



## A Geographical Analysis of the Socio-economic Condition of the Bidi-workers in the Sunderban Region of West Bengal

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### Abstract

*"Bidis" or "beedis", the "poor man's cigarette" in India are made of about 0.2 gram of sun-dried and processed tobacco flakes, rolled in tendu leafs (Diospyros elanoxylon) or temburni leaf and held together by a cotton thread. The bidi industry is an important cottage industry that provides a subsidiary source of livelihood to agricultural labourers during the post-harvest period. It plays a pivotal role in the life and livelihood of the local people of the Sunderban region of South 24 Parganas district which is considered to be one of the most backward regions of West Bengal (Giriappa, 1987). A large numbers of women and children are engaged in the bidi rolling job which is basically unorganized and informal in nature. The workers seem to have no legitimate rights as industrial labourers without any valid full-proof registration systems and ID card and are poorly paid. Although it has a serious occupational health hazard, nobody seems to bother. The region being economically backward, they choose it as alternative occupations. Even, most of the workers are school drop-out girl child. Their wages may enhance with the setting of co-operatives for better marketing the products. All these have been dealt with in this article.*

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### Introduction

After 1980, the epicenter of this industry grew in the state of West Bengal, Bihar (undivided), and Orissa because of the availability of cheap labour and raw material. Presently, Madhya Pradesh account for the highest share of employment (17%) in the bidi industry, followed by Tamil Nadu (14%), Andhra Pradesh (14%), Karnataka (12%), West Bengal (11%) and Uttar Pradesh (10%). However, history of development of bidi-rolling industry in West Bengal, particularly in Sunderban is not exactly known to us. According to O' Malley (1914) the tobacco was generally grown for domestic use only in the late 19<sup>th</sup> century in this region. Two kinds of tobacco viz. 'hingli' and 'mandhata' were grown chiefly in the northern and north-eastern parts of 24 Parganas District (Hunter, 1875). So it is assumed that the industry has been running for more than a century.

### Objectives

Since women and child labour form the major labour force, the study aims at evaluating their contribution to rural development. It also attempts to evaluate the

present scenario of the bidi industry as a cottage industry and the socio- economic condition of the bidi-workers of the study area. Assessment has been done to explore the problems and prospects of this industry in the study area.

### Methodology

Data has been collected both from primary (through questionnaire survey on household basis using systemic stratified sampling techniques) and secondary sources like, District Statistical Handbook of South 24 Parganas, Labour Department of India and W.B. Govt. and also several books and journals. The database are then manipulated with relevant statistical techniques and the results have been shown with conventional cartographic techniques.

### Nature and Process of Bidi Rolling

The bidi manufacturing involves many inter-related stages. Firstly, the tendu leaves are collected by the forest-based local people and then auctioned and marketed to the wholesale contractors of different states. Then, employers through middleman called

contractors, provide the tendu leaves, tobacco, yarn and thread to the workers who cut the leaves into a specific size and shape. These are then filled with the required amount of tobacco and rolled into bidi and tied with yarn. Then, 25 sticks of bidis are made a bundle and for curing it's keep in the oven. Finally, the bundles are supplied to the contractors, who then brand these and sell in the markets.

### Location of the Study Area

Sunderban is located on the extreme south-eastern fringe of West Bengal, covered by the world's largest mangrove forest. The total area of the Indian Sunderban is about 9,600 sq. Km (which covers nearly 40% of total Sunderban). There are 19 CD Blocks in this area of which 13 are located in the South 24 Parganas district while the remaining ones are located in the North 24 Parganas district. Because of the remote location and non-availability of job opportunities a large number of people, particularly women and children have been forced to take up the bidi rolling job. Most of the bidi workers belong to Kultali and Joynagar-I block.

### Spatial Distribution of Bidi Workers

There are approximately 4.4 million fulltime workers and another 4 million people engaged with bidi industry related job in India. According to the labour dept. of West Bengal there are 19,74,238 identity card issued by jointly the labour dept. of state and central up to December 2010. The most labours (7,60,000) are in Murshidabad district and South 24 Parganas district have also more than one lakh workers. According to the Labour Welfare Dept. of West Bengal, there are 60,774 persons are engaged in bidi rolling job in the 13<sup>th</sup> development block of the Sunderban region of South 24 Parganas district.

