

Preliminary communication
(accepted December 29, 2014)

SOCIO-ECONOMIC STATUS OF WOMEN BEEDI WORKERS IN BUNDELKHAND REGION OF UTTAR PRADESH: AN EMPIRICAL ANALYSIS¹

Mohd Shamim Ansari²
Aparna Raj

Abstract

The central idea of this paper is to explore link between socio-economic positions of women working in unorganized sector with special reference to beedi rolling. In India Beedi making is an age old industry and one of the largest job providers for women in the unorganized sector. Women are having inherent advantage in this job in this job of beedi rolling due to deft fingers; yet significant gender bias exists. The job is mainly done by weaker economic class in the country who don't have adequate education and skill to look for alternate job. The work of beedi rolling is preferred by the women because it can be carried from home along with domestic chores. Thus, they supplement family income along with managing the household jobs. However, in the recent year the trade is shrinking thus there is situation of underemployment.

Keywords: Beedi, Socio-Economics, Exploitation, Plight, Gender Bias.

Jel Classification: A1; D12; D71

INTRODUCTION

In India Beedi making is an age old industry and one of the largest job providers for women in the unorganized sector. The Indian market for smoking is dominated by beedi. "Beedis or "Beedis" are hand rolled, unfiltered cigarettes. A beedi consists of about 0.2 gram of processed sun dried tobacco flakes, rolled in a tendu leaf or temburni leaf and

¹ This paper is a part of research project "The Plight of Women Beedi Worker in Bundelkhand Region: Causes and Solution" which is funded by India Council of Social Science Research (ICSSR), New Delhi (India). The Authors are grateful to the funding agency for providing financial assistance to accomplish the project.

² **Mohd Shamim Ansari**, PhD, Institute of Economics and Finance, Bundekhand University, Jhansi; **Aparna Raj**, PhD, Institute of Tourism and Hotel Management, Bundekhand University, Jhansi, India.

then tied with cotton thread. The tobacco rolled in beedi is different from that used in cigarettes.

The beedi rolling activity is primarily carried out by workers having weaker socio-economic status in the society. Most of the beedi making work is carried out in rural and semi-urban areas where it is one of the major sources of livelihood for many families. The work of beedi making is primarily carried by Schedule Castes (SC) and Muslims OBC who lost their traditional source of livelihood (weaving, potteries etc.) due cheap industrial substitutes and changing consumer preference. Beedi making is viewed by these families as an additional source of income to cover-up the shrinking income. Muslim women dominate the beedi work because due to religious stricture they are not allowed to go out to work. Thus home based work is widely acceptable among them (Bhatty 1980, 1985; Koli 1990; Mohandas 1980; Gopal 1997). The participation of Scheduled Castes is high in certain centres of Maharashtra, Madhya Pradesh, Rajasthan and Andhra Pradesh (Labour Bureau 1996; Prasad and Prasad 1985). Children of beedi workers get involved in this work at a tender age; as a result cases of school dropouts are also reported in large number.

Socio-economic empowerment is essential for self-respect which cannot be achieved without economic independence. It has been widely reported that women beedi workers have poor socio-economic condition. Further, in spite of many legislations and efforts of trade unions, the conditions of beedi workers continued to deteriorate; forcing them to entertain child labour.

1. HISTORICAL FRAMEWORK OF BEEDI INDUSTRY

There is no definite information as to when and how manufacture of beedis started in India. Tribal people of ancient India used to smoke tobacco in a pipe made from leaves of trees, from where the practice of wrapping tobacco in a leaf probably originated. Beedi smoking was mentioned as early as 1711. Beedis first appeared along the east coast of India in the early part of the eighteenth century and were sold in bundles of 20 to 30. Though beedi is of Indian origin it is widely used in other Asian countries also such as Pakistan, Bangladesh, Nepal, Sri Lanka, Singapore and Malaysia.

The first formal production of beedi started in 1902, although the rural people were known to have made beedies for their own consumption much before this date. Madhya Pradesh, the largest producer of tendu leaves in India, is one of the first states where beedi manufacturing began in 1902 in Jabalpur district. In 1915, a beedi rolling unit was established by Abdul Noor Mohammed in Sagar. According to a report of the Labor Investigation Committee appointed by the Government of India in 1946, merchants from Gujarat introduced manufacture of beedis in Madhya Pradesh in the first decade of the twentieth century. The Court of Inquiry into Labor Conditions in Beedi report published by the Government of Madras in 1947 says the oldest beedi-making unit was established as early as 1887 (Chauhan 2001). This agrees with the International Labor Organization's estimate that the Indian beedi industry started around 1900 (Kumar 2003). Sagar, Damoh and Jabalpur districts in Madhya Pradesh accounted for nearly half the country's production of beedis until the late 1980s, reaching a peak of 77 billion sticks in 1984. By 1997, the beedi production from Madhya Pradesh reduced to 52 billion sticks owing to a rise in labor costs. This led to emergency of other epicentres of beedi rolling in the poor

pockets of West Bengal, Bihar, Orissa, Andhra Pradesh, Tamil Nadu and Karnataka, where labor is cheaper and workmanship was found to be better (Pasad and Prasad 1995).

