FACTORS RESPONSIBLE FOR THE PERFORMANCE OF WOMEN IN THE LABOUR FORCE, IN BURDWAN.

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Introduction

India is the fifth largest economy in the entire world, as of the financial year 2023. This is a huge growth for an agrarian country, who had been under the foreign rule not a century back. But this growth hasn't been as all encompassing for both the genders. In fact, the representation of the female gender in this growth has been completely displaced, as the country has progressed forward. The reason cited is the creation of jobs is behind in the race for demand of jobs, for women. The growth path has only blessed the job sectors which have lesser requirement of female labour and at the same time turned its head away from the job sectors which require their higher participation. This is shocking, seeing that India is home to 17% of the entire female population of the entire world.

India's Female Labour Force Participation Rate (FLFPR) has always been at an all time low when compared to the rest world and it has been categorized in the bottom 20% and faring just slightly better or could be said almost at par with the Arab countries. It seems that while the world average FLFPR was at 50% India's at the time of comparison came up to only 9.4%.

Also, the U-shaped curve for FLFPR which has been traced out for many steadily developing countries (which states that as a country progresses forward even as the educational attainment and fertility rate decrease causes the participation of women first to plummet and then rise as the country progressed)was not found for India. India's growth experience has been seen as the rapid decline of the agricultural sector without a corresponding growth in the manufacturing sector. Instead, this slack in the growth of the manufacturing sector was picked up by the service sector. The employment ratio of males to female has been 54.1 to the measly 16.2 according to a CMIE Report. Now, this is only for the service sector. It has also been noticed that the agricultural sector has been the main employer of women (57.3%) even though the contribution of agriculture and its allied activities to the Gross Domestic Product (GDP) has fallen steadily from 47.6% when the country had gained independence to about 16.4% in 2022.The reasoning behind this as put forward by the NSSO has been that the women are employed in India only in the more home-based, labour-intensive informal work (home-based in the sense that they work in their family lands for which they aren't compensated).

The employment of women or FLFPR has declined from about 31.4% recorded in the 1990s to 20.8% in 2022 .It also needs to be put to light that, the northern-eastern and eastern states show the state wise participation of women to be even lesser than that of the west and southern states. Andhra Pradesh recorded a rate of 37.6 whereas Bihar recorded it to be 9.4, the lowest in the entire country. So one might wish to know the reasoning behind this state wise as well as country wise low FLFPR.

It is been seen the women who are actively competing in the labour force even after their opportunities have decreased and are still decreasing, face a double work burden which is all but absent in the men who

are competing for the same jobs. The reasons for this double burden faced by these employed women lies in the fact that they face an inequality beginning from their family sphere and ending in the work sphere. The inequalities come across because of the unequal distribution of familial responsibilities(be it they are in role of a daughter, a sister or that of a wife), inequality in the face of education levels (the women are not encouraged always to push themselves forward and pursue higher studies) and then even if they overcome these hurdles and get employed their recruitment (biased), wages (less everywhere except perhaps in the places which demand equal pay because of Trade Unions), incentives are all not adequate enough to interest them to stay in the labour force. So thereby women are rapidly dropping from the labour force as time goes by and at the same time new women who should participate in the labour force after pursuing higher education look at these conditions are staying away from participating all together.

In this dissertation, we try to see how the working day of women is differently distributed from that of who aren't actively participating in the labour force and how the factors driving the declining FLFPR (seen in many empirical studies) affect the women who hold the currently employed status of the labour force.

Motivation

It has been observed the women have always showed lesser participation than men in the labour force. In fact, this participation of Indian women has always been at an all time low when compared to the world's female labour participation rate but recently it has been a free fall even after India's rapid growth and development.

According to a report by McKinsey Global Institute the growth of India could take a leap by the year 2025 if only the participation of women in the labour force is completely at par with that of the men. This would result in returns in an 18% increase over the usual GDP of 770 billion, which is multiple times of the return expected from the initial investment made by the Government and businesses of the country. But as we continue to observe even after high education levels, decrease in total fertility, mortality rates, advancement of infrastructure, the FLFPR is still not increasing.

The focus of this article is to understand why even after the higher educational attainment and with having to deal with the pressure to provide their children with a better future, only maybe less than half or just half the women are willingly working. What is stopping the housewives from pursuing work and provide better quality of life to their children and better future for themselves as well. Another motivating factor is to check the need of work of the women who are belonging to the families where the men are working in the lower end jobs. The dissertation tries to look into the key factors influencing the hours put in by these women in their jobs even as they keep completing their household responsibilities sincerely.

Literature reviews

Choudhury et al. (2022) tried to analyse the various factors which affected the withdrawal of women from the labour force, this was to answer two specific questions, which were: Is the hypothesis regarding the U-curve existing for the female labour force, empirically valid and whether only the supply side factors were sufficient to explain the falling of Female Labour Force Participation Rate (FLFPR). They mainly used three rounds of NSSO data 50^{th}, 61^{st} and 68^{th} which spanned the years of (1993–94), (2004–05) and (2011–12) respectively. It was seen that the existence of the U-shaped curve for female labour force participation rate was empirically valid only for education but in the analysis of three relationship were analyzed the relationship between FLFPR and MPCE (Marginal Per Capita Expenditure) wasn't U-shaped but negative, the relationship which existed between FLFPR and education aforementioned decreased with time while the relationship between FLFPR and the women's income was also negative. Also, it was also seen that the FLFPR would decrease in time regardless of its relationship with income and education. As probability of the women belonging to the upper decile (according to MPCE) have greater probability of entering job market due to better qualifications but the prevalence of the negative income effect tends to overwhelm their participation rate, which results in their withdrawal from the labour force.

Sai et al. (2022) in their paper checked the validity of the hypothesis of the U-shaped link present between the economic development and the female labour force participation rate, which was seen to be valid for many countries in the rest of the world. By the means of time series econometric model an analysis into the critical factors affecting the FLFPR was conducted. The main variables considered in the study was GDP (Gross Domestic Product) of the country which is a representation of the economic development, FLFPR, Life Expectancy, Fertility rate, Education level of women, Unemployment rate. The findings of the study revealed that there is the presence of an inverted U-shaped curve instead of the U-shaped curve expected between GDP and FLFPR. Also, there is a significant positive relationship between the life expectancy and FLFPR. The unemployment rate is an insignificant factor in terms of FLFPR whereas the fertility rate and FLFPR have a positive relationship also the presence of the U-shaped curve is valid here. There is no evidence, based support for the alleged negative relationship between fertility and female labour force participation rate as studied in several developing countries. In India, women's decisions to enter or leave the labour force are made at the time of marriage, and having a child having no additional effect. Education level of the women which was represented by the gross enrolment ratio shows a positive significant relationship between FLFPR and education.

Das et al. (2022) in their paper examined the effect of the fertility rate on the employment of women and how the employment of women in the labour force affects the economic growth of a country. It was

observed the female participation rate and fertility rate in India have been showing a declining trend for the time period 1990 – 2019. And the high rate of female labour force participation that is present, is mostly associated with the agricultural sector which requires low-skill labour in India. This is actually a matter of utmost concern as this raises the question of whether the economic development which is taking place is actually as inclusive of the female gender as it is of the male gender. The time series analysis observations show a negative association between female labour force participation and economic growth. Thusly, the findings raise the observation that even after the sharp economic growth of the country it is creating an unequal gender gap in terms of employment and wages received.

Winkler (2022) in her paper passed on the message that greater the rise in economic activity of the women working outside resulted in better living conditions for her mentally, culturally as well as socially. The main determinants of FLFP were found to be two sets of factors one which determined her market wage which received by working a job and the other reservation wage which in actuality is value of the time she spends at home. The former set consisted of her education, time spent by her working and her work experience while the latter consisted of spouse's income the accessibility to alternative household production number of children in the family, et cetera. Also, it was seen that the women's labour force participation is affected by government labour market, tax, transfer, and family policies, as well as by employer policies. Now the effect of educational attainment is significant though it doesn't always translate into a positive effect implying higher education for women doesn't always signify increased labour force participation. Also, the husband's income plays an inverse effect on the women's participation in the labour force. The presence of family policies act as a double-edged sword whilst it increases participation of women it reduces their reach to the top echelons of their work career. Also, the education has an overall ambiguous effect on the participation rate it may cause them to enter job market or it may also encourage them to invest more into their academic qualifications.

Abraham et al. (2021) in their study's result do not show any negative impact of motherhood on labour market participation, the women's overall employment is not impacted by motherhood, and their participation in paid work shows a significant increase after the first child has been conceived.However, these results are not statistically significant, also education which was significant variable in women's supply shows women who have not completed graduation are statistically significantly less likely to be employed in paid work than those who completed only their primary education.

Nayak et al. (2019) in their joint paper analyzed the nature of the relationship between Per Capita Income (PCI) of a State and Female Labour Force Participation (FLFP) and also checked whether there were any regional differences in female labour force participation rates between different states in India. Through the multivariate regression analysis, they found that there was a negative trend between the PCI and FLFP which was significant in nature, which implied that as household income increases and the households become wealthier, the need to work diminishes and women confine themselves within the domestic sphere to engage in familial responsibilities. Dummy variable regression lines were used to study the Female LFPR patterns in 16 states divided into 4 categories- North, South, East and West. The results of the regression show that in comparison to FLFPR in southern states are the best followed by the eastern then western and lastly the northern states. Overall, it was still seen that there has been a steady decline in the female workforce.

Roy (2017) in her paper analyses the data present by the World Bank spanning the years of 2007-2016, with regards to the FLFPR in India. By the use of various statistical techniques, she presents her observations in various graphical representations which reveal the different supply side as well as demand side factors which affect the FLFPR. She establishes, that female labour is necessary and therefore high when the women belong to the lower income categories. This happens because the low skilled jobs employ the women to a greater degree. This is due to the presence of low education level in the men who participate likewise for the same jobs as the women. But as the income level increases the labour force participation rate dramatically falls because the female labour is substituted by the male labour, which takes place because in the higher income categories it is seen that the huge negative effect of the education of men dominate the positive education effect of women in FLFPR, also some women withdraw from the female labour force to enrol in higher degrees in order to earn better pay. This arises due to the wage gap which is present in the jobs requiring higher skill and which pay more to the men than the women. One surprising result, which was found using sectional analysis in the context of urban working women, was the effect of income in the urban women. Instead, of causing a downfall in the FLFPR it actually caused it to pick up pace. The various suggestions, by Roy in her paper was the provision of incentives to lessen the withdrawal of women from the labour force as well as for the government to check on the wage gap between men and women, as well as provision of more skill development programmes which would allow the women to increase her participation in the labour market.

Kaur (2016) made an attempt examine the trends and patterns of female workforce participation among the Northeast states of India with the help of OLS Method (Ordinary Least Squares Method). Multivariate

regression analysis technique has been used on data of three specific periods (census years) viz. 1991, 2001 and 2011. His findings, in the paper, show a positive relationship between female literacy rate and female labour force participation rate but it is not significant due to the structural and cultural impediments which arises in the life of women who has education and is actively pursuing work. The findings suggest that the women FLFPR in the northern eastern region is higher than national average but never more than that of their male counterpart in any period.It has been seen that excluding Assam other places have shown n increasing trend in the FLFPR.

Lahoti et al. (2015) with the help of several multivariate regression models using the ordinary least squares method of estimation, examined the various drivers of female labour force participation and the relationship between female labour force participation rate and economic development was explored. They found the global U-shaped curve for FLFPR and the economic development of the country to not be present in the models (which took in to account both the paid and unpaid work performed by women) it seems that in the models the economic activity of a women regressed with the NSDP (Net State Domestic Product, taken as a stand in for economic development) loses the U-shape significance when the other variables of education, time and other demographic factors are taken into consideration. It is claimed by the authors that the various states where FLFPR was regressed with NSDP presented different curves, reasoning following this were the lack of proper job opportunities and status condition considerations by the women. The paper findings also suggests that a growth in the manufacturing sectors would have befitted the country more because this would lead to increases in the in FLFPR.

Sorsa (2015) observed in her paper the supply of female labour is affected by cultural and socioeconomic factors, access to resources, safety concerns with infrastructure, biases in regulations, or income levels. The high proportion of women who are unemployed were seen to be well educated this seems to indicate that though there has been demands for jobs but lack of creation of new jobs in spite of the high growth the country has seen in the past decade. In her paper, she confirms the broad trends of low and declining female labour force participation. She also claims that raising female labour force participation could substantially boost growth in India by dealing with both supply and demand constraints.

Srija et al. (2015) with the help of trend analysis in the data National Sample Survey (NSS) Rounds on the Employment and Unemployment Survey found that the rural female LFPR (RFLFPR)has seen the rural FLFPR has been almost half of the MLFPR (Male Labour Force Participation Rate). This plummet has been observed in the rural side because of a mixture of many factors working together. Though the decline

in the age bracket of 15-24 was due to them increasing the level of their education (i.e.,education effect) and income effect which suggests the magnitude of improvement in the average per capita consumption expenditure in rural areas, has caused women to withdraw from the labour force. The study also showed that there aren't sufficient non-farm jobs and thusly women don't participate in the labour force. Improving connectivity by providing adequate infrastructurein terms of roads is necessary to increase FLFPR.

