

Gender inequality in education and employment in the scheduled castes and tribes of India

By: [Dana Dunn](#)

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Abstract:

The complex stratification systems in India give rise to a multiplicity of social categories which often obscure the relative status of women and men within the more disadvantaged segments of the population. The focus of this study is on the situation of women in scheduled castes and tribes - groups which are referred to as "weaker sections of people" and granted special safeguards and concessions under the Indian constitution. Women in these underprivileged groups are doubly disadvantaged: their minority group status interacts with India's patriarchal culture to produce deplorable living conditions. Drawing from both ethnographic and statistical sources, the paper presents a descriptive profile of scheduled caste and tribe women's status in Indian society. Using Indian Census data, the study documents extreme degrees of gender inequality among the scheduled groups. Findings indicate that relative to men, women in these groups have far more limited access to both educational and employment resources. This research also suggests that socioeconomic development serves to reduce the disadvantage of scheduled group women relative to men. Among the scheduled groups considered to be more developed according to standard indicators, findings indicate less gender inequality in education and employment.

Keywords: Education | Employment | India

Article:

Introduction

Over the last few decades, development in India has served to enhance the opportunities of many upper-class, urban women. These women now have greater access to education and employment, and as a result, are able to participate in the economy on a more equal basis with men (Karlekar 1982; Liddle & Joshi 1986). Generalizing from these privileged women to the larger female population, however, is quite misleading. The bulk of the female population in India still suffers from impoverishment. Estimates suggest that as many as 80 percent of the women in India live at or below a minimal subsistence level (Mukhopadhyay 1984). The most extreme deprivation exists among women in the scheduled caste and tribe populations, groups designated as particularly

disadvantaged in the Indian Constitution. The minority group status of these women interacts with India's patriarchal culture to produce deplorable living conditions (Ghandially 1988). These 'doubly disadvantaged' women strive not for gender equality, but for their very survival (Mukhopadhyay 1984). The plight of these women is the focus of this paper. The extent of gender inequality in the scheduled caste and tribe population of India is best understood in the context of both history, and the larger society. For this reason, the first section of this paper is devoted to a brief description of the changing status of Indian women. A profile of the scheduled caste and tribe populations follows. Indicators of women's status in the scheduled groups are then examined, in order to evaluate the degree of gender inequality present. The final portion of the paper explores the relationship between the overall level of development of scheduled groups within a state and women's status relative to men.

Gender inequality in India: Past and present

For more than two centuries writers and researchers have depicted Indian womanhood as a rather grim existence. Yet many accounts suggest that the status of women in Dravidian civilization prior to the Aryan invasions was quite high. These accounts of the Hindus claim that woman's position was equal to or even superior to man's (Duley 1986; Morgan 1984; Sinha 1983). In fact, women were among the composers of the sacred Hindu texts, the Vedas. The development of the agrarian civilization with an emphasis on surplus wealth and private property gradually led to the extreme subjugation of women in Indian society (O'Kelley & Carney 1986; Manohar 1983). The earliest references to women as property are found in texts written in the period 800-500 BC. According to Hindu law books written in the second century BC the position of women is one of complete dependence on men - on fathers in childhood, on husbands as adults, and on sons in old age (Sinha 1983).

A statistical profile of women in India reveals much about their status today, and the picture that emerges is a dismal one. The fact that India is one of the few nations in the world where life expectancy at birth is shorter for females than males is a clear indication of women's standing relative to men's. In 1981, life expectancy at birth was 57 years for men and 52 years for women (CMIE 1982). The lower life expectancy for women is due to systematic discrimination against them. Compared to sons, daughters are far more likely to be malnourished and far less likely to receive adequate health care (Jain 1984; Papanek 1990; Visaria & Visaria 1981).

Another indicator of women's low status relative to men's is the literacy rate. Women are only a little more than half as likely as men to be functionally literate. As of 1985, the literacy rate for women in India was about 33 percent (Sivard 1985; Visaria & Visaria 1981). Similarly, women are a little more than half as likely as men to be enrolled in higher education (World Bank 1988).

Statistics on female employment further reinforce the disadvantage faced by women. Women's labor force participation rate is less than half that of men, and their unemployment rate is far higher than that of men (Morgan 1984; Sivard 1985). In 1980, women comprised 32 percent of the labor force. In the same year, 60 percent of the rural unemployed were women. When women are employed, they are far more likely than men to work in the informal sector for low wages and no benefits. Almost 50 percent of the female labor force was classified as unpaid family labor in the 1971 Census (Morgan 1984). The ministry of labor reports that 80 percent of all urban working women are concentrated in 12 occupational categories which include teachers,

nurses, clerks, domestic servants, construction workers, and unskilled laborers (Liddle & Joshi 1986). The largest employment category for women in India is agriculture, 79% of the employed women work in this category. Unfortunately, some research suggests that the mechanization of agriculture and continued development in India has served to worsen rather than improve their employment situation (Jain 1984; Karlekar 1982; Mukhopadhyay 1984; Sudar 1981).