Over the last century, Indian tobacco cultivation and trade began to expand, with Andhra Pradesh, Gujarat and Karnataka producing over 70% of the total. Nearly 85% of the world's beedi tobacco is grown in India. Gujarat, Karnataka and Maharashtra occupy about 35% of the area under tobacco cultivation, mostly in (Ghosh PC 2005). Annually, 150,000 tons of tobacco and 30,000 tons of tendu leaves are used to manufacture beedis (WTF 2001). Currently, the major suppliers of beedi tobacco leaves are the western states of Gujarat and Maharashtra.

According to the "Report on Marketing of Tobacco in India and Burma" (1939), about one-fourth of the total bidi production was concentrated in Central Province (Gujarat, MP), while about 40% of the total production was contributed by the Provinces of Bombay (Maharashtra and Karnataka) and Madras (Andhra Pradesh and Tamil Nadu) and the remaining was scattered over the rest of the country.

Even today the beedi industry has significant economic and social implications. Beedis account for over half of the tobacco consumed in India (ILO Report). Beedi sector is the top most employed among the unorganized household industry. There are about 300 major manufacturers of branded beedis and thousands of small scale manufacturers cum contractors who account for the bulk beedi production³. Total number of beedi worker is estimated to be about 4.5 million⁴. The number could be even higher since most of the beedi workers are not registered.

Traditional beedi rolling area worker are facing scarcity of work opportunity and shrink in income level. This could be attributed to factors like (1) entry of tobacco multinationals (2) shift in consumer preference from beedi to cigarettes and other non beedi tobacco products like *gutka*, *pan masala* (3) tough competition among the existing manufacturers has forced many to relocate their activities to backward & poverty ridden area in search of unorganized & cheaper labour.

2. REVIEW LITERATURE

Existing studies on the socio-economic conditions of women beedi workers; narrate the stories of their continuous struggle. Women constitute 76 per cent of total employment in beedi manufacturing (Sudarshan and Kaur 1999). Illiteracy, poverty, poor mobility and almost zero job opportunities for unskilled-untrained women; ensure their high levels of participation in the beedi making activity. These features associated with weaker socio-economic class of women work force; reduce their bargaining power and always put the beedi making companies/commission agents at an advantageous situation (Nair 1990; Dharmalingam 1993; Gopal 1998).

Low wages, irregular employment, exploitation by middlemen/agents; poor credit access, indebtedness, child labour, health hazard, illiteracy, poor working and living conditions, lack medical facilities etc. are some of the common elements in stories of their misery (Sudarshan and Kaur 1999, Srinivasan 1999, Thangaraju 1993, Vadmalai 1990). Excessive legislations but poor implement could be held responsible for plight of beedi workers (Avachat 1978, Mishra 2000, Basu 1978). On account of low level of

³ S. K. Das form GLW, Ministry of Labour, 'A Better Deal for Beedi Workers'

⁴ Ministry of Labour, Annual Report 1999–2000, 109.

income accompanied by situation of under-employment; the workers are unable to meet their basic necessities even.

The composition of beedi workers in terms of age and gender varies from place to place. Age has an inverse relationship to productivity and earnings in beedi making (Dharmalingam 1993; Mohandas and Kumar 1992; 2000). Mookerjee 1984) pointed out that young worker can roll 1000 beedis in 8 hours, while aged workers could roll only 400–450 beedis a day.

Beedi making mainly constitutes home-based workers who earn for family along with domestic chores (Datar 1995, Ghosh PC et al. 2005). Children also form a larger chunk of workforce in beedi making (GoI 1996; Prasad and Prasad 1985; Bhatta 1987; Gopal 2000; Koli 1990). The average family income of beedi workers is about Rs. 2000/- per month and almost same level of expenditure. They earn Rs.600/- to Rs.1000/- per month from beedi work. They have neither agricultural land nor own any house. As a result they need to make frequent loan even for petty purposes (Dudhyal and Sonar 2006).

Women and children are preferred for the beedi rolling because of some natural inherent skills. There are many citations to indicate that women and children especially girls; are better at this job. However, it is ironical that, beedi rolling is also not immune to atrocities against women. Women's involvement in beedi rolling has been linked to the ease of learning the skill, its manual operations, can be carried out at home and so on (Nair 1990; Pande R 2000.; Karunanidhi n.d.). Simultaneously, it is noted that men earn more and their wages are higher (Labour Bureau, 1995; Bhatta 1987).

