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Caste and occupational distribution in rural Punjab

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Abstract

People across the world are discriminated against in the labour market based on their unproductive characteristics such as race, colour, gender, religion, etc. Caste is one such social attribute in Indian society. The present paper using primary field data and the National Sample Survey Organization's data attempts to analyse differences in the nature of unemployment and occupation along with occupational stagnation across the caste groups in rural Punjab. The univariate analysis shows the presence of underemployment among the scheduled castes (SCs) workers in rural Punjab. Relative to the non-Scheduled castes (non-SCs), the majority of the SCs workers are employed as casual wage labour. Further, occupational stagnation for the SCs in low status and low rewarding traditional occupations in rural Punjab was observed.

JEL Codes: E21, E22, J62.

Keywords: Scheduled castes, nature of unemployment, caste and underemployment, caste and occupational differences, rural Punjab

Introduction

Caste along with religion, ethnicity, and regionalism is one of the institutions employed to segment people into groups and is associated with the operation of their day-to-day life and living conditions associated with overall well-being in society. It is one of the old institutions in India that continues to persist and form the base of discrimination despite wide condemnation and provisions enshrined in the Constitution of India. Pieces of evidence generated by the policymakers and scholars suggest that people belonging to the deprived castes continue to suffer from a higher incidence of poverty and abysmal low level of socio-economic status. The issue attracted the increasing attention of researchers and policymakers in India. Consequently, a significant volume of literature has emerged examining the different dimensions of their backwardness. However, there are not many studies examining their socioeconomic well-being simultaneously. The research in the field of economics has remained concentrated on the analysis of problems associated with poverty and inequality (Dutta 2011; Thorat, Mahamallik, & Sadana 2012; Vithayathil & Singh 2012) ^[11, 36, 37].

Review of Literature

The issue of economic discrimination is well developed ever since it is brought to the forefront by Becker (1957) ^[5] in his taste for discrimination. Later on Arrow (1973) ^[2], Akerlof (1976) ^[1], and Phelps (1972) ^[29] contributed their statistical discrimination theory and opened a new front of the discussion. However, due to the scarcity of suitable information, the empirical literature on the topic tested the validity of the theory of statistical discrimination whereas scanty evidence is available on the validity of taste for discrimination theory (Krueger 1963; Ayres and Siegelman 1995; Heckman 1998; Neumark 1999; List 2004; Dickson & Oaxaca 2009) ^[24, 38, 16, 28, 26, 10]. Most of the empirical evidence establishes the prevalence of market discrimination against marginalised groups including minorities, blacks, and scheduled castes (SCs) (Goldsmith, Hamilton, & Darity 2007; Charles & Guryan 2008; Banerjee, Bertrand, Datta, & Mullainathan 2009; Singh 2009; Lang & Lehmann 2011) ^[14, 8, 4, 33, 25]. Researchers found that employers discriminate against the workers mainly at the entry point or at the time of hiring (Blinder 1973; Darity & Nembhard 2000; Cassan 2011) ^[6, 9, 39]. Blacks suffer from wage discrimination on account of their occupational segregation into low-paying occupations by whites (Gill 1989) ^[12].

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Caste identity by shaping perceptions of self-worth affects actual earnings from self-employment (Goel & Deshpande, 2016) [13]. Relative to the more privileged caste groups, children from marginalized caste groups lack not only access to high-quality educational opportunities (Chapman, 2020) [7] but also to high-status and high-income occupations. Further, a lack of intergenerational occupational mobility leads to the transfer of one generation's disadvantages to the next generation (Reddy & Swaminathan, 2014) [32]. Thorat (2002 & 2009) [34, 35] reported that *Dalits* not only continue to suffer from occupational segregation and restrictions on occupation changes but also paid wages lower than the non-*Dalits*. Ito (2009) [18] concluded that caste discrimination in India takes the form of job or occupation discrimination than wage discrimination. Madheswaran and Attewell (2012) [27] found a much lower rate of returns to education for SCs and scheduled tribes (STs) as compared with the non-SCs/STs. However, the issue of discrimination has taken a back seat till the recent past in the state of Punjab. This is specifically true about rural Punjab which has the unique feature of being one of the most prosperous states in India and having the highest proportion of SCs population in its rural area. Although many attempts have been made to address the socio-political condition of the SCs in the State none addressed economic discrimination in general and market discrimination in particular (Jodhka 2002 & 2004; Ram 2004 & 2007; Judge & Bal 2008; Bal & Judge 2010) [19, 40, 30, 31, 22, 3]. Whether SCs in rural Punjab experience discrimination in employment? If yes, what is the nature of employment? Have they experienced intergenerational occupational mobility? These are some research questions that remained unanswered.