Verick et al. (2014) stated in their paper the nations where labour force participation rates are nearly on par, pointed out the standard of recruitment and prospects for decent wages persist to be disproportionately distributed among males and females. The complexity of female labour force participation in emerging nations which was addressed in this research paper, through econometric analysis of factors associated with employment outcomes revealed that higher education is important if women are to have regular paid work and salaried jobs. According to them it is important to consider the effectiveness of workforce with the need to concentrate on encouraging greater labour-market outputs for females. The women are heavily represented in the informal economy which provides a vital source of livelihoods for masses of women in these countries but also wherethe safety is a great issue as they don't have formal protection. Also at the same time, their work is not captured accurately in national surveys and is subsequently under-reported. Thusly, policy interventions by the Government should tackle a range of issues, including improving access to and relevance of education and training programmes, promoting childcare and other institutional/legal measures to ease the burden of domestic duties, enhancing safety for women and encouraging private sector development in industries and regions that would increase job opportunities for women in developing countries.

Kapsos et al. (2014) in their paper studied factors like her educational qualification and whether she was married or unmarried as these are significant determinants of the women's labour supply . The econometrics analysis, showed that women with pre-primary to secondary education, and women aged between 15 and 19 are less likely to participate in the labour market than other woman who belong to rural side who are associated with a greater likeness to participate in the labour force. The presence of young children in the household, as well influences the likelihood of India's women to participate in the labour market.

Sanhita et al. (2013) in their paper attempt to examine the drivers of female labour force participation in India. They examined the relationship between economic or educational status of women's (as an indicator of development) and their labour force participation at a given point of time in India. There is no evidence

of a positive relationship between education of females and their participation in the labour force, as shown by the 66th round of NSS data.There is no evidence of social and cultural interaction effects which would explain the decline in female labour force participation in India. Also, consumption, assets, family size, number of children below the age of five are the main determinants of low female labour force participation in India. The MPCE curve which acts a proxy for the economic development and FLFPR is found to be U-shaped.

Bhalla et al. (2011) saw that factor such as family income, the education levels of the women all had the intended significant positive effect on the Labour Force Participation Rate (LFPR) of the women taken into consideration. The only negative significant factor, that is, the factor which caused the women to not be a part of the labour force, was the education level of their spouses. If the education level of the men was quite high then it would result in the women not participating in the labour force. The reasoning behind this, as presented in the paper, was that the men with high levels of education tended to earn higher incomes and even greater than the potential earnings of the female which made it unnecessary for the women to contribute as another earner within the family. It was noticed that the effect of the spouse's education level was even greater than that of the female education and thusly it dominated over the latter causing a decrease in FLFPR. Another point for the low FLFPR is the gender-based wage gap the women face in their workplace as well as the difficulty they face in getting into paid jobs in the first place.

Faridi et al.(2011) after examining the data of Pakistan's Bahawalpur district found a positive relationship between the women's age and self-employment status as well as a positive relationship between the women's self-employment status and her experience.Analysis of various education level shows that women who have low-level education highly tends towards self-employment than women who have high level of education.

Shaheen et al. (2011) investigated the patterns of female labour force participation in case of Pakistan. The study used multiple cluster analysis on the survey report of 2007-2008 of Pakistan . The variables used in the analysis are female labour force participation, used her age, the place of residence, her marital status, the level of education she had received as well as her family size, family monthly income and head of the family's education. Results of Logit model depicts that household head education, primary, middle, matric & madrassa (otherwise known as secondary education) education level is negatively related with the decision of female labour force participation while, decision towards participation is strong if female belonged to urban area, if she is married, if she has higher education, and if she has large family size.

Mahendra (2004) studied the FLFPR in India. He identified the determinants of female work participation was family size, the larger it was the lower was the ability of a woman to participate in the labour force. By applying regression analysis, he also pointed out that females belonging to the medium and higher income groups are less likely to participate in the labour force to earn income.

Das et al. (2003) by the logistic regression predicted the female labour force participation showed that primary and post-primary education each significantly reduces the likelihood of being employed for women. It was seen higher regional education captures the economic development of the region, which implies higher employment opportunities, and this should increase the labour force participation. The positive effect which is present is by far superseded by the increase in competition due to a higher pool of educated individuals. It was expected areas with higher levels of education in the aggregate to be more developed and have a higher demand for labour, but the supply of educated labour far exceeds the demand.

Naqvi et al. (2002) have analyzed the effects of factors in the terms of social-economic factors as well as the the demography. They conducted the study using Logit and Probit regression models to estimate the parameters and it was seen that the education of women, their marital status, number of children they have as well as the number of female family members all are negatively related to a woman's participation in the labour force.

Objectives

In this paper, we look into the effects produced by select factors on the decision of women who wish to be in the labour force and for those who are already participating in it.

Thusly, this study aims at fulfilling the following objectives:

1. To analyse how the number of children, the education level, wages received by the women and their husbands participating in the survey, affect the former's participation in the labour force.

2. To see how the women who participated in the survey divided their day working day into working at their job as well as giving time to domestic responsibilities.

3. To examine the role of women as both as an earner as well the nurturer within the family.

Methodology

This study is based on the primary data which has been collected from select places in the town of Burdwan of Purba Bardhhaman district, West Bengal, India. The survey provides regionally representative data of the nucleated families in Burdwan. The respondents of the survey were all married women. The survey was conducted through a questionnaire which took in their personal details including age, work experience, members in family, etc.

In this paper, the pictorial representations (like bar graphs and pie charts) and descriptive statistics like the various measures of Central tendency (such as Mean, Median & Mode), dispersion (like Range, Standard Deviation & Coefficient of Variation) has been used to represent the non-experimental data collected. The descriptive statistics has been a supplement to the correlation analysis followed by the consequent t-test of the variables (based on the information taken to be variables of one kind or another) and then also to the three-variable based regression model.

In this paper we have stuck to taking only three variables in the regression models, at a time instead of more than that, as there has been a lack of institutional providence of sophisticated statistical packages, like E-VIEWS. We have used Microsoft Excel to work on the calculations for the correlations, t-test and regression models.

Result

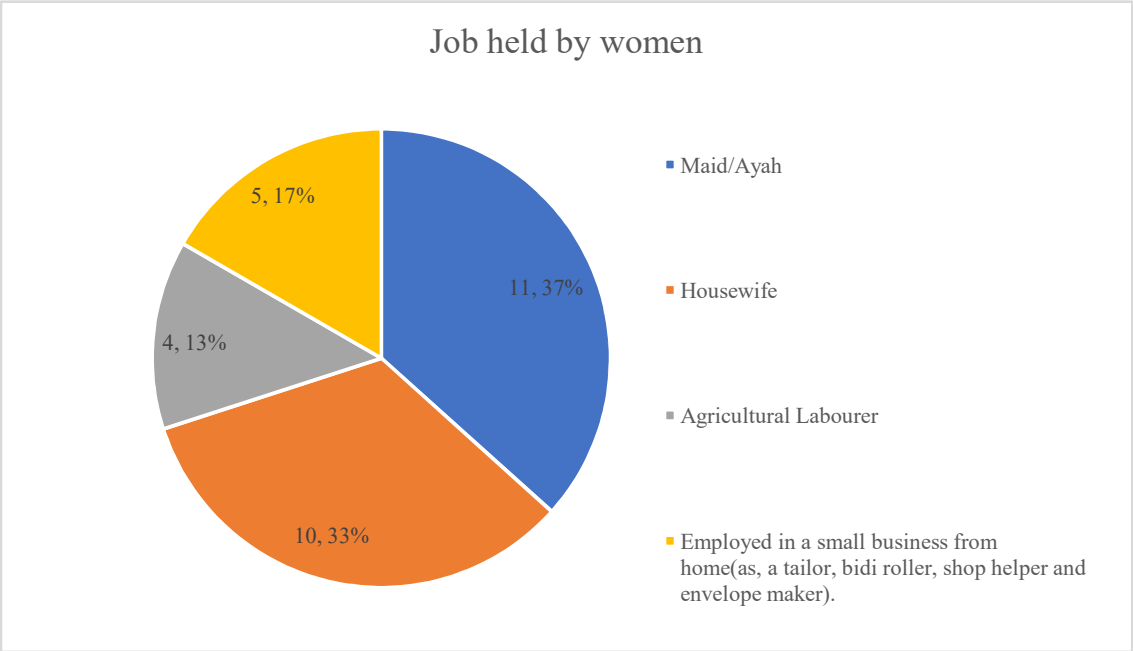
The result section will now present all the data collected in the survey in the form of graphical representations, summary statistics and analysis performed by correlation and regression.

By the means of stratified random sampling, out of the total no. of slums in Bardhhaman city which numbers to 15,156 in which population of 68,216 resides and which comes up to 21.71% of total population of Bardhhaman town we had selected areas of Perbirhata and Mirchoba where the slum areas where present.

We categorize the women into those who are employed in an occupation and those who aren't but are merely housewives. The occupations with which most of the women responded are as follows: Maids/ayahs, Agricultural Labourers and Employed in small businesses (as, a tailor, bidi roller, shop helper, envelope maker and caterer).

We show this through the means of the following Figure 1.

Figure 1: Career paths under taken by women



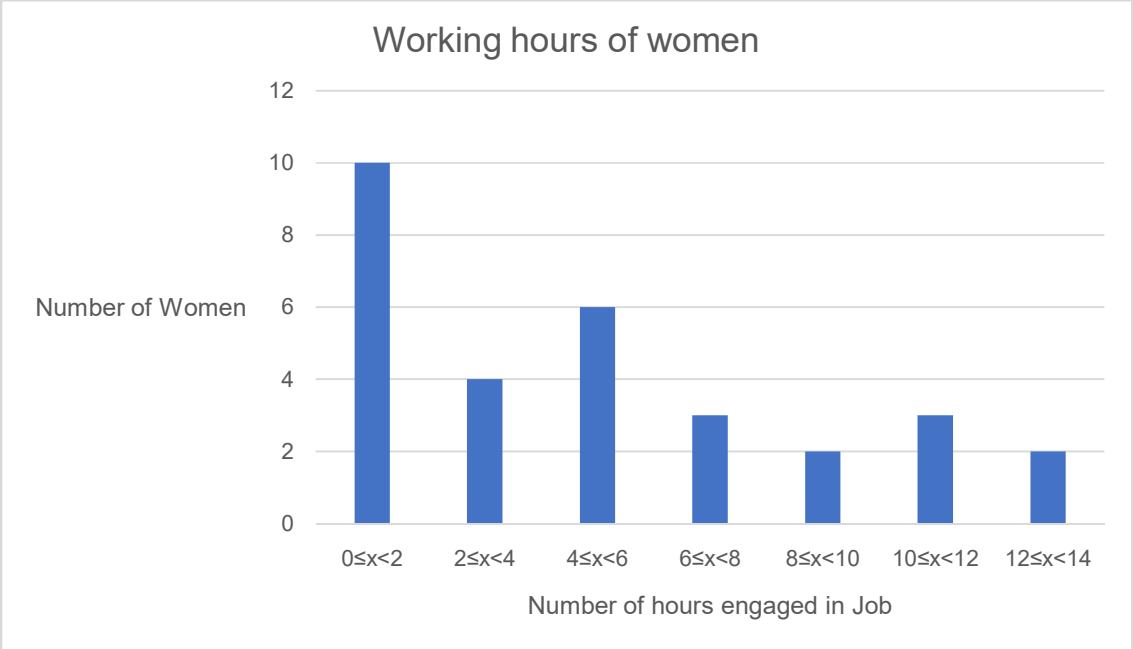
According to the data we collected through the survey, we found as shown above in Figure 1, in the sample of 30 families recorded, the most common occupation amongst women was either maids or ayahs accounting for thirty seven percent or eleven women. The second most common response, of the women were that they didn't hold any jobs and were housewives, this accounted for thirty-three or ten responses of the total answers received. The other two responses, one which accounts for seventeen percent or of five out of the thirty in the sample is that answered that they were part timers and/or they mostly worked at a small business as bidi rollers, envelope makers, helpers at shops or tailors and the last thirteen or four

women worked as agricultural labourers.

The figure represents that all these women in the data set were married, and were categorized into those women who didn't hold jobs (10)and also those who did(11+5+4=20).

Now we shall take a look into the part of the working day which is assigned to the production of marketable goods and services by the women. We shall compare the time spent of the women who don't produce them are presented alongside the employed women. Those who have no contribution to the GDP have their time listed under the 0-2 hours benchmark in the Figure 2.

Figure 2: Time spent on a Job by a Woman on a daily basis.

