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Caste Inequality and Organizational Membership: An Analysis of Household Data from IHDS1 and IHDS2

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# Caste Inequality and Organizational Membership: An Analysis of Household Data from IHDS1 and IHDS2

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### Abstract:

Using the Indian Human Development Surveys from 2004-05 and 2012 as two cross sections, this paper estimates the probabilities of households being members of two kinds of formal groups/institutions: 'caste associations' and 'religious/social' organizations. Three kinds of econometric specifications are used: the linear probability model (OLS), logistic regression, and the 'marginal effects' variant of the logistic model. The main empirical results, consistent across all three specifications, showed significant differences across the various caste groups in terms of the determinants of membership in these two groups. An important secondary result was the importance of social network densities as determinants of joining these two groups.

### <u>Keywords:</u>

Caste inequality, organizational membership, social networks, IHDS household datasets

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# Caste Inequality and Organizational Membership: An Analysis of Household Data from IHDS1 and IHDS2

# Introduction<sup>1</sup>

Social science research on caste in India is inextricably, and in a sense by definition, linked to questions of inequalities of all kinds. In fact, according to Jodha (2012), caste is a 'paradox' and its analysis has *primarily* been from the perspective of inequality. But these issues of caste inequalities are subtle, and especially today, cannot be simplistically framed in theoretical binaries. For example, Deshpande (2013: 12) observes that "the jati system should be understood as a system of graded inequality, and not a simple dichotomous hierarchy between 'upper castes' and 'lower castes'". Dr.B.R.Ambedkar's oft-cited comment is succinctly telling about this subtlety: "The caste system is not merely a division of labour. It is also a division of labourers" (2002: 263). According to Deshpande (2013: 18), national data, for the purposes of the government's affirmative action policies, now divides the Indian population into four mutually exclusive but totally exhaustive groups: : (i) SCs (ex-untouchable jatis) constitute around 18% of the population, (ii) STs, on average, constitute around 8%, (iii) OBCs ("a heterogenous collection of Hindu low castes, some non-Hindu communities, some tribes not included in STs") constitute around 43% of rural and 39% of urban populations and finally, (iv) 'Others', the residual, all else not included in (i) to (iii). According to Jodha (2012: 81), each state has its own list of SCs, and currently, there are a total of 1231 communities listed as SCs in the entire country.

In a comprehensive yet precise review of caste inequalities during the process of economic development, Mosse (2018) summarizes critical issues on the structure of discrimination in various sectors in India. For example, he points out that caste discrimination in urban labour markets have three effects: 'occupational ranking', that is, caste typing of jobs; 'network effects or occupational hoarding', that is recruitment through caste contacts; and 'categorical exclusion' due to skill and educational barriers that becomes self-reproducing over time, especially as 'merit' is defined and designed by the upper castes.. He cites Desai *et al.* (2010) that shows that while for OBCs and STs, poor educational outcomes are determined by low enrolment or parental income or education, for Dalits, caste identity has an independent effect on the impact of schooling. Discrimination, Mosse (2018: 428) states, operates directly on

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these caste identities. Even when Dalits can escape these forms of discrimination in urban labour markets by entering business communities through self-employment, they still encounter the above three effects in 'ranked' markets. However, often there are returns to 'enclave economies' for Dalits, that is, they have higher incomes in own-dominated villages as Iversen *et al.* (2014) found using nationally representative data from 1993-94 and 2004-05. Often there are violent reactions to these gains. As the income, and the standard of living gaps between Dalits and dominant castes narrows, hate crimes increase. Sharma (2015), cited in Mosse (2018: 427), using a decade of crime data (2001-2010), finds evidence of this correlation as Dalit signs of progress become common and easy targets for destruction and arson.

Empirical evidence of discrimination and disadvantage against Dalits abounds. In terms of labour market dynamics in the 1990s and beyond, Mohanty (2006) finds the following: upper caste Hindus are significantly better off in terms of employment and relative incomes compared to STs, SCs and other backward classes; in urban India, STs, SCs and OBCs have comparable profiles but are at a great distance from the upper caste Hindus; and in rural India, OBCs are situated in the middle, that is, between ST and SCs on the one hand and upper caste Hindus on on the other, but again at a significant distance from the latter. Deshpande (2013), referring to skewed landownership patterns using 2004-05 NSS data, points to how SCs owned only 9% of the land, whereas all 'Others' owned 36%. Desai and Dubey (2011: 44) state the following with respect to the inequality of opportunity: "When compared to forward castes, Dalits and adivasis are less likely to own land, have fewer years of education, have lower household size adjusted consumption expenditure and have fewer important social connections". In terms of regional variations, they find greater inequality in developed villages and smaller cities compared to least developed villages and large cities. Thorat and Joshi (2015), cited in Mosse (2018: 426), found that 27% of a nationally representative survey admitted practicing 'untouchability in private spaces".

How do different castes, especially those who are severely disadvantaged, assert their collective voice to protect their rights? This is where caste associations play a crucial role. Historically, by the early decades of the twentieth century, and here it is important to quote from Jodha (2012: 145) at length:

"different caste groups had begun to organize themselves in the form of 'caste associations', a process that had been completely unknown till then. With the formation of associational identities a new sense of competitiveness also developed among different caste groups. Though they all deployed the idiom of caste, something new was happening to caste. It began to be articulated and mobilized on horizontal lines, as regional-level pressure groups. They raised the questions of representation and equity".

Rudolph and Rudolph (1960) were among the first to study caste associations in democratic India. According to them, caste associations are formal organizations, often encompassing several endogamous castes or jatis of similar name, occupation and rank. Thus, they are more akin to voluntary organizations rather than an ascriptive association, where birth in the caste is a necessary but not a sufficient condition for membership. In other words, the caste associations are critical agencies for the mobilization and coordination of their collective voice in society and politics at large. In Madras Presidency for example, educated and professional sections of the non-Brahmin castes mobilized their associations to counter explicit Brahmin dominance, and this formed the basis of the Justice Party and the demand for reservations for non-Brahmins (Prakash, 1997, cited in Deshpande, 2013: 44). In more contemporary times, Waghmore (2019) explores the effects of these caste associations in creating a culture of cosmopolitanism in contemporary Mumbai. In the case of Dalit assertion, Pai (2013) examines its three contemporary forms: grass roots assertion, social mobilization by Dalit-based political parties, and middlr class activism. In sum then, these caste associations have shifted the terms of discourse from the 'politics of ideology' to the 'politics of representation' (Yadhav, 1999; Palshikar, 2007).

In spite of these empowering caste associations and their associated political formations, "the elements of hierarchy and inequality continue to be reproduced even today in many different ways" (Jodha, 2012: xiv). There are of course other organizations that households from various caste groups can join besides their caste associations. There is an array of religious, social and festival society organizations in India that members of households from various castes, religions and tribes can join. For a list of these religious and social organizations, mostly Hindu, but also Islamic, Christian, Buddhist and Sikh, one can refer to the following Wikipedia link: https://en.wikipedia.org/wiki/Category:Religious organisations based in India. In addition, households can also choose to be members of one or more of these groups: trade unions, employer organizations, self-help groups, co-operatives, women's' groups and so on. In brief, the main objective of this empirical paper is to model the household's propensity/probability of joining one or more of these groups, focussing in on caste associations and religious/social organizations by sharply distinguishing between them, and investigating whether there are any systematic and robust caste patterns to these determinations.

My motivation in attempting to undertake the above exercise originates from reading the chapter on 'Social Integration and Exclusion' by Desai *et al.* (2010) in *Human Development in India: Challenges for a Society in Transition.* In this chapter, the author(s) succinctly and lucidly describe and summarize the four dimensions of social integration and exclusion that are included in their (2004-05) India Human Development Survey (henceforth IHDS1; see next section below that describes the datasets in detail). These four dimensions are: (a) membership in nine types of organizations, (b) (self) reported conflicts in the local neighbourhood, (c) (self) reported incidents of crime victimization, and (d) (self) reported social network contacts with formal organizations (schools, medical system, government, politicians). While I use dimension (a), that is, membership of a household in different organizations. The nine types of organizations listed are: caste associations, religious/social organizations, self-help groups, credit/savings groups, mahila mandals, union/business groups, youth/sports/reading groups, cooperatives, and development/NGOs.