These and other equally depressing statistics have not gone unnoticed. There is an active women's movement in India today - and it now begins to reach to all segments of the female population for membership (Everett 1979; Jain 1984; Liddle & Joshi 1986; Patel 1988). India has taken steps to eliminate gender discrimination in the law, but this more progressive legislation has proved unenforceable in the face of tradition, poverty and illiteracy (O'Kelley & Carney 1986). Even the Dowry Prohibition Act is disregarded by much of the Hindu population, and violators are seldom brought to court. In India today, the practice of dowry sometimes leads to a form of extortion wherein the husband's family may actually torture a bride to extract more money from her family. Dowry murders have also been committed at all levels of Hindu society, and even these extreme cases of legal violations typically evade legal prosecution (Ghandially & Kumar 1988; Morgan 1984). The widespread continuation of the practice of dowry does not bode well for women, for the practice is one of the reasons for prejudice against daughters, and their subsequent ill-treatment in the family of origin.

Scheduled caste and scheduled tribe populations

Much of Indian society (the Hindu population) is characterized by a rigid, hierarchical caste system. A caste is composed of individuals who follow certain rules of commensality and connubality. While there are thousands of castes, they can be subsumed under five major divisions - the fourfold varna (ritual orders of the caste system) scheme and those who fall outside this typology, the untouchables or Harijans. The five categories are the Brahmins, the priestly caste; Kshatriyyas, the warrior caste; Vaishyas, the merchant caste; Shudras, the artisan caste; and those who perform ritually polluting work and are considered 'untouchable' (Das 1982; Mukhopadhyay 1984). In addition to the population encompassed within the caste system, India also has a large number of aboriginal tribes. India has one of the largest tribal populations of any country - tribes represent about 7 percent of the total population (Chattopadhyay 1978; Debi 1978). More than thirty-eight million people in some 450 groups are counted as tribals in recent censuses (Debi 1978; Dube 1977; Mandelbaum 1970).

Table 1. Scheduled caste and scheduled tribe populations by state, 1981

State	SC population	ST population
Andhra Pradesh	7,961,730	3,176,001
Bihar	10,142,365	5,810,872
Gujarat	2,438,306	4,848,586
Haryana	2,464,012	
Himachal Pradesh	1,053,958	194,263
Jammu & Kashmir	497,363	
Karnataka	5,595,353	1,825,203
Kerala	2,549,382	261,475
Madya Pradesh	7,358,533	11,987,031
Maharashtra	4,479,763	5,772,038
Manipur	17,753	387,977
Meghalaya	5,492	1,076,345
Nagaland	650,885	
Orissa	3,865,543	5,915,067
Punjab	4,511,703	
Rajasthan	5,838,879	4,183,124
Sikkim	18,281	73,623
Tamil Nadu	7,427,398	458,462
Tripura	310,383	583,920
Uttar Pradesh	23,453,339	232,705
West Bengal	12,000,768	3,070,672
Andoman & the Nicobar Is.	22,361	
Arunachal Pradesh	2,919	441,167
Chandigarh	63,621	
Dadra & Nagar Haveli	2,041	81,714
Mizoram	135	401,907
Pondicherry	96,636	

Article 341 of the Indian Constitution designates certain disadvantaged tribal and caste populations as scheduled castes and tribes (Bose, Gupta & Raychaudhuri 1977; Gallanter 1984). The Constitution directs that '... the state shall promote with special care the education and economic interests of the weaker sections of people, and in particular, of the scheduled castes and scheduled tribes and shall protect them from social injustice and all forms of exploitation'. Special safeguards and concessions granted to the scheduled groups include reservations in the legislature proportionate to strength in the population and educational grants and scholarships (Gallanter 1984; Mandelbaum 1970; Mies 1986).¹

The scheduled castes account for about 15 percent of the Indian population or about 80 million people (Das 1982; Gallanter 1984). The bulk of the scheduled caste population lives in rural areas and is employed as agricultural laborers or marginal farmers. Only about 11 percent of the scheduled caste members live in urban areas, residing most often in slum areas and performing marginal labor. Many suggest that the Constitutional guarantee of protection for these scheduled caste groups has not substantially improved their position in Hindu society (Galanter 1984). Over the last decade, resentment against the special provisions for scheduled groups has become apparent in the larger population (Kumar 1988). Even violence and brutality against the scheduled castes are fairly common (Souza 1982).

The spectrum of tribal groups ranges from hunter-gatherers who are clearly outside the caste society to settled agricultural groups that are in the process of assimilation into caste society (Ghurye 1980; Mandelbaum 1970; Sinha 1983). Tribal peoples are found from the high valleys near the Himalayas to the hills of Southern India, but the main tribal territories are concentrated in the central region of the hill country. Some tribes are quite small with

populations numbering only a few hundred to a thousand. Other groups are much larger, with millions of members (Census of India 1981; Mandelbaum 1970).

The concept minority, as used in the sociological literature, is a useful tool for describing the situation of scheduled castes and tribes of Indian society. Social subordination and disadvantage are the key elements which distinguish minorities from the dominant group (Vander Zanden 1983). The following definition summarizes the key characteristics of minority groups: 'Minorities are any culturally or physically distinctive and self conscious social aggregates, with hereditary membership and a high degree of endogamy, which are subject to political, or economic, or social discrimination by a dominant segment of an envioning political society' (Williams 1964: 304). All of the elements of this definition apply to the scheduled groups in India.

While all members of the scheduled groups face disadvantages as a result of their minority status, women in these groups are particularly disadvantaged. For scheduled group women caste or tribal disadvantage interacts with women's subordinate status to create 'double minority' status. For this reason, statistical profiles of all Indian women (like the one presented earlier) often create a distorted image of the situation of these minority women. Unfortunately, scheduled group women in Indian society remain almost invisible in the social science literature (Ghandially 1988).