All over the Sunderban area, besides the agricultural activities, there are no alternative employment opportunities. Because of this, a large number of women and men workers are engaged in bidi rolling job. The men workers do work during the off-season of the agricultural activities and women do this all through the year. During off-season, all working members of the concerned family are involved in this job. Bidi workers are mostly concentrated in the Kultali, Joynagar-I, Patharpratima blocks. They have no identity card. The number of bidi makers is gradually increasing in this region and particularly, after the Aila (25 May, 2009) a large number of people have been forced to take up this occupation.

### Economic Impact of Bidi Works in this Region

It is noted that over threefourth of bidi rollers are female workers. They used to continue bidi rolling from morning to mid-night after performing their daily domestic works. The region is a mono-cropped one (rice) and the marginal workers engage themselves in bidi rolling during the post-monsoon period. Nearly 70% of bidi

rollers earn a paltry amount Rs. 50 per 1000 bidi rolled, which takes 12 hours or more a day.

Although, this is much below the minimum wages fixed by the Govt. (Rs. 160/-) and it is not enough to support an average family of 5 to 8 members. Bidi rolling not only provides a source of income but also has a great social impact. For example, a woman is respected only by her bride if she can make bidi and the amount of dowry becomes less. It also stops the forceful migration to the other states. Today, the industry has come to occupy a very important niche in the overall industrial spectrum of the country by providing a large number of people's employment.

### Socio-Economic Condition of Bidi Workers

#### (a) Caste and Composition of Bidi Workers

The current research is based on 200 sample household survey of the bidi workers of the various blocks of Sunderban region. It shows that, most of the bidi worker's household (nearly 81%) belong to the scheduled caste (SC) community and only 3% to the scheduled tribe (ST) community (Table - 8). Thus the general (G) category comprise the remaining ones (Hindu = 9% and Muslim = 6%). Hence, 85% of the total bidi workers belonged to the socio-economically backward communities. Again, a large portion of the bidi workers of the Muslim group are included in the other backward community or OBC. Being poor they have been forced to the job of binding bidis.

#### (b) Size of Family Members

The study is based on 200 bidi worker's families of the different Blocks of the Sunderban region of South 24 Parganas District. There are a total of 1084 family members, of which 296 are bidi workers with an average family size of 5.4/ family. Therefore, dependency ratio of bidi workers is much higher. About 69% of the families have 4 to 5 members/ family (Table 4).

Only 9% of the families have a size of 1 3 / family. Actually they have a large numbers of family members. But, daughter has been migrated to other region for their marriage purpose. Some have gone to other states for job; hence during the survey family size appears to be smaller. About 16% of the households have more than 8 members/ family; these are mainly Muslim families.

#### (c) Literacy and Educational Level of Bidi Workers

About 70% full-time workers are women and children in this Sunderban region. Most of the bidi workers (nearly 65%) are illiterate and have been rolling bidis for more than 15 years (Table 5). Basically, poverty and the non-availability of the educational facility are responsible for this. On the other hand, nearly 16% of the bidi workers had studied up to primary level and they now can just sign their names only. Only 9% of the total bidi workers have studied up to upper primary level while only 5% have passed Madhyamik level and 3% Higher

Secondary level while only 2% have graduation degree certificates. Child workers are mainly school drop-out girls from poor family.

#### **(d) Income Level**

The average decadal growth rate of population in the Sunderban region has been found to be about 18% with crude density above 1000/km<sup>2</sup> (2011 Census). About 65% of population depends upon agriculture, while 78% of the economy of is agricultural dependent (Adhikari, 2012). Per capita land occupancy of the agricultural labours is only 0.5 ha. Two major economic activities in this region, such as fishing and honey-collection have substantially declined during the last 10 years that causes a sharp fall in the family income. So people of this region are continuously searching a new job for sustenance. Majority of the bidi-workers (nearly 43%) earn Rs. 1000/- to 1500/- per month from the bidi rolling job, whereas only 32% earn Rs. 600/- to 1000/- / month (Table 6). About 18% of the total workers have been earning more than Rs.1500/- per month.

#### **(e) Subsidiary Occupation**

Bidi rolling is being regarded as one of the most health hazardous works. Currently they are focusing on sectors like, regeneration of land and water resources, food processing, horticulture, animal husbandry, forestry, medical plants, minor forest produce, wood work, handicrafts, teaching and so on. In Sunderban region, nearly 37% of the families regard it as their traditional family occupation (Table 7). As marginal worker they are also doing various kinds of informal activities like agricultural labourer, daily wagers, domestic help, street vendors, etc. Hence unemployment rate is very high.