Desai et al. (2010) report the following descriptive patterns in the group membership data from the 2004-05 IHDS report: (a) around 36% of households reported being a member of at least one group, (b) the largest membership are in two groups, caste associations and religious/social organizations (around 14% each), (c) around 18% of households are members of only one group, (d) richer and more educated households are more likely to be organizational members, (e) rural-urban differences are minor compared to state differences, (f) state wise variation dominates variation by social position within states, and (g) "differences among castes and religions are negligible, and whatever differences exist are almost wholly attributable to geography" (2010: 172). In Desai and Dubey, (2011: 43-44), using a logistic regression equation with marginal effects, and controlling for region, landownership, income and education levels, found that Dalits and STs had a higher predicted probability of participation in formal organizations and in attending a political meeting than other caste groups. My point of departure in this paper is to investigate points (f) and especially (g) above. I hypothesize that there could be strong caste patterns over what types of organizations different caste households decide to join. The structure of the paper is as follows. The next section describes in detail the two datasets I use. The following section spells out my empirical procedures or models. I then present and discuss the results and finally conclude.

#### **The IHDS Databases**

The India Human Development Survey (IHDS) is a nationally representative, multi-topic panel survey jointly organized by researchers from the University of Maryland and the National Council of Applied Economic Research (NCAER), New Delhi. IHDS consists of two rounds of survey. The first round of interviews was completed in 2004-5 on 41,554 households in 1503 villages and 971 urban neighborhoods across India. A second round of IHDS survey was conducted in 2011-12 on 42,152 households across India, out of which the majority consisted of re-interviewed households. Funding for the second round of this survey was provided by the National Institutes of Health and additional funding was provided by The Ford Foundation.

In the first survey, henceforth referred to as IHDS-I, out of the 41,554 households, 26734 households were categorized as rural households and 14,820 households were urban households according to the 2001 Census. In the second survey, henceforth referred to as IHDS-II, out of the 42,152 households, 83% of the households have been re-interviewed. Re-interviewed households refer to households who were interviewed during IHDS-I in 2004-05 and re-interviewed during the second round in 2011-12. There are 34,621 such households. For the rest of the households interviewed during IHDS-II, 2134 households are new, that is, they have been interviewed only during the second round of survey of IHDS, and not in the first round. The remaining 5397 households are split households. IHDS defines split households as those household by the time IHDS-II was conducted. There were 6911 households who were 'attrition households' – households who were interviewed only in IHDS-I. Out of the 42,152 households according to the 2011 Census. Both the surveys covered the households according to the 2011 Census. Both the surveys covered the households according to the 2011 Census.

The IHDS survey captures responses relevant not only to the households, but also to the individuals residing in those households. Hence, the IHDS dataset can be broadly categorized into a household dataset and an individual dataset. The household dataset captures all possible details pertaining to household characteristics. It involves information on religion, caste, primary occupation of the head of household, their origin, as well the principal source of income of the family. The household dataset contains information on the amount of land possessed by the household, livestock owned, amount of land cultivated, expenses and net income from the same. Similarly, it captures all relevant information about the household non-farm business (if it has any). It also contains information on the households' monthly

consumption amounts and the expenses incurred for various necessities such as medicines, clothing, school-books etc. In addition, information on the debt status of the household be it from banks, government or personal are included . A first of its kind, the IHDS dataset contains information on four social inclusion aspects of the households as well. 'Social network' captures whether households are acquainted with someone in the medical field, academic field or other government jobs (in case of IHDS-I), politicians and military (in addition, in case of IHDS-II). 'Organizational membership' in different formal organizations contains information on the household's membership to nine different types of formal groups (discussed earlier). 'Local trust and conflict' contains information on the type of bonding people residing in a community share with each other, as well as the nature of conflict, both local and caste/community conflicts. IHDS-II in addition provides information on the practice of untouchability in society. IHDS also contains information on the frequency of theft, burglary or attack (crime) on the households as well as the frequency of girl harassment in the neighborhood. It also tries to estimate the degree of confidence households have on the various institutions in society. Most importantly, the IHDS household dataset provides information on the net annual income of the household – income from farms, business and aggregate of both, after adjusting for all associated expenses.

In case of IHDS-I, the number of individuals surveyed in 41,554 households was 215,754. For IHDS-II, the number of individuals surveyed in 42,152 households was 204,569. The individual dataset contains information on individual characteristics such as age, sex, marital status, educational status (in terms of number of years they have pursued education as well as their degrees), the type of occupation they are associated with (wage income from agricultural or non-agricultural sources, self-income from agriculture or business) and all other related details such as the number of hours worked, whether it is a permanent job or temporary etc. It covers information on health issues faced by women and children in the family, as well as their reading and writing abilities. The individual dataset captures information on whether individuals in the households' avail of the various government benefit schemes. Apart from these, the IHDS-II individual dataset contains information on whether individuals avail of the MGNREGA scheme. The IHDS-II individual dataset covers migration information as well that is not covered in IHDS-I.

### **Empirical Procedures**

As stated earlier, I make a sharp distinction between the two major organizational groups: caste associations and religious/social organizations. Given the long history of caste associations and

its largely empowering effects, my hypothesis is that different castes may have different propensities/probabilities of joining the above two organizations. Each household chooses to be a member of none of them, one of them, both of them, with or without membership in other groups as well (these are self-reported choices). Recall that in IHDS1, only 36% of households were members of at least one group, whereas, in IHDS2, it rises to 41% (see Table 1, which I will discuss below in the results section in detail). I concentrate on these four specific subsets of households in both IHDS1 and IHDS2 in order to hopefully disentangle the caste effects on propensities to join the above two groups: (1) households who are members only of caste associations and nothing else, (2) households who are members only of religious/social organizations and nothing else, (3) households who are members of caste associations and any other organizations but not members of religious/social organizations, and (4) households who are members of religious/social organizations and any other organizations but not members of caste associations. At the extreme, for certain castes, it could be that membership in these two groups are mutually exclusive on ideological grounds. In IHDS1, only 7.4% of households reported that they were members of both caste associations and religious/social organizations irrespective of whether or not they belonged to other organizations, and this number drops to 5.6% in IHDS2 (see Table 1).

The basic model is the following:  $P^{(y=1/x)} = y^{2} = \beta^{0} + \beta^{1} x_{1} + \dots + \beta^{k} x_{k}$ , where y<sup>is</sup> the predicted probability of having y=1 for the given values of x<sub>1</sub>....x<sub>k</sub>. This is the simple linear probability model (OLS), and it suffers from two problems: heteroskedasticity and the possibility that y<sup>i</sup> < 0 or > 1 which makes no sense. The first problem can be fixed by using robust standard errors, but the second problem is serious and it implies that a logit or a probit model is called for as these are specifically made for binary dependent variables and always result in  $0 < y^{i} < 1$ . The problem with the standard logistic regression model however is that the estimated coefficients cannot be interpreted as easily as in OLS since the 'marginal effects' depends on what the x values are. Thus, the compromise here is to use the marginal effects variant of the logistic regression model that sets the x values equal to their means. I present results for all three of these econometric specifications. I am using and interpreting the two datasets as two cross-sections in this paper, and in a later paper I intend to combine them into a panel.

I have four dependent variables: (1) the probability the household belongs *only* to caste associations and to no other groups (=1) compared to *all* other households (=0), (2) the probability the household belongs to a caste association *only* (as in 1) plus if the household

belongs to a caste association and to any other group but does *not* belong to religious/social organizations (=1) compared to all other households (=0), (3) the probability the household belongs *only* to religious/social organizations and to no other group (=1) compared to *all* other households (=0), and (4) the probability the household belongs to religious/social organizations *only* (as in 3) plus if the household belongs to religious/social organizations and to any other group but does *not* belong to caste associations (=1) compared to all other households (=0). [For simplicity, I call the second dependent variable henceforth as 'caste plus', and the fourth dependent variable 'religious/social plus'].