Methodology: Measuring gender inequality in the scheduled castes and tribes

Macrostructural theories of gender inequality suggest that women's roles in the economy are a key determinant of their overall status (Blumberg 1984; Chafetz 1984). In contemporary societies, women's access to the formal education system is an important prerequisite to entry into the more rewarding positions in the occupational structure. For this reason, the present analysis examines minority women's representation in both the educational system and the labor market.

In more developed societies, and in the elite sectors of developing societies, women's representation in professional and managerial positions is an apt indicator of their overall status (Almquist 1987; Poston, Almquist & Shu 1987). In India, where the predominant source of employment is agriculture (Ambewadikar 1986), managerial and professional employment opportunities are limited. Examining these occupations to gain insight into labor market gender inequality would be inappropriate, in that it would capture information on only a small segment of the population. Furthermore, such a focus is inappropriate because even in the urban population very few disadvantaged, minority women will have access to these higher status occupations. A more appropriate focus is on employment in the agricultural sector, where the Indian Census divides workers into two broad categories - cultivators and agricultural laborers. Cultivators own or lease the land they work, laborers work on another person's land for wages. It is generally the case that cultivators have higher status than laborers (Census of India 1971; Gulati 1984; Mukhopadhyay 1984).

The occupational distribution of men and women in agriculture indicates that women comprise a disproportionate share of laborers, and men constitute a disproportionate share of cultivators. Changes over time (1971-1981) show that the proportion of female to male cultivators has increased. While this change appears, on the surface, to mark an improvement in women's occupational status in agriculture, it is actually a case of women taking over positions vacated by men. The large scale emigration of men to urban centers to seek better employment

opportunities leaves women behind to cultivate the more marginal land holdings (Sethi 1982; Verma & Dixit 1988).

The majority of agricultural laborers in India are drawn from the scheduled castes and tribes (Ambewadikar 1986; Sethi 1982). The percentage of cultivators in the scheduled groups is smaller than that in the larger population, and more scheduled group men than women are engaged in cultivation (Reddy 1984). A measure of the extent to which scheduled caste and tribe women are represented as cultivators is included in this analysis. Higher representation as cultivators is interpreted as an indicator of higher status.

Another appropriate variable to examine when evaluating the degree of gender inequality in less developed economies is women's presence in the manufacturing sector. Manufacturing occupations are typically associated with higher status than agricultural labor, and even cultivators in cases where the land holding is a rather small and marginal plot. Manufacturing employment often represents progress and 'high technology' in developing societies. One exception exists, however, and that is household manufacturing. Case studies suggest that home-based production is one of the most exploitative work arrangements in India. The utilization of home workers enables employers to avoid industrial regulations which govern hours of work, working conditions, benefits and wages (Singh 1988). Disadvantaged women in the scheduled castes and tribes provide a willing pool of labor for household enterprise, and are disproportionately represented in home production (Karlekar 1982; Mukhopadhyay 1984). Minority women's presence in household manufacturing is also examined in this paper as an indicator of women's disadvantaged position in the labor market.

One of the most controversial indicators of women's status in India is the extent to which they are formally employed, independent of the specific occupational or industrial category (Miller 1981). A number of studies on India suggest that when the economic status of a group improves, women are withdrawn from the labor force (Bhatty 1984; D'Souza 1975; Khan & Ayesha 1982; Singh 1988). Other researchers claim that employment rates of women decline with increases of literacy, but increase with women's representation in higher education (D'Souza 1975; Standing 1982).

The work participation rates of women in the scheduled castes and tribes are significantly higher than those of the non-scheduled female population. As of 1971, the employment rate for scheduled caste women was about 18 percent, and the rate for scheduled tribe women was about 21 percent, compared to a work participation rate of less than 12 percent for the nonscheduled female population (Debi 1978; Usha Rao 1983).² While scheduled group women's work participation rates are higher than the rates for other women, they are still much lower than those for scheduled group men (Debi 1978).

At the lowest levels of the stratification hierarchy in Indian society, women who work for wages often do so because the income of their husbands is insufficient for family support (D'Souza 1975). In these situations female employment is an indication of low status for the family unit. Scheduled group families who can afford to withdraw women from employment often do so to emulate higher status groups. In such cases the exclusion of women from employment represents a status symbol for the family unit (Singh 1988). While female employment may detract from overall family status it enhances individual women's status relative to men within the family. Evidence suggests that when women perform a productive role for wages, they are less subservient to men (Chafetz 1984). In addition to increasing women's economic independence, female employment also serves to lower dowries and decrease the value placed on sons (Bhatty 1986). In this research, higher rates of formal employment represent

enhanced status for women relative to men within the family. Women's shares of marginal employment and unemployment are also examined as indicators of low status.

The government of India views basic literacy as well as more advanced educational credentials as the necessary first steps toward the attainment of rewarding positions in the economy and a higher standard of living for disadvantaged segments of the population (Bhai 1986; Mitra 1979). In India, more equality of educational opportunity began to be emphasized in the decades following Independence in 1947. Policies of protective discrimination for the scheduled groups emerged as an effort to promote greater minority group access to education (Kumar 1988). Despite protective legislation, the average levels of educational attainment for the scheduled populations remain quite low. Widespread illiteracy exists in both the scheduled castes and tribes, with men in both groups about three times more likely than women to be literate. Country wide, 31 percent of the scheduled caste men were functionally literate in 1981 compared to 11 percent of the women. Twenty-five percent of scheduled tribe men were functionally literate in the same year, contrasted with only 8 percent of scheduled tribe women (EIS 1987). With basic literacy rates this low, it is not difficult to image the discouraging statistics which emerge for formal educational attainment. At all levels of educational attainment, scheduled group women are under-represented compared to men. Minority women's educational attainment at various levels (primary, secondary, and college degree) is also explored in this analysis, along with illiteracy rates.