#### **(f) Health Condition of Bidi Workers**

The employment size of bidi workers is next only to agriculture and handloom sector in India. The occupational life of women bidi workers are characterized by low wages, pack-related remuneration, lack of social security and absence of organization. The condition of the female bidi workers were deplorable as many of them had to roll bidi as there is no other employment opportunities for them. Hence, women workers are mainly exposed to occupational health hazard.

The nature of work is so monotonous that after a few years, it becomes mechanical and boring. Most of them work under severe stress and exploitative conditions that compound their risk to illness (Sarkar, 2004). The most common problems are — inhalation of tobacco and the posture which requires sitting at same place and in the same position for hours at a time that often cause headache, backache, neck ache, back-strain, swelling of the lower limbs and digestive problems, asthma, tuberculosis, cancer etc. They often suffer from respiratory disorder, gastrointestinal illness,

and gynecological problems and are susceptible to fungal diseases, peptic ulcer and diarrhea (Table – 8). They also have a high degree of leucorrhea (Ranjitsingh and Padmalata, 1995). A study conducted in Kerala revealed that about 67% of workers suffer from one or more diseases and 95% believed that it is due to tobacco fumes (Mohandas, 1988). Even the children are being affected by various bidi related diseases.

#### **Remedial Measures for Health Issues**

Mr. S. N. Rao, the president of the Central India Bidi Working Associations asserted (1988) that, bidi workers of whom quite a large number are women are treated like bonded labourers. They invariably work anywhere between 10 to 12 hours per day. They live under deplorable conditions and are exploited very much. So in these situations, there should be welfare schemes for women bidi workers such as —

1. Imparting proper health education and awareness among bidi workers.
2. Health dispensaries should be settled in bidi workers concentrated blocks.
3. Adequate medicines should be stocked in the dispensaries of the LWO.
4. Require static cum mobile/ static allopathic and ayurvedic dispensaries.
5. Schemes for reservation of beds in TB hospitals.
6. Schemes for domiciliary treatment of bidi workers suffering from T.B., cancer, mental disease etc.
7. Grant of financial assistance to women bidi workers for purchase of spectacles.
8. Reimbursement of expenditure as financial assistance to women workers in respect of heart diseases, kidney transplantation.
9. Lady Doctors should be appointed in sufficient number in all dispensaries.
10. Enable organizing of unorganized home based bidi women into self-groups, community organization and / or under their membership based organization (such as Kerala Dinesh Bidi Cooperative-KDBC).
11. Improve women's awareness of employment opportunities and widen occupational choices through entrepreneurial development programmes and participatory rapid appraisal exercises at local level to be conducted through their organizations.
12. As regard facilities for credit, the states policy needs to encourage banks need to set aside funds for providing micro



- loans (Bandhan micro finance in W.B.) to women without stringent collateral requirements.
13. Promote access of bidi women to government's welfare, employment (such as MGNREGS, ICDS) and anti-poverty schemes through a single window approach at every district level.
  14. Provision of affordable, contributory, social insurance of women workers, with incentive components for encouraging education of girl child (along the lines of the Jana Shree Bima Yojana of LIC, Kanyashree of W.B. Govt.).
  15. Need to involve private sector industry in skill training and to promote alternative employment opportunities for women bidi workers through fiscal and monetary incentives (such as garments export industry in Mangalore), fish processing, herbal medicinal plants, food processing, jari works, and various small and cottage industry.

## Problems and Prospects of Bidi Industry

### 1) Minimum Wages

On the issue of minimum wages, the West Bengal Labour Welfare Department recommended that, the minimum wage for bidi workers should not be less than Rs.133/- for 1000 bidis rolling. But the survey shows that, the bidi workers can get only Rs. 50 - 60/-. A worker could roll only 700 - 800 bidis/ day.

In this region, the bulk of the bidi workers are poor, landless labourers and are otherwise unemployed. Therefore, they are solely dependent on bidi-making as their source of livelihood. In the absence of any option, they are being forced to accept almost half wages of that prescribed by the Govt. The employers/ contractors take the advantages of the lack of organization among the workers and force them to take very low wage by promoting unhealthy competition among the bidi-workers.

### 2) Occupational Health Hazard

Almost all workers complained about their backache and joint pains. The bidi-workers (mostly are women) sit for bidi rolling 8 – 9 hours a day cross-legged or with leg outstretched and keep the raw materials on their laps or on the floor beside them. Because of this, posture-related problems are very common to them (Rao, 1992). It includes backache, headache, burning of eyes, pain in leg, neck, backbone etc. Inhalation of tobacco dust also affects the respiratory problem, mostly throat burning and cough. This happens because the rollers do not wear the protective clothes, gloves or mask.