Desai *et al.* (2010: 171) explicitly state that "For organizational memberships, village or neighbourhood conflict, and crime, what matters is the local context". Thus, I include 'reports of conflicts in the neighbourhood', 'crime victimization', and 'network contacts with formal organizations', all dichotomous variables, as a set of local/environmental determinants on the household's propensity to join organizations.

The 'village or neighbourhood conflict' variables are the following: (a) 'local conflict' (do people get along well or if there is conflict) = 1 if household reported a lot or some conflict, = 0 if no conflict and people get along, (b) 'local bonding' (local people bond together when there is a community problem, such as water supply problem) = 1 if household reported people bond to solve community issues, = 0 if household solves problem individually/no bonding, (c) 'community conflict' (degree of conflict among communities/jatis that live there) = 1 if household reported a lot or some conflict, = 0 if not much or none, and (d) 'practice untouchability' (whether household practices it) = 1 if yes, = 0 if denied its practice (only available in IHDS2). One could hypothesize here, that more village and neighbourhood conflict, the more likely households would join formal organizations.

The 'crime victimization' variables are the following: (a) 'recent theft' (anything stolen in the past twelve months prior to survey) = 1 if yes, = 0 if no, (b) 'recent burglary' (anyone broke into your home in the past twelve months prior to survey) = 1 if yes, = 0 if no, (c) 'recent attack' (any household member attacked or threatened in the past twelve months prior to survey) = 1 if yes, = 0 if no, and (d) 'girl harassment in the neighbourhood' (frequency of harassment faced by unmarried girls) = 1 if often or sometimes, = 0 if never or rarely. Here too, one would expect increasing crime to elicit greater propensities to join organizations.

The 'network contacts with formal organizations' are the following: (a) 'social network in medical field' (any relative/acquaintance a doctor/nurse who work in hospitals/clinics) = 1 if

yes, = 0 if no, (b) 'social network in school' (any relative/acquaintance a teacher/principal/school official) = 1 if yes, = 0 if no, (c) 'social network on other government jobs' (any relative/acquaintance in government service) = 1 if yes, = 0 if no, (d) 'social network' with politicians' (any personal acquaintance with an elected member or a political party member) = 1 if yes, = 0 if no (only in IHDS2), and (e) 'social network with police/military' (any personal acquaintance with police and/or military officials) = 1 if yes, = 0 if no (only in IHDS2). In terms of these network variables, it is not a priori obvious what effects they will have on a household's propensity to join organizations. One could argue that those households who are relatively bereft of these network densities may have a greater likelihood of joining organizations than those blessed with dense social networks. On the other hand, those households with dense networks may be more 'aware' and 'informed' and hence have higher joining propensities. Perhaps, what effect dominates depends on the kind of organization. (One caveat here needs to be noted: of course, the causation could be the other way around, that is, households who are members of one or more organization are more likely to have greater network densities by virtue of their greater contacts with people. This could be another potential paper).

The two continuous variables are the following. First, is 'net household income', a variable constructed in the IHDS household dataset. The source of income may be self-employment or wage employment in agricultural and non-agricultural sectors. Net income is the aggregate of all such incomes, after adjusting for expenses. Second, is 'years of education completed by the head of the household' (this value ranges from 0 to 15 in IHDS1 and 0 to 16 in IHDS2; if completed 12 years implies higher secondary education attained, if 15, then a graduate). This second variable is the only one retrieved from the individual dataset of the IHDS rather than the household dataset (from which all other variables are retrieved). I use these two variables mainly as controls and hesitate to speculate on their effects on our dependent variables. But to the extent an 'income effect' dominates, we would expect more affluent households to have higher propensities; conversely, if a 'substitution effect' dominates, we would expect affluent households not really needing to join organizations. Again, it may depend on the kind of organization.

As Desai *et al.* (2010) have stressed several times, there are huge inter-state differences in all these social integration and exclusion variables, especially true in the case of joining organizations. For example, in IHDS1, the Northeast states, Kerela, and Bihar have relatively high organizational membership compared to West Bengal, UP, and Punjab. Thus, I have state

dummies in the model(s). To the extent states have varying and distinctly different population distributions by castes, these dummies control for this phenomenon. I also include a ruralurban dummy (= 1 if rural, = 0 if urban) and this too is a control variable.

Our focus and main variables are the caste dummies. In IHDS-I, the caste category has been divided into five groups – Brahmin, OBC, SC, ST, and Others. In IHDS-II, there is an added sixth category – Forward/General caste (Except Brahmin). "Others" simply refers to a residual category: any household that does not fit into the rest of the categories. Keeping Scheduled Caste (SC) as the reference group, four caste dummies have been constructed for IHDS-I, and five for IHDS2. The above caste dummies are = 1 if a household belongs to that particular caste category, = 0 otherwise.

#### **Results and Discussion**

Table 1 presents some details of the two datasets and is self-explanatory. From the second to the fourteenth row, the number of households (and the percentage of total households) who said 'yes' to the various binary independent variables are listed. For example, 21% of households in IHDS2 reported that they practiced 'untouchability', and 40% of households in IHDS1 reported that they had 'social networks' with people in schools and/or colleges. The last six rows lists the number of households (and percentage) who said 'yes' with respect to being a member in one, or more but not in one, type of organization. For example, only 4.4% of total households in IHDS2 reported being a member of a religious/social group and any other groups but not a member in a caste association/group. If we compare the percentages across the two cross sections/datasets we observe the following: (a) 'local bonding', 'community conflict', and 'girl harassment' have gone up, whereas, 'recent attack' has come down, (b) 'social network' in both the medical field and schools/colleges have risen, and finally, (c) the percentage of households belonging only to caste associations has declined, whereas, the percentage of households belonging to religious/social groups and other groups but not caste associations have increased. The last point is puzzling, that is, why has the percentage of households belonging only to caste associations declined from 2005 to 2012? Could it be that being a member of only a caste association does not offer enough protection, empowerment, and a sense of identity as before? (see for example, Ahuja, 2019). Households perhaps need to hedge themselves by joining organizations other than caste associations, such as religious/social organizations, so as to signal a multidimensional identity. These are mere speculations as I could not find any explanations for this decline in the IHDS2 documents.

#### (Table 1 about here)

Tables 2-4 presents the empirical results for both IHDS1 and IHDS2 from the three econometric specifications (linear probability model with robust standard errors, i.e., OLS; logistic regression; marginal effects logistic regression) for the dependent variables: (1) the probability the household belongs *only* to caste associations and to no other groups (=1) compared to *all* other households (=0), and (2) the probability the household belongs to a caste association *only* (as in 1) plus if the household belongs to a caste association and to any other group but does *not* belong to religious/social organizations (=1) compared to all other households (=0). Columns 1 and 2 present the first dependent variable for IHDS1 and IHDS2 respectively, and similarly columns 3 and 4 for the second dependent variable.

First, looking at the 'village and neighbourhood conflict' variables we find the following: (a) unlike my *a priori* expectation, in IHDS1, absence of 'local conflict' increases the probability of membership in both dependent variables (columns 1 and 3 in all three tables), but this is not true in IHDS2 (columns 2 and 4 in all three tables); (b) as hypothesized, higher the 'local bonding' greater the probability of membership in both dependent variables in IHDS1 (columns 1 and 3 in both tables) and this is true in IHDS2 for the first dependent variable (column 3 in all three tables), but, for the second dependent variable, the coefficient turns negative and significant indicating the reverse causality (lesser or no bonding increases the probability of membership; column 4 in all three tables); (c) increases in 'community/jati' conflict' significantly increases the household's probability of membership in both the dependent variables in IHDS1 and IHDS2 across all specifications; and finally, (d) strangely (and sadly), those households who reported that they practice 'untouchability' are more likely to be members of only caste associations (only in IHDS2, column 2 in Tables 2-3 but not so in Table 4).