Women workers are the worst victims of exploitation in the beedi industry. The maximum average daily earning of a labeller/packer is reported to be 42% higher than the maximum average daily earnings from beedi rolling. Similarly, the maximum average daily remuneration of a helper is reported to be 10 per cent higher. The maximum daily average earnings of a beedi checker was not much different from that of the maximum average daily earning of a beedi roller. However, the minimum average daily earnings of a male beedi checker was 41 per cent higher than the minimum average daily earning of a male beedi roller. The corresponding differential was 52 per cent for the female counterparts. The male participation rate was 15 times higher in beedi checking than the female participation rate.

Employers and intermediaries (also referred as contractors/traders/sattedars/middlemen) are known to exploit home workers by supplying sub-standard and under-weighted raw materials to the rollers, a practice which leads to rolling fewer beedis. However, when collecting the rolled beedis the intermediaries do not make any allowances for the shortfall in rolling which might have resulted from poor quality or under-weighted raw materials supplied. The fixed quota of beedis, which could have been produced with the entire lot of raw materials supplied, had those been in perfect condition, is demanded instead (ILO, 2003).

Poor home-workers are not able to bargain with the middlemen for consideration on the ground of poor quality of raw materials supplied out of fear that they may not be given rolling jobs if they do. They try to make good the shortfall by buying raw materials either from the employer/middlemen or market and rolling fresh beedis.

Large rate of beedi rejection on grounds of poor quality is very common exploitative practice in the industry as they are not judged up to standard by the checker. No wage is paid for the rejected beedis. The rejected beedis are either taken by middlemen or sold in the market at a lower rate. Sometimes is also broken and the tobacco given back to the rollers. Such exploitation sometimes leads to shortfalls to the extent of 300 to 400 beedis

per 1,000 contracted (ibid). Beedi and Cigar Workers (Conditions of Employment) Act, 1966 mention that no employer/contractor shall arbitrarily reject more than 2.5 per cent of the beedis. Rejection of 2.5 per cent or more requires that the workers must be given in writing the reasons for such rejection. Many cases of demand of commission by intermediaries from the workers are also reported (Labour Bureau 1995)

3. RESEARCH METHODOLOGY

The primary objective of this paper is to (1) explore the living and working conditions of women beedi workers in the Bundelkhand Region of Uttar Pradesh, India, (2) Identify and examine the their economic status, (3) Study the characteristic of families engaged in this particular activity; and (4) explore the nature of exploitation faced by women beedi workers in the area under study and (5) to indentify the factors that could be held responsible for plight of women beedi workers in the region.

1. *Area under study*: Bundelkhand Region of Uttar Pradesh comprises of seven districts. However, beedi making is confined to only four districts of Bundelkhand Region of Uttar Pradesh (1) Jhansi (2) Lalitpur (3) Mahoba and (4) Jalaun. The specific areas were chosen from the region where there was concentration of beedi workers, both in the rural and urban areas for each district.
2. *Data Collection*: Schedules were used to collect the primary data for the study. In depth interviews were also organized with the different stakeholders involved in beedi trade.
3. *Sample Design and Size*: Purposive random sampling has used for the study. Female members of the families who were involved in beedi work and who were voluntarily willing to answer the schedules were included for the study. A sample of 500 was used for the study i.e. (1) Jhansi 209, (2) Lalitpur 126, (3) Mahoba 90 and (4) Jalaun 75. Lesser numbers of sample size have been used as beedi work is almost on the verge of shrinking in the district like Mahoba and Jalaun.
4. *Tools and Techniques of Data Analysis*: In order to draw empirical evidence for the study frequency analysis has been done using SPSS 16. Hypotheses were tested using t-value test and Chi-square.
5. *Hypothesis of the study*: The hypothesis framed and their results are presented in Section B of Analysis in Table 13.

4. ANALYSIS AND FINDINGS

Social Status of Beedi Workers: The Average age of Women Beedi workers in the Bundelkhand region lies between 35–40 years. Mostly the middle age women (30–40 years) are group are engaged in beedi rolling to supplement family income.

Majority of the beedi workers are illiterate as 69% of the respondent reported that they are not able to read and write. However, only 10% of the respondent received primary level schooling while 12 % had received middle level schooling. This is one of the primary reasons of the plight of women beedi workers in the regions as the manufacturers/contractors take benefits of their ignorance.

Many studies have reported that the job is mostly done by Schedule castes (SC) or Muslims OBC. The fact is found to be true for Bundelkhand Region of Uttar Pradesh

also. This is evident from the fact that 65 % of beedi workers are Hindus while 35% are Muslims. At the same time about 87.1% of the Hindus belong to SC categories. The study also reveals that only Muslim Other Back Ward Castes (OBCs) are engaged in this particular job and people other religions are not involved in this job. It has been found that about 80.4% of the respondents are married and they job to supplement family income and thus support head of the family.

Position in the family: Women beedi workers were asked to comment about their status in the family. For this purpose two parameters were taken: (1) Role in Family Decision Making; and (2) Role in Decision Making due to contribution to family income were considered for the study.