Objectives of the study

The present paper attempts to fill this gap by generating empirical evidence on caste-based economic discrimination by analyzing differences in employment and intergenerational occupational mobility in rural Punjab. In this regard we test the following hypothesis.

H₁: Compare to the non-SCs workers, the SCs workers are underemployed in rural Punjab.

Data and Methodology

The scheduled castes population is approximately one-third of the total population of the State. On the other hand, according to the Census of India (2011), the STs Population is zero in the rural areas of the State. Therefore, the present analysis is focused on the SCs population of rural Punjab. The present study analysed discrimination, both at the macro as well as micro levels. For the macro analysis of discrimination in Punjab state, unit-level data from the 68th round of the National Sample Survey Organization (NSSO) was used.

The microanalysis has been conducted based on both quantitative and qualitative data, collected from 431 households, using a well-structured schedule, through a primary survey in the three districts- Jalandhar, Bathinda, and Rupnagar- of Punjab. The size of the sample was selected using the Published Tables at a five percent Precision Level where Confidence Level is 95 percent and P=0.5 (Israel 2009) [17]. The sampled households were selected following the multistage random sampling

procedure. Two blocks (one with a high and one with a low proportion of rural SCs population) from each of the selected districts and two villages (one with a high and one with a low proportion of rural SCs population) from each of the selected blocks were selected following the proportion of rural SCs population respectively. Finally, from the selected villages, the households were selected for the survey. For this purpose, exhaustive lists of all the households in the selected villages were prepared along with their basic characteristics like primary occupation, caste, landholding, etc. Then, the households in each selected village were stratified based on caste and occupation. Thus, three-fourths of the sample from SCs households and one-fourth of the sample from non-SC households were selected by applying the proportion to the population sampling technique. From each of the selected villages, a minimum of 35 households- including 25 SCs and 10 non-SCs households- were randomly selected and surveyed. Thus, from the selected villages, 303 SCs and 128 non-SCs households were surveyed. We used the structured questionnaire to collect information from the selected households regarding socioeconomic characteristics including occupations of household members. A univariate analysis technique was used to test various hypotheses. The caste group-wise differences in inter-generation occupational stagnation are tested using the Z statistics.

Results and Discussion

This section is divided into three sub-sections: 1. Unemployment across the caste groups; 2. Occupational differences across the caste groups; and 3. Occupational stagnation across the caste groups, and are presented as follows:

Unemployment across the Caste Groups: The NSSO collects information regarding the household type that is primarily determined based on the usual principal status of the household from which it earns the major share of its income. To understand occupational segregation and wage differences in a better manner it is necessary to understand the extent of unemployment among the SCs and non-SCs. The unemployment rate for the SCs and non-SCs caste groups of rural Punjab is calculated and presented in Table 1.

Table 1: Unemployment rates for persons of age 15 years and above across the caste groups in rural Punjab: 2011-12

Unemployment rates	Percentage	
	SCs	non-SCs
Usual Principal Status (UPS)	1.3	1.9
Usual Principal and Subsidiary Status (UPSS)	1.1	1.6
Current Weekly Status (CWS)	2.4	3.3
Current Daily Status (CDS)	4.5	4.0

Note: 1. The caste group SCs includes all the Scheduled castes of Punjab State. 2. The caste group non-SCs include BC/OBC and General.