#### (Tables 2-4 about here)

Second, examining the 'crime victimization' variables in Tables 2-4, we find the following: (a) increases in 'recent theft' incidents clearly increases the household's probability of being a member of a caste association *only* as well as the caste plus dependent variable (more or less all columns across three tables), (b) 'recent attack' and 'recent burglary' have no effect on membership probabilities, and (c) interestingly, frequency of 'girl harassment in the neighbourhood' has a significant negative effect across all specifications, implying that those neighbourhoods where girls are relatively free from harassment are more likely to have

households who are members of caste associations *only* and caste plus. Could the causation be the other way in this case? That is, in neighbourhoods where more households are members of caste *only* and caste plus associations are also the ones that are relatively safe for girls, a proposition that needs to be further explored.

Third, the 'social network' variables in Tables 2-4 indicate the following: (a) having a network of relatives/acquaintances in government service decreases the probability that a household will be a member of caste associations *only* and caste plus; in other words, those without this network are more likely to be members (columns 1-3 in all three tables), (b) having networks in the medical field increases the probability of membership in IHDS2, (c) having networks in schools/colleges have inconsistent outcomes, and finally, (d) having networks with politicians and with military/police (only in IHDS2) clearly increases the probability of our caste plus variable, but has no effect on membership in caste associations *only*. Both household income and years of education of head of household seem to have no effect on membership in caste associations *only* the rural-urban dummy: rural households have a significantly higher probability of membership in both the caste *only* and caste plus dependent variables in IHDS1 (2004-05) but this significantly changes in IHDS2 (2012) where urban households now have a higher probability of membership in *only* caste associations.

The first set of my main results are the coefficients on the caste dummies. In all three econometric specifications in Tables 2-4, and *ceteris paribus*, households from (the reference category) scheduled castes have significantly higher probabilities of being members in caste associations *only*, as well as in our caste plus variable, compared to Brahmin, OBC, and (only in IHDS2) Forward/General (except Brahmins) comparable households. There seems to be no difference between these probabilities for comparable scheduled caste and scheduled tribe households. In the case of 'Others', scheduled castes have a higher probability of being members in terms of our caste plus dependent variable.

Tables 5-7 presents the empirical results for both IHDS1 and IHDS2 from the three econometric specifications for the dependent variables: (1) the probability the household belongs to religious/social organizations *only* and to no other groups (=1) compared to *all* other households (=0), and (2) the probability the household belongs to a religious/social organization and organization only (as in 1) plus if the household belongs to a religious/social organization and

to any other group but does *not* belong to caste associations (=1) compared to all other households (=0).

#### (Tables 5-7 about here)

First, looking at the 'village and neighbourhood conflict' variables we find the following: (a) partly like in the earlier case, here too, absence of 'local conflict' increases the probability of membership in both dependent variables (columns 1-4 in all three tables) but this time not only in IHDS1 (as before) but also in IHDS2, (b) like before, here too, by and large (4 out of 6 coefficients; columns 1 and 3 in Tables 6 and 7), higher the 'local bonding' greater the probability of membership in religious/social organizations only in IHDS1; however, in IHDS2 the coefficients for both our dependent variables are negative and significant (columns 2 and 4 in Tables 5-7) indicating that lesser or no bonding increases the probability of membership, (c) increases in 'community/jati' conflict' significantly increases the household's probability of membership in both the dependent variables in IHDS1 across all specifications; in IHDS2 however, the relative absence of community conflict increases the probability of membership in religious/social organizations only, while the presence of community conflict increases the probability in our religious/social plus dependent variable; and finally, (d) those households who reported that they practice 'untouchability' are more likely to be members of religious/social organizations plus other organizations but not caste associations (only in IHDS2, column 4 in Tables 5-7).

Second, examining the 'crime victimization' variables in Tables 5-7, we find the following: (a) like before, increases in 'recent theft' incidents clearly increases the household's probability of being a member of a religious/social organization *only* as well as the religious/social plus dependent variable (more or less all columns across three tables), (b) 'recent attack' and 'recent burglary' have no effect on membership probabilities, and (c) unlike earlier, frequency of 'girl harassment in the neighbourhood' has a significant negative effect in all three specifications (only in IHDS2, column 2 in all three tables), implying that those neighbourhoods where girls are relatively free from harassment are more likely to have households who are members of religious/social organizations *only*.

Third, the 'social network' variables in Tables 5-7 indicate the following: (a) as opposed to our earlier results, in this case, having a network of relatives/acquaintances in government service has no effect on the probability that a household will *only* be a member of religious/social organizations, although it has a positive effect on the religious/social plus dependent variable,

(b) having networks in the medical field increases the probability of membership in both IHDS1 and IHDS2 across all three specifications (earlier this held only for IHDS2), (c) while earlier, having networks in schools/colleges had non-robust outcomes, in this case, it clearly increases the probability of membership in both our dependent variables across all three specifications, and finally, (d) having networks with politicians increases membership probability but not so with military/police (only in IHDS2). Both household income and years of education of head of household seem to have no effect on membership in religious/social organizations *only*, but do have mild positive effects on our religious/social plus dependent variable. Finally, the rural-urban dummy: unlike before, in this case, urban households have a significantly higher probability of membership in religious/social organizations *only* in both IHDS1 and IHDS2.

The second set of my main results are the coefficients on the caste dummies. In all three econometric specifications in Tables 5-7, and *ceteris paribus*, households from Brahmin, OBC, Forward/General (except Brahmins), Scheduled Tribes (only in IHDS1), as well as Others (only in IHDS1), have significantly higher probabilities of being members in religious/social organizations *only* compared to Scheduled Caste households (the reference category). The same applies to my religious/social plus dependent variable but not in the case of Scheduled Tribes and Others (columns 2 and 4 in all three tables). There seems to be no difference between these probabilities for comparable scheduled caste and scheduled tribe households.

Desai and Dubey (2011: 43-44) in their empirical exercise, where the dependent variable was 'predicted probability of participation by adivasis and Dalits' (scheduled castes), found that they were "far more politically active than forward castes". Their dependent variable was membership in the number of organizations, that is, aggregated over all types of organizations. In this paper, by disaggregating and then isolating the type of organizations into the two main groups, that is, caste associations and religious/social organizations, and then creating two plus types of categories, I provide completely different and interesting caste patterns to these predictive probabilities. Taking my two sets of main results together, I have shown that in the case of caste associations (and caste associations plus), scheduled caste households have significantly higher probabilities of being a member than comparable households from the other caste categories, whereas, they have significantly lower probabilities of being a member of a religious/social organization compared to similar households from the other caste categories. Another key difference that emerges from my results taken together are the effects of the 'social network' variables on the outcome measures. Specifically, the significantly

higher probability of membership in religious/social associations (*only*, and plus) for those households with dense contacts/networks (in the medical, school, government service and political sectors), compared to households who are network deficient. In sharp contrast, in the case of membership in caste associations (*only*, and plus), 'social network' matters little, except in the case of government service, where the coefficient becomes significantly negative indicating a lower probability of membership for those with contacts. All these results are consistent across all three of my econometric specifications. In addition to these main results, the other results also indicate that there have been some significant changes when we compare the IHDS1 and IHDS2 datasets (as discussed in this section earlier).

#### Conclusion

I started this paper by stating that research on caste in India is inextricably linked to issues of inequalities of all kinds. Using the two IHDS datasets from 2004-05 and 2012, I principally estimated the household's probabilities of joining two kinds of formal collective groups: caste associations and religious/social organizations. The main empirical results, in all three econometric specifications, showed significant differences across the various caste groups in terms of the determinants of membership in these two groups. Specifically, ceteris paribus, the scheduled caste (Dalits) households had significantly higher probabilities of joining caste associations than comparable households from other castes. On the other hand, they had significantly lower probabilities of joining 'religious/social' organizations than comparable households from the other caste categories. An important secondary result was the importance of social network densities as determinants of joining 'religious/social' organizations, whereas, they are relatively unimportant in the case of caste associations. In the case of caste associations, those households without networks with government agencies/employees have significantly higher probabilities of joining caste associations compared to those households with these networks. Both crime and community conflict at the local neighbourhood level had similar effects on both my probabilities. Rather than calling these stark differences above as a dimension of caste inequality, perhaps it would be more nuanced to call it an instance of caste asymmetry.