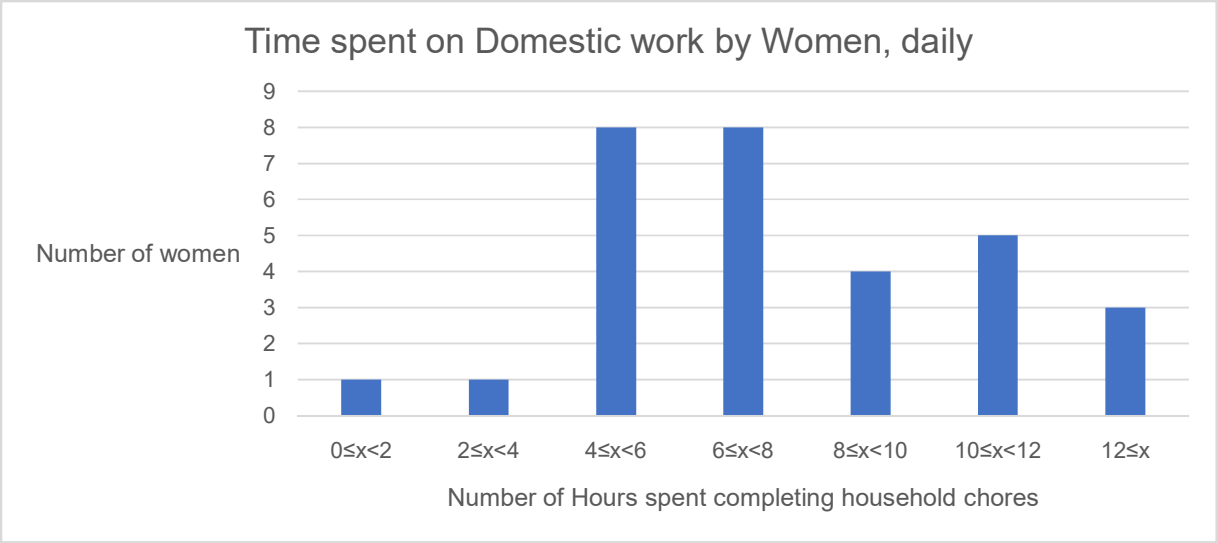


As mentioned beforehand, the second most common response we received from 10 out of the 30 women we surveyed, was they were not contributing to the production of marketable good and service, which is why their working hours is listed under the 0-2 hours on a daily basis. The rest 20 employed women working (in their jobs) hours per day are plotted on the graph in accordance to the response recorded from them. It is to be noted the long working hours listed by the women doesn't necessarily imply that they didn't pause between working these high hours, The response recorded by those women who had listed themselves as maids/ayahs had the most varied working hours out of all the occupations out of the ten of them one worked for 11 hours a day which falls under the 10-12 hours per day, again two of them worked for 8 hours in a day and this is why they are listed under the 8-10 hours bracket, two of them worked for 6 hours falling in 6-8 hours category another four for 4 and 5 hours categorized into the 4-6 hours, a pair recorded working 3 hours per day thus falling under the 2-4 hours bracket. Out of those who were employed at small businesses were five out of thirty surveyed women. They were a caterer who spent 14

hours of her day in this service falling under the 12-14 hours bracket, a shop helper who spend 11 hours put under 10-12 hours' time frame and one who worked for 5 hours in the 6-8 hours' time frame and one who worked 3 hours categorized into the 2-4 hours frame. The women who were employed as agricultural labourers recorded two falling under the 10-12 hours mark working 11 hours and 12 hours a day, again another worked for 5 hours put under 4-6 hours bracket and the last one worked for 6 hours put under the 6-8 hours bracket.

Now, we will see the time spent by all women of the data set, in their domestic work, by the means of a graphical representation. It is to be noted, that 10 out of the 30 women were housewives and classified under non-working, which doesn't imply that they were free loaders in their respective families. They all earned their keep by looking after the needs of the whole family, like doing the dishes, laundry, taking care of their kids, keeping the house clean to even some of the women growing vegetables and rearing chickens or ducks. As these goods, weren't available for sale in the market (and these women could have easily sold these goods and services, they don't receive any payment for their work) these are classified under the extended SNA group of National System of Accounts which provides the guidelines for measurement in GDP (Gross Domestic Product). Keeping all these things in mind, let us take a look at the Figure 3.

Figure 3: Time spent on Domestic responsibilities by a woman on a daily.



We see in the above Figure 3, the time spent on the horizontal axis and the number of women on the vertical axis. The women mostly spend 4-6 hours, eight from the thirty of them; and while another eight women had 6-8 hours and four of them got classified under8-10 hours. There were five of them spending10-12 hours and three claimed to be spending more than 12 hours on household chores. Some of the working women are unable to look after household work, like one of them was able to spare only 2-4 hours in a day and the other was sparing even less time than 2 hours which is why she is classified under 0-2 hours.

The table below helps us to look at how the respondent women were able to distribute their workload side by side with their domestic responsibilities.

Table 1: Summary Statistics of the Working day for all Women

Working hours detail of women		Domestic work hours detail of women	
Mean working hours of female	4.33	Mean domestic work hours of female	7.5
Median working hours of female	4.00	Median domestic work hours female	6.5
Modal working hours female	0.00	Modal domestic work hours female	10
Range (in hours)	14.00	Range (in hours)	14
Standard deviation in working hours for female	4.25	Standard deviation in domestic work hours for female	3.49
Coefficient of variation	0.98	Coefficient of variation	0.47

As recorded in Table 1, after calculations it was found that the average working hours for women was4.33 hours and the median working hours was 4. The most common working hours (mode), recorded in the housewives (10) as 0 hours. The range as found was 14 hours (14-0). The standard deviation was calculated as 4.25 hours and the coefficient of variation was 0.98. It was found that the average of the whole domestic hours for women at home was 7.5 hours and the median working hours was 6.5 hours. The most common domestic work hours recorded in the women was 10 hours. The range as found was 14 (16-2). Standard deviation was calculated as 3.49 hours and the coefficient of variation was 0.47 which is less than 0.5showing that the variability of domestic hours of women about mean wasn't by a lot. All worked more or less the same amount of time around the house. This all is due to the fact that the women in all the families are the secondary earners and they contribute to 25% or less to the family income. The main responsibility of the respondents was first to look after the family and then to anything else as second.

As, in this paper our main focus lies on the women who are already a part of the labour force we shall take a look into of their double work burden and compare it with the domesticated hours of the housewives we haven't taken in the working hours of the housewives in the Table 2 because every calculation would show the value of zero. Now presenting, Table 2.

Table 2: Summary Statistics showing the difference in Working Day of Employed Women and the Housewives

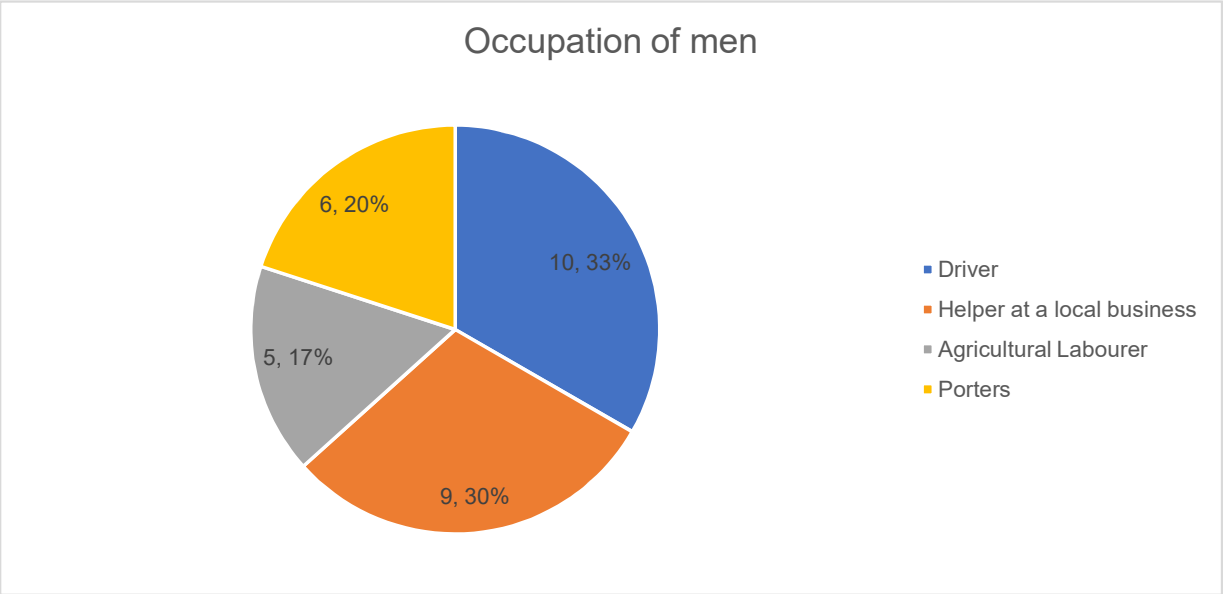
Working hours detail of employed women		Domestic work hours detail of employed women		Domestic work hours detail of housewives	
Mean working hours of employed female	6.5	Mean domestic work hours ofemployed female	7.15	Mean domestic work hours of housewives	8.3

Median working hours of employed female	5.5	Median domestic work hours employed female	7	Median domestic work hours housewives	6.5
Modal working hoursof employed female	11	Modal domestic work hours employed female	5	Modal domestic work hours housewives	6

As recorded in Table 2, the double work burden of women naturally didn't excuse from their household responsibilities. In fact, as we see even after the average time spent by the twenty employed women was 6.5 hours, median working hours was 5.5 hours and the modal working hours calculated to 11, the time spent by them (the employed women) on domestic chores on average was 7.15 slightly lesser than that of 8.13 hours of the housewives, median domestic hours was 7 and 6.5 and modal domestic hours for employed women was 5 while that of the housewives was 6. Not a huge difference, taking into fact the employed women are performing two roles it seems that only their average working day was increasing which wasn't there for the domesticated housewives. This may be a chief reason as to why women aren't staying employed.

Now we shall start off by taking a look into what types of jobs the men/husbands of the respondents were engaged in.It is to be noted that in ten of the families they were the sole breadwinners while for the other twenty they bore the majority part of the financial burden. From the survey it was observed that most of them were drivers and worked their jobs in two shifts. Apart of them were porters and were paid on a daily basis, while another part of them were helpers at local business and a few of them were agricultural labourers. This is shown in the Figure 4, given below.

Figure 4: The Career paths undertaken by Men



According to the data we collected through the survey, we found as shown above in Figure 4, in the sample of thirty families recorded, the most common occupation of men percentage wise thirty three percent, recorded by ten men, was found to be driver the second most common response at thirty percent numbered at nine men was helper at a local business (mill worker, municipality worker, garage worker, florist, etc.) Again, six men accounting for twenty percent were porters and five were agricultural labourers accounting for the seventeen percent.

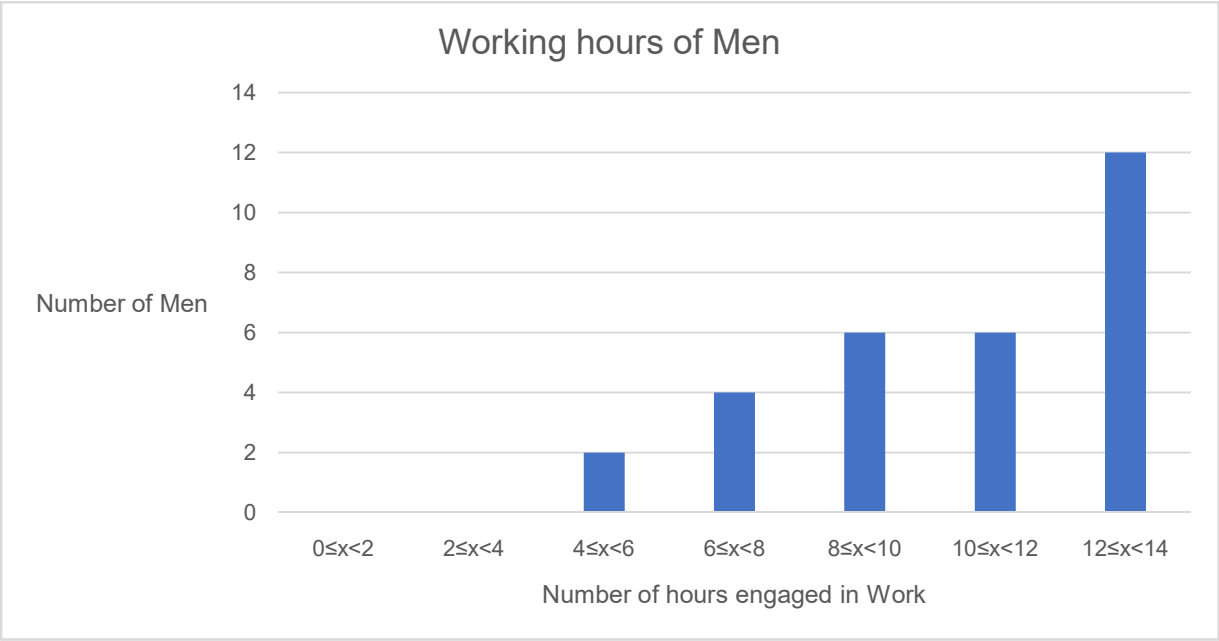
It is to be noted, every spouse in this dataset was employed which implies unlike the women they didn't have the option to be a stay in the home person.