The 1981 Census of India which includes special tables for both the scheduled caste and tribe populations, is the data source for this research. The unit of analysis is individual Indian states, with all the scheduled caste persons in a state constituting one unit and all the scheduled tribe persons in a state constituting another.

Although the information used in this research was obtained from a national census, such data must be approached with caution. The enumeration of over 650 million people leaves open many possibilities for error and undercount, and the fact that these counts deal with the most disadvantaged members of Indian society exacerbates the potential for problems.³ This census data, for all its faults, is the best information available on education and employment among the scheduled groups. It has been used repeatedly as the data source for studying the scheduled castes and tribes (Debi 1978; Kumar 1988; Miller 1981; Reddy 1984). As always in social research, the limitations of the data available must be weighed against the alternatives and against the importance of the subject under study.

Findings: Gender inequality in education and employment

Each of the indicators of minority women's status described above is examined in three forms. First, the percentage of scheduled caste and tribe men and women in each category is examined. The mean and range for each education and employment category is presented in Table 2. Then minority women's share (unadjusted) of each category is calculated (Table 3). Following Almquist (1987), the variables are then adjusted in order to provide a more accurate indication of the extent of gender inequality in the scheduled groups (Table 3). Adjusted share variables are calculated by subtracting women's share of the total force (or other relevant category)⁴ from the unadjusted share variable. Positive signs for the adjusted share variables indicate that women are over-represented in the category; negative signs indicate that they are under-represented. The closer the adjusted share variables are to zero, the less the gender inequality.

Table 2. Percentages of women and men in selected education and employment categories, 1981

	Women		Men	
	\bar{X}	Range	\bar{X}	Range
Literates (%)	17	3-57	38	4-62
Primary education (%)	5	0-17	11	4-31
Middle education (%)	2	0-12	5	1-15
Secondary education (%)	1	0-3	3	1-9
College degree (%)	0	0	0	0-2
Employed (%)	32	7-53	56	48-92
Cultivators (%)	11	0-47	23	0-46
Non-household manufacturing (%)	2	0-42	3	0-11
Marginal workers (%)	9	0-29	2	0-8
Seeking work (%)	3	0-15	2	0-12

Table 3. Women's unadjusted and adjusted shares of selected education and employment categories, 1981

	Unadjusted share		Adjusted share	
	\bar{X}	Range	\bar{X}	Range
Literates (%)	38	14-77	-15	-46-30
Primary education (%)	27	3-55	-21	-44-2
Middle education (%)	23	10-46	-25	-45--5
Secondary education (%)	20	0-44	-28	-45--7
College degree (%)	13	0-35	-35	-53--11
Employed (%)	34	1-49	-48	-57--11
Cultivators (%)	23	0-55	-7	-27--5
Non-household manufacturing (%)	39	5-100	-8	-40--15
Marginal workers (%)	80	44-95	46	8-75
Seeking work (%)	57	35-64	18	-46-35

Table 2 shows that the mean percentage of women in each education and higher status employment category is lower than the mean percentage of men. By contrast, the average percentage of women is slightly higher than that of men in the low status employment categories of marginal workers and seeking work.

Table 3 displays the mean and range for women's unadjusted and adjusted shares of the literacy and education variables. A state by state examination of the data reveals that women are under-represented as literates in all but one state (Mizoram), where the degree of over-representation for tribal women is minimal. The extent of women's under-representation as literates ranges from -46 to 30, with a mean of -15. Women are under-represented at each of the four levels of educational attainment in all but one state (Dadra and Nagar Haveli), where scheduled caste women are only slightly over-represented. The mean level of under-representation for women is substantial, and increases at each higher level of education (primary $X = -21.06$; middle $X = -24.66$; secondary $X = -28.02$; college degree $X = -34.57$). These data indicate that women are severely restricted relative to men in terms of access to formal education. The mean and range for women's unadjusted and adjusted share of the various employment categories is also presented in Table 3. Women are extremely under-represented in formal employment ($X = -47.51$) in all states. The two higher status employment categories, cultivator and non household manufacturing worker, also reflect under-representation by women in the majority of states, but the average levels of under-representation are much lower than is the case for the broad category of employment (cultivator $X = -6.94$; non household manufacturing worker $X = -0.83$). Marginal workers, a lower status category of workers, are disproportionately women in every state ($X = 45.63$). Averaging across all states, women are

only slightly more likely than men to be seeking work ($X = 0.18$). High rates of marginal employment for women may serve to decrease the number of women who are classified as 'seeking work'.

Findings: Socioeconomic development and gender inequality in the scheduled groups

Development is a multidimensional process which involves the reorganization and reorientation of economic and social systems such that they facilitate: (1) a higher material standard of living, (2) enhanced self-esteem, and (3) greater personal and social freedoms (Todaro 1989). The first dimension of development is the easiest to measure, and for this reason is the focus of this and most social science research. This material aspect of development is commonly operationalized as economic growth, or an increase in the overall amount of surplus resources available in a society (Bornschieer, Chase-Dunn & Rubinson 1980; Evans & Timberlake 1980).

