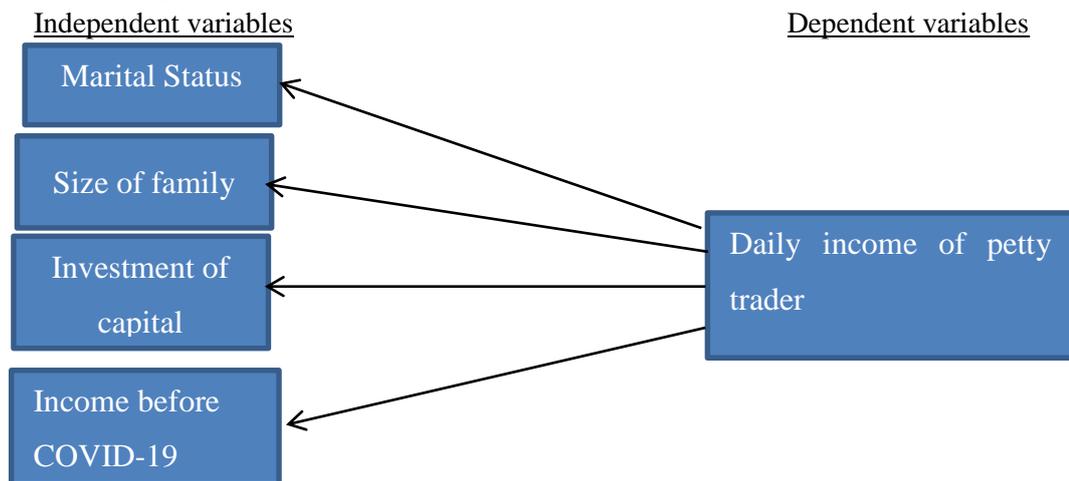
H<sub>3</sub>: There is a significant relationship between the household income of petty traders and the investment of capital of petty traders.

H<sub>4</sub>: There is a significant relationship between the household income of petty traders and the income before the COVID-19.

### **Conceptual Framework**

The conceptual framework has described the association between different variables which make a household income of petty trader components. In the view of Ndunguru (2007) conceptual framework disclose a studied phenomenon of conceptual-CRM-variables into an easy set of relationship; it makes be easily understood. The marital status and COVID -19 in household income of petty traders are conceptualized with the framework. The economic theory of household income and its behavior is complex. There are different factor which effects of public or private sector investment at micro and macro-level consequences like demographic structure, decision – making process, resource allocation, income-earning mechanisms and division of labor (Mattila- Wiro, 1999). The change in these factors brings to change investment either in the public or private sector.

A market can be contemplated as a critical place composed of many integrated systems (Nystrem, 1998 and 2002). Similarly, it is not only a particular place for exchange goods and services but also for working, meeting, and socializing. The selection of this theory is supported by the reality which petty trading constitutes different structures, processes, social relations, and COVID – 19 problems that determine the shape of day-to-day activities. For example, the theory provides knowledge on how general rules and regulations work in petty trading, gain validity and character, use and management of trading spaces. This study investigates implicit norms, values that affect the income of petty traders. These theories help to identify unknown obstacles and illuminating the mechanisms.

**Figure 1***Economic Theories of the household**Note:* Developed by researcher, 2021

The over and above conceptual framework chart shows that the household income of petty traders is a dependent variable and independent variable. Except for these variables, different variables make a change in the household income of petty traders. Here, the change in marital status, income before COVID – 19, and income during the COVID-19 period make a change in the household income of petty traders.

### Materials and Methods

This study aimed to identify the factors affecting the household income of petty traders during the COVID-19 Pandemic in Dhahran. In the view of Kothari (2004) research methodology is a tool that is used to solve the research problem. This study follows a cross-section research design. In the opinion of Uzobo & Odubo, (2016), a research design is a master plan based on that research is conducted. In social science including economics, the cross-sectional design is very suitable to collect data from different persons at a given same point of time opened by Thomal, (2020). Hence, during lockdown due to COVID-19, it is quite easy to collect data and identify correlations.