Now likewise, for the men we will divide their working day into the time they spend on their jobs and time spent on their domestic responsibilities.

In the patriarchal form of society, it is accepted that the men will play the role of the protector and the provider though modernization has displaced some of the financial burden they are expected to take and the women too contribute in sharing of the household expenses. We need to come out of this way of thinking and see to it that they are equal in all spheres of their lives.

So, we shall first take a look into how many hours, the main and in some cases the sole provider of the family, the men, spend on their respective jobs. It is shown in Figure 5.

Figure 5: The time spent on a Job by a Man on a daily basis.

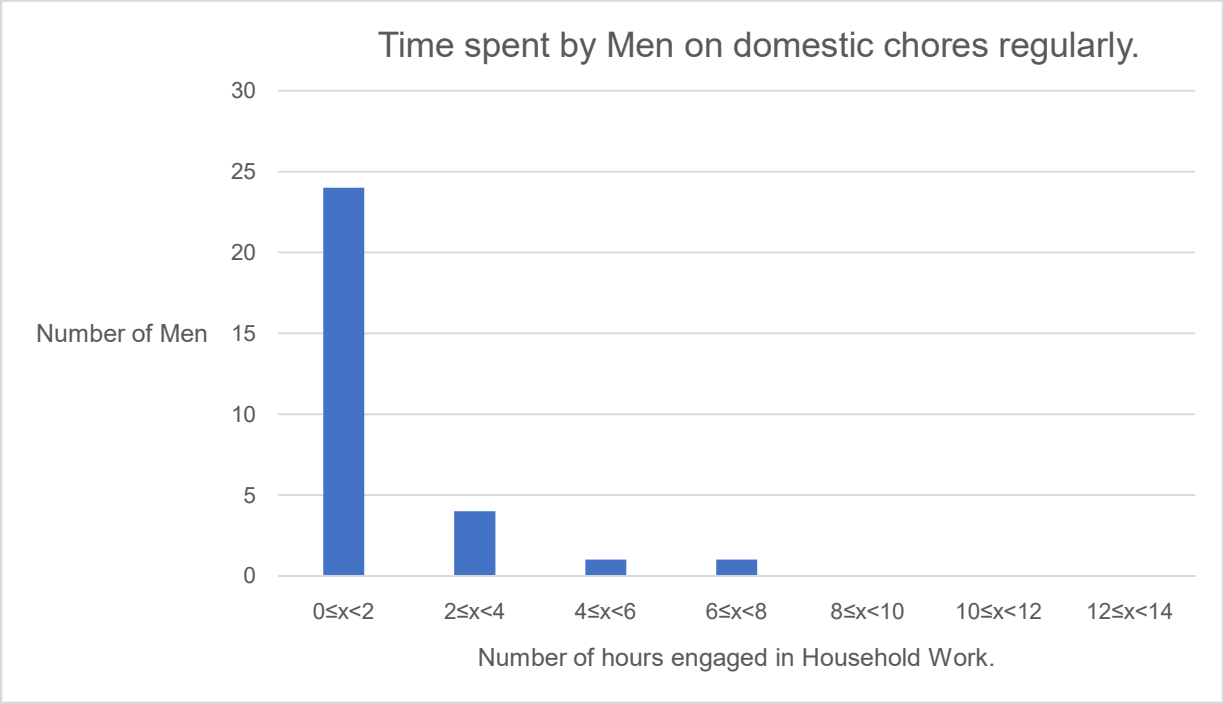


It has been observed in Figure 5, that the most of the men, that is, twelve of the thirty men recorded the hours that they worked their jobs to be 12 hours per day but less than 14 hours (by working in shifts of two) and six out of the thirty of them worked for 10-12 hours per day also there were another six working in the 6-8 hours per day, category. Four out of the thirty and worked in the 6-8 hours category and only two worked in the 4-6 hours time frame. It is seen that the variability in the working hours of men is less in men than in women and they all work for longer hours than their female counterparts.

It is expected from a humane view, that the burden of household responsibilities be shouldered by both the men and women equally. But unfortunately this mindset is lacking in most of the families which have been taken into consideration. In the society, it is expected a woman will fall into the role of nurturing and care giving and child rearing whereas the men will take to the ways of earning and protecting the family. This mindset has become so stereotypical that if out of the norm, when we see men giving more time to the household responsibilities, it automatically puts us on alert. Which is why, when we surveyed, the two places, a single man who claimed to spending 7 hours doing the household work, caught our eye. The man as a municipality porter and only worked for two hours a day which is why he, helped out his wife by taking more responsibility of the household duties, as his wife worked the busy 8 hours as a maid.

The time spent by the men on their household responsibilities, is shown by the following figure, Figure 6.

Figure 6: The Time spent on Domestic responsibilities by a man, on a daily basis.



As, we see in Figure 6, according to the data we collected through survey, it was seen in the sample of thirty men the most common response received from twenty three men in the data set was they didn't contribute anything to the household responsibilities and a man claimed to be helping his wife regularly for an hour or so, which is why these twenty four men have been categorized under the 0-2 hours benchmark. Four men claimed to have been helping their spouses for 2-4 hours per day as the latter to held jobs that contributed to household income. Only a single man recorded, 4 hours of household work in the dataset marking him under 4-6 hours per day group and another claimed to help per for 7 hours per day which is why he was grouped under the 6-8 hours.

Here, the Table 3, below shows how the respondents' husbands distributed their workload side by side with their domestic responsibilities. It represents the working day of men, set side by side for comparison.

Table 3: Summary Statistics of The Working day for the Men

Working hours detail of men		Domestic work hours detail of men	
Mean working hours of male	10.24	Mean domestic work hours of male	0.6
Median working hours of male	11	Median domestic work hours male	0
Modal working hours male	8	Modal domestic work hours male	0
Range (in hours)	13	Range (in hours)	7

Standard deviation in working hours for male	3.25	Standard deviation in domestic work hours for male	1.5
Coefficient of variation	0.32	Coefficient of variation	2.5

So, as recorded in Table 3, after calculations it was found the average working hours of men in their jobs was 10.24 hours. The median working hours amounted to 11 hours. The modal working hours of men was calculated to be 8 hours. The hours are high because men worked in two shifts, at their work. The range was calculated to be 13 hours and the standard deviation, 3.25 hours the coefficient of variation was 0.32 which is less than 0.5 showing that there is not much variation in the time spend at their workplace. All worked more or less the same but here it is to be noted that high working hours didn't necessarily imply great levels of income. Also, the calculations show that the average time spent by men shouldering the household burden is 0.6 hours and the median as well as modal time was calculated to be 0 which implies that middlemost as well as the most common hours recorded by men performing household chores was 0 hours. The range calculation shows that the time spent by men on household work is 7 hours. This is an anomaly because we recorded the time municipality porter, spent on domestic chores was 7 hours. The standard deviation was calculated 1.5 hours and the coefficient of variation is 2.5.

It wasn't necessary to divide the men into those who are working and those who are unemployed because as mentioned earlier no man was unemployed in the dataset.

As, the wage of a worker influences the time he/she spends on the job we shall now take a look at the income/ wage distribution of both the respondents and their husbands' side by side in the next graphical representation, Figure 7.

Figure 7: Wage distribution of the respondents and their husbands, on a monthly basis.

	≤2000	2000<X≤5000	5000<X≤8000	8000<X≤11000	11000<X≤14000	14000<X≤17000	17000<X≤20000
Respondents	16	6	6	2	0	0	0
Spouse	0	6	12	7	3	1	1

From Figure 7, we see that the income earned by the female respondents (whom, we had interviewed during the survey) and their husbands. As we see sixteen out of the thirty women earned income below Rs.2000 due to the fact that they were housewives and they had no means of income. Another six earned income between Rs.2000 and Rs.5000 also another six earned in the category of Rs.5000 and Rs.8000 while two of them were earning between the range of Rs.8000 and Rs.11000. Out of the thirty men whose data we had collected in the survey we saw six men earning in the income group of Rs.2000 and Rs.5000, twelve men earning in the range of Rs.5000 and Rs.8000, another seven's earnings were classified under the Rs.8000 and Rs.11000 while the rest are spread out in the three ranges of three men earning between Rs.11000 and Rs.14000 and a single man under Rs.14000 and Rs.17000 and one last one in the category of Rs.17000 and Rs.20000.

An interesting observation following the above Figure 7, is that we see that even in the lower end of high paying jobs men earn more than women which is why they were men, five to be precise who earned more than Rs.11000 while there wasn't a single woman present and again the highest pay received by two women out of the thirty lied only between Rs.8000 and Rs.11000.

The descriptive statistics presented below regarding the wages received by men and women in the dataset would help in establishing a much clearer picture of the difference between the earnings of men and women. Now, presenting Table 4.

Table 4: Summary Statistics of the Wages received by Women and Men in a Month.

Female Income (in Rs.)		Male Income (in Rs.)	
Mean income (in Rs.)	3081.07	Mean income (in Rs.)	8074.40
Median income (in Rs.)	1750	Median income (in Rs.)	8000
Modal income (in Rs.)	0	Modal income (in Rs.)	6000
Range (in Rs.)	9000	Range (in Rs.)	15500
Standard deviation about income (in Rs.)	3179.35	Standard deviation about income (in Rs.)	3536.18
Coefficient of variation	1.03	Coefficient of variation	2.28

The Table 4, shows the average income of the women amounted to Rs.3081.07 while that for their husbands amounted to Rs.8074.40 after calculations. The median income in the women was Rs.1750 while that for the men was Rs.8000. The modal income in the data for women was Rs.0 but for the men it was Rs.6000. The range for the women's income was Rs.9000 but for the men it was found to be Rs.15500. The standard deviation in women's income was Rs.3179.35 but for men it was Rs.3536.18. The coefficients of variation were 1.03 and 2.28 for women and men, respectively.

Armed with this information, presented in the past few pages, we are quite interested to know whether there exists any relationship between the time spent by women shouldering the household work and the income of men. By correlation analysis, it was seen that the former is indeed linked to the latter and the correlation coefficient was calculated as -0.01 which is quite unexpectedly implies a very low negative relation. It should have been so that if income of men rises then the women devote more hours of their working day to household work. But the negative relationship implies that if the income of men increases then the women will decrease the amount of time given to household chores, which indirectly interprets to the time spent by women on their jobs increasing.

Now, then again Table 4, shows the commendable gap existing between the earnings of the respondents and their husbands. **But is this huge disparity in wages in anyway affecting the participation of women in work and is this a significant reason as to why we found so many women not being an active working part of the labour force?**

We shall check the gravity of this wage disparity, by seeing whether the difference between the average earnings of the women and their husband, is significant or not, by using t-test.

Thusly, we set up the Null Hypothesis (H_0) as there is no difference between the average male income and the average female income, that is, it is zero against the Alternative Hypothesis (H_1) that the average income of men is greater than the average income of women.

Therefore, to test: $H_0: \mu_{FI} = \mu_{MI} against, H_1: \mu_{FI} < \mu_{MI}$.

where, μ_{FI} denotes the average female income and μ_{MI} denotes the average male income.

Test Statistic: Under H_0, the test statistic $t^* = \frac{\bar{d}}{S/\sqrt{n}} \sim t_{n-1}$.

Here, $\bar{d}$ is the difference between the female income and male income, S represents the sample deviation while n represents the sample size.

Value of $\bar{d} = -5193.33; S = 4280.34; n = 30$.

Therefore, $t^* = -6.65$.

For one-tailed test, the tabulated value of t-statistic at 10%, 5% and 1% level of significance for 29 degrees of freedom is $t_{0.1,29}$=1.31, $t_{0.05,29}$=1.69 and $t_{0.01,29}$=2.46 respectively.