The response on these parameters was conflicting in nature. On an average more than 81% of the respondents reported that “*Yes they have Role in Decision Making*” (Figure 1). However, when asked, “*Whether you are consulted in the family decision making due to contribution in family income?*” Only 7% of the total respondents positively (YES), while remaining 93% feel that the consulted in family income not because they supplement family income because they are considered part of the family (Figure 2).

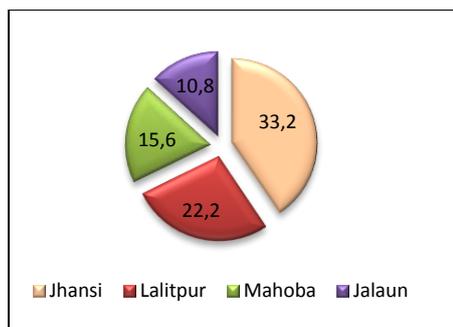


Figure 1. Role In Family Decision Making

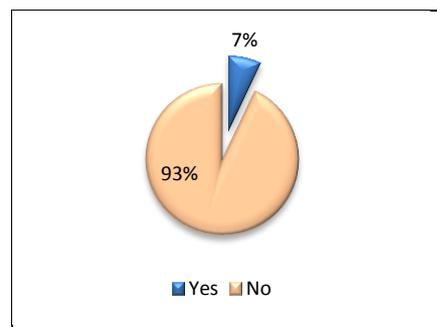


Figure 2. Role in Decision Making Due to Contribution in Income

Economics Status of Beedi Workers: The parameters considered to analyse Economic Status are (1) nature of ration card holding (2) purpose for doing this job; (3) monthly income from beedi; (4) monthly income of spouse; (5) total monthly family income; (6) nature of assets holding; (7) pattern of income and expenditure (8) savings; and (9) credit facilities.

4.1. Economics Classification of Beedi Workers

Based on the nature of ration cards issued by the government the beedi workers could be classified into three economic class viz. (1) Pink Card Holders: “*Poorest of the Poor*”; (2) White Card Holders: “*Below Poverty*”; and (3) APL: “*Above Poverty Line*”. Of the total respondents, 21.6% falls under the “*Poorest of the Poor*” category; 38% falls under “*Below Poverty*”; while remaining 40% falls under *Above Poverty Line*” (Table 1).

Table 1. Kinds of Ration Card (Economics Class)

District	Kind of Ration Card				Total	
	Pink Card Holder (Antodaya*)	White Card Holder (BPL**)	Yellow Card Holder (APL***)	No card		
Total	f	108	190	200	2	500
	%	(21.60)	(38.00)	(40.00)	(0.40)	

Note: * Pink Card Holder: Extremely Poor; ** White Card Holder: BPL: Below Poverty Line; *** Yellow Card Holder: APL: Above Poverty Line

4.2. Reasons for doing this Job

Most of the respondents have cited one or more reasons for rolling beedis; even they are aware of health hazard in this job. According to respondents; they are doing this job due to combination of factors such as (1) easy to learn (28.2%); (2) No alternate source; of income (92.8%); (3) can be managed with domestic chores (49.8%) and (4) Easy source of livelihood (10.8%). However, majority of the respondents (92.8%) have cited that they are doing this job because there is no alternate source of income or alternate job opportunity. About 50% of the respondents agreed that as it can be manage with domestic chores; it is one of the best ways to support family (Table 2).

Table 2. Reasons for rolling beedi even aware of its health hazard

		Responses		Percent of Cases
		N	Percent	
Roll beedi even if it hazardous to health♀	a. Easy to learn	141	15.5%	28.4%
	b. Manageable with household work	249	27.4%	50.1%
	c. No alternate source	464	51.1%	93.4%
	d. Easy Source of livelihood	54	5.9%	10.9%

Note: *.Dichotomy group tabulated at value 1. ♀Multiple response set question.

When asked reasons for doing this job based on indicators viz. (1) earn livelihood for the family; (2) financial security for the family; (3) education of children; (4) marriage of daughter; and (5) to improve living standard. Their response on this parameter was also mixed. One or more reasons were cited by them. 93.8 % agreed that it is one of the easy ways to earn livelihood for the family and 72.6% agreed that the job provides an opportunity to improve financial security for the family. However, majority of the respondents feels that the, “*earning from beedi making is not adequate*” (Table 3).

Table 3. Purpose of This Job

Purpose of Doing Jobs♀		Responses		Percent of Cases
		N	Percent	
	Earn livelihood for family	469	42.2%	94.7%
	Financial Security	363	32.6%	73.3%
	Education of Children	242	21.8%	48.9%
	Marriage of Daughter	30	2.7%	6.1%
	Improved living of Standard	8	0.7%	1.6%

Note: Multiple Response Questions

4.3. Mapping Income Profile

Beedi as only source of income: 6.6% of the respondents have reported that beedi making is the only source of income for the family (Figure 3) and 93.4% of the workers have reported that they do this job to supplement family income. Beedi is not the only source of family income in the region and most of the families have to explore alternate source of income for subsistence.