Finally, in terms of future extensions on the same theme, I briefly conclude with one point: I have used the datasets as two cross sections, and we saw how several things changed between the two time periods, and some of these changes were reflected in the empirical results. I now plan to merge the two datasets into a panel and estimate similar equations now with fixed

effects. This will enable us also to examine households who have perhaps changed their membership from one type to another, have dropped out of being a member altogether, and who joined specific organizations in the second period. Examining these time variant granularities will shed further light on this theme.

|   | 2005       | 2012       |
|---|------------|------------|
| VARIABLES   | IHDS-I     | IHDS-II    |
| Total households  | 41554      | 42152      |
| Local conflict  | 18708 (45) | 17563 (42) |
| Local bonding   | 23836 (57) | 30726 (73) |
| Community conflict  | 11867 (29) | 17280 (41) |
| Practice untouchability   | NA         | 8762 (21)  |
| Recent Theft  | 1601 (3.9) | 1607 (3.8) |
| Recent burglary   | 416 (1)    | 436 (1)    |
| Recent attack   | 1038 (2.5) | 774 (1.8)  |
| Girl harassment in the neighborhood   | 4996 (12)  | 8399 (20)  |
| Social network in medical field   | 13174 (32) | 23847 (57) |
| Social network in school  | 16500 (40) | 24729 (59) |
| Social network in other government jobs   | 14285 (34) | 12845 (30) |
| Social network with politicians   | NA         | 9629 (23)  |
| Social network with police/military   | NA         | 14293 (34) |
| Belonging to at least one group   | 14959 (36) | 17255 (41) |
| Belonging only to caste associations  | 1240 (3)   | 444 (1)    |
| Belonging only to religious/social organizations  | 1569 (4)   | 1632 (4)   |
| Belonging to caste associations and any other, but not religious/social                               | 1195 (2.8) | 806 (2)    |
| Belonging to religious/social organizations and any other but not caste                               | 1347 (3.2) | 1861(4.4)  |
| Belonging to both religious/social organizations and to caste associations and to other groups or not | 3080 (7.4) | 2356 (5.6) |

# TABLE 1: NUMBER OF HOUSEHOLDS (%) WHO SAID 'YES" TO THESE VARIABLES

| VARIABLES                                  | (1)        | (2)        | (3)        | (4)        |
|--|------------|------------|------------|------------|
| Local conflict                             | -0.0161*** | -0.0003    | -0.0282*** | 0.0030     |
|  | (0.002)    | (0.001)    | (0.002)    | (0.002)    |
| Local bonding                              | 0.0123***  | -0.0010    | 0.0213***  | -0.0035*   |
| 6  | (0.002)    | (0.001)    | (0.002)    | (0.002)    |
| Community conflict                         | 0.0224***  | 0.0026*    | 0.0449***  | 0.0137***  |
| 5  | (0.002)    | (0.001)    | (0.003)    | (0.002)    |
| Practice untouchability                    | NA         | 0.0021*    | NA         | -0.0012    |
| 5  |            | (0.001)    |            | (0.002)    |
| Recent Theft                               | 0.0093*    | 0.0057*    | 0.0102     | 0.0066     |
|  | (0.005)    | (0.003)    | (0.007)    | (0.005)    |
| Recent burglary                            | -0.0007    | 0.0010     | 0.0067     | -0.0007    |
|  | (0.010)    | (0.007)    | (0.014)    | (0.010)    |
| Recent attack                              | -0.0069    | 0.0014     | -0.0052    | 0.0091     |
|  | (0.007)    | (0.004)    | (0.009)    | (0.007)    |
| Girl harassment in the neighborhood        | -0.0082*** | -0.0018    | -0.0154*** | -0.0043**  |
| 6  | (0.002)    | (0.001)    | (0.003)    | (0.002)    |
| Social network in medical field            | -0.0029    | 0.0025*    | -0.0040    | 0.0090***  |
|  | (0.002)    | (0.001)    | (0.003)    | (0.002)    |
| Social network in school                   | -0.0033    | 0.0013     | -0.0003    | 0.0037*    |
|  | (0.002)    | (0.001)    | (0.003)    | (0.002)    |
| Social network in other govt jobs          | -0.0062*** | -0.0029**  | -0.0068**  | 0.0012     |
|  | (0.002)    | (0.001)    | (0.003)    | (0.002)    |
| Social network with politicians            | NA         | 0.0016     | NA         | 0.0112***  |
|  |            | (0.001)    |            | (0.003)    |
| Social network with police/military        | NA         | 0.0013     | NA         | 0.0028     |
|  |            | (0.001)    |            | (0.002)    |
| Net household income                       | 0.0000     | -0.0000    | 0.0000*    | 0.0000     |
|  | (0.000)    | (0.000)    | (0.000)    | (0.000)    |
| Years of education completed by head of hh | 0.0003     | 0.0001     | 0.0009***  | 0.0001     |
| 1 5  | (0.000)    | (0.000)    | (0.000)    | (0.000)    |
| Brahmin                                    | -0.0093*** | -0.0040*   | -0.0196*** | -0.0119*** |
|  | (0.003)    | (0.002)    | (0.004)    | (0.003)    |
| Forward/General (Except Brahmin)           | NA         | -0.0024    | NA         | -0.0117*** |
|  |            | (0.002)    |            | (0.002)    |
| OBC  | -0.0011    | -0.0029**  | -0.0084**  | -0.0068*** |
|  | (0.002)    | (0.001)    | (0.003)    | (0.002)    |
| Scheduled Tribe                            | 0.0028     | 0.0008     | 0.0024     | 0.0014     |
|  | (0.004)    | (0.002)    | (0.005)    | (0.004)    |
| Others                                     | -0.0003    | -0.0048    | -0.0131*** | -0.0138    |
|  | (0.002)    | (0.005)    | (0.003)    | (0.009)    |
| Rural                                      | 0.0042**   | -0.0037*** | 0.0113***  | 0.0019     |
|  | (0.002)    | (0.001)    | (0.003)    | (0.002)    |
| Constant                                   | 0.0070     | 0.0201***  | 0.0170**   | 0.0113*    |
|  | (0.005)    | (0.005)    | (0.007)    | (0.006)    |
| Observations                               | 40,054     | 41,376     | 40.055     | 41,376     |
| R-squared                                  | 0.051      | 0.012      | 0.090      | 0.080      |
| State Dummy                                | Yes        | Yes        | Yes        | Yes        |
| Robust standard errors in parentheses      |            |            |            |            |

#### TABLE 2: OLS ESTIMATES OF CASTE ASSOCIATIONS AND CASTE PLUS

Robust standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Column (1): Only Caste Associations - IHDS1

Column (2): Only Caste Associations - IHDS2

Column (3): Caste and Other Organizations except Religious/Social + Only Caste Association--IHDS1 Column (4): Caste and Other Organizations except Religious/Social + Only Caste Association -IHDS2