Source: Calculated from Unit Level data, National Sample Survey Organization (NSSO) 68th Round (2011-12).

As defined, the usually unemployed by principal status (UPS) is an approximate measure of long-term unemployment during a reference period of 365 days preceding the date of the visit to the household. It is observed from the analysis that a large proportion of the other caste group is unemployed than the SCs caste group as

per the UPS method. However, this may be true due to the inclusion of subsidiary activity employed workers in this category. That is, a relatively lower proportion of non-SCs groups might be employed in subsidiary activities than the SCs caste group. Therefore, it is considered better to measure the magnitude of persons unemployed for a relatively long period during a reference period of 365 days by excluding the Subsidiary status workers.

The second measure in Table 1 i.e., Usual Principal and Subsidiary Status (UPSS) is used for the same. UPSS also shows that a larger proportion of the other caste workers are unemployed than the SCs caste group. Although the above measures of unemployment help us to measure the extent of long-period persistent unemployment, they fail to capture the seasonal variation in the labour market. Therefore, to approximate both persistent and discontinuous unemployment occurring due to seasonal fluctuations in the labour market, unemployment based on weekly status is measured using the Current Weekly Status (CWS) of the workers. Like the UPS and UPSS, the CWS measure also shows that the proportion of unemployed among the non-SCs caste group is relatively larger than the SCs workers. The workforce from the former caste group is relatively more prone to both continual and irregular unemployment caused by seasonal fluctuations.

This may be true due to two reasons. The first reason for low unemployment among the SCs measure may be that the unemployed SCs workers are ready to perform virtually any work offered to them whereas, the other caste workers decide to work on basis of their preferences for work activities. The latter caste group workers are not available for all kinds of work activities; therefore, in the absence of preferable work activities, they may willingly not accept the work and remain unemployed. Another reason why a lower proportion of SCs workers is suffering from unemployment may be the implementation of the National Rural Employment Guarantee Act, 2005 later renamed Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) which is aimed to enhance livelihood security in rural areas by providing at least 100 days of wage employment in a financial year to every household whose adult members volunteer to do unskilled manual work. It is observed from the field survey of 431 households spread across twelve villages of Bathinda, Jalandhar, and Rupnagar districts of Punjab, conducted during the year 2015-16, that most of the non-SCs caste group workers consider MGNREGA to be meant for the SCs workers, and therefore, they do not register themselves for the same. Whatever reason they (other caste workers) give for not registering with the MGNREGA, the reality is that the work activities

offered under the said Act are least preferred by them whereas the same is performed by the SCs workers. This not only causes the differences in the unemployment level between the SCs and non-SCs workers but also signifies that the latter caste group workers are not ready to work in the same activities as are performed by the former caste group. For a more disintegrated analysis of unemployment caused by the seasonal fluctuations, and measuring underemployment, another measure is used known as Current Daily Status (CDS) which indicates the average level of unemployment on a day during the survey year. The scenario of unemployment under this measure in the SCs and non-SCs caste group is different from the rest of the unemployment measures. A relatively larger proportion of the SCs workers are found unemployed than the other caste group workers when computed on daily status basis. This indicates the availability of relatively limited employment for the SCs in rural Punjab on a short-run (daily) basis. Though the position is the other way round in the relatively medium and long run for which due to their consumption needs, SCs cannot afford to remain unemployed for a longer period and get them engaged in available opportunities. Also, this may be on account of the difference in the occupation and activities of the two caste group workers. Thus CDS shows the presence of high level of underemployment among the SCs workers than among the non-SCs group workers.

Occupational Differences across the Caste groups: The worker's employment status makes the occupational differences across caste groups crystal clear. Therefore, we analyzed the employment status of the workers across the caste group in rural Punjab (see Table 2). In the case of self-employment, while approximately one-third of the non-SCs are employed as own-account worker and 8.5 percent as employers, the respective percentages for the SCs workers stand at a much lower level which is 20 percent and approximately 1 percent. In the case of casual wage labour, the SCs workers outnumber the other caste group workers. Approximately 55 percent of the SCs workers are engaged in other than public types of work as casual wage workers whereas the corresponding percentages for the non-SCs group workers are approximately 15 percent only. In brief, it is clear from the ongoing occupation and employment status analysis that there exist significant differences across the workers belonging to different caste groups concerning the types of occupations they are engaged in. While approximately one-half of the SCs workers are employed as casual labour, approximately two-thirds of the other caste group workers are engaged in self-employment activities.