In recent years, various perspectives on development (e.g. world system perspective and dependency perspective) have focused attention on how this increasing surplus is distributed across segments of the population. Mounting evidence suggests that socioeconomic development often leads to a more unequal distribution of resources as wealth becomes increasingly concentrated in the hands of a small elite class while the majority of the population experiences a decline in standard of living (Bornschieer, Chase-Dunn & Rubinson 1980; Bornschieer & Ballmer-Cao 1980; Chilicote & Johnson 1983; Evans & Timberlake 1980; Rubinson 1976). Unfortunately, these contemporary perspectives on development often neglect to examine the extent to which socioeconomic development affects the distribution of resources within groups/classes and across the sexes (Ward 1984). The present research examines this key distributional issue for the scheduled caste and tribe populations of India. Numerous development indicators for each of the scheduled groups are correlated with women's adjusted share of the educational and employment variables in order to determine whether higher levels of development are associated with an increase or decrease in gender inequality.

Table 4. Measures of socioeconomic development, 1981

	\bar{X}	Range
Literates (%)	29.3	10.3-84.4
Primary education (%)	8.4	2.2-28.1
Middle education (%)	5.2	0.8-26.2
Secondary education (%)	1.9	0.35-5.3
College degree (%)	0.4	0-3
Child marriage (%)	1.2	0-6
Employed (%)	44.7	29.8-82.2
Urban (%)	15.1	1.2-89.3

The level of socioeconomic development of each of the scheduled groups is measured by the percentage of the population that: (1) is literate, (2) completed primary education, (3) completed secondary school, (4) graduated from college, (5) is between the ages of 0 and 14 and married, (6) is employed, and (7) resides in urban area. These measures, taken from the 1981 Census of the population, are standard indicators of human development widely used in the literature on socioeconomic development (Adelman & Morris 1973; Todaro 1989; world Bank 1988; United Nations Development Program 1990). Moderate to high correlations exist between the varidUs development indicators (not shown).⁵

The first five measures of educational attainment indicate that the majority of the scheduled caste and tribe population has very limited access to education (see Table 4). Literacy rates are very low, with the average percentage of the minority groups who are literate at only 29 percent. The average percentage who completed primary school is only eight. For the secondary level and beyond, average levels of attainment drop below two percent of the population of the group. On the whole, the scheduled castes average slightly higher levels of educational attainment than the scheduled tribes.

The percentage of the population between the ages of 0 and 14 who are married can also be viewed as a proxy for development in India. Often, child marriage for girls is viewed as a means of ensuring the purity of the bride. Furthermore, early marriage of young girls to men of the same social status ensures the ritual purity of each caste group (Gupta 1976). Currently, Indian law specifies a minimum age for marriages (21 for males and 17 for females), yet according to the 1971 Census, 14 percent of the girls in rural India between the ages of 10 and 14 were married (Gupta 1976; Mukhopadhyay, 1984). Table 4 indicates that the rates of child marriage are much lower for the scheduled groups in the samples (sample mean = 1%). One possible explanation for the relatively low rates of child marriage in the scheduled groups in this sample is that traditional dowry practice may discourage economically disadvantaged parents from advocating early marriage for their daughters. Rates of child marriage range from a high of seven percent to a low of less than one percent in this study. Groups with lower rates of child marriage are generally thought to be higher on a scale of socioeconomic development (Singh 1979).

The percentage of the population (both male and female) employed, another indicator of socioeconomic development, varies considerably across groups (range 30% to 82% ; see Table 4). Higher rates of employment reflect greater opportunities to participate in the economy. It would, however, be misleading to assume that work participation is voluntary for the bulk of the population of India. As noted earlier, Hindu culture favors the exclusion of women from formal employment (D'Souza 1975; Singh 1988), but the low standard of living of the scheduled groups results in employment being required in order to meet basic needs (Standing 1978). Thus, for the purpose of this analysis, higher work participation rates are interpreted as an indication of a higher standard of living, or a higher degree of socioeconomic development.

The final development measure, percentage of the population residing in urban areas, is a commonly used indicator of the extent to which the primary economic activity has undergone a shift from agriculture to industry. When the industrial base is sufficient to attract a large portion of the population to urban centers, a country is considered to be more developed. Table 4 shows that in India, the majority of the scheduled caste and tribe population still resides in rural areas ($X = 15\%$).

Table five presents the zero-order correlation coefficients between each of the development measures and women's adjusted share of the employment and educational categories. As might be expected, the literacy and education measures of development have a consistent, positive impact on women's adjusted share of the various educational categories. On the whole, the correlations are stronger between the educational development indicators and women's adjusted share for the lower levels of educational attainment.

Women in the more educated minority groups appear to be able to exchange their higher educational credentials for improved access to employment relative to men (see Table 5). The educational development indicators are positively correlated with women's adjusted shares of employment, cultivators, and non-household manufacturing, but the correlations are not

significant for the latter two variables. The positive correlation between the group's education level and women's employment (work participation rate) does not support the view that more developed scheduled groups withdraw women from the labor force in an attempt to emulate higher status groups.

While higher rates of educational attainment have a positive impact on women's access to formal employment relative to men, higher rates of literacy and primary education have a negative effect on women's share of marginal employment (see Table 5). This finding suggests that when a larger percentage of the population has access to primary education women gain skills which enhance their access to more valued work roles. Rates of educational attainment are not significantly correlated with the unemployment rate (those seeking work) for castes and tribes in a state (see Table 5).