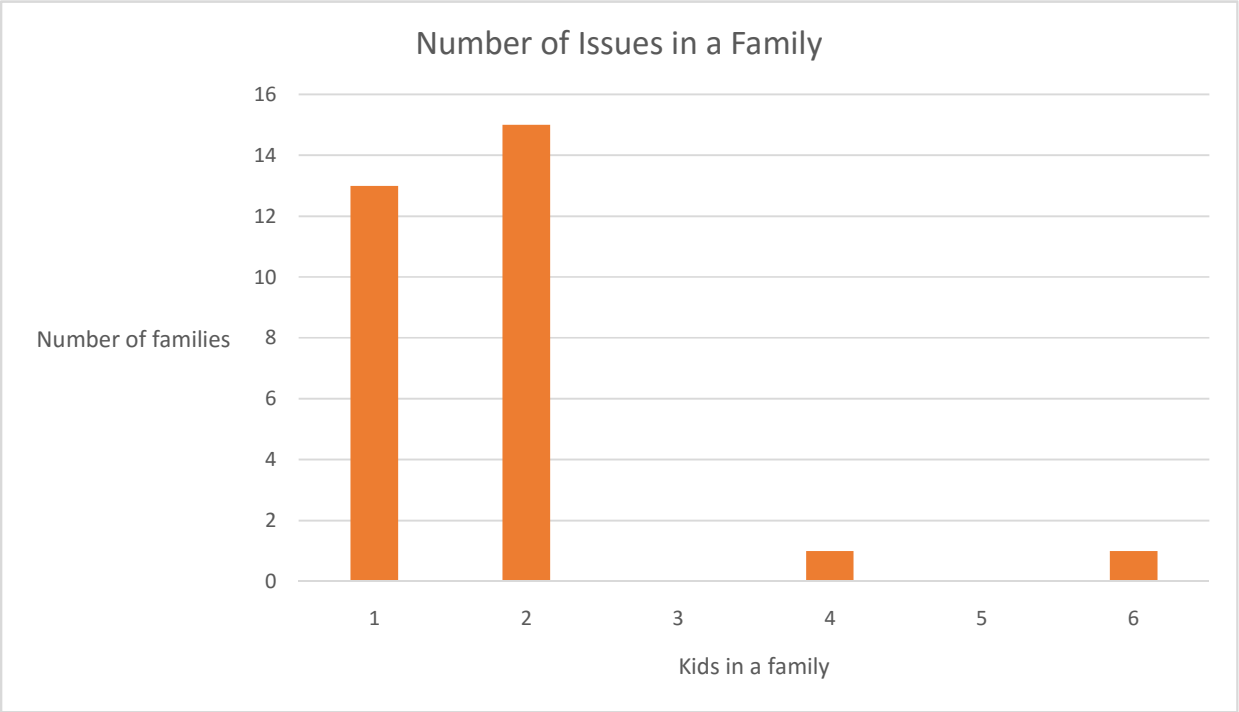
Now as $|t^*| > t_{0.1,29}$ and $|t^*| > t_{0.05,29}$ and $|t^*| > t_{0.01,29}$.

The null hypothesis is rejected at all levels of significance and the alternative hypothesis is accepted. This implies that the average income of men is greater than average income of women.

Now we also saw, from Table 2, the average working hours of women was way lesser than the average time they spend on domestic chores. So, we can hypothesize that, the women spend more time on household chores because it also includes child rearing and nurturing them is the main responsibility bore by the women in the family. But it can also be so, that when the number of children increases in the family women search for means of earning income or higher income so that they can look after their children better.

To check, which way does the women take to try and improve the living conditions of her children better we shall first take a look into the number of children present in families on a whole by the means of the figure shown below, Figure 8.

Figure 8: Children present in families.



The Figure 8, shows that thirteen families out of the thirty had a kid and fifteen families had two kids while just a single family had four kids and six kids respectively.

It is to be noted we haven't taken the **age of individual kids into consideration.**

But we still draw a hypothesis that the women with younger kids and more kids will spend more time at home performing the household chores and hence more hours of her working day will be spent in domestic work (child care).

In order to check this claim of a positive relationship, we have used a correlation analysis. Surprisingly, **the correlation coefficient calculated** between the number of children a woman has and the time she spends on household work, was **-0.38**. This implies a moderately negative relation which can be interpreted to as the more children a woman has to provide them with better care, she will spend more of her working day in a job.

Let us test the significance of this relation by the t-test. The t-test statistic would actually help us determine whether this correlation coefficient calculated, actually represents the correlation present between the two variables in the population.

Let us thereby, assume that the correlation coefficient of the population is represented by ρ.

To test the significance of the sample correlation coefficient (denoted by r), we set up the null hypothesis (H_0) where ρ is equal to zero and the alternative hypothesis(H_1) as ρ not equal to zero. This interprets to

testing the claim that the sample correlation coefficient not being a representation of the population against sample correlation being a representative of the population.

Therefore, to test *H_0: $\rho=0$ against H_1: $\rho\neq0$.*

The t-statistic under H_0 is calculated to be $t^* = \frac{r(n-2)^{0.5}}{(1-r^2)^{0.5}}$.

Calculations, present r=0.38 as the observed correlation coefficient in a sample where n=30, pairs of observations of a bi-variate normal population. It was found that, the value of $t^* = -2.17\ so,\ |t^*| = 2.17$. For two-tailed test, the tabulated value of t-statistic at 10%, 5% and 1% level of significance for 28 degrees of freedom is $t_{0.1,28}$=1.70, $t_{0.05,28}$=2.04 and $t_{0.01,28}$=2.76 respectively.

As, $|t^*| > t_{0.1,28}$, $|t^*| > t_{0.05,,28}$ but $|t^*| < t_{0.01,28}$. The result is significant at the 10% and 5% level of significance but it is insignificant at 1% level of significance. **So, we accept the alternative hypothesis at 5% and 10% level of significance and interpret it as the sample correlation coefficient r actually is a true representative of population coefficient and the variables (the number of children a woman has and the time spent by her completing household chores) are negatively correlated in the population (r=-0.38).**

Another thing which requires checking was whether there was any relation between the income earned by women and the number of children she had. The correlation analysis revealed that there was a **low positive relation (the value was 0.26)** between the two variables. This implies that if the number of children increase in a family a woman will be required to earn greater pay. **It is to be noted, that this relation was found between all the women who were surveyed, but when we just took the women who were already employed and the number of children present in their family into consideration the correlation coefficient value drastically fell to 0.05.** It shows there is a negligible positive relation between the number of children a woman has and the pay she earns.

Which makes us come to a realization that there are other factors, which affect the women's employment and the number of hours she puts into her job.

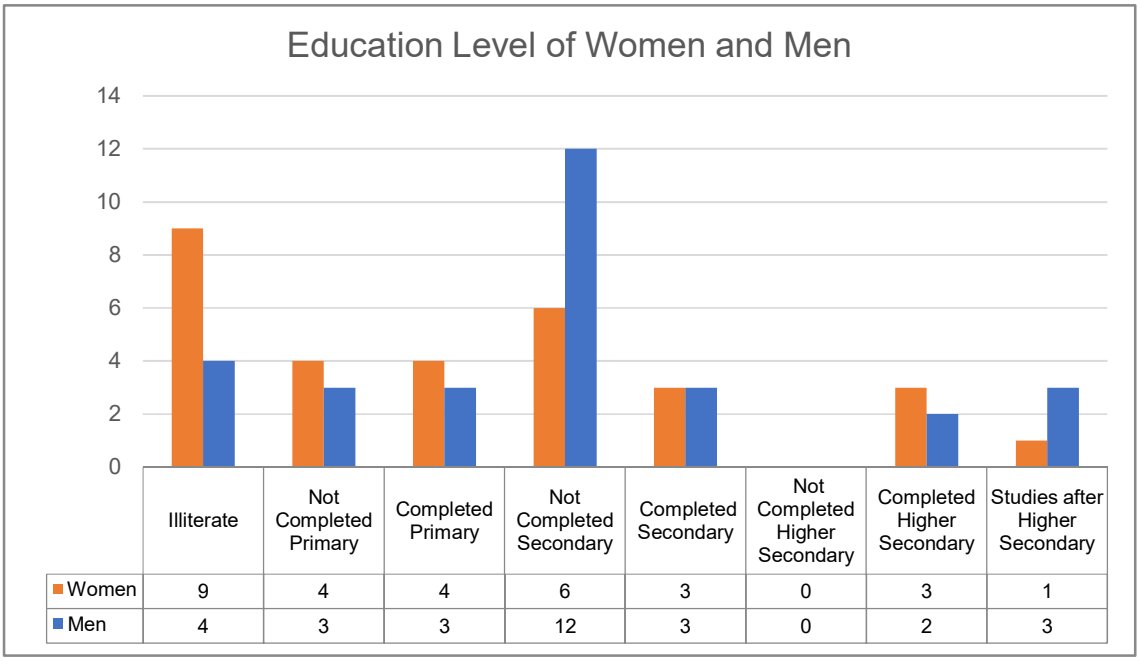
We, know that the women who were unemployed before wouldn't be getting employed that easily and there is also the fact that the women who were already employed getting better employment opportunities, this is due to various factors.

And one such factor could be her education, even though we have surveyed women **who belong to the marginalized sector of the society, we shouldn't readily dismiss her education as to not being a significant factor** which determines her job opportunities.

It would be wise, if we conducted a side-by-side analysis of the educational qualification of the female respondents and their spouses'.

Therefore, now we present the education levels of both the women and men in the data set, in Figure 9.

Figure 9: Education distribution of the respondents and their husbands.



	Illiterate	Not Completed Primary	Completed Primary	Not Completed Secondary	Completed Secondary	Not Completed Higher Secondary	Completed Higher Secondary	Studies after Higher Secondary
Women	9	4	4	6	3	0	3	1
Men	4	3	3	12	3	0	2	3

In Figure 9, we see that the number of women who are illiterate amount to nine out of the thirty respondents we surveyed, while only four men were illiterate in the entire data set. Four women and three men were unable to complete their primary level of education and only four women and three other men completed their primary education. Twelve men and six women were unable to complete their secondary education but three women and men finished their secondary education. Three women and two men completed their higher secondary and there were none who hadn't completed their higher secondary be in the respondents or their husbands. Only one woman and three men had pursued education beyond higher secondary.

If we peruse, the Figure 9, the three observations quickly follow: a) The number of women who are illiterates is greater than the number of men who are illiterate. b) The number of men who haven't completed their secondary education have surpassed the number of women by quite a margin. c) Only one of the women has studied after higher secondary while there were a trio of men who continued their education after higher secondary.

This automatically raises the question is there a significance of these observations on the education levels attained by the female respondents and their husbands?

We shall try and answer that question after a fairer comparison of the educational attainment of women and men by the means of the descriptive statistics provided in Table 5, below. It is to be noted, that we have in our study measured the education level of both the genders by considering as Class 1 to represent a year of schooling received and in accordance set up the for every additional class, the year of schooling received to

increase by one year. Any person whose, education is below Class 1 has been considered to receive zero years of schooling.**We have established Class 1 to represent the origin.**

Table 5: Summary Statistics of the Education level of Women & Men.

Female Education (in Years.)		Male Education (in Years.)	
Average years of schooling	5.4	Average years of schooling	6.63
Median years of schooling	5.43	Median years of schooling	6.63
Modal years of schooling	5.48	Modal years of schooling	6.64
Range in years of schooling	16	Range in years of schooling	16
Standard deviation about years of schooling	4.21	Standard deviation about years of schooling	3.82
Coefficient of variation	0.77	Coefficient of variation	0.57

From Table 5, we see that the average years of schooling the women have received is 5.4 approximated to Class 5 that is completed primary while their husbands averaged to 6.63 approximated to Class 7, that is not completed their secondary education but completed primary. Again, the median years of schooling for the women was 5.43 that is completed primary and for the men it was not completed secondary but completed primary. Women had the modal years of schooling similarly approximated to Class 5 while for the men it again came to Class 7. The range for both the women and the men was 16 years which is because a woman and three men had pursued education beyond higher secondary. The standard deviation in years of schooling received was 4.21 and 3.82 approximated to Class 4 for both women and men respectively. The coefficient of variation in case of women was 0.77 and men it was 0.57.

We see, in the descriptive statistics that the average years of schooling received by the men are greater than the women. We shall now check, if this difference in the educational attainment is significant or not through a t-test.

We set up the null hypothesis (H_0) as the average years of schooling received by men and women is insignificant against the alternative hypothesis (H_1) the average years of schooling received by men is greater than the average years of schooling received by the women.

Therefore, to test, $\boldsymbol{H_0: \mu_{FE} = \mu_{ME} against, H_1: \mu_{FE} < \mu_{ME}}$

where, μ_{FE} denotes the average female years of schooling and μ_{ME} denotes the average male years of schooling.

Test Statistic: Under H_0, the test statistic $t^* = \frac{\bar{d}}{S/\sqrt{n}} \sim t_{n-1}$.

Here, $\bar{d}$ is the difference between the average female years of schooling and the average male years of schooling, S represents the sample deviation while n represents the sample size.

Value of $\bar{d} = -1.8; S = 3.68; n = 30.$

Therefore, $t^* = -2.67.$

For one-tailed test, the tabulated value of t-statistic at 10%, 5% and 1% level of significance for 29 degrees of freedom is $t_{0.1,29}$=1.31, $t_{0.05,29}$=1.69 and $t_{0.01,29}$=2.46 respectively.