Table 2: Distribution of workers by the caste group and status of employment in rural Punjab: 2011-12 (percentage)

Employment status		Caste group		Zsc-o
		SCs	non-SCs	
Self-employed as	Own account worker	20.3	37.8	-9.545*
	Employer	0.8	8.5	-9.678*
	Unpaid family worker	3.1	16.7	-1.934*
Regular wage/salaried		21.0	21.9	-0.524
Casual wage labour in	Public works	0.1	0.0	0.976
	Other types of work	54.7	15.1	21.140*

Note: 1. The caste group SCs includes all the Scheduled castes of Punjab State. 2. The caste group non-SCs include BC/OBC and General. 3. Zsc-o is the computed value of the test statistics for the difference of proportion between the SCs and non-SCs. 4. * indicate value significant statistically at a 1% level of significance.

Source: Calculated from Unit Level data, National Sample Survey Office (NSSO) 68th Round (2011-12).

Although occupational differences are present in both agriculture and non-agriculture- sectors, however, they are more visible in the case of off-field activities and non-agriculture sector activities. We analyzed the distribution of workers across the Caste groups in the selected National Classification of 3-digit Occupations (NCO 2004) in rural Punjab (see Table 3). About three-fourths of the SCs workers are employed in low-paying as well as low-status elementary occupations and as craft and related trades workers. Only the remaining one-fourth of the SCs workers are engaged in other occupations which include low as well as high-income and high-status occupations. In contrast with

this, the occupational distribution of the non-SCs caste group workers is the other way around. That is, approximately one-fourth of the other caste group workers are engaged in low-income and low-status occupations while the remaining three-fourths are working in high-income and high-status occupations such as Skilled Agricultural and Fishery workers (approximately 45 percent), Legislators, Senior Officials and Managers (7.5 percent), etc. The evidence supports our hypothesis that the SCs are suffering from occupational segregation in low-rewarding activities.

Table 3: Distribution of workers across the caste groups in NCO 3-digit occupations in rural Punjab: 2011-12 (percentage)

NCO 3 Digit Occupations	Caste group		Z _{sc-o}
	SCs	non-SCs	
Legislators, Senior Officials, and Managers	4.9	7.5	-2.627*
Professionals	1.8	3.2	-2.201**
Technicians and Associate Professionals	1.0	2.0	-2.031**
Clerks	0.8	1.4	-1.411
Service workers and Shop & Market Sales workers	4.5	6.4	-2.031**
Skilled Agricultural and Fishery workers	6.4	44.8	-24.907*
Craft and related trades workers	24.5	15.1	5.569*
Plant and Machine Operators and Assemblers	5.3	6.4	-1.128
Elementary occupations	50.8	13.2	20.287*

Note: 1. The caste group SCs includes all the Scheduled castes of Punjab State. 2. The caste group non-SCs include BC/OBC and General. 3. Z_{sc-o} is the computed value of the test statistics for the difference of proportion between the SCs and non-SCs. 4. * and ** indicate value significant statistically at 1%, and 5% levels of significance respectively.

Source: Calculated from Unit Level data, National Sample Survey Organization (NSSO) 68th Round (2011-12).

