

## **An analysis of the pattern of employment of Female workers within the Tertiary sector of India.**

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**Abstract:** The tertiary sector is the most dynamic sector of the economy today, in terms of both output and employment. Post liberalization, the tertiary sector contributes more than half of the GDP and employs the second highest labour force after agriculture. The economic reforms of 1991 raised the hope of increased labour participation of women with the rise of new services like IT, BPO and expansion of existing services like education and health etc. However, though liberalization of services did see an improvement in the various spheres of life of women, there has not been much of a change in terms of their employment status. Evidence shows that women still concentrate in informal sector and in jobs which are ill paid with little upward mobility. The present study analyses the position of female main and marginal workers of the tertiary sector with respect to socio-economic demographic parameters and comes up with policy prescriptions on how to increase the employment level of women in this sector.

**Keywords-**Female, employment, main workers, marginal workers, tertiary sector.

JEL Classification: J<sub>01</sub>, J<sub>16</sub>, J<sub>21</sub>

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### **I. INTRODUCTION**

The tertiary sector started to grow in the mid-1980s, but growth accelerated in the 1990s when India initiated a series of economic reforms after the country faced a severe balance of payment crisis. Reforms in the tertiary sector were a part of the overall reform program which led to privatization, the removal of FDI restrictions. The growth of tertiary sector has surpassed the growth of the primary and the secondary sector and has been much more stable than the other two. It was naturally expected that the rapidly expanding tertiary sector would provide fresh employment to the millions of unemployed workers including women. With the transformation of the economy from an agro-based economy to knowledge-based economy, there was a creation of a job market for females owing to two significant changes- opening of new avenues of employment in IT, ITES sectors. and expansion of the traditional sub-sectors like health, education etc. following liberalisation. However, employment growth in the tertiary sector has not been adequate in view of the growth of the labour force. A combination of demand and supply factors has contributed to the stagnation of the female labour participation. The supply side analysis postulates that the supply of well-paying secure jobs for women is low. Thus, educated women who belong to the higher socio-economic strata prefer to opt out of the labour force rather than accept low end jobs. The demand side argument puts forward the theory that the social and cultural norms of the society prevent women from entering the work force. The present paper thus basically explores the answer to the question whether liberalisation has really opened new opportunities of women in the tertiary sector. The paper is divided in the following sections-Section I deals with the existing literature, section II points out to the research gap the significance of the study and its objectives. Section III is about the data collection and methodology, Section IV analyses the findings, Section V concludes and prescribes policies while the last section deals with the limitations of the study and points out to the scope for further research.

#### **A review of existing literature**

The literature surrounding female labour participation can be classified in three strands. The discussion for female labour participation starts from the basic static labour supply model. Becker (1965) states that women make their labour supply decision not only considering leisure and labour trade off but also other home-based activities like care for family. There are two distinct schools of thought regarding the relation between economic development and female work participation. The first following Becker talks about a positive relationship while

the second approach suggests a convex impact of growth on female labour participation. According to Boserup(1970), female labour participation first increases then decreases and then finally increases again with the development of the economy tracing a U-shaped curve. This curve is known as “the feminisation” curve in economic literature. When countries are characterized by low income having a large agricultural sector, female labour participation is high. This is because most women work in farms making it possible for them to combine farm work with household duties. In the next stage of development, countries undergo industrialisation and the focus of production shifts from family farm to factories. Female labour participation declines during this stage as society in general, abhors the idea of women working in factories. Moreover, factory work involves arduous physical work and women find it difficult to adopt to new technologies and production techniques. In the last stage of development as women gain higher education and have access to white collar jobs, their female labour participation increases. However, it should be pointed out that although the relation between female labour participation and the level of economic growth has been confirmed by several economists like Goldin (1994), empirical studies at the individual level shows that in the case of India, the U-shaped relationship is not evident Bhalla and Kaur (2003).