There are two types of data quantitative and qualitative. And the quantitative way is a path based on which a researcher collects quantitative data. With due to respect, Strayss and Corbin (2008) defined that, it is the way which derived findings take place employing statistical procedures. The researcher follows the quantitative method in this study in that this approach

takes limited time and is possible to analyze and computed data within a short period in the view of Marshal and Rossman (2006). This investigation was managed in Dharan few wards like 1,2,14, 12 of a sub-metropolitan city. The reason for choosing this area is due to convenience and being able to meet with a large number of petty traders in less time. It helps to gather adequate data in little time and support to study this research topic. Crawl (1993) argued that population is an aggregate of people that the investigator wants to collect information and draw conclusions to. In this study, the population contained petty traders. In the same way, a sample is a few numbers of respondents pinched from the population on the basis that the investigator wants to get information and find a conclusion (Kothari, 2004). The purposive sampling method was used to collect data from the different wards of the study area. Especially, 1,2,12, and 14 wards were selected because of flexibility to the lockdown. Likewise, a simple random sampling method was used to collect data. The sample size was 48. The sample size is too small because of the problem of lockdown. There is no boundary in gender, class, and age. In this study, quantitative data were collected using a structured questionnaire.

Data analysis is another important part of research to find answers to the questions. Gubba and Lincoln (1998) told that data analysis is a well-ordered process that involves working with collected data, organizing and dividing them into small suitable portions. There are two types of variables i.e. independent variables and dependent variables. Marital status, size of family, investment of capital, and income of trade before COVID 19 are independent variables and the daily income of petty traders is the dependent variable. Descriptive analysis is involving computation to the average value correlation used for hypothesis testing. The presentation of findings was in some suitable form of a table, and a diagram for easier interpretation and understanding with the help of Statistical Package for Social Science (SPSS) version 26.0.

## Results and Discussion

Testing the Significance of a Correlation

Let  $\alpha = 0.05$  be the level of significance.

### Descriptive Statistics

Cross-section data was used in the study. Data of Marital status, size of family, investment of capital, and income of trade before COVID 19 are collected in 2021 was used.

**Table 1**

#### *Statistical Analysis*

Variables	Ran ge	Mi n.	Ma x.	Mea n	Std. Deviation	Skewn ess	Kurto sis	Coefficient of variation
Marital Status of the	5	0	5	0.42	0.99	3.37	12.54	234.76

petty traders								
Size of Family	5	3	8	4.81	1.32	0.83	0.37	27.34
Investment of Capital	3	0	3	1.04	0.90	0.84	0.26	86.35
Income of trade before COVID19	3	0	3	1.65	0.96	-0.13	-0.87	57.94
Daily income of petty traders	100	25	125	968.	290.02	-0.43	-0.71	29.94
Valid N (listwise)	48							

*Note.* Field Survey, 2021.

Table 1 shows that the mean value of marital status, Size of family, Investment of capital assets, the income of petty traders before the COVID-19 period, and daily household income of petty traders of 48 traders in 2021 A.D. The mean values of marital status, Size of family, Investment of capital assets, the income of petty traders before the COVID-19 period, and daily household income of petty traders are 0.42, 4.81, 1.04, 1.65, and 968.75 respectively. It shows that the marital status of the respondents is (0.42) lowest and the daily household income of petty traders is (968.75) highest.