Occupational Stagnation across the Caste groups: An attempt is made to explore the occupational stagnation across the caste groups in terms of occupational distribution of the SCs and non-SCs group workers using NSSO's data. For this purpose, the occupational distribution of workers is further classified to analyze and understand and is presented in Table 4. The occupations are classified into three broad categories, that is, a) occupations that are traditionally associated with the SCs community, b) new occupations that are not associated with the SCs community, and c) high-status and/or income-paying occupations. The information reveals that in the first category of occupations, 1.2 percent of the SCs workers are still engaged in occupations traditionally associated with their caste backgrounds. However, none from other caste households work in these occupations. It lends support to the proposed hypothesis that relative to the other caste group workers, the SCs workers experience occupational stagnation in rural Punjab. Even in the case of the second category of occupations, which primarily comprises the occupations/jobs whereby more physical labour is used than mental labour, the proportion of the SCs caste group workers is significantly larger than the other caste group workers. As is evident from the analysis, more than one-fourth of the SCs workers are engaged in agriculture and allied activities, whereas approximately 5 percent of the other caste group workers are performing

these activities. A similar kind of situation is present in other occupations such as mining and construction labourers; manufacturing and transport labourers, freight handlers; domestic and related helpers, cleaners and launderers; and street vendors and related workers, messengers, porters, doorkeepers, and related workers.

In contrast with the earlier two occupation categories, the situation of the third category is altogether different. This category consists of skilled occupations, which require more mental labour than physical labour. Alternatively, this category comprises high-skilled, high-income, and high-status occupations such as Senior officials and Managers; College, University and Higher Education Teaching, Secondary Education Teaching, other Teaching Professionals, and the like. The differences among the SCs and other caste group workers establish the fact that all these high-status and high-income paying remunerative occupations have remained beyond the reach of the SCs community workers. It is observed that a significantly lower proportion of SCs workers are engaged in all these skilled and remunerative occupations. This is suggestive of the existence of both premarket and market discrimination in rural Punjab. In brief, evidence suggests that the SCs are suffering from occupational segregation as they remained deprived of high status, and better rewarding occupations.

Table 4: Distribution of workers across the caste groups in selected NCO 3-digit occupations in rural Punjab: 2011-12 (percentage)

NCO 3 Digit Occupations	Caste group		Zsc-o
	SCs	Non-SCs	
Occupations traditionally associated with the SC			
Garbage Collectors and Related Labourers	1.0	0.0	3.101*
Mining and Mineral Processing Plant Operators	0.1	0.0	0.976
Pelt, Leather, and Shoe Making Trades workers	0.1	0.0	0.976
Some new/other occupations and the presence of the SC			
Agricultural, Fishery and Related Labourers	28.3	4.5	15.252*
Mining and Construction Labourers	12.2	4.5	6.442*
Painters, Building Structure Cleaners and Related Trades Workers	12.2	5.9	5.114*
Manufacturing Labourers, and Transport Labourers and Freight Handlers	4.7	1.5	4.220*
Domestic and Related Helpers, Cleaners and Launderers	2.4	0.6	3.353*
Street Vendors and Related Workers, and Messengers, Porters, Door Keepers and Related Workers	2.3	2.0	0.490
High-status/income-paying occupations and the presence of the SC			
Senior officials and Managers	4.9	7.4	-2.533**
College, University and Higher Education Teaching, Secondary Education Teaching, and other Teaching Professionals	0.2	1.5	-3.671*
Middle, Primary and Pre-Primary Education Teaching Associate Professionals	0.1	0.8	-2.713*
Organization Clerks and Customer Services Clerks	0.8	1.4	-1.411
All other occupations	30.6	69.9	-20.383*

Note: 1. The caste group SCs includes all the Scheduled castes of Punjab State. 2. The caste group non-SCs include BC/OBC and General. 3. Zsc-o is the computed value of the test statistics for the difference of proportion between the SCs and non-SCs. 4. * and ** indicate value significant statistically at 1%, and 5% levels of significance respectively.

Source: Calculated from Unit Level data, National Sample Survey Organization (NSSO) 68th Round (2011-12).

Conclusion

The paper examined the nature of unemployment along with occupational differences and stagnation among the caste groups in rural Punjab, India. The analysis proved that relative to the non-SCs, the SCs are suffering from underemployment and occupational stagnation. The SCs workers continue in the traditionally associated occupations. Therefore, there is a need to revisit the policy measures used by the Government to address the problem of unemployment and occupational stagnation across the caste groups.

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