Breathlessness which is also the result of the giddiness is a most common problem like stomach pain, cramps, gas etc. Other symptoms are piles, urinary burning, palpitation, fever, swelling etc. Absence of rest,

pressure of works, poor food habits, poverty, size of family etc. are the main factors for their health problems. The problems of women are never highlighted in this BPL families and the females themselves do not prefer to spend money for their own health problem by thinking their family's economic conditions. Most of the bidi-makers are living in a single room and as a result, the room is perpetually full of tobacco dust. Bidi-workers and even the breast-fed children are forced to live this environment and are getting exposed tobacco dust regularly.

### 3) Lack of Assistance from Govt. and others

The bidi workers are not getting any financial assistance either from the Govt. or any NGO. Although microfinance organization like 'Bandhan' gives 1-year loan to workers with high interest. Banks are indifferent to them; hence, they are being forced to take loan from the mahajans with high interest by keeping some goods as mortgage such as jewellery, land and also manual labour etc.

### 4) Insufficient of Electricity:

Most of the blocks are not electrified in this region. During evening and night they work with kerosene lamps which creates dangerous strain on their eyes of the bidi rollers. The electrified villages on the other hand are regularly facing the problems of frequent power cut, low voltage, etc.

### 5) Problems of Transport and Communication

The transports and communication systems, of the Sunderban is very poor. The inhabited blocks along the jungles like Kultali, Namkhana, Patharpratima, Canning, Gosaba, Sagardwip and others go through the small estuary by small boats. Most of the rural roads are unmetalled and are not usable during the rainy season. Although two railway lines in the Sealdah South Section are spread upto Canning and Namkhana, but the remote villages are poorly accessible with very poor connectivity. Most of the islands are isolated with only small boats ferrying across them. However, some of the roads are now made metalled under the PMGSY.

### 6) Political Disturbance

The area is politically disturbed. The simple, down to earth peoples of this area have been influenced by the different political parties. As a result, the peaceful ambience has been lost. Political murders, riots, robbery and abduction are very common.

### Future Prospect of Bidi Workers

The bidi workers of the study area are now facing many problems like uncertain employment, absence of clear-cut employer-employee relation, prevalence of middle-man system, absence of social security, full of health hazards and lack of proper beneficiary systems / groups. Hence the prospect seems to be bleak in the context of globalization that popularized the sale of 'mini cigarettes'.

### Bidi Workers' Welfare Recommendation

1. The very poor infrastructure such as dilapidated

roads and transports facilities, absence of irrigation facilities, salinization of soil, low land productivity, disguised unemployment, no opportunities in alternative employment etc. are the common picture in this backward Sunderban region. So, the Govt. should take to initial action to mitigate these problems. There should be fool-proof registration systems and ID cards provided to the all workers and contractors, so that the benefit can reach them. There have only two Bidi Labour Welfare Dept. at Kakdwip and Magrahat which are far away from the remote places of the Sunderban. So, it is more essential to set up such office in each Block.

2. The contractors should be forced by the Govt. for providing the minimum wage. The implementation of the poverty eradication programmes like MGNREGP should be successfully launched and it will be an immediate alternative solution for the bidi workers. The ICDS and the Sarva Siksha Abhijan Programme also should be implemented successfully in this region to encourage the bidi workers to send their children to school.
3. Awareness campaign should be run by the Govt in respect of the Welfare Schemes such as the bidi workers children's student scholarship, electric connectivity facility, house-building subsidy etc. Similarly, health and sanitation awareness campaigns with mobile dispensaries should be arranged.
4. There are no organization among the home-based bidi workers and also no history or experience of self-help group in this region. So it's more relevant to create such group for taking their legitimate issues and concerns.
5. The bidi cess collected by the Govt. should be used for the various welfare schemes of the bidi workers. Technical and vocational training should be arranged along with financial support to enable them to be free from the middleman system.
6. At present, the manufacturing of the mini-cigarettes by the multi-national companies and the strict implementation of existing legislation by the India Govt. has created a dangerous problem to the bidi industry as well as the bidi workers. As the demand is gradually declining, the bidi rollers do not get work more than 2-3 days a week. In this situation, they must be seeking to search, some alternative employment, although it's more challenging task to them because, the bidi rolling is perceived as a very easy, convenient, home-based activity which has been done by the illiterate women village workers of this remote region have no such skill that, they can do engaged with some alternative works(Rajasekhar,2001). Alternative occupations like grazing, prawn collection, fishing, forest resource collection, animal husbandry etc may also be searched for viability and feasibility.