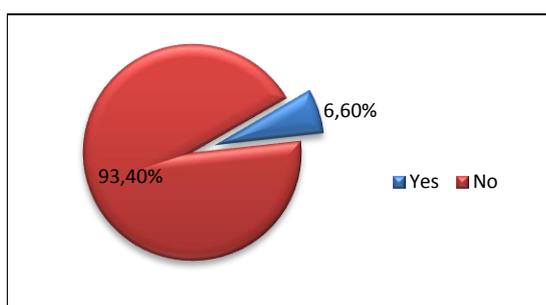


Figure 3. Beedi as only source of Income

Their spouse, parents, in-laws and even children are engaged in one or more jobs. The other source of income for the families could be summed up as follows (Table 4 and 5).

Table 4. Other Sources of Income

District	Other Sources of Income								Total
	Agriculture	Livestock	Manual Work	Tailoring	Saloon	Beedi Related Jobs	Other casual works in both organized an unorganized sector	More than one job performed by other family member	
Total	f 3	7	114	28	4	26	172	146	500
	% (0.60)	(1.40)	(22.80)	(5.60)	(0.80)	(5.20)	(34.40)	(29.20)	

Table 5. Others family members who earn

District	Who Earns for the family other than you?							Total
	Only my self	Husband	Parents in Law	Sons	Parents	Husband & Sons	Husband & Parents in Law	
Total	f 23	247	1	69	21	137	2	500
	% (4.6)	(49.4)	(0.2)	(13.8)	(4.2)	(27.4)	(0.4)	

Beedi making is just an additional source of income. Women are generally engaged in beedi making just to supplement family income. Out of the total respondents 93.6% reported to have considered beedi making as an additional source of family income (Table 6).

Table 6. Beedi Making as Source of Income

District	Beedi Making as Source of Income		Total
	Main Source	Additional Source	
Total	f	468	500
	%	(93.6)	

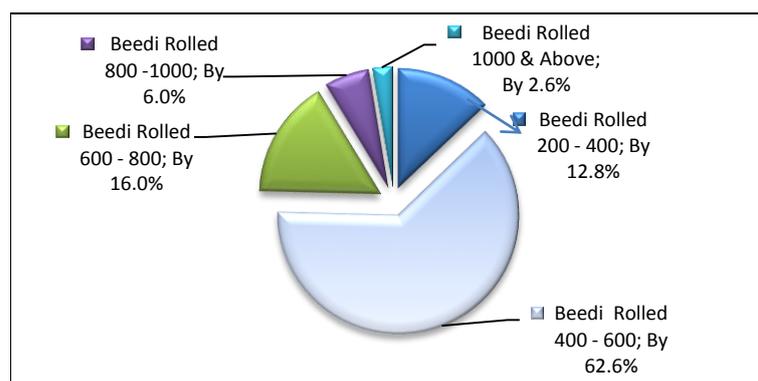


Figure 4. Percentage respondents reporting number of beedi rolled in a day

Of the total 500 respondents 62.6% reported to roll 400–600 beedi while 16% of respondents could roll 600-800 beedi in a day. 6% of the respondents could roll beedi between 800–1000 a day. However, only 2.6% of the respondents could roll 1000 & above beedi a day (Figure 4).

Table 7. Monthly Income from Beedi Rolling

District	Monthly Income from Beedi Rolling					Total	
	Below 500	500–1000	1000–1500	1500–2000	2500 & Above		
Total	f	226	228	39	6	1	500
	%	(45.20)	(45.60)	(7.80)	(1.20)	(0.20)	

It can be observed that 45.2% of the total respondent have reported income below Rs.500 and 45.6% have reported income between Rs.500–1000 from beedi (Table 7).

Table 8. Husband's Monthly Income

District	Husband's Monthly Income						Total	
	Nil	Below 1000	1000–3000	3000–5000	5000–8000	8000 & Above		
Total	f	112	11	281	62	22	12	500
	%	(22.40)	(2.20)	(56.20)	(12.40)	(4.40)	(2.40)	

22.4% of the respondents have reported that their husband do not earn anything thus have to roll beedi to support the family. Only 2.4% have reported that their husband earn above Rs.8000 a month (Table 8). Majority of the beedi workers have reported that total family income of beedi worker is between Rs.2000-5000 while less than 1 per cent of the respondents reported that their family income is Rs.10,000 and above (Table 8).

Table 9. Total Family Income

District		Total Family Income					Total
		0–2000	2000–5000	5000–8000	8000–10000	10000 & above	
Total	f	26	370	78	22	4	500
	%	(5.20)	(74.00)	(15.60)	(4.40)	(0.80)	

Of the total 500 respondents 74% have reported that their monthly family is between Rs.2000–5000 while 15.6% have reported to have monthly family income between Rs. 5000–8000 (Figure 5).