Now as $|t^*| > t_{0.1,29}$ and $|t^*| > t_{0.05,29}$ and $|t^*| > t_{0.01,29}$.

The null hypothesis is rejected at all levels of significance and the alternative hypothesis is accepted. This implies that the average years of schooling received by men is greater than the average years of schooling received by the women.

Now as we have shown the complete data we collected in the survey by the means of graphical representation and descriptive statistics we shall now move on to see the effect of the different factors on the working hours of women, through regression analysis.

The regression analysis is a statistical method used to show the relationship between two or more variables. This is usually used to show the relationship between the dependent and independent variables. As stated before, we have used three variable regression models for the regression analysis; there are two independent and one dependent variable. In all the three-variable regression models that we have made, the dependent variable and one of the independent variables has been the same, which is, number of hours working by women and the number of children a woman has.

The formula of the regression line can be stated as follows:

$$Y_i = \beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \varepsilon_i \quad \forall\, i = 1,2,\dots,30.$$

where, i = individual number in sample.

Y_i = the dependent variable (or, regressand).

β_0 = the intercept term.

$\beta_1 \& \beta_2$ = the behavioural/slope coefficients of $X_{1i} \& X_{2i}$ respectively.

X_{1i} = the first independent variable(or, regressor).

X_{2i} = the second independent variable(or, regressor).

It is to be noted, that we have exclusively used three-variable model setup (instead, of using multi-variable regression model) because our sample size is very small and which is why if we had used a multi-variable model setup it would have significantly decreased the power of the test (that is, the probability of rejecting a null hypothesis when it is false), which is dependent on the degrees of freedom (calculated as, the difference between the sample size and number of parameters) .

First Model:

The first model considers the time spend by woman working outside to be the dependent variable and the number of children a woman has as well as the time spend by men working outside as the independent variables. The regression table, from MS Excel, is shown as follows:

Regression Statistics	
Multiple R	0.44
R Square	0.19
Adjusted R Square	0.13
Standard Error	3.96
Observations	30

ANOVA					
	Df	SS	MS	F	Significance F
Regression	2	101.34	50.67	3.23	0.06
Residual	27	423.33	15.68		
Total	29	524.67			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	0.88	3.07	0.29	0.78	-5.41	7.17	-5.41	7.17
Number of children	1.82	0.73	2.48	0.02	0.32	3.31	0.32	3.31
Working hours of male	0.02	0.23	0.10	0.92	-0.46	0.50	-0.46	0.50

From the above table we can set up the estimated regression equation as follows:

$$\widehat{workhrswomen}_\iota = 0.88 + 1.82\widehat{children}_\iota + 0.02\widehat{workhrsmen}_\iota$$

$$S.E \quad : \quad (3.07) \quad (0.73) \quad (0.23)$$

$$t - value \quad : \quad (0.29) \quad (2.48) \quad (0.10)$$

$$p - value \quad : \quad (0.78) \quad (0.02) \quad (0.92)$$

$$R^2 = 0.19 \qquad \overline{R^2} = 0.13$$

$$F^* = 3.23$$

From the above equation, it is clear that there exists a positive relationship between the time spend by woman working outside and the number of children she has and again there exists a positive relationship between time spend by men working outside.

It is seen, that everything else set to zero i.e. if the woman has no children and also the time spent by men working is zero then on average the time spend by the woman working hours will be 0.88 on a daily basis,

as the value of intercept term denoted by $(\widehat{\beta_0})$ is seen to be0.88. then on average the time spend by the woman working will 0.88 on a daily basis, as the value of intercept term denoted by $(\widehat{\beta_0})$ is seen to be0.88. Also, ceteris paribus, as the value of the slope coefficient of number of children is denoted by $(\widehat{\beta_1})$ is seen to be 1.82,implies that, if the number of children increases by one, would on average increase the woman's working hours daily by about 1.82 times. Also, ceteris paribus, as the value of the slope coefficient of time spend by men working outside denoted by $(\widehat{\beta_2})$ is seen to be 0.02,implies that, if the time spend by men working outside increases by an hour would on average increase the woman's working hours daily by about 0.02 times.

The R-square value is used to measure the goodness of fit of an estimated line which is how good an estimated line represents the data set or how much a model is able to explain the regressand. Here, $R^2 = 0.19$, which implies that 19% of the total variation in the time spend by woman working outside can be explained by the two regressors: the number of children a woman has; the time spend by men working outside, jointly.

As the R-square (R^2) value assumes that both the independent variables are affecting the result of this regression model and keeps increasing as we increase the number of independent variables, we use the value of Adjusted R-square ($\overline{R^2}$) which will only rise when the independent variables considered are actually producing an effect on the model. Here, $\overline{R^2} = 0.13$ which means that taking into account the two regressors, the model explains only 13% of the variation in working hour of women or the regressand.

Now we shall, interpret the significance of individual slope coefficients one by one.

Firstly, we shall, take the individual slope coefficient (here,$\widehat{\beta_1}$) in the null hypothesis (H_0) as equal to zero against the alternative hypothesis (H_1) that $\widehat{\beta_1}$ not equal to zero, this means that we are seeing whether there is no significant relationship between the time spend by woman working outside and the number of children they have against the alternative that there is a significant relationship between them.

Therefore, to test, $H_0: \widehat{\beta_1} = 0$ against $H_1: \widehat{\beta_1} \neq 0$.

We can conduct the testing of this hypothesis with the help of p-value. The p-value is computed after the test statistic (here, following the t-distribution) is computed from the data set. The p-value is defined as the exact probability of obtaining the estimated test statistic under the null hypothesis. The H_0 is rejected when the p-value is small but if it is big then the H_1 is rejected. The p-value obtained in this equation for $\widehat{\beta_1}$ is 0.02 which is greater than 0.01 but lesser than 0.05 and 0.1. Therefore, we reject the null hypothesis (H_0) and accept the alternative hypothesis (H_1) at 5% and 10% level of significance implying that there is a significant relationship between the time spend by woman working outside and the number of children while we reject the alternative hypothesis (H_1) and accept the null hypothesis (H_0) at 1% level of

significance implying there is no relationship between the time spend by woman working outside and the number of children she has.

We take the individual slope coefficient (here,$\widehat{\beta_2}$) in the null hypothesis (H_0) as equal to zero against the alternative hypothesis (H_1) that $\widehat{\beta_2}$ not equal to zero, this means that we are seeing whether there is no significant relationship between the time spend by woman working outside and the time spend by men working outside they have against the alternative that there is a significant relationship between them.

Therefore, to test, $H_0: \widehat{\beta_2} = 0$ against $H_1: \widehat{\beta_2} \neq 0$.

The p-value obtained in this equation for $\widehat{\beta_2}$ is 0.92 and it is greater than 0.1and 0.05 as well as 0.01 therefore we accept the null hypothesis (H_0) and reject the alternative hypothesis (H_1) all levels of significance (i.e., 1%, 5% and 10%). This means that there is no significant relationship between the time spend by woman working outside and the time spend by men working outside.

Now, we shall look at the overall significance of the estimated regression line using the joint null hypothesis (H_0) which assumes that both $\hat{\beta}_1$ and $\widehat{\beta_2}$ are jointly or simultaneously equal to zero against the alternative hypothesis (H_1) that both $\hat{\beta}_1$ and $\widehat{\beta_2}$ are not simultaneously zero. Here, this implies that we are checking whether the time spend by women working outside is not linearly related to the number of children she has as well the time spend by the men working outside against the alternative that the time spend by women working outside is linearly related to the number of children she has as well the time spend by men working outside. We test this through the F-test.

Whenever, the calculated F statistic value is lesser than the tabulated F value we consider the estimated regression line, as a result insignificant and thusly accept the null hypothesis (H_0) and that both $\hat{\beta}_1$ and $\widehat{\beta_2}$ are simultaneously zero. Or else, we accept the alternative hypothesis (H_1) both $\hat{\beta}_1$ and $\widehat{\beta_2}$ are not simultaneously zero.

Therefore, to test, $H_0: \widehat{\beta_1} = \widehat{\beta_2} = 0$ against $H_1: \widehat{\beta_1} and \widehat{\beta_2} \neq 0$, simultaneously.

For the above estimated regression line, we obtained F*= 3.23 (calculated value).

The tabulated value of F at 10% level of significance, the 2 slope coefficients and 27 degrees of freedom is $F_{0.1,2,27}$=2.51. The tabulated value of F at 5% level of significance, the 2 slope coefficients and 27 degrees of freedom it is $F_{0.05,2,27}$=3.35. And the tabulated value of F at 1% level of significance the 2 slope coefficients and 27 degrees of freedom is $F_{0.01,2,27}$=5.49.

Thus, we see that F*> $F_{0.1,2,27}$ but F*< $F_{0.05,2,27}$ and F*< $F_{0.01,2,27}$. Therefore, we reject the null hypothesis (H_0) at 10% level of significance and accept the alternative hypothesis (H_1). This, implies that at the 10%

level of significance both $\hat{\beta}_1$ and $\widehat{\beta_2}$ are not simultaneously zero and there exists a linear relationship between the time spend by women working outside and the number of children she has as well the time spend by men working outside. However, we fail to reject the null hypothesis at 5% and 1% level of significance thusly, implying that the both $\hat{\beta}_1$ and $\widehat{\beta_2}$ are simultaneously zero and there doesn't exist a linear relationship between the time spend by women working outside and the number of children she has as well the time spend by men working outside.

In this estimated linear regression model, it is clear that number of children is a significant factor whereas, the time spend by men working outside isn't one.

Second Model

The second model considers the time spend by woman working outside to be the dependent variable and the number of children a woman has as well as the time spent by men on domestic chores as the independent variables. The regression table, from the MS Excel, is shown as follows:

Regression Statistics								
Multiple R	0.44							
R Square	0.19							
Adjusted R Square	0.13							
Standard Error	3.96							
Observations	30							
ANOVA								
	df	SS	MS	F	Significance F			
Regression	2	101.94	50.97	3.26	0.05			
Residual	27	422.73	15.66					
Total	29	524.67						
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	1.17	1.44	0.81	0.43	-1.79	4.13	-1.79	4.13
Number of children	1.75	0.74	2.37	0.03	0.23	3.26	0.23	3.26
Domestic work hours of male	0.10	0.47	0.22	0.83	-0.87	1.08	-0.87	1.08

From the above table we can set up the estimated regression equation as follows:

$$\widehat{workhrswomen}_\iota = 1.17 + 1.75\widehat{children}_\iota + 0.10\widehat{domhrsmen}_\iota$$

$$S.E \quad : (1.44) \qquad (0.74) \qquad (0.47)$$

$$t - value \quad : \ (0.81) \qquad (2.37) \qquad (0.22)$$

$$p - value \quad : (0.43) \qquad (0.03) \qquad (0.83)$$

$$R^2 = 0.19 \qquad \overline{R^2} = 0.13$$

$$F^* = 3.26$$

From the above equation, it is clear that there exists a positive relationship between the time spend by woman working outside and the number of children she has and as well as a positive relationship between the time spend by woman working outside and time spent by the men on the household work.

It is seen, that everything else set to zero i.e., if the woman has no children and also the time spent by men on the domestic chores is zero then on average the time spend by the woman working hours will be 1.17on a daily basis, as the value of intercept term denoted by $(\widehat{\beta_0})$ is seen to be 1.17. Also, ceteris paribus, as the value of the slope coefficient ofnumberof children is denoted by $(\widehat{\beta_1})$ is seen to be 1.75,implies that, if the number of children increases by one, would on average increase the woman's working hours daily by about 1.75 times. Also, ceteris paribus, as the value of the slope coefficient of time spent by the men on the household work denoted by $(\widehat{\beta_2})$ is seen to be 0.10,implies that,if the additional time spent by the men on the household work increases by an hour would on average increase the woman's working hours daily by about 0.10 times.

Here, $R^2 = 0.19$, which implies that 19% of the total variation in the time spend by woman working outside can be explained by the two regressors: the number of children a woman has; time spent by the men on the household work, jointly.

Here, $\overline{R^2} = 0.13$ which means that taking into account the two regressors, the model explains only 13% of the variation in working hour of women or the regressand.

Now we shall, interpret the significance of individual slope coefficients one by one.

Firstly, we shall, take the individual slope coefficient (here,$\widehat{\beta_1}$) in the null hypothesis (H_0) as equal to zero against the alternative hypothesis (H_1) that $\widehat{\beta_1}$ not equal to zero, this means that we are seeing whether there is no significant relationship between the time spend by woman working outside and the number of children they have against the alternative that there is a significant relationship between them.

Therefore, to test, $H_0: \widehat{\beta_1} = 0$ against $H_1: \widehat{\beta_1} \neq 0$.