Similarly, the standard deviation of marital status, Size of family, Investment of capital assets, the daily income of petty traders before the COVID-19 period, and daily household income of petty traders are 0.99, 1.32, 0.90, 0.96, and 290.02 respectively. Thus the standard deviation of the investment of capital assets is the lowest (0.90) and the standard deviation of daily household income of petty traders is the highest (290.02). It indicates that the investment of capital assets is more consistent as it has the lowest standard deviation, hence, less deviated from the mean value. The daily household income of petty traders is the highest is less consistent as it has the highest standard deviation, hence, more deviated from the mean value. Also, the coefficient of variation of marital status, Size of family, Investment of capital assets, the income of petty traders before the COVID-19 period, and daily household income of petty traders is 234.76, 27.34, 86.35, 57.94, and 29.94 respectively. It shows that size of the family is more consistent as it has the lowest coefficient of variation. The marital status is less consistent as it has the highest coefficient of variation. Likewise, the value of skewness for the marital status, size of family, investment of capital asset, an income of petty traders before COVID-19 period, and daily household income of petty traders are found to be 3.37, 0.83, 0.84, -0.13, and -0.43 respectively. The value of skewness for the marital status of the respondents is 3.37 which indicates that the distribution of data is not symmetrical, that is, it is positively and highly skewed, according to the Rule of Thumb. The value of skewness for the size of a family and investment of capital assets is 0.83 and 0.84 which indicates that the distribution of data is moderately skewed, that is, it is positively skewed. The value of skewness for the daily income of petty traders during the COVID – 19 period and the daily household income of petty traders

is -0.13 and -0.43 which indicates that the distribution of data is fairly symmetrical, that is, it lies between -0.5 and 0.5. The value of kurtosis for marital status is 12.54 which indicates that the distribution is leptokurtic. The value of kurtosis for the size of a family is 0.37 which indicates the distribution is platykurtic. Similarly, the value of kurtosis for an investment of capital assets is found to be 0.26 which shows that the distribution is platykurtic. Likewise, the value of kurtosis for a daily income before COVID – 19 of petty traders is found to be -0.87 and the daily household income of petty traders is -0.71 which is clear that the distribution is platykurtic. The maximum value of the marital status is 5 (separated), the Size of the family is (8), Investment of capital asset is 3(above 150000), the income of petty traders before the COVID-19 period is 3(above 1000) and daily household income of petty traders is Rs. 1250. Similarly, the minimum value of the marital status is 0(marries), the Size of the family is 3, Investment of capital asset is 0 (5000-50000), the income of petty traders before the COVID-19 period is 0 (0-500) and daily household income of petty traders Rs. 250.

### Correlation

**Table 2**

*Pearson Correlation of Zero-Order is Used to Identify the Relationship Between the Bivariate Variables.*

	Marital Status	Size of Family	Investment	Daily income before COVID-19	The daily income of petty traders
Marital Status	1				
Size of Family	-.135	1			
Investment	.220	-.101	1		
Daily income before COVID-19	-.136	.214	-.046	1	
Daily income of petty traders	-.363*	.193	-.036	.359*	1

\*. Correlation is significant at the 0.05 level (2-tailed).

*Note.* Field Survey, 2021.

Table 2 presents the relationship within the variables, whether each variable has a strong correlation with over variables or not. It is noted daily household income of petty traders and has Marital Status of the respondents a negative and low degree of correlation (-.363). Likewise, there is a negative and low degree of correlation between the daily household income of petty traders and the Marital status of petty traders(-0.36). There is a positive and low degree of correlation between daily household income of petty traders and size of family (0.19). There

is a negative and low degree of correlation between the daily household income of petty traders and the investment of capital (-0.04). Similarly, there is a low degree and positive correlation between the daily household income of petty traders and income of trade before COVID 19(0.06).

### Hypothesis Testing

#### *Testing the Significance of a Correlation*

Let  $\alpha = 0.05$  be the level of significance.

**Table 3**

#### *Correlations*

Variables		Marital Status of the respondents
The daily income of petty traders	Pearson	-.36*
	Correlation	
	Sig. (2-tailed)	0.01
	N	48

\* Correlation is significant at the 0.05 level (2-tailed).

*Note.* Field Survey, 2021.