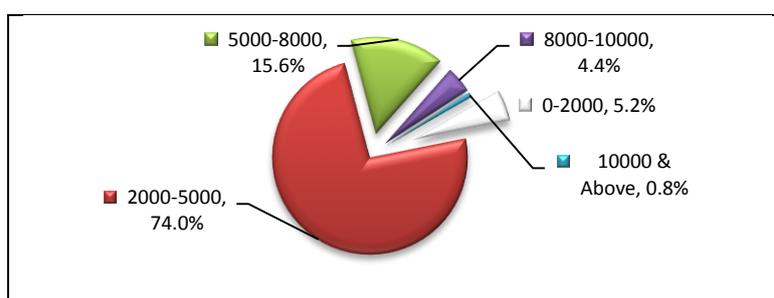


Figure 5. Total Family Income

4.4. Assets Structure of Beedi workers

The beedi workers of the under study is own one or more assets *viz.* house (57.4%), gold jewellery (14.6%), and silver jewellery (13.6%). Investment in financial instruments is not preferred by the majority beedi workers. This may be because of liquidity need. They prefer to investment their savings in gold and silver jewellery because in time of need loan can be availed by mortgaging. The ownership of agricultural land is only with 4.9% of the respondents (Table 10).

Table 10. Assets Structure of Beedi Workers

District		*Asset structure of Beedi Workers ^{a,b}							Total
		RL	AL	House	Vehicle	Jewellery Gold	Jewellery Silver	FINANCIAL SECURITIES	
Total	f	11	37	434	51	110	103	10	756
	Per Cent ♀	1.5%	4.9%	57.4%	6.7%	14.6%	13.6%	1.3%	100.0%

Note: *Percentages and totals are based on responses.(RL-Residential Land, AL-Agricultural Land; a. Dichotomy group tabulated at value 1. ♀Multiple Response Questions; b. Percentages are based on responses, but no pairing is performed.

Table 11. Spend All Money

District		Yes	No	Not applicable
		Total	f	429
	%	(85.8)	(11.6)	(2.6)

85.8% of the respondents reported that they are not able to save. They spend all the earning from beedi on meeting basic domestic needs (Table 11). However, they cited one or more heads where they spend their income from beedi. 92.8% of the workers

spend their income from beedi primarily on satisfying domestic daily needs. However, 21% of the women reported that they spend income to satisfy their own needs. At the same time only 2% of the respondents feel that they spend this income to secure better livelihood for the family. Only 1.2% reported that they have no idea how their earning is being spend by the head of the family. Beedi workers are hardly able to save any amount from their income. Only 6.4% of respondents reported that they are able to save some part of their income which is very negligible i.e. below Rs. 500 (Table 12).

Table 12. Amount of Saving

District		Below 500	Nothing	Total
Total	f	32	468	500
	%	(6.40)	(93.60)	

The beedi workers were asked, “Whether they have taken any loan from local money lenders/banks/contractors/KCC etc.?” 98.8% of the respondents have reported that they have not taken any form of loan. Only 6 respondents (1.2%) have said that they have borrowed. In case of needs they prefer to borrow very short term demand loan from relatives and friends for contingencies such as medical, school fees etc.

The following Section depicts result of various hypotheses tested at 5% level of confidence (Table 13).

4.5. Hypothesis testing

Table 13. Social-Economic Status of Beedi Workers

S. No	Hypothesis	T.test Value*	Level of Significance	df	Interpretation	Result
			A:Social Status			
	<i>Distribution based on Literacy Rate</i> H ₀ : $\mu = 74.04$ (National Average) H _a : $\mu < 74.04$ (National Average)	29.601	5%	499	Since calculate t-value is greater than the tabulated t value 1.960 at 5% level of significance hence null hypothesis is rejected. We may conclude that the literacy rate of beedi workers is less than the national average.	Significant
	<i>Distribution based on Religion</i> H ₀ : Participation Ratio of Muslim and Non Muslim Beedi workers are equally distributed H _a : Participation Ratio of Non Muslim Beedi more than Muslims beedi workers	63.366	5%	499	Since calculate t-value is greater than the tabulated t value 1.960 at 5% level of significance hence null hypothesis is rejected. We may conclude that the participation ratio of muslim beedi workers is less than Non-Muslim beedi workers.	Significant
	<i>Distribution based on Category (SC/OBC/UR)</i> H ₀ : Beedi workers are equally distributed across all categories H _a : Beedi workers are equally distributed across all categories	40.884	5%	499	Since calculate t-value is greater than the tabulated t value 1.960 at 5% level of significance hence null hypothesis is rejected. We may conclude that the beedi workers are not evenly distributed by across all categories. It has been observed that the job of beedi making is largely dominated by weaker section of society such as SC and OBC.	Significant

Table 13. (continued)