Researchers have taken a keen interest in the labour force participation of females after liberalization. Klasen and Pieters (2013) states that due to increasing educational levels and rapid economic growth, the supply of educated female workers has exceeded the demand of jobs. Chen and Raveendran (2011) explores trends in urban employment in India, with a focus on urban informal employment. They provide an analysis of the overall and growing significance of four groups of urban informal workers at the bottom of the economic pyramid in India: domestic workers, home-based workers, street vendors, and waste pickers. Within the urban informal workforce there are important differences between women and men workers: by industrial branch, employment unit, status in employment, and specific groups. According to them what is needed is an inclusionary, rather than exclusionary, approach to the urban informal economy in which informal and formal units and workers are encouraged and supported to work side-by-side. Sudarshan Bhattacharya (2008) in a primary survey on urban women in Delhi finds that family objection and household works are the key constraint of the women joining the workforce. Mobility and safety concerns are the next frequently cited hurdles. Bhattacharya also pointed out that female work participation rates are found to be higher in the primary survey than those reported in NSSO because of including household work. Oslen and Mehta also point out to the under estimation of female participation rate because of improper estimates of household work. Srivastav and Srivastav (2009) analyses the trend and pattern of women's employment in rural India along with its determinants through regression analysis. Women are more proportionately employed only in the subsidiary status than men in rural areas. The reasons are twofold. From the perspective of the demand, the lack of demand for female labour stems from the fact that the rural economy has remained stagnant over the years and employment opportunities have not grown. Thus, women are primarily occupied in agriculture and are often able to work for only a few months of the year. On the supply side since women's work participation is in addition to their domestic duties, they are able to enter the workforce as subsidiary workers only. Neff Daniel et al (2012) examine the sharp fall in female labour participation in rural India between 2004-05 and 2009-10. They examine the four standard explanations that more women are now pursuing higher education in the rural areas and are therefore not available for work (education effect). Two - that household income is rising quickly enough and that there is a tendency for women to quickly withdraw from the labour force to attend to domestic duties (income effect). Third employment opportunities are decreasing, and fourth social and cultural factors are interacting with these factors and amplifying their effects. Their findings suggest that the decline in rural female labour force participation was mainly because of income effect and partly due to education effect. Neither changes in employment opportunities nor social and cultural interaction play a big role as the income effect.

### **Research gap and Significance of the study**

Worldwide the tertiary sector attracts the highest percentage of women. This is because the different subsectors of the tertiary sector offer a myriad of job opportunities for women. Working involves less physical work, offers flexible timings. However, in India women are concentrated in only selected sectors of the tertiary sector. This leads to gender segregation and a rise in inequality. Unfortunately, there's not much work done regarding the employment of women within the tertiary sector. Most of the literature focuses on the reasons behind the low female participation in India. The tertiary sector has a huge potential to absorb female labour provided it can match the demand of work by women with its supply.

### **Research Methodology**

The paper is based on secondary data collected from Census 2001 and 2011. We have classified female workers in two categories- main and marginal. Workers were mainly classified as main and marginal workers based on their work. Those workers who had worked for the major part of the year were termed as main workers. Major part of the year meant six months (183 days) or more. Those who had not worked for the major

part of the year (i.e. those who had worked for less than 6 months or less than 183 days in a year) were termed as marginal workers. Data retrieved from the census have been statistically processed, analysed and interpreted. Statistical tools have been used as per requirements.

### **Objectives**

The present study explores the pattern of female employment within the tertiary sector. Female employment is dependent on several factors- socio economic and demographic. The study specifically focuses on two crucial parameters – age composition and academic qualifications of women. The study also compares the states in terms of their percentage of female main and marginal workers to bring out the regional heterogeneity in the market of female workers.