Table 5. Zero order correlation coefficients between measures of socioeconomic development and dependent variables of women's status^a

Measure of socioeconomic development	Literates	Primary education	Middle education	Secondary education	College degree
Literates (%)	0.49	0.77	0.71	0.66	0.40
Primary (%)	NS	0.75	0.68	0.65	0.43
Middle education (%)	NS	0.72	0.56	0.50	NS
Secondary education (%)	NS	0.58	0.42	0.47	0.44
College degree (%)	0.36	0.41	0.43	0.50	0.43
Employed (%)	0.35	NS	NS	0.30	NS
Child marriage (%)	NS	-0.66	-0.63	-0.60	-0.40
Urban (%)	NS	0.30	NS	0.31	NS

	Employed	Cultivator	Non household manufacturing	Marginal workers	Seeking work
Literates (%)	0.49	NS	NS ^b	-0.41	NS
Primary (%)	0.55	NS	NS	-0.48	NS
Middle education (%)	0.31	NS	NS	NS	NS
Secondary education (%)	0.65	NS	NS	NS	NS
College degree (%)	0.84	NS	NS	NS	NS
Employed (%)	0.49	NS	NS	-0.35	NS
Child marriage (%)	NS	NS	NS	0.35	NS
Urban (%)	0.30	NS	NS	NS	NS

^a Adjusted share variables.

^b NS indicates that the correlation coefficient is not significant at the 0.05 level; all other correlation coefficients are significant at the 0.05 level.

Women are a larger share of the literates in states where overall employment rates are higher (see Table 5). The data indicates that women also have greater access to educational credentials when formal employment rates are higher, but the correlations between employment and education prove significant only at the secondary level of education. The effect of higher rates of employment for scheduled groups on women's employment status relative to men is also positive. When formal employment rates are higher, women have enhanced access to formal employment and are less likely to be represented among marginal workers.

As predicted, groups with fewer child marriages exhibit less educational gender inequality (see Table 5). Women have increased access to all levels of education when rates of child marriage are low. By contrast, high rates of child marriage are associated with higher rates of marginal employment for women.

Finally, the overall effect of urbanization on gender equality in education and employment is positive (see Table 5). Among more urbanized groups, women have more equal

access to educational opportunities at the primary and secondary level, and to formal employment.

Conclusions and policy implications

The multiplicity of social categories in India often serves to obscure the status of women in the most disadvantaged segments of the population. This study focuses specifically on the situation of minority women, and documents the presence of extreme degrees of gender inequality among the scheduled castes and tribes. Relative to minority men, minority women in India have far more limited access to both educational and employment resources. For these women, the hardships associated with living in a 'low-income' developing nation and the deprivations associated with minority status are compounded by a patriarchal value system. These findings point to the importance of developing and enforcing policies designed to promote greater equality between the sexes. The provision of educational scholarships, vocational training, loans, credit, and child care for scheduled group women would improve their ability to participate in the economy, and enhance their status relative to men.

This study also shows that socioeconomic development is associated with an overall improvement in the standard of living of scheduled group women relative to men. Scheduled groups considered to be more developed exhibit less gender inequality in terms of access to both education and employment. Caution must be exercised when considering the policy implications of this finding. While it is tempting to conclude that general development programs are sufficient for the reduction of levels of gender inequality, this study does not necessarily show this to be the case. This aggregate level research does not examine the manner in which the various Indian states developed. Previous research suggests that certain types of development programs are more beneficial to women; specifically, those which target aid and assistance directly to women (Bagchi 1982; Buvinic & Yudelman 1989; Devi 1989; Leahy 1986). Furthermore, it is not possible to determine from this study whether gender equality is bolstered by development, or whether gender equality serves to enhance development efforts. Future research designed to explore the direction of the relationship between gender equality and development is needed to inform development policy. If future research shows that development leads to a more equal distribution of resources across the sexes, this would provide further incentive to promote development efforts. By contrast, if future research indicates that gender equality facilitates the development process, such findings would provide a strong rationale for improving women's status and could prove useful for women's groups working actively to reduce levels of gender inequality. With regard to policy formulation, the present study shows that for the scheduled groups in India, gender equality should be conceptualized as an integral part of the development process.

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Notes

1. For a detailed discussion of the designation of scheduled castes and tribes and the various compensatory benefits targeted to these groups see M. Gallanter, *Competing Inequalities* (California, University of California Press, 1984).
2. While these figures may seem low, it is important to note that much female labor is not counted in the census data because women are disproportionately likely to work as unpaid family laborers in the informal sector of the economy.
3. The bulk of the Indian census information is collected by enumerators who go out and canvass their districts (Mahatme 1985), a necessity for gathering such information in a nation with low levels of literacy. Mukerji (1982) argues that the strong and detailed nature of family relationships in India lessens the likelihood of undercounts. In his research, an untrained health worker easily obtained detailed information about families that had been gone from villages for several years. Mukerji asserts that census enumerators, as trained locals, should have little trouble obtaining relatively complete information, and he estimates the 1981 Census undercount at less than 2% . Mahatme's (1985) reports that a post-enumeration check was performed on the 1981 Census by comparing it to the Sample Registration Scheme, which has been examined and reconciled at the state and local level each six months since 1964. The undercounts for the 1971 and 1981 censuses were estimated at 1.7% and 1.8%, respectively (Natarajan & Unni 1983).
4. The ratio subtracted from the unadjusted share in calculating the adjusted share differs for some variables. For the education variables, the ratio subtracted in the adjustment process is the female population divided by the total population. For the cultivation variable, the ratio subtracted is the number of females employed in agriculture divided by the total number of agricultural employees. For the manufacturing variable, the ratio subtracted is the number of females employed in manufacturing divided by the total number of manufacturing employees. The marginal worker variable is adjusted by the number of female total workers divided by the total number of workers. The seeking work variable is adjusted by the number of females in the population divided by the number of persons in the population.
5. High levels of multicollinearity prohibit using multiple regression analysis to predict the effect of development on levels of gender inequality within the scheduled groups.