The p-value obtained in this equation for $\widehat{\beta_1}$ is 0.03 which is greater than 0.01 but lesser than 0.05 and 0.1. Therefore, we reject the null hypothesis (H_0) and accept the alternative hypothesis (H_1) at 5% and 10% level of significance implying that there is a significant relationship between the time spend by woman working outside and the number of children while we reject the alternative hypothesis (H_1) and accept the

null hypothesis (H_0) at 1% level of significance implying there is no relationship between the time spend by woman working outside and the number of children she has.

We take the individual slope coefficient (here,$\widehat{\beta_2}$) in the null hypothesis (H_0) as equal to zero against the alternative hypothesis (H_1) that $\widehat{\beta_2}$ not equal to zero, this means that we are seeing whether there is no significant relationship between the time spend by woman working outside and the time spend by men working domestic chores, against the alternative that there is a significant relationship between them.

Therefore, to test, $H_0: \widehat{\beta_2} = 0$ against $H_1: \widehat{\beta_2} \neq 0$.

The p-value obtained in this equation for $\widehat{\beta_2}$ is 0.83 and it is greater than 0.1 and 0.05 as well as 0.01 therefore we accept the null hypothesis (H_0) and reject the alternative hypothesis (H_1) all levels of significance (i.e., 1%, 5% and 10%). This means that there is no significant relationship between the time spend by woman working outside and the time spend by men on the household work.

Now, we shall look at the overall significance of the estimated regression line through the F-test. The joint null hypothesis (H_0) assumes that both $\hat{\beta}_1$ and $\widehat{\beta_2}$ are jointly or simultaneously equal to zero against the alternative hypothesis (H_1) that both $\hat{\beta}_1$ and $\widehat{\beta_2}$ are not simultaneously zero. Here, this implies that we are checking whether the time spend by women working outside is not linearly related to the number of children she has as well the time spend by men on the household work against the alternative that the time spend by women working outside is linearly related to the number of children she has as well the time the time spend by men on the household work.

Therefore, to test, $H_0: \widehat{\beta_1} = \widehat{\beta_2} = 0$ against $H_1: \widehat{\beta_1} an \ \widehat{\ }_2 \neq 0$, simultaneously.

For the above estimated regression line, we obtained F*= 3.26 (calculated value).

The tabulated value of F at 10% level of significance, the 2 slope coefficients and 27 degrees of freedom is $F_{0.1,2,27}$=2.51. The tabulated value of F at 5% level of significance, the 2 slope coefficients and 27 degrees of freedom it is $F_{0.05,2,27}$=3.35. And the tabulated value of F at 1% level of significance the 2 slope coefficients and 27 degrees of freedom is $F_{0.01,2,27}$=5.49.

Thus, we see that F*> $F_{0.1,2,27}$ but F*< $F_{0.05,2,27}$ and F*< $F_{0.01,2,27}$. Therefore, we reject the null hypothesis (H_0) at 10% level of significance and accept the alternative hypothesis (H_1). This, implies that at the 10% level of significance both $\hat{\beta}_1$ and $\widehat{\beta_2}$ are not simultaneously zero and there exists a linear relationship between the time spend by women working outside and the number of children she has as well the time spend by men on the household work. However, we fail to reject the null hypothesis at 5% and 1% level of significance thusly, implying that the both $\hat{\beta}_1$ and $\widehat{\beta_2}$ are simultaneously zero and there doesn't exist a

linear relationship between the time spend by women working outside and the number of children she has as well the time spend by men on the household work.

In this estimated linear regression model, it is clear that number of children is a significant factor whereas, the time spend by men on the household work isn't one.

Third Model

The third model considers the time spend by woman working outside to be the dependent variable and the number of children a woman has as well as the years of education the woman received as the independent variables. We have in our study, measured the education level of the women by considering as Class 1 to represent a year of schooling received and in accordance set up the for every additional class, the year of schooling received to increase by one year. Any person whose, education is below Class 1 has been considered to receive zero years of schooling**.We have established Class 1 to represent the origin because under regression analysis the change of scale doesn't affect the regression.** The regression table, from the MS Excel, is shown as follows:

Regression Statistics	
Multiple R	0.65
R Square	0.42
Adjusted R Square	0.38
Standard Error	3.35
Observations	30

ANOVA

	df	SS	MS	F	Significance F
Regression	2	221.69	110.84	9.88	0.00
Residual	27	302.98	11.22		
Total	29	524.67			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	4.86	1.66	2.92	0.01	1.45	8.26	1.45	8.26
Number of children	1.15	0.63	1.83	0.08	-0.14	2.44	-0.14	2.44
Years of schooling of female	-0.47	0.14	-3.28	0.00	-0.77	-0.18	-0.77	-0.18

From the table we can set up the estimated regression equation as follows:

$$\widehat{workhrswomen}_{\iota} = 4.86 + 1.15\widehat{children}_{\iota} - 0.47\widehat{edufemale}_{\iota}$$

$$S.E \quad : (1.66) \quad (0.63) \quad (0.14)$$

$$t - value \quad : (2.92) \quad (1.83) \quad (-3.28)$$

$$p - value \quad : (0.01) \quad (0.08) \quad (0.00)$$

$$R^2 = 0.42 \qquad \overline{R^2} = 0.38$$

$$F^* = 9.88$$

From the above equation, it is clear that there exists a positive relationship between the time spend by woman working outside and the number of children she has and a negative relationship between the time spend by woman working outside and years of schooling the woman has received.

It is seen, that everything else set to zero i.e., if the woman has no children and years of schooling the woman has received is zero then on average woman's working hours will be 4.86on a daily basis, as the value of intercept term denoted by $(\widehat{\beta_0})$ is seen to be 4.86. Also, ceteris paribus, as the value of the slope coefficient ofnumberof children is denoted by $(\widehat{\beta_1})$ is seen to be 1.15,implies that, if the number of children increases by one, would on average increase the woman's working hours daily by about 1.15 times. Also, ceteris paribus, as the value of the slope coefficient of years of schooling the woman has received, denoted by $(\widehat{\beta_2})$ is seen to be -0.47,implies that, if the years of schooling the woman has received increases by a year would on average decrease the woman's working hours daily by about 0.47 times.

Here, $R^2 = 0.42$, which implies that 42% of the total variation in the time spend by woman working outside can be explained by the two regressors: the number of children a woman has; years of schooling the woman has received, jointly.

Here, $\overline{R^2} = 0.38$ which means that taking into account the two regressors, the model explains only 38% of the variation in working hour of women or the regressand.

Now we shall, interpret the significance of individual slope coefficients one by one.

Firstly, we shall, take the individual slope coefficient (here,$\widehat{\beta_1}$) in the null hypothesis (H_0) as equal to zero against the alternative hypothesis (H_1) that $\widehat{\beta_1}$ not equal to zero, this means that we are seeing whether there is no significant relationship between the time spend by woman working outside and the number of children they have against the alternative that there is a significant relationship between them.

Therefore, to test, $H_0: \widehat{\beta_1} = 0$ against $H_1: \widehat{\beta_1} \neq 0$.

The p-value obtained in this equation for $\widehat{\beta_1}$ is 0.08 which is greater than 0.01 and 0.05 but lesser than 0.1. Therefore, we reject the null hypothesis (H_0) and accept the alternative hypothesis (H_1) at 10% level of significance implying that there is a significant relationship between the time spend by woman working

outside and the number of children, while we reject the alternative hypothesis (H_1) and accept the null hypothesis (H_0) at 5% and 1% level of significance implying there is no relationship between the time spend by woman working outside and the number of children she has.

We take the individual slope coefficient (here,$\widehat{\beta_2}$) in the null hypothesis (H_0) as equal to zero against the alternative hypothesis (H_1) that $\widehat{\beta_2}$ not equal to zero, this means that we are seeing whether there is no significant relationship between the time spend by woman working outside and the years of schooling the woman has received, against the alternative that there is a significant relationship between them.

Therefore, to test, $H_0: \widehat{\beta_2} = 0$ against $H_1: \widehat{\beta_2} \neq 0$.

The p-value obtained in this equation for $\widehat{\beta_2}$ is 0.00 and it is lesser than 0.1, 0.05 as well as 0.01 therefore we reject the null hypothesis (H_0) and accept the alternative hypothesis (H_1) all levels of significance (i.e., 1%, 5% and 10%). This means that there is a significant relationship between the time spend by woman working outside and years of schooling the woman has received.

Now, we shall look at the overall significance of the estimated regression line through the F-test. The joint null hypothesis (H_0) assumes that both $\hat{\beta}_1$ and $\widehat{\beta_2}$ are jointly or simultaneously equal to zero against the alternative hypothesis (H_1) that both $\hat{\beta}_1$ and $\widehat{\beta_2}$ are not simultaneously zero. Here, this implies that we are checking whether the time spend by women working outside is not linearly related to the number of children she has as well as years of schooling the woman has received against the alternative that the time spend by women working outside is linearly related to the number of children she has as well the time the years of schooling the woman has received

Therefore, to test, $H_0: \widehat{\beta_1} = \widehat{\beta_2} = 0$ against $H_1: \widehat{\beta_1} and \widehat{\beta_2} \neq 0$ simultaneously.

For the above estimated regression line, we obtained F*= 9.88 (calculated value).

The tabulated value of F at 10% level of significance, the 2 slope coefficients and 27 degrees of freedom is $F_{0.1,2,27}$=2.51. The tabulated value of F at 5% level of significance, the 2 slope coefficients and 27 degrees of freedom it is $F_{0.05,2,27}$=3.35. And the tabulated value of F at 1% level of significance the 2 slope coefficients and 27 degrees of freedom is $F_{0.01,2,27}$=5.49.

Thus, we see that F*> $F_{0.1,2,27,}$ F*>$F_{0.05,2,27}$ and F*>$F_{0.01,2,27}$. Therefore, we reject the null hypothesis (H_0) at all levels of significance and accept the alternative hypothesis (H_1). This, implies that at all levels of significance both $\hat{\beta}_1$ and $\widehat{\beta_2}$ are not simultaneously zero and there exists a linear relationship between the time spend by women working outside and the number of children she has as well years of schooling the woman has received.

In this estimated linear regression model, it is clear that number of children as well as the years of schooling the woman has received are both significant factors.

Fourth Model

The fourth model considers the time spend by woman working outside to be the dependent variable and the number of children a woman has as well as the total family income as the independent variables. The regression table, from the MS Excel, is shown as follows:

Regression Statistics	
Multiple R	0.67
R Square	0.45
Adjusted R Square	0.41
Standard Error	3.26
Observations	30

ANOVA

	df	SS	MS	F	Significance F
Regression	2	237.86	118.93	11.20	0.00
Residual	27	286.81	10.62		
Total	29	524.67			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	-3.59	1.78	-2.02	0.05	-7.24	0.06	-7.24	0.06
Number of children	1.69	0.58	2.90	0.01	0.49	2.88	0.49	2.88
Total family income	0.00	0.00	3.59	0.00	0.00	0.00	0.00	0.00

From the above table we can set up the estimated regression equation as follows:

$$\widehat{workhrswomen}_\iota = -3.59 + 1.69\widehat{children}_\iota - 0.00\widehat{totalfamilyinc}_\iota$$

$$S.E \quad : (1.78) \quad (0.58) \quad (0.00)$$

$$t - value \quad : (-2.02) \quad (2.90) \quad (3.59)$$

$$p - value \quad : (0.05) \quad (0.01) \quad (0.00)$$

$$R^2 = 0.45 \qquad \overline{R^2} = 0.41$$

$$F^* = 11.20$$

From the above equation, it is clear that there exists a positive relationship between the time spend by woman working outside and the number of children she has and a negative (implied, because of the presence of the negative sign)but also at the same time no linear relationship between the time spend by woman working outside and the total family income.

It is seen, that everything else set to zero i.e., if the woman has no children and the total family income is zero then on average woman's working hourswill be -3.59on a daily basis, as the value of intercept term denoted by $(\widehat{\beta_0})$ is seen to be -3.59. Also, ceteris paribus, as the value of the slope coefficient ofnumberof children is denoted by $(\widehat{\beta_1})$ is seen to be 1.69,implies that, if the number of children increases by one, would on average increase the woman's working hours daily by about 1.69 times. Also, ceteris paribus, as the value of the slope coefficient of total family income , denoted by $(\widehat{\beta_2})$ is seen to be -0.00,implies that,if total family income increases by a rupee would on average decrease the woman's working hours daily by about 0.00 times.

Here, $R^2 = 0.45$, which implies that 45% of the total variation in the time spend by woman working outside can be explained by the two regressors: the number of children a woman has; the total family income, jointly.

Here, $\overline{R^2} = 0.41$ which means that taking into account the two regressors, the model explains only 41% of the variation in working hour of women or the regressand.

Now we shall, interpret the significance of individual slope coefficients one by one.