### **Empirical findings**

Our analysis reveals that 63% of the female main workers is still occupied in the primary sector while for marginal workers this percentage is even higher (75.81%). The tertiary sector absorbs around 25% of the total female workers and 15% of total female marginal workers. The Secondary sector which has been stagnant in the last couple of decades offers limited scope for women employing 11.77% of female main workers and 9.28% of female marginal workers. The fact that rural India is still based on agrarian economy is evident on the fact that 79.65% of female main workers and 82.31% of female marginal workers are absorbed in the primary sector. The tertiary sector absorbs only 12.95% of female main and 10.01% of female marginal workers. However, this pattern gets reversed in the urban area. We find that 62.68% of main workers and 56% of marginal workers are absorbed in the tertiary sector, the highest for any sector in the urban areas. (Table 1). Thus, we find that there is a significant difference in the pattern of employability of women between the rural and urban areas. While the percentage of women working in the tertiary sector is less, it is compensated by the high percentage of women workers in the urban areas. The low percentage of rural women in the tertiary sector is an indicator of the lack of expansion of the different subsectors of the tertiary sector in the rural areas. Sectors like transport, banking, health are yet to penetrate deeply into the rural hinterlands. Unfortunately, the secondary sector employs limited female labour in both rural and urban areas. The secondary sector needs to overhaul its employment policy if it wants to attract female labour.

Table 2 analyses the industry wise classification of female main and marginal workers according to rural and urban areas. Since the tertiary sector is a heterogeneous sector we find that the share of women varies in the different sub-sectors. Within the tertiary sector we find that the highest percentage of women is found in the sectors, health and education (P-Q) and in domestic and other services (R-U) Apart from these Subsectors trade (G) employs around 10.32% of female main workers. Others sub sectors Transportation and Storage (H), Accommodation and Food service activity (I), Information and Communication (J), Financial, Real Estate and Scientific and Technical activities (K-M) absorb very little percentage of women. This is because these sectors mainly belong to the formal categories and hence require a minimal level of skill and education. Moreover, sectors like Transportation and Storage (H), Accommodation and Food service activity (I) and Information and Communication (J) are capital intensive and have inflexible working hours making work difficult for women. On the other hand, for sectors like domestic services (R-U) entry is easy as they don't have any entry standards. Thus, for women who are pushed out of agricultural sector, these sectors become an automatic choice of entry. There is not much difference in the employment pattern of women in the rural and urban areas for main and marginal workers except that the percentage of female marginal workers working in health and education sectors is far less than their main counterparts.

A close look at the age composition of women working in the tertiary sector reveals that female labour participation increases from the age group 15-19 till 40-49 except for the age group 30-34 which observes a slight decline in female labour force participation. The same trend is observed for both rural and urban areas. For marginal workers however, a different pattern is observed. Labour force participation increases up to the age group 20-25, then continues to fall. While the drop in female labour for main worker is less, we find this drop to be quite significant for the marginal workers. This can be explained from the fact that the main reason for women working as marginal workers is household work. Thus, post marriage, the burden of family forces these women to withdraw themselves for the labour force. Female labour force participation reaches its peak for the age group 40-49 and the starts falling again. We can associate the decline in participation rate post fifty as an income effect when women decide to withdraw themselves from the labour market as their financial need is less. (Table 3) The fall in female labour post fifty is a characteristic common to all types of female labour, main or marginal irrespective of the region, rural and urban.

We next turn our attention to the educational status of women working in the tertiary sector. We find that overall the educational qualification of women working in the tertiary sector is quite poor. 28.48% of women working in the tertiary sector are just literates without even completing their secondary level education. The fact that almost 37% of rural women working in the tertiary sector lie below the basic secondary level of education point

out to the failure of the education system. Most rural villages do not have schools that go beyond primary level. To pursue education beyond secondary level, girls have to travel to distant villages or towns. Given the poor connectivity in rural areas, owing to lack of proper transport system and the condition of roads, women have no other option but to quit their studies. Abject poverty is another reason, where often the girls' parents do not have enough resources to allow the girls to continue their education. Women who are equipped with a graduate degree and above constitute only 27.7 % of the total women working in the tertiary sector. For the rural area, this figure further declines to 17%. The share of women with technical degrees and diploma is also very less and this is particularly true for marginal workers. One thing that becomes very clear from the above analysis is that women lack the skills that market requires for employability. (Table 4, 5)