| VARIABLES  | (1)                   | (2)                   | (3)                  | (4)               |
|--|-----------------------|-----------------------|----------------------|-------------------|
| Local conflict                                       | -0.5514***            | -0.0304               | -0.5619***           | 0.1188            |
|  | (0.073)               | (0.125)               | (0.057)              | (0.084)           |
| Local bonding  | 0.4119***             | -0.0761               | 0.3757***            | -0.1478**         |
| 8  | (0.069)               | (0.112)               | (0.051)              | (0.070)           |
| Community conflict                                   | 0.6265***             | 0.2454*               | 0.7683***            | 0.5110***         |
|  | (0.069)               | (0.127)               | (0.053)              | (0.083)           |
| Practice untouchability                              | NA                    | 0.2276*               | NA                   | -0.0720           |
|  |                       | (0.131)               |                      | (0.094)           |
| Recent Theft   | 0.4159**              | 0.5033**              | 0.3064**             | 0.3300*           |
|  | (0.165)               | (0.241)               | (0.137)              | (0.184)           |
| Recent burglary                                      | -0.1162               | -0.0760               | 0.0156               | -0.1811           |
|  | (0.317)               | (0.476)               | (0.250)              | (0.345)           |
| Recent attack  | -0.1448               | 0.1099                | -0.0751              | 0.3986*           |
|  | (0.200)               | (0.360)               | (0.147)              | (0.230)           |
| Girl harassment in the neighborhood                  | -0.2428**             | -0.1572               | -0.2431***           | -0.1898**         |
|  | (0.124)               | (0.128)               | (0.089)              | (0.084)           |
| Social network in medical field                      | -0.0504               | 0.2485*               | -0.0537              | 0.3669***         |
|  | (0.083)               | (0.130)               | (0.061)              | (0.079)           |
| Social network in school                             | -0.1383*              | 0.1407                | -0.0019              | 0.1348*           |
|  | (0.083)               | (0.124)               | (0.060)              | (0.076)           |
| Social network in other govt jobs                    | -0.2047**             | -0.2813**             | -0.1107*             | 0.0253            |
| social network in other gove jobs                    | (0.082)               | (0.132)               | (0.060)              | (0.078)           |
| Social network with politicians                      | NA                    | 0.1504                | NA                   | 0.3478***         |
| Social network with pointelans                       | 1411                  | (0.133)               | 1 12 1               | (0.081)           |
| Social network with police/military                  | NA                    | 0.1160                | NA                   | 0.1557**          |
| social network with ponee, minury                    | 1.17.1                | (0.120)               | 142 1                | (0.075)           |
| Net household income                                 | 0.0000                | -0.0000               | 0.0000**             | 0.0000            |
| The nousehold meane                                  | (0.000)               | (0.000)               | (0.000)              | (0.000)           |
| Years of education completed by head of hh           | 0.0103                | 0.0055                | 0.0178***            | 0.0065            |
| rears of education completed by head of his          | (0.008)               | (0.011)               | (0.005)              | (0.007)           |
| Brahmin  | -0.6243***            | -0.3938               | -0.5769***           | -0.4991**         |
| Diamini  | (0.212)               | (0.283)               | (0.146)              | (0.198)           |
| Forward/General (Except Brahmin)                     | NA                    | -0.2150               | (0.140)<br>NA        | -0.4451***        |
| Forward/General (Except Brannin)                     | INA                   | (0.155)               | INA                  | (0.103)           |
| OBC  | -0.0123               | -0.2742**             | -0.1446**            | -0.2517***        |
| OBC  | (0.083)               | (0.130)               | (0.061)              | (0.079)           |
| Scheduled Tribe                                      | 0.0736                | 0.0818                | 0.0315               | 0.0562            |
| Scheduled The  | (0.118)               | (0.201)               | (0.090)              | (0.130)           |
| Others   | 0.0097                | -0.4272               | -0.2658***           | -0.4013*          |
| Oulers   |                       |                       |                      |                   |
| Rural  | (0.097)<br>0.1595**   | (0.425)<br>-0.3406*** | (0.072)<br>0.2273*** | (0.222)<br>0.0799 |
| Nulai  |                       |                       |                      |                   |
| Constant   | (0.073)<br>-4.7206*** | (0.108)               | (0.054)              | (0.070)           |
| Constant   |                       | -3.8726***            | -3.8388***           | -4.3289***        |
| Davida Dian  | (0.397)               | (0.338)               | (0.263)              | (0.305)           |
| Pseudo-R sq  | 0.1435                | 0.0821                | 0.1684               | 0.1780            |
| Observations   | 36,736                | 40,687                | 39,375               | 40,928            |
| State Dummy<br>Robust standard errors in parentheses | Yes                   | Yes                   | Yes                  | Yes               |

#### TABLE 3: LOGIT ESTIMATES OF CASTE ASSOCIATIONS AND CASTE PLUS

Robust standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Column (1): Only Caste Associations - IHDS1

Column (2): Only Caste Associations - IHDS2

Column (3): Caste and Other Organizations except Religious/Social + Only Caste Association - IHDS1 Column (4): Caste and Other Organizations except Religious/Social + Only Caste Association - IHDS2

| VARIABLES                                  | (1)        | (2)           | (3)        | (4)           |
|--|------------|---------------|------------|---------------|
| Local conflict                             | -0.0089*** | -0.0002       | -0.0149*** | 0.0017        |
|  | (0.001)    | (0.001)       | (0.002)    | (0.001)       |
| Local bonding                              | 0.0066***  | -0.0005       | 0.0099***  | -0.0021**     |
| c  | (0.001)    | (0.001)       | (0.001)    | (0.001)       |
| Community conflict                         | 0.0119***  | 0.0016*       | 0.0247***  | 0.0075***     |
|  | (0.002)    | (0.001)       | (0.002)    | (0.001)       |
| Practice untouchability                    | NA         | 0.0015        | NA         | -0.0010       |
|  |            | (0.001)       |            | (0.001)       |
| Recent Theft                               | 0.0083**   | 0.0040*       | 0.0095*    | 0.0054        |
|  | (0.004)    | (0.002)       | (0.005)    | (0.003)       |
| Recent burglary                            | -0.0018    | -0.0005       | 0.0004     | -0.0023       |
|  | (0.005)    | (0.003)       | (0.007)    | (0.004)       |
| Recent attack                              | -0.0022    | 0.0007        | -0.0020    | 0.0067        |
|  | (0.003)    | (0.002)       | (0.004)    | (0.005)       |
| Girl harassment in the neighborhood        | -0.0036**  | -0.0009       | -0.0060*** | -0.0025**     |
| e  | (0.002)    | (0.001)       | (0.002)    | (0.001)       |
| Social network in medical field            | -0.0008    | 0.0015*       | -0.0014    | 0.0050***     |
|  | (0.001)    | (0.001)       | (0.002)    | (0.001)       |
| Social network in school                   | -0.0022*   | 0.0009        | -0.0001    | 0.0019*       |
|  | (0.001)    | (0.001)       | (0.002)    | (0.001)       |
| Social network in other govt jobs          | -0.0033**  | -0.0017**     | -0.0029*   | 0.0004        |
| 5 5  | (0.001)    | (0.001)       | (0.002)    | (0.001)       |
| Social network with politicians            | NA         | 0.0010        | NA         | 0.0053***     |
| F  |            | (0.001)       |            | (0.001)       |
| Social network with police/military        | NA         | 0.0007        | NA         | 0.0022**      |
|  |            | (0.001)       | 1.1.1      | (0.001)       |
| Net household income                       | 0.0000     | -0.0000       | 0.0000**   | 0.0000        |
|  | (0.000)    | (0.000)       | (0.000)    | (0.000)       |
| Years of education completed by head of hh | 0.0002     | 0.0000        | 0.0005***  | 0.0001        |
| reals of education completed by head of mi | (0.000)    | (0.000)       | (0.000)    | (0.000)       |
| Brahmin                                    | -0.0079*** | -0.0021*      | -0.0124*** | -0.0057***    |
| Diminin                                    | (0.002)    | (0.001)       | (0.003)    | (0.002)       |
| Forward/General (Except Brahmin)           | NA         | -0.0013       | NA         | -0.0056***    |
| rorwara General (Except Brainini)          | 1111       | (0.001)       | 1 12 1     | (0.001)       |
| OBC  | -0.0002    | -0.0017**     | -0.0039**  | -0.0034***    |
| 020  | (0.001)    | (0.001)       | (0.002)    | (0.001)       |
| Scheduled Tribe                            | 0.0012     | 0.0005        | 0.0009     | 0.0008        |
|  | (0.0012)   | (0.001)       | (0.002)    | (0.002)       |
| Others                                     | 0.0002     | -0.0022       | -0.0068*** | -0.0047**     |
|  | (0.002)    | (0.002)       | (0.002)    | (0.002)       |
| Rural                                      | 0.0026**   | -0.0022***    | 0.0060***  | 0.0011        |
| ixuitui                                    | (0.001)    | (0.001)       | (0.001)    | (0.0011)      |
| Observations                               | 36,736     | 40,687        | 39,375     | 40,928        |
| State Dummy                                | Yes        | 40,087<br>Yes | Yes        | 40,928<br>Yes |
| Standard errors in parentheses             | 103        | 103           | 103        | 105           |