### Conclusion

Generally the bidi workers do not get the minimum wages rates, nor are they aware of it. A large numbers of bidi workers do not possess identity cards. As a result, the bidi workers remain deprived from the benefits of the

different development programmes and schemes. Almost all workers of this region are home-based, earning only Rs.50 - 60/- per 1000 rolled bidis. The contractors supply all the raw materials to the workers. More than 70% of the bidi workers are female. Their work-environment is highly unhygienic with poor lighting and congenial atmosphere. Most of the bidi workers are illiterate, poor and suffer from various diseases without proper treatment. Bidi welfare offices and dispensaries at Magrahat and at Kakdwip are far from the interior part of Sunderban where bidi workers are mainly concentrated. Almost 66% of bidi workers have no toilet facility and almost 71% of them have no electric connection. There are no SHGs or Bidi Worker's Union. Most of them belong to the Backward Classes group (S/C, S/T and OBC). Almost 68% of the bidi workers are landless and nearly 63% belong to the BPL category. They have no other better employment opportunities and are the most vulnerable section of our society.

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Table – 1: Total Number of Bidi Workers in India (2002)

Sl. No.	State	Total No. of Bidi Workers	%
1	Andhrapradesh	625050	14.16
2	Assam	7725	0.17
3	Bihar	391500	8.87
4	Gujrata	50000	1.13
5	Karnataka	360876	8.18
6	Kerala	136416	3.09
7	Madhyapradesh	750000	17.00
8	Maharastra	256000	5.80
9	Orissa	160000	3.62
10	Rajasthan	100000	2.26
11	Tripura	5000	0.11
12	Tamilnadu	620950	14.07
13	Uttarpradesh	450000	10.20
14	West Bengal	497758	11.28
	TOTAL	4411275	100.00

Source: Director General, Labour Welfare, Ministry of Labour, New Delhi

Table – 2: Block wise Distribution of Bidi Workers in Sunderban (South 24 Pgs Dist.)

Rank	Block	Bidi Workers with I-Card
1	Kultali	13,267
2	Joynagar – I	12,153
3	Joynagar – II	8,204
4	Patharpratima	8,132
5	Kakdwip	5,051
6	Mathurapur – II	4,595
7	Namkhana	3,102
8	Mathurapur – I	2,498
9	Sagardwip	2,237
10	Canning – I	458
11	Canning – II	409
12	Basanti	356
13	Gosaba	312

Total = 60,774

Source: Office of the District Labour Commissioner, S.24 Parganas.

Table – 3: Caste and Religious Composition of Bidi Workers

Caste/Religious Category	Muslim	Hindu			
		General	SC	ST	Others
No. of Family	18	12	162	6	02
Percentage	09	06	081	3	01

Source: Household Survey

Table – 4: Size of Family Members of Bidi Workers

Size of Family	1 – 3	4 – 5	6 – 8	9 – 10
No. of Family	18	138	12	32
No. of Members	54	690	84	256

Source: Household Survey  
 Total Surveyed Family = 200, Total No. of Family Members = 542  
 Average Family Size = 5.42, Bidi Workers among the Family Members = 296  
 Average Family Members of Bidi Workers = 1.4

Table – 5: Educational Level of Bidi Workers

	Illiterate	Primary	Upper Primary	M.P.	H.S.	U.G.	P.G
Bidi Workers	65	16	09	05	03	02	–
Family Members	28	32	26	07	04	02	01

Source: Household Survey

Table – 6: Monthly Income of Per Worker

Monthly Income(Rs.)	< 600	601 to 1000	1001 to 1500	>1500
% of Workers	07	32	43	18

Source: Household Survey

Table – 7: Family Occupation Bidi and Other than Bidi Making

Category	Bidi Making Alone	Agri. Work	Agri. Labour	Daily Labour	Petty Business/others	Service	Not Employed
% of Total Works	37	07	10	13	05	01	27

Source: Household Survey

Table – 8: Symptoms reported by the women bidi workers

Symptom Groups	Symptoms Described
Aches and pain	Backache, neck ache, headache, burning of eyes , pain in legs, numbness of fingers
Coughs	Exposure to tobacco
Giddiness	Giddiness, breathlessness
Stomach pains	Stomach pains, cramps, gas, spasmodic pains leading to diarrhea
Others	Piles, urinary burning, white discharge, palpitation, wheezing, fevers, worry ,joint pains and swelling

Source: Gopal, M (1997): *Labour Process and its Impact on the Lives of Women Workers*, JNU, New Delhi.