Firstly, we shall, take the individual slope coefficient (here,$\widehat{\beta_1}$) in the null hypothesis (H_0) as equal to zero against the alternative hypothesis (H_1) that $\widehat{\beta_1}$ not equal to zero, this means that we are seeing whether there is no significant relationship between the time spend by woman working outside and the number of children they have against the alternative that there is a significant relationship between them.

Therefore, to test, $H_0: \widehat{\beta_1} = 0$ against $H_1: \widehat{\beta_1} \neq 0$.

The p-value obtained in this equation for $\widehat{\beta_1}$ is 0.01 which is equal to 0.01 but lesser than 0.05 and 0.1. Therefore, we reject the null hypothesis (H_0) and accept the alternative hypothesis (H_1) at 10% and 5% levels of significance implying that there is a significant relationship between the time spend by woman working outside and the number of children, while we reject the alternative hypothesis (H_1) and accept the null hypothesis (H_0) at 1% level of significance implying there is no relationship between the time spend by woman working outside and the number of children she has.

We take the individual slope coefficient (here,$\widehat{\beta_2}$) in the null hypothesis (H_0) as equal to zero against the alternative hypothesis (H_1) that $\widehat{\beta_2}$ not equal to zero, this means that we are seeing whether there is no

significant relationship between the time spend by woman working outside and the total family income, against the alternative that there is a significant relationship between them.

Therefore, to test, $H_0: \widehat{\beta_2} = 0$ against $H_1: \widehat{\beta_2} \neq 0$.

The p-value obtained in this equation for $\widehat{\beta_2}$ is 0.00 and it is lesser than 0.1, 0.05 as well as 0.01 therefore we reject the null hypothesis (H_0) and accept the alternative hypothesis (H_1) all levels of significance (i.e., 1%, 5% and 10%). This means that there is a significant relationship between the time spend by woman working outside and the total family income.

Now, the one thing which we observe in this the p-value for the total family income has come out to be a significant factor. But we saw before that the total family income on a monthly basis has no effect on the average daily working hours of women because the value of the slope was also zero. It can be reasoned that, though the total family income is a significant factor it was unable to influence the daily working hours of the women in the sample because a third of their population were housewives and not employed in any manner or fashion.

Now, we shall look at the overall significance of the estimated regression line through the F-test. The joint null hypothesis (H_0) assumes that both $\hat{\beta}_1$ and $\widehat{\beta_2}$ are jointly or simultaneously equal to zero against the alternative hypothesis (H_1) that both $\hat{\beta}_1$ and $\widehat{\beta_2}$ are not simultaneously zero. Here, this implies that we are checking whether the time spend by women working outside is not linearly related to the number of children she has as well as the total family income against the alternative that the time spend by women working outside is linearly related to the number of children she has as well the total family income.

Therefore, to test, $H_0: \widehat{\beta_1} = \widehat{\beta_2} = 0$ against $H_1: \widehat{\beta_1} and \widehat{\beta_2} \neq 0$ simultaneously.

For the above estimated regression line, we obtained F*= 11.20 (calculated value).

The tabulated value of F at 10% level of significance, the 2 slope coefficients and 27 degrees of freedom is $F_{0.1,2,27}$=2.51. The tabulated value of F at 5% level of significance, the 2 slope coefficients and 27 degrees of freedom it is $F_{0.05,2,27}$=3.35. And the tabulated value of F at 1% level of significance the 2 slope coefficients and 27 degrees of freedom is $F_{0.01,2,27}$=5.49.

Thus, we see that F*> $F_{0.1,2,27,}$ F*>$F_{0.05,2,27}$ and F*>$F_{0.01,2,27}$. Therefore, we reject the null hypothesis (H_0) at all levels of significance and accept the alternative hypothesis (H_1). This, implies that at all levels of significance both $\hat{\beta}_1$ and $\widehat{\beta_2}$ are not simultaneously zero and there exists a linear relationship between the time spend by women working outside and the number of children she has as the total family income.

In this estimated linear regression model, it is clear that number of children and the total family income are both significant factors.

Thusly, from the above models we have established that the number of children is a significant factor which has a positive impact on the working hours of women whereas the years of schooling the woman has received and the total family income have a significant negative effect on the working hours of woman. There are two positive insignificant factors which are the time spent by men in their work and the time spent by them on household work.

We had conducted regression analysis using the male income as well as the female income as regressors but we haven't presented them here as they too like total family income were significant factors because of their p-value were unable to influence the working hours of women because their slope coefficients were zero. The reasoning is exactly what we realized in case of total family income received on a monthly basis.

Now we shall move on to the policy suggestions in accordance to our result and findings, in the next section.

Policy Suggestions

Findings reveal that, as stated before the monthly family income, years of schooling the woman receives (i.e., her education level) as well as the number of children she has are all significant factors. Thusly, they are the three main drivers behind the time she spends working to earn an income. Now the following advisories could be adopted to increase the time she spends employed at her job and stays in the labour force, they are as follows:

1. The basic importance of education in women, needs to be stressed, especially, the skill driven education which will help them get employed better and on easier terms needs to be implemented as a part of her education. This will also prevent the negative relationship coming forward between her job and education level.

2. The jobs suitable for women need to rise so that their broadening employment opportunities, allow them to stay employed.

3. It was seen in the paper that there was a disparity in the wages even in the low-end jobs of the society. This disparity needs to be regulated and checked even though these are part of the mixed SNA activities in the National System of Accounts.

4. It was seen that the number of children had a positive impact on the working hours of women but this needs to be addressed as well so women don't just cite the increasing number of mouths to feed as a reason to be employed. The importance of family planning lies in the fact that it would help them to have a higher standard of living.

5. It was seen that the family income had a negative effect on the employed women's working hours this implies that women start slacking off on their jobs or give it up all together which isn't acceptable. The women need to understand that it is high time they quit thinking along the lines of gender stereotypes and start working so that they can increase their standing within the family.

6. The government needs to provide incentives and flexibility in job timings is presented even in these lower end jobs so that a woman is at least encouraged to try her hand at working and becoming employed.

Conclusion

The analysis in the paper helped in studying the factors which would affect the time women spent working their jobs, even when their activities are classified under the mixed SNA category.

It was seen that women play their gender role with more care and thusly pay more attention to their domestic duties and couldn't care to be a part of the working population that earns an income. This is the reason behind the 33% of the women in the sample citing that they were unemployed. Also, it has been seen this is also the reason why their total contribution in the total family income only amounts to a measly 22%.

This all circles back to how the average education received by men was greater than that of the women and even if they were of the same educational background, it was seen that their job opportunities weren't as many as what were available to the men. Thusly the lack of desire to be employed was visible in the more educated women who decreased the average time they spent working with just a single year's rise in schooling. It seems however, that the time the men stay working at their jobs and also the time they spend shouldering the household responsibility doesn't play a deciding role in the average working time of women.

But both directly and indirectly it was seen that the number of children is a deciding factor in the employability of women because with the former there existed a positive relation and while with the latter a negligibly low negative correlation. It is to be noted that due to the lack of experience as well as unavailability of the information first hand we hadn't asked taken the age of the children into consideration, which would have perhaps pushed forward a negative relationship between the working hours of women and the number of children they have at the same time a positive relation with the time spent on domestic work by women. The reasoning behind this is that the women carry the majority part of the burden of family responsibilities and would thusly have to spent more time in child rearing and this would increase their time in the time spent by them on household work.

There were a few unexplored factors which affect the employability of women, like the number of members present in their age, family, the type of family structure in which they live, were the subsidies and incentives provided to them by the Government a driving factor of their employment, schemes of vocational courses and direct job opportunities by the Government can all be studied. Also in this paper, we were unable to differentiate the factors separately as demand side or supply side because there wasn't a market existing for which the jobs cited by the women could be measured as well as the lack due to the academic limitation of just studying 30 women and basing their jobs into high-end and low-end jobs was a tough and maybe sometimes somewhat biased due to the lack of knowledge and experience. With the help of better understanding and experience this too can be explored further.

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Appendix 1: Questionnaire

1. What is the age of the respondent?

2. What is the of her spouse?

3. How many children are present in the family?

4. What is the educational qualification of the respondent?

5. What is the educational qualification of her husband?

6. What occupation is the respondent employed in?

7. What occupation is the respondent's spouse employed in?

8. What is the income of the respondent on a monthly basis?

9. What is the income earned by her spouse on a monthly basis?

10. How much time is spent on the job if the respondent is employed?

11. How much time is spent on domestic work by the respondent?

12. How much time is spent on the job by the spouse?

13. How much time is spent on domestic work by the spouse?

Appendix 2: Survey Data

Family Details			Education Detail		Work Details							Finance details on Monthly Basis		
Age of respondent female	Age of respondent's Husband	Number of children	FEMALE EDUCATION	MALE EDUCATION	Women's Occupation	Working hours of female	Working hours of male	Domestic work hours of female	Men's Occupation	Working hours of male	Domestic work hours of male	Income of Men	Income of women	Total Family Income
65	70	6	ILITERATE	ILLIterate	SHOPKEEPER	11	6	5	DRIVER	6	0	9000	2700	11700
38	46	2	ILLITERATE	CLASS 6	AYAH AT NURSING HOME	8	8	10	AYAH AT NURSING HOME	8	0	8732	8732	17464
48	49	1	ILITERATE	CLASS 5	MAID/ AYAH AT A SCHOOL	11	10	5	BUS CONTRACTOR	10	0	15000	5000	20000
30	38	1	ILITERATE	CLASS 5	MAID	6	12	10	AYAH AT NURSING HOME	12	0	12000	8000	20000
26	31	1	CLASS 2	CLASS 3	HOUSEWIFE	0	8	16	MILL WORKER	8	0	6000	0	6000
21	27	1	GRADUATION	CLASS 8	STUDENT	0	13	5	TOTO DRIVER	13	0	8000	0	8000
30	34	1	CLASS 8	CLASS 7	MAID	4	12	8	GARMENT SHOP WORKER	12	2	5000	2000	7000
33	43	2	CLASS 10	CLASS 9	TAILOR	2	8	6	MASONARY WORKER	8	0	6000	1000	7000
23	35	2	ILITERATE	CLASS 5	FARM WORKER	6	6	5	FARMER	6	0	13000	9000	22000
33	40	2	CLASS 8	CLASS 6	FARM WORKER	5	5	4	MASONARY WORKER	5	1	3000	9000	12000
49	53	1	CLASS 10	CLASS 12	HOUSEWIFE	0	10	6	LORY DRIVER	10	0	11000	0	11000
40	45	4	CLASS 4	CLASS 8	MAID	6	8	4	MILL WORKER	8	0	4000	7000	11000
46	55	2	CLASS 9	CLASS 12	HOUSEWIFE	0	11	6	GARMENT SHOP WORKER	11	0	10000	0	10000
38	44	1	CLASS 10	GRADUATE	HOUSEWIFE	0	12	5	FLORIST	12	3	8000	0	8000
47	55	1	CLASS 9	CLASS 10	HOUSEWIFE	0	13	7	FARMER	13	2	5000	0	5000
35	39	2	GRADUATE	CLASS 9	HOUSEWIFE	0	11	7	GARAGE WORKER	11	0	7000	0	7000
35	NA	2	CLASS 5	ILITERATE	CATERING SERVICE	14	5	2	PORTER	5	0	2500	4000	6500
20	22	1	CLASS 4	CLASS 4	HOUSEWIFE	0	7	10	MASONARY WORKER	7	0	9000	0	12000
25	30	2	ILITERATE	ILITERATE	FARM WORKER	11	11	6	FARMER	11	0	6000	6000	12000
32	40	2	CLASS 4	CLASS 5	FARM WORKER	12	12	5	FARM WORKER	12	0	6000	6000	12000
41	52	1	ILITERATE	ILITERATE	MAID	2	3	8	MUNICIPALITY WORKER	3	4	8000	1000	9000
27	37	2	CLASS 5	CLASS 8	BIDI WORKER	3	8	10	VAN DRIVER	8	0	5000	1500	6500
19	27	2	CLASS 6	CLASS 9	HOUSEWIFE	0	12	6	MILL WORKER	12	0	8000	0	8000
22	28	1	CLASS 7	CLASS 9	MAID	3	8	8	MASONARY WORKER	8	0	5000	1000	6000
33	40	2	CLASS 3	CLASS 7	ENVELOPE MAKER	5	12	8	DRIVER	12	0	10000	1500	11500
29	30	2	ILITERATE	CLASS 2	MAID	4	10	14	SHOPKEEPER	10	0	6000	3000	9000
36	46	2	ILITERATE	CLASS 5	MAID	5	16	12	LORY DRIVER	16	3	7000	4000	10000
32	41	1	CLASS 12	GRADUATE	HOUSEWIFE	0	15	15	MILL WORKER	15	0	9500	0	9500
30	43	2	CLASS 5	CLASS 7	MAID	8	17	3	PORTER	17	7	12000	8000	20000
23	29	1	CLASS 12	GRADUATE	MAID	4	13	10	AUTO DRIVER	13	0	18000	4000	22000