#### TABLE 4: MARGINAL EFFECTS OF LOGIT FOR CASTE ASSOCIATIONS AND CASTE PLUS

Standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Column (1): Only Caste Associations - IHDS1

Column (2): Only Caste Associations - IHDS2

Column (3): Caste and Other Organizations except Religious/Social + Only Caste Associations - IHDS1 Column (4): Caste and Other Organizations except Religious/Social + Only Caste Associations - IHDS2

| VARIABLES                                  | (1)        | (2)        | (3)        | (4)        |
|--|------------|------------|------------|------------|
| Local conflict                             | -0.0087*** | -0.0090*** | -0.0129*** | -0.0308*** |
|  | (0.002)    | (0.003)    | (0.003)    | (0.004)    |
| Local bonding                              | 0.0025     | -0.0088*** | 0.0035     | -0.0119*** |
| 8  | (0.002)    | (0.002)    | (0.003)    | (0.003)    |
| Community conflict                         | 0.0037*    | -0.0105*** | 0.0106***  | 0.0166***  |
| 5  | (0.002)    | (0.003)    | (0.003)    | (0.004)    |
| Practice untouchability                    | NA         | 0.0009     | NA         | 0.0058*    |
| 5  |            | (0.002)    |            | (0.003)    |
| Recent Theft                               | 0.0105*    | 0.0125**   | 0.0134*    | 0.0144*    |
|  | (0.006)    | (0.006)    | (0.008)    | (0.008)    |
| Recent burglary                            | -0.0139    | -0.0122    | -0.0013    | -0.0067    |
| 8 5  | (0.011)    | (0.010)    | (0.016)    | (0.014)    |
| Recent attack                              | 0.0019     | 0.0040     | 0.0225**   | -0.0119    |
|  | (0.007)    | (0.008)    | (0.010)    | (0.010)    |
| Girl harassment in the neighborhood        | 0.0032     | -0.0042*   | 0.0093**   | 0.0002     |
| e  | (0.003)    | (0.002)    | (0.004)    | (0.003)    |
| Social network in medical field            | 0.0095***  | 0.0097***  | 0.0159***  | 0.0169***  |
|  | (0.003)    | (0.002)    | (0.004)    | (0.003)    |
| Social network in school                   | 0.0049*    | 0.0054**   | 0.0112***  | 0.0099***  |
|  | (0.003)    | (0.002)    | (0.003)    | (0.003)    |
| Social network in other govt jobs          | 0.0019     | 0.0021     | 0.0076**   | 0.0197***  |
|  | (0.003)    | (0.003)    | (0.003)    | (0.004)    |
| Social network with politicians            | NA         | -0.0016    | NA         | 0.0210***  |
| F  |            | (0.003)    |            | (0.004)    |
| Social network with police/military        | NA         | -0.0032    | NA         | 0.0041     |
| I J  |            | (0.002)    |            | (0.003)    |
| Net household income                       | -0.0000**  | 0.0000     | 0.0000*    | 0.0000***  |
|  | (0.000)    | (0.000)    | (0.000)    | (0.000)    |
| Years of education completed by head of hh | 0.0001     | -0.0003    | 0.0014***  | 0.0004     |
| 1 5  | (0.000)    | (0.000)    | (0.000)    | (0.000)    |
| Brahmin                                    | 0.0164***  | 0.0253***  | 0.0232***  | 0.0288***  |
|  | (0.005)    | (0.006)    | (0.006)    | (0.007)    |
| Forward/General (Except Brahmin)           | NA         | 0.0070**   | NA         | 0.0126***  |
|  |            | (0.003)    |            | (0.004)    |
| OBC  | 0.0093***  | 0.0080***  | 0.0145***  | 0.0155***  |
|  | (0.002)    | (0.002)    | (0.003)    | (0.003)    |
| Scheduled Tribe                            | 0.0099**   | -0.0016    | 0.0134**   | -0.0044    |
|  | (0.004)    | (0.004)    | (0.005)    | (0.005)    |
| Others                                     | 0.0048*    | 0.0021     | 0.0112***  | 0.0151     |
|  | (0.003)    | (0.007)    | (0.003)    | (0.012)    |
| Rural                                      | -0.0035    | -0.0036*   | 0.0101***  | -0.0010    |
|  | (0.002)    | (0.002)    | (0.003)    | (0.003)    |
| Constant                                   | 0.1318***  | 0.1018***  | 0.1075***  | 0.0874***  |
|  | (0.014)    | (0.012)    | (0.015)    | (0.014)    |
| Observations                               | 40,058     | 41,377     | 40,058     | 41,377     |
| R-squared                                  | 0.068      | 0.043      | 0.133      | 0.126      |
| State Dummy                                | Yes        | Yes        | Yes        | Yes        |
| Robust standard errors in parentheses      |            |            |            |            |

#### TABLE 5: OLS ESTIMATES OF RELIGIOUS/SOCIAL ORGANIZATIONS AND R/S PLUS

Robust standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Column (1): Only Religious/Social Organizations - IHDS1

Column (2): Only Religious/Social Organizations - IHDS2

Column (3): Religious/Social and Other Organizations except Caste + Only Religious/Social Organizations - IHDS1

Column (4): Religious/Social and Other Organizations except Caste + Only Religious/Social Organizations - IHDS2

| VARIABLES                                  | (1)        | (2)        | (3)        | (4)        |
|--|------------|------------|------------|------------|
| Local conflict                             | -0.2796*** | -0.2362*** | -0.2660*** | -0.4784*** |
|  | (0.061)    | (0.080)    | (0.049)    | (0.063)    |
| Local bonding                              | 0.1030*    | -0.2416*** | 0.0824*    | -0.2016*** |
| C  | (0.058)    | (0.059)    | (0.046)    | (0.043)    |
| Community conflict                         | 0.1099*    | -0.3054*** | 0.2118***  | 0.2828***  |
|  | (0.066)    | (0.080)    | (0.053)    | (0.063)    |
| Practice untouchability                    | NA         | 0.0088     | NA         | 0.1202**   |
|  |            | (0.069)    |            | (0.053)    |
| Recent Theft                               | 0.2769**   | 0.2998**   | 0.2139*    | 0.2090**   |
|  | (0.136)    | (0.124)    | (0.113)    | (0.094)    |
| Recent burglary                            | -0.3997    | -0.2894    | -0.0881    | -0.1015    |
|  | (0.284)    | (0.261)    | (0.214)    | (0.186)    |
| Recent attack                              | 0.0863     | 0.1270     | 0.3088**   | -0.1524    |
|  | (0.170)    | (0.187)    | (0.126)    | (0.156)    |
| Girl harassment in the neighborhood        | 0.0994     | -0.1312*   | 0.1779***  | 0.0104     |
| C C  | (0.084)    | (0.071)    | (0.067)    | (0.050)    |
| Social network in medical field            | 0.2701***  | 0.2832***  | 0.2834***  | 0.3005***  |
|  | (0.066)    | (0.067)    | (0.052)    | (0.052)    |
| Social network in school                   | 0.1525**   | 0.1671**   | 0.2112***  | 0.2141***  |
|  | (0.068)    | (0.066)    | (0.053)    | (0.051)    |
| Social network in other govt jobs          | 0.0730     | 0.0876     | 0.1535***  | 0.2754***  |
|  | (0.065)    | (0.069)    | (0.051)    | (0.048)    |
| Social network with politicians            | NA         | -0.0565    | NA         | 0.2370***  |
| I  |            | (0.074)    |            | (0.050)    |
| Social network with police/military        | NA         | -0.0940    | NA         | 0.0458     |
| 1 5  |            | (0.066)    |            | (0.049)    |
| Net household income                       | -0.0000*   | Ò.000Ó     | 0.0000**   | 0.0000***  |
|  | (0.000)    | (0.000)    | (0.000)    | (0.000)    |
| Years of education completed by head of hh | 0.0032     | -0.0081    | 0.0241***  | 0.0076*    |
| 1 5  | (0.006)    | (0.006)    | (0.005)    | (0.004)    |
| Brahmin                                    | 0.5825***  | 0.6416***  | 0.5201***  | 0.4473***  |
|  | (0.133)    | (0.121)    | (0.104)    | (0.095)    |
| Forward/General (Except Brahmin)           | NA         | 0.2570***  | NA         | 0.2409***  |
|  |            | (0.084)    |            | (0.063)    |
| OBC  | 0.3686***  | 0.2796***  | 0.3382***  | 0.3065***  |
|  | (0.089)    | (0.079)    | (0.069)    | (0.059)    |
| Scheduled Tribe                            | 0.3871***  | 0.0166     | 0.3344***  | 0.0062     |
|  | (0.120)    | (0.119)    | (0.095)    | (0.089)    |
| Others                                     | 0.2678***  | 0.0142     | 0.3083***  | 0.2021     |
|  | (0.092)    | (0.290)    | (0.072)    | (0.186)    |
| Rural                                      | -0.1049*   | -0.1259**  | 0.1912***  | -0.0170    |
|  | (0.062)    | (0.059)    | (0.050)    | (0.044)    |
| Constant                                   | -2.2390*** | -2.3474*** | -2.6640*** | -2.6675*** |
|  | (0.160)    | (0.168)    | (0.143)    | (0.143)    |
| Pseudo-R sq                                | 0.1651     | 0.1126     | 0.1830     | 0.1631     |
| Observations                               | 39,776     | 41,235     | 39,880     | 41,319     |
|  | / · · *    | Yes        | /          | ·- ·       |