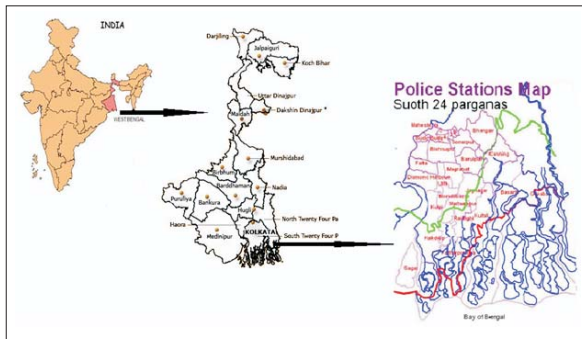


Fig. 1: Location of the Study Area

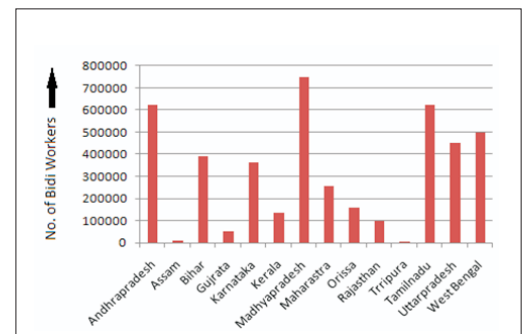


Fig. 2: Distribution of Bidi Workers in India

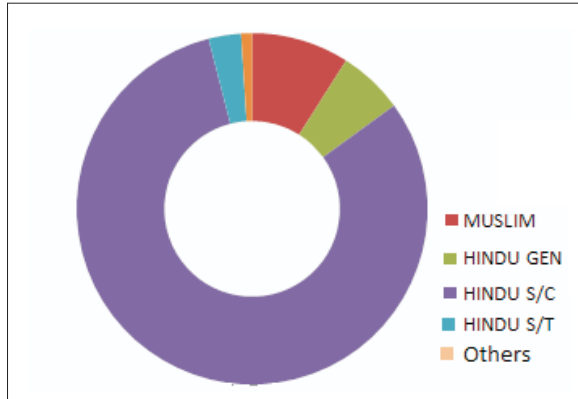


Fig. 3: Social Groups of the Bidi Workers of the Study Area

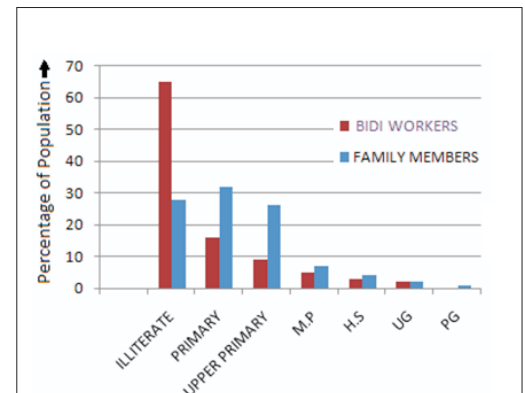


Fig. 4: Education Level of Bidi Workers of the Study Area

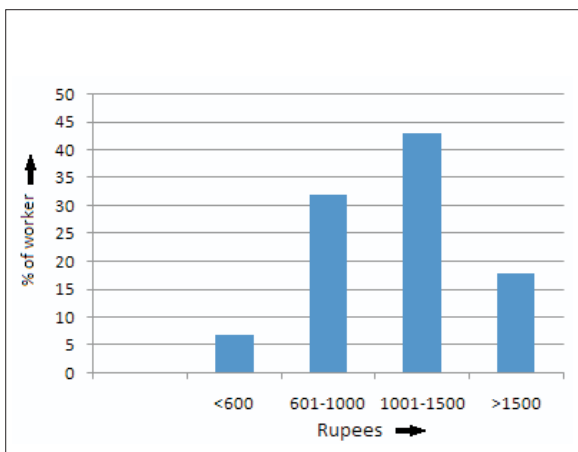


Fig. 5: Income Level of the Bidi Workers of the Study Area



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