Table 3 shows that p-value (0.01) < 0.05, the null hypothesis is rejected and the alternative hypothesis is accepted. We have sufficient evidence to conclude that there is a significant relationship between the daily income of the petty traders and the marital status of the petty traders.

**Table 4**

#### *Correlations*

Variable	Size of Family
Daily income of petty traders	0.19
Pearson Correlation	0.18
Sig. (2-tailed)	
N	48

\* Correlation is significant at the 0.05 level (2-tailed).

*Note.* Field Survey, 2021.

Table 4 shows that p-value (0.18) > 0.05, the null hypothesis is accepted. We have sufficient evidence to conclude that there is no significant relationship between the daily income of the petty traders and the size of the family of the petty traders.

**Table 5**  
*Correlations*

Variables	Investment of Capital
Daily income of petty traders	-0.04
Pearson Correlation	0.81
Sig. (2-tailed)	
N	48

\* Correlation is significant at the 0.05 level (2-tailed).

*Notes:* Field Survey, (Jan 2021)

Table 5 shows that p-value (0.81) >0.05, the null hypothesis is accepted. We have sufficient evidence to conclude that there is no significant relationship between the daily income of the petty traders and the investment of capital in petty trade.

**Table 6**  
*Correlations*

Variables	Income of trade before COVID19
Daily income of petty traders	0.05
Pearson Correlation	0.71
Sig. (2-tailed)	
N	48

\* Correlation is significant at the 0.05 level (2-tailed).

*Note.* Field Survey, 2021.

Table 6 shows that p-value (0.71) >0.05, the null hypothesis is accepted. We have sufficient evidence to conclude that there is no significant relationship between the daily income of the petty traders and the income of petty trade before COVID 19.

The study was done by Puspa Sharma and Pushkar K. Pradhan in Kathmandu Valley established income of some petty traders is little above the expenditure. And there is a tough competitive market among small trading because of involving a large number of members in such work. Similarly, the investigation performed by Bahai Seleman Juma in Tanzania set up that the main problem which is faced by petty trading is a weak situation of market frame insufficiency of capital, low knowledge about

business skill, and importance of business by which they also not able to pay taxes. Likewise, the research compelled by Fikre Mariam Zergaw Giref in Ethiopia launched that the main source of assets is their saving and the remaining sources are friends and relatives, family contributions. And found that the standard deviation of the opening fund and the choose informal business has a positive relationship. In the same way, the interpretation done by Stephen P. Mnyawi and G. Benedict argued that permanent place and adequacy of capital investment are prerequisites for the favor of small trading development.

But I had explored that there is a significant relationship between the daily income and marital status of the petty traders. But there is no significant relationship between daily income and size of the family, investment of capital and the income of petty trade before COVID 19.

### **Conclusions**

In compact review, the study terminates that the mean or average value of daily household income of petty traders was the highest and the marital status had a lower mean or average value. Most of the variables were not normally distributed. There was a significant relationship between the daily income of the petty traders and the marital status of the petty traders. But there was no significant relationship between the daily household income of the petty traders and the size of the family of the petty traders, daily household income of the petty traders and investment of petty traders, and daily household income of the petty traders and the income of petty trade before COVID 19. The limitations of the study are the insignificant difference between the variations might be due to some data which were presented in a range. In this context, the investigator should collect the data in continuous form and its precise value. This study was limited to primary data with few numbers of the appellant that are 48. The sample data were only from a few petty traders in a few areas of Dharan. Thus, the finding of the investigation cannot be generalized. There were limited variables like marital status, family size, investment of capital, income before COVID 19, and household income of petty trade. The existing number of variables was not sufficient to correlate to the household income of petty traders and other variables. Hence, the researcher should increase the number of variables and collect continuous data and explore the connection between these variables. There were very few studies were done so, the study on this area should increase to show the correlation between household income of petty traders and other variables. Likewise, all the above findings were helpful to the planners and policymakers in Dharan sub-metropolitan city to formulate favorable policy and manage the micro-business sector including petty traders.

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