#### TABLE 6: LOGIT ESTIMATES OF RELIGIOUS/SOCIAL ORGANIZATIONS AND R/S PLUS

Robust standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Column (1): Only Religious/Social Organizations - IHDS1

Column (2): Only Religious/Social Organizations - IHDS2

Column (3): Religious/Social and Other Organizations except Caste + Only Religious/Social Organizations - IHDS1

Column (4): Religious/Social and Other Organizations except Caste + Only Religious/Social Organizations - IHDS2

| VARIABLES                                  | (1)        | (2)           | (3)        | (4)           |
|--|------------|---------------|------------|---------------|
| Local conflict                             | -0.0049*** | -0.0051***    | -0.0106*** | -0.0230***    |
|  | (0.001)    | (0.002)       | (0.002)    | (0.003)       |
| Local bonding                              | 0.0018*    | -0.0056***    | 0.0033*    | -0.0104***    |
| 6  | (0.001)    | (0.001)       | (0.002)    | (0.002)       |
| Community conflict                         | 0.0020     | -0.0065***    | 0.0089***  | 0.0144***     |
|  | (0.001)    | (0.002)       | (0.002)    | (0.003)       |
| Practice untouchability                    | NA         | 0.0002        | NA         | 0.0061**      |
|  |            | (0.002)       | 1.1.1      | (0.003)       |
| Recent Theft                               | 0.0055*    | 0.0075**      | 0.0094*    | 0.0113**      |
|  | (0.003)    | (0.004)       | (0.005)    | (0.006)       |
| Recent burglary                            | -0.0059*   | -0.0056       | -0.0034    | -0.0048       |
| Accent burghary                            | (0.003)    | (0.004)       | (0.008)    | (0.008)       |
| Recent attack                              | 0.0016     | 0.0030        | 0.0142**   | -0.0071       |
|  | (0.003)    | (0.005)       | (0.007)    | (0.007)       |
| Girl harassment in the neighborhood        | 0.0018     | -0.0028*      | 0.0076**   | 0.0005        |
| Shi harassinent in the neighborhood        | (0.0018    | (0.001)       | (0.003)    | (0.003)       |
| Social network in medical field            | 0.0050***  | 0.0061***     | 0.0120***  | 0.0147**      |
| Social network in medical field            |            |               |            |               |
|  | (0.001)    | (0.001)       | (0.002)    | (0.002)       |
| Social network in school                   | 0.0027**   | 0.0036**      | 0.0087***  | 0.0104***     |
| N TA CATA CTA                              | (0.001)    | (0.001)       | (0.002)    | (0.002)       |
| Social network in other govt jobs          | 0.0013     | 0.0020        | 0.0063***  | 0.0143***     |
|  | (0.001)    | (0.002)       | (0.002)    | (0.003)       |
| Social network with politicians            | NA         | -0.0012       | NA         | 0.0125***     |
|  |            | (0.002)       |            | (0.003)       |
| Social network with police/military        | NA         | -0.0020       | NA         | 0.0023        |
|  |            | (0.001)       |            | (0.002)       |
| Net household income                       | -0.0000*   | 0.0000        | 0.0000**   | 0.0000***     |
|  | (0.000)    | (0.000)       | (0.000)    | (0.000)       |
| Years of education completed by head of hh | 0.0001     | -0.0002       | 0.0010***  | 0.0004*       |
|  | (0.000)    | (0.000)       | (0.000)    | (0.000)       |
| Brahmin                                    | 0.0133***  | 0.0187***     | 0.0260***  | 0.0266***     |
|  | (0.004)    | (0.005)       | (0.006)    | (0.007)       |
| Forward/General (Except Brahmin)           | NA         | 0.0060***     | NA         | 0.0127***     |
|  |            | (0.002)       |            | (0.003)       |
| OBC  | 0.0068***  | 0.0063***     | 0.0141***  | 0.0156***     |
|  | (0.002)    | (0.002)       | (0.003)    | (0.003)       |
| Scheduled Tribe                            | 0.0080***  | 0.0004        | 0.0153***  | 0.0003        |
|  | (0.003)    | (0.003)       | (0.005)    | (0.004)       |
| Others                                     | 0.0050***  | 0.0003        | 0.0133***  | 0.0109        |
|  | (0.002)    | (0.006)       | (0.003)    | (0.011)       |
| Rural                                      | -0.0019*   | -0.0028**     | 0.0075***  | -0.0008       |
|  | (0.001)    | (0.001)       | (0.002)    | (0.002)       |
| Observations                               | 39,776     | 41,235        | 39,880     | 41,319        |
| State Dummy                                | Yes        | 41,235<br>Yes | Yes        | 41,519<br>Yes |
| Standard errors in parentheses             | 105        | 103           | 103        | 105           |

Standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Column (1): Only Religious/Social Organizations - IHDS1

Column (2): Only Religious/Socials Organizations - IHDS2

Column (3): Religious/Social and Other Organizations except Caste + Only Religious/Social Organizations - IHDS1

Column (4): Religious/Social and Other Organizations except Caste + Only Religious/Social Organizations - IHDS2

# References

Ahuja, A. (2019). *Mobilizing the Marginalized*. Oxford: OUP.

Ambedkar, B.R. (2002). In V.Rodrigues (ed.). *The essential writings of B.R.Ambedkar*. New Delhi: OUP.

Desai, S., C. Adams, and A.Dubey. (2010). "Segmented Schooling: Inequalities in primary education". In S. Thorat and K. Newman (eds.), *Blocked by caste: Economic Discrimination in modern India*, New Delhi, OUP, pp.230-252.

Desai, S. and A. Dubey. (2011). "Caste in the 21<sup>st</sup> Century India: Competing Narratives", *Economic and Political Weekly*, Vol. 46, pp. 40-49.

Desai, S., A. Dubey, B. Joshi, M. Sen, A. Shariff, and R. D. Vanneman. (2010). *Human Development in India: Challenges for a Society in Transition*. Chapter 11, pp. 171-181. New Delhi: OUP.

Deshpande, A. (2013). Affirmative Action in India, New Delhi: OUP.

Iversen, V., A. Kalwij, A. Verschoor, and A. Dubey. (2014). "Caste dominance and economic performance in rural India". *Economic Development and Cultural Change*, Vol. 62, pp.423-457.

Jodha, S. S. (2012). Caste. New Delhi: OUP.

Mohanty, M. (2006). "Social Inequality, Labour Market Dynamics and Reservation", *Economic and Political Weekly*, Vol.41, pp.3777-3789.

Mosse, D. (2018). "