Hypothesis	T.test Value	Level of Significance	df	Interpretation	Result
<i>Distribution based on Role in family decision making</i> H ₀ : Women beedi workers are not consulted in family decision making. H _a : Women beedi workers are considered in family decision making	68.431	5%	499	Since calculate t-value is greater than the tabulated t value 1.960 at 5% level of significance hence null hypothesis is rejected.	Significant
<i>Economic Classifications</i> H ₀ : beedi workers are equally distributed across economic class based on holding of ration cards H _a : beedi workers are not equally distributed across economic class based on holding of ration cards	$\chi^2 = 1.0512$	5%	9	Calculated value of Chi-Square (χ^2) less than tabulated value (16.919) of χ^2 at <i>df</i> 9 and 5% level of significance. Thus, Null Hypothesis (H ₀) may be accepted. Hence we may conclude that beedi workers are equally distributed across economic class based on holding of ration cards	Insignificant
<i>Per Capital Monthly income from beedi (annual per capital: 35,816/12 months)</i> H ₀ : $\mu = \text{Rs. } 2985$ (National Average) H _a : $\mu < \text{Rs. } 2985$ (National Average)	52.747	5%	499	Since calculate t-value is greater than the tabulated t value 1.960 at 5% level of significance hence null hypothesis is rejected. We may conclude that the per capita monthly income of beedi workers is less than the national average.	Significant
<i>Rented house</i> H ₀ : Majority of the beedi workers do not live in rented house H _a : Majority of the beedi workers live in rented house	$\chi^2 = 3.176$	5%	3	Calculated value of Chi-Square (χ^2) less than tabulated value (7.815) of χ^2 at <i>df</i> 3 and 5% level of significance. Hence we may conclude that majority of beedi workers live in their own house	Insignificant

Note: * In most of the software that is available for carrying out the statistical analysis Z test option is not available. This is because with a large sample it will not make a difference whether Z or t test is used. The computed value of t would be the same as that of the Z Value

CONCLUSIONS AND POLICY RECOMMENDATIONS

The findings of this study clearly show that the plight of women beedi workers in the Bundelkhand Region of Uttar Pradesh is also a never ending process. They are barred from facilities for which they are legally entitled. About 94 per cent of the respondents are dissatisfaction with the current job and want to switchover to new jobs if they get relatively suitable opportunities. However, they regret that ample opportunities of switching over are missing in the region. In Chitrakoot, Hamirpur and Banda districts beedi work is no more carried out. This is followed by stagnant agricultural produce. Thus, workers were forced to look for employment in other sectors. Relatively a larger number of out-migration: entire families have left the region in search of work in other states. The boom in the real estate has opened many job opportunities for the displaced beedi workers which also offer better wages. Many have opted for street vending, opened groceries etc. Many women beedi workers have gone into domestic service. Many beedi contractors are turning to it as a side business. It has also been observed that the owners have no plan for future diversification. Even though some of the beedi

companies have diversified into new line of business but such plans are exclusive in nature. No beedi company is concerned about resolving the miseries of beedi workers who have been working for decades. This may be because even the loyal workers donnot have the requisite skill for the newly developed business line. Thus, Interventions are required on priority.

A sustainable approach is advisable to improve the working and living conditions of beedi workers. Existing beedi traders, government agencies and NGOs must be sensitised to explore local resources and upgrade the inherent skill of existing beedi workers who facing the situation of under-employment. Sustainable rehabilitation can be the primary mantra for resolving their misery which is possible through employment diversification and identification of new job opportunities.

It is expected that the following policy recommendations can be fruitful in resolving the plight of women beedi workers in the area understudy. Beedi manufacturers in the region can opt for product mix or change in area of operation by exploring opportunities available in the local economies. As the economy of Bundelkhand is largely based agricultural produce such as pulses, groundnut, mustard, peppermint, peas, lemon and wood-apple etc.; diversifying into agriculture business can prove to be a good business avenue.

The Government has already created several institutions, laboratories, testing centres, training institutes and technical schools at district and state level. It is suggested that these institutions and available training infrastructures be revitalized through PPP Model and equipped to deliver professional services driven by market considerations.

Indian women inherently possess skill like embroidery/handicraft/tailoring, Processing pickles, Cattle raising, Pulse processing, Weaving, Bead work, Pottery, Making Paper Box/packing materials/ Childcare, Dying clothes, Nursery raising, Bamboo work, Spices (processing and mixing), Ironing clothes, Kite-making, paper bags making etc. Counselling centres can help in identifying and harnessing these skills in areas other than beedi making. They can be facilitators in upgrading existing skills and generating business proposition from them. Adopting Credit Linked SHGs Business Model can be a sustainable approach. The positive note is that more than 96 per cent of the respondents want to acquire other skills for such purpose. Rehabilitation programmes of beedi workers must be planned on sustainable basis, as a casual approach would defeat the very objective of resolving the misery of existing beedi workers.