Lastly, we look at how female main and marginal workers working in the tertiary sector are placed across the different states. We find that there is clear disparity amongst the states as regards to the levels of employment. Goa tops the list in terms of having the highest share of female main and marginal workers in the tertiary sector. Apart from Goa, the other top four states having the highest share of female main workers in the tertiary sector are Jammu and Kashmir, Punjab, Kerala and West Bengal. Similarly, the states having the lowest share of female main workers are Rajasthan, Chhattisgarh, Madhya Pradesh, Arunachal Pradesh and Andhra Pradesh respectively. Jharkhand, Chhattisgarh and Rajasthan continue to have one of the lowest shares of female marginal workers in the tertiary sector which itself highlights the inability of the tertiary sector of these states to absorb overall women. Himachal Pradesh has the lowest share of female marginal worker. We observe a very interesting trend here-the northern and the north eastern states outweigh the southern states in terms of the employment of female main workers but when it comes to the employment of marginal workers the Southern states fare much better than their northern and north eastern counterparts barring some exceptions like Punjab and Mizoram. (Table 6)

### **Conclusion and recommendation**

Decent employment of women is one of the key elements for the development of an economy. The paper reveals that the maximum percentage of women work in domestic and other services within the tertiary sector. The formal sectors like transport and business services continue to absorb minimal female labour. The paper also points out to the lack of technical skills of women working in this sector. The disparity among the Indian states with respect to the employment levels of women should also be a matter of concern to the policy makers. The study prescribes the following policy prescriptions for increased female participation in the tertiary sector.

- Sectors like transport, storage and communications which absorb very low female labour need to overhaul their policies and give special incentives to women. For example, percentage of number of jobs can be reserved for women. Apart from those flexible timings, concessions etc. can also be introduced.
- Formal sector employment must have certain facilities for marriage women like day care facilities, pick-up and drop facilities etc. since, evidence shows that work participation is relatively less for married women.
- Since, women working in the formal sector rely heavily on women working in the informal sector; informal sector needs to maintain basic standards of working like pension, health insurance.
- Women must be imparted professional or vocational skills that are market-oriented right from their school and college days. If these programmes also come with placement facilities, the chances of employment for women will increase further. Such trainings must be provided keeping in mind the demography and need of the area

### **Limitations of the study and scope of further research**

Since there is a divergence between the data provided in census 2001 and 2011, an overall inter temporal comparison encompassing the pattern of female employment could not be made. Though, the paper clearly points out to the difference between main and marginal female workers across the states, it has not been explored in detail. More over the variation in the inter-sectoral pattern of employment has not been addressed. A detailed micro economic study of the individual sub sectors could be a great help to policy makers if India needs to increase its female labour participation in the tertiary sector. A cross-section analysis addressing the regional variation across the states can also add immense value in this regard.

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**Appendix:**

*Table 1:Sectoral Composition of Female Main and Marginal Workers (in Percentage)*

	WORKERS	PS	SS	TS	TOTAL
TOTAL	MAIN	63.26	11.77	24.97	100
	MARGINAL	75.81	9.28	14.91	100
RURAL	MAIN	79.65	7.40	12.95	100
	MARGINAL	82.31	7.68	10.01	100
URBAN	MAIN	11.78	25.54	62.68	100
	MARGINAL	21.30	22.75	55.95	100

Source: 2011 Census.

*Table 2:Industry-wise Classification of Female Main and Marginal Workers according to Rural and Urban areas*

	WORKERS	G	H	I	J	K-M	N-O	P-Q	R-U
TOTAL	MAIN	10.32	1.99	2.08	2.11	3.31	8.86	34.48	36.85
	MARGINAL	2.51	0.28	0.37	0.16	0.25	0.78	2.57	33.56
RURAL	MAIN	9.05	1.34	1.99	0.47	1.18	4.69	38.95	42.34
	MARGINAL	5.91	0.55	0.66	0.11	0.25	1.16	5.46	85.90
URBAN	MAIN	11.15	2.41	2.14	3.18	4.69	11.56	31.57	33.29
	MARGINAL	6.61	0.90	1.30	0.84	1.16	3.09	7.69	78.41

Source: 2011 Census.