Reference

- Adelman I. & C.T. Morris (1973). *Economic Growth and Social Equity in Developing Countries*. Stanford, CA: Stanford University Press.
- Almquist, E.M. (1987), Labor market gender inequality in minority groups, *Gender and Society* 1 (4): 400-413.
- Ambedwadikar, R.M. (1986). Role of development schemes for the scheduled castes and scheduled tribes: Do they work? In Joshi (ed.), *Untouchables: Voices of the Dalit Liberation Movement*, pp. 49-59, London: Zed Books.
- Agrawal, A.N., H.O. Verma & R.C. Gupta (1987). *India Economic Information Yearbook*. New Delhi: National Press.
- Bagchi, D. (1982). Female roles in agricultural modernization: An Indian case-study, *Women in International Development Working Paper*, No. 10, Michigan State University.
- Bhai, P.N. (1986). *Harijan Women in Independent India*. New Delhi: B.R. Publishing.

- Bhatty, Z. (1984). Unequal gains of development for women. In: K.M. Manohar (ed.), *Women's Status and Development in India*, Warangal: Society for Women's Studies and Development, pp. 14-23.
- Blumberg, R.L. (1984). A general theory of gender stratification. In: R. Collins, *Sociological Theory*, San Francisco: Jossey Bass, pp. 252-270.
- Bornschieer, V. & T. Ballmer-Cao (1980). Income inequality: A cross-national study of the relationship between MNC penetration, dimensions of the lower structure and income distribution, *American Sociological Review* 44: (3): 487-506.
- Bornschieer, V. & C. Chase-Dunn (1980). Cross-national evidence of the effects of foreign investment and aid on economic growth and inequality: A survey of findings and a reanalysis, *American Journal of Sociology* 84 (3): 651-683.
- Bose, A., D. Gupta & G. Raychaudhuri (1977). *Population Statistics in India*. New Delhi: Vikas Publishing House.
- Burman, B.J. (1977). Census of India: Scheduled castes and scheduled tribes. In: A. Bose, D. Gupta and G. Raychaudhuri (eds.), *Population Statistics in India*. New Delhi: Vikas Publishing House, pp. 28-37.
- Buvinic, M. & C. Yudelman (1989). *Women, Poverty and Progress in the Third World*. New York: Foreign Policy Association.
- CMIE, Center for Monitoring Indian Economy (1982). *Basic Statistics Relating to the Indian Economy, Vol., All India*.
- Census of India (1981). *Scheduled Castes and Scheduled Tribes Series 9*. New Delhi: Government of India.
- Chafetz, J.S. (1984). *Sex and Advantage: A Comparative, Macro-structural Theory of Sex Stratification*. Totowa, NJ: Rowmand and Allenheld.
- Chattopadhyay, K.C (1978). *Tribalism in India*. New Delhi: Vikas Publishing House.
- Chilicote, R.H. & D. Johnson (1983). *Theories and Development: Modes of Production of Production or Dependency*. Beverly Hills: Sage Publications.
- Das, B. (1982). Untouchability, scheduled castes and nation building, *Social Action* 32: 269-282.
- Debi, B. (1978). Tribal women: A study of modern conditions and future prospects. In: Ray et al. (eds.), *Role and Status of Women in India*. Calcutta: Firma KLM.
- Devi, A.K. (1989). *Women in agriculture and rural areas - India*, Women in International Development Working Paper, No. 183, Michigan State University.
- D'Souza, V. (1975). Family status and male work participation. In: V. D'Souza (ed.), *Women in Contemporary India*. India, Manohar, pp. 129-141.
- Dube, S.C. (1977). *Tribal Heritage of India*. New Delhi: Vikas Publishing House.
- Duley, M.I. (1986). Women in India. In: M. Duley & M. Edward (eds.), *The Cross-cultural Study of Women*. New York: City University of New York, pp. 127-236.
- EIS, Economic Intelligence Service (1987). *Basic Statistics Relating to the Indian Economy*. New Delhi: Center for Monitoring the Indian Economy.
- Evans, P.B. & M. Timberlake (1980). Dependence, inequality and the growth of the tertiary: A comparative analysis of less-developed countries, *American Sociological Review* 45 (4): 531-552.
- Everett J.M. (1979). *Women and Social Change in India*. New York: St Martins Press.
- Gallanter, M. (1984). *Competing Inequalities: Law and the Backward Classes in India*. California: University of California Press.