REFERENCES

- Avachat, Anil. 1978. Beedi Workers of Nipani. *Economic and Political Weekly* 13 (30): 1203–1205.
- Census of India. 1961. District Census Handbook, North Arcot.
- Bhatty, Zarina. 1987. Economic contribution of women to household budget: A case study of the beedi industry. In *Invisible hands: Women in home-based production*, edited by Andrea Menefee Singh, Anita Kelles-Viitanen, 35–50. New Delhi, India: Sage Publications.
- Chauhan, Yash. 2001. *History and Struggles of beedi Workers in India*. New Delhi: N. M. Joshi Institute and ILO.
- Datar, Chhaya. 1985. Divisions and unity: Dynamics of organising bidi and tobacco workers at Nipani. *Manush* 33: 29–32.
- Dharmaliagam, A. 1993. Female Beedi Workers in a South Indian Village. *Economic and Political Weekly* 28 (27–28): 1461–1468.

- Dudhyal, Poonam D., and Gangadhar B. Sonar. 2006. Beedi work and women health: A study in Solapur city. Special issue, *Journal of global economy* 2 (3): 199–206.
- Ghosh, P. C. et al. 2005. Occupational Health Profile of the Beedi Workers and Ergonomic Intervention. *INDOSHNEWS* 10 (2). http://www.dgfasli.nic.in/newsletter/apr_jun05.pdf
- Gopal, Meena. 2000. Health of women workers in the beedi industry. *Medico Friends Circle Bulletin* (Jan-Feb) <http://www.mfcindia.org/mfcpdfs/MFC268-269.pdf>
- Govt. of India. 1996. Report on Socio-Economic Conditions of Women Workers in Selected Beedi Units in India (1994–95). Labour bureau, Ministry of Labour, Chandigarh/Shimla.
- . 1997. Report on the Working and Living Conditions of Beedi Industry in India.
- International Labour Organisation, (Annexure 1), Beedi Sector in India: A Note; [updated 2003 Apr 30; cited 2005 Jun 29]. New Delhi: ILO. Available from: <http://www.ilo.org/public/english/region/asro/NewDelhi/download/notebeedi.pdf>.
- Jhabwal, Renana, and Rahima Shaikh. n.d. *Wage fixation for Home Based Piece Rate workers: Technical Study Based on a survey of workers in Gujrate*. Ahmedabad, India: SEWA Academy, Self Employed Women's Association (SEWA).
- Karunanidhi, G. n.d., Health risks of beedi making. *Social Welfare* 44 (30): 9–11.
- Koli, P. P. 1990. Socio-economic conditions of female beedi workers in Solapur district. *Social Change* 20 (2):76–81.
- Kumar, A. 2003. *Dhamoh Ke Beedi Shramiko Ki Dastan* (Hindi) New Delhi, Indian Institute of Human Rights.
- Labour Bureau. 1996: 54–55.
- Lahgir, Sarada. 2011. Beedi workers in Orissa: Destinated with never ending Miseries. <http://orissadiary.com/CurrentNews.asp?id=29588>
- Mishra, Lakshmidar. 2000. *Child Labourers in India*. New Delhi: Oxford University Press.
- Mohandas, M., and P. V. Praveen Kumar. 1992. Impact of Cooperativisation on Working Conditions: Study of Beedi Industry in Kerala. *Economic and Political Weekly* XXVII (26): 1333–38.
- Nair, Ravindran G. 1990. Child pledging in beedi industry. *Social Welfare* 37(4):15–16.
- Pande, Rekha. 1999. Structural violence and women's health. In *The bidi industry of India. Paper presented at the Global Symposium on Violence and Health*, Oct 12–15; Kobe, Japan.
- Prasad, K. V. Eshwara and Anuradha Prasad. 1985. *Beedi Workers of Central India: A Study of Production Process and Working and Living Conditions*. New Delhi: National Labour Institute.
- Sarkar, Siddharth. 2004. Women Workers in Beedi Rolling. *The Indian Journal of Economics* 47 (4): 135–140.
- Srinivasan, R. 1999. *Study on the Problems Faced by Beedi Rolling Workers*. Unpublished Project Report, Sacred Heart College.
- Srinivasulu, K. 1997. Impact of liberalisation on beedi workers. *Economic and Political Weekly* 32 (11): 515–517.
- Sudarshan, Ratna and Rupinder Kaur. 1999. The tobacco industry and women's employment: old concerns and new imperatives. *Indian Journal of Labour Economics* 42 (4): 675–685.
- Thangaraju, N. 1993. The Study of Socio-Economic Conditions of Beedi Workers at Pudukottai Village, North Arcot Ambedkar Dt, TamilNadu. Unpublished project Report, Sacred Heart College, Tirupattur.
- Vadamalai, L. 1990. A Study of Socio-Economic Conditions of Beedi Workers and Their Problems at Tirupattur, North Arcot Ambedkar District. Unpublished Project Report, Sacred Heart College, Tirupattur.