Table 3:Age Composition of Female Main and Marginal Workers.

	MAIN WORKERS		MARGINAL WORKERS	
	RURAL	URBAN	RURAL	URBAN
5-9	0.95	0.77	3.46	4.04
10-14	1.26	1.15	5.73	5.59
15-19	3.66	3.32	10.38	9.42
20-24	10.21	9.82	13.66	14.00
25-29	14.77	14.87	13.03	13.54
30-34	14.22	14.06	11.17	11.25
35-39	14.43	14.38	10.45	10.63
40-49	22.05	22.87	14.73	15.24
50-59	12.21	12.86	8.74	8.57
60-69	4.35	4.02	5.68	4.70
70-79	1.17	1.06	1.78	1.56
80+	0.44	0.42	0.65	0.71
Age Not Stated	0.40	0.40	0.55	0.74

Source: 2011 Census.

Table 4: Educational status of literate female marginal workers.

TOTAL	Literate but below matric/secondary	65.16
	Matric/secondary but below graduate	23.10
	Technical diploma or certificate not equal to degree	0.45
	Graduate and above other than technical degree	6.01
	Technical degree or diploma equal to degree or post-graduate degree	0.91
RURAL	Literate but below matric/secondary	74.09
	Matric/secondary but below graduate	18.49
	Technical diploma or certificate not equal to degree	0.32
	Graduate and above other than technical degree	2.51
	Technical degree or diploma equal to degree or post-graduate degree	0.39
URBAN	Literate but below matric/secondary	52.76
	Matric/secondary but below graduate	29.50
	Technical diploma or certificate not equal to degree	0.62
	Graduate and above other than technical degree	10.58
	Technical degree or diploma equal to degree or post-graduate degree	1.62

Source: 2011 Census.

Table 5: Education Status of Female Literate Workers.

	Literacy Types	
TOTAL	Literate but below matric/secondary	28.48
	Matric/secondary but below graduate	25.54
	Technical diploma or certificate not equal to degree	3.21
	Graduate and above other than technical degree	27.70
	Technical degree or diploma equal to degree or post-graduate degree	8.78
RURAL	Literate but below matric/secondary	36.96
	Matric/secondary but below graduate	30.58
	Technical diploma or certificate not equal to degree	3.32
	Graduate and above other than technical degree	17.21
	Technical degree or diploma equal to degree or post-graduate degree	4.89
URBAN	Literate but below matric/secondary	23.75
	Matric/secondary but below graduate	22.73
	Technical diploma or certificate not equal to degree	3.15
	Graduate and above other than technical degree	33.55
	Technical degree or diploma equal to degree or post-graduate degree	10.96

Source: 2011 Census.



*Table 6: State wise division of percentage of female main and marginal workers within the tertiary sector*

STATES	PERCENTAGE OF MAIN WORKERS	PERCENTAGE OF MARGINAL WORKERS
JAMMU AND KASHMIR	56.31	7.09
HIMACHAL PRADESH	24.51	0.75
PUNJAB	57.37	25.17
UTTARAKHAND	24.29	6.19
HARYANA	37.64	11.24
RAJASTHAN	12.75	2.99
UTTAR PRADESH	34.41	9.26
BIHAR	23.53	3.30
SIKKIM	34.90	5.34
ARUNACHAL PRADESH	19.31	18.82
NAGALAND	20.11	6.55
MANIPUR	26.83	15.35
MIZORAM	32.68	30.17
TRIPURA	35.23	5.98
MEGHALAYA	29.67	7.40
ASSAM	31.60	7.25
WEST BENGAL	39.80	12.51
JHARKHAND	22.89	2.60
ODISHA	28.22	3.45
CHHATTISGARH	14.23	2.51
MADHYA PRADESH	15.01	5.24
GUJARAT	24.01	22.50
MAHARASHTRA	22.7	30.17
ANDHRA PRADESH	16.34	28.68
KARNATAKA	23.50	28.68
GOA	71.03	47.89
KERALA	49.60	23.35
TAMIL NADU	24.14	30.55

Source: 2011 Census.