- Ghandially, R. (1988). Introduction. In: R. Ghandially (ed.), *Women in Indian Society*, New Delhi: Sage Publication, pp. 13-19. Ghandially, R. & P. Kumar (1988). Bride burning: The psycho-social dynamics of dowry deaths. In: R. Ghandially (ed.), *Women in Indian Society*, pp. 167-177.
- Ghurye, G.S. (1980). *The Scheduled Tribes of India*. New Brunswick: Transaction Books.
- Gulati, L. (1984). Agricultural laborers. In: T. Lebra, T. Paulson and J. Everett (eds.), *Women and work in India: Continuity and Change*. New Delhi: Promilla and Company Publishers, pp. 63-77.
- Gupta, A.R. (1976). *Women in Hindu Society*. New Delhi: Jyotana Prakashan.
- Gupta, A.R. (1987). *India: A Statistical Outline*, 8th ed. New Delhi: Oxford and IBH Publishers.
- Jain, D. (1984). India: A condition across caste and class. In: Morgan (ed.), *Sisterhood is Global*, New York: Anchor Books, pp. 305-309.
- Karlekar, M. (1982). Some perspectives on the employment of scheduled caste women, *Social Action* 32: 292-302.
- Khan, M.A. & N. Ayesha (1982) *Status of Women in Rural India*. New Delhi: Uppal Publishing House.
- Kumar, K. (1988). Education: Safer options. In: Bouton and Oldenburg (eds.), *India Briefing: 1988*, pp. 111-128.
- Leahy, M.E. (1986). *Development Strategies and the Status of Women*. Boulder, CO : Lynn Rienner Publishers.
- Liddle, J. & R. Joshi (1986). *Daughters of Independence: Gender, Caste, and Class in India*. New Jersey: Rutgers University Press.
- Mahatme, A.W. (1985). The census of India, *Indian Journal of Social Work* 46: 197-215.
- Mandelbaum, D. 1970. *Society in India*, Vols. 1 & 2. Berkeley, CA: University of California Press.
- Manohar, L.M. (1983). *Socio-economic Status of Indian Women*. New Delhi: Seema Publications.
- Mies, M. (1986). *Indian Women in Subsistence and Agricultural Labour*. Geneva: International Labour Office.
- Miller, B. (1981). *The Endangered Sex*. Ithaca, NY: Cornell University Press.
- Mitra, A. (1979). *The Status of Women, Literacy and Employment*. New Delhi: Indian Council of Social Science Research.
- Morgan, R. (1984). *Sisterhood is Global*. Garden City: Anchor Books.
- Mukerji, S. (1982). Under-enumeration in Indian censuses, *Economic and Political Weekly* 11 (13-20): 1870-1875.
- Mukhopadhyay, M. (1984). *Silver Shackles: Women and Development in India*. Oxford: Oxfam.
- Natarajen, K.S. & K.K. Unni (1983). Under-enumeration in Indian censuses, *Economic and Political Weekly* 18: 314-316.
- O'Kelley, C. & L. Carney (1986). *Women and Men in Society*. Belmont: Wadsworth Publishing Company.
- Papanek, H. (1990). To each less than she needs, from each more than she can do. In: Tinker (ed.), *Persistent Inequalities*, New York: Oxford University Press, pp. 162-181.
- Patel, V. (1988). Emergence and proliferation of autonomous women's groups in India: 1974-1984. In: Ghandially (ed.), *Women in Indian Society*, New Delhi: Sage Publications, pp. 249-256.

- Poston, D.L. Jr., E. Almquist & Shu (1987). Gender inequalities among the minority populations of China. Texas Population Research Center Paper, Series 9. Austin: University of Texas.
- Reddy, D.N. (1984). Women in economic development: The scheduled caste female agricultural labourers in India: A target group approach. In: Manohare (ed.), *Women's Status and Development in India*. Warangal: Society for Women's Studies and Development, pp. 40-51.
- Rubinson, R. (1976). The world economy and the distribution of income within states: A crossnational study, *American Sociological Review* 41 (4): 638-659.
- Sethi, R.M. (1982). Changing patterns of female labour in agriculture: The case of Punjab, *Social Action* 34: 354-367.
- Singh, I.P. (1988). *Women's Oppression: Men Responsible*. Delhi: Renaissance Publishing.
- Singh, K.P., (1979). *Status of Women and Population Growth in India*. India: Munshiram Manoharial Publishers.
- Sinha, B. (1983). *Society in Tribal India*. Washington, DC: World Priorities.
- Sivard, R. (1985). *Women: A World Survey*. Washington, DC: World Priorities.
- Souza, A. (1982). Introduction, *Social Action* 32: 245-246.
- Standing, G. (1982). *Labour Force Participation and Development*. Geneva: International Labour Office.
- Sundar, P. (1981). Characteristics of female employment: Implications of research and policy, *Economic and Political Weekly* 14: 864-873.
- Todaro, M. P. (1983). *Economic Development in the Third world*. New York: Longman.
- United Nations Development Program (1990). *Human development, Report 1990*. New York: Oxford.
- Usha Rao, N.J. (1983). *Women in a Developing Society*. New Delhi: Ashish.
- Vander Zanden, T.W. (1983). *American Minority Relations*. New York: Knopf.
- Verma, D.N. & R.S. Dixit (1988). Place of women in occupational structure of scheduled caste population in UP. In: D. Maurya (ed.), *Women in India*, India: Chugh Publications, pp. 181-188.
- Visaria, P. & L. Visaria (1981). *India's Populations: Second and Growing*. Washington DC: Population Reference Bureau.
- The World Bank (1988). *World Development, Report 1988*. New York: Oxford University Press.
- Ward, K. (1984). *Women in the World System: Its Impact on Status and Fertility*. New York: Praeger.
- Williams, R.M. (1964). *Strangers Next Door*. Englewood Cliffs, NJ: Prentice-Hall.

Address for correspondence: Dr Dana Dunn, Department of Sociology, University of Texas at Arlington, P.O. Box 19599, Arlington, TX 76019, USA Phone: Office (817) 273 3778; Home (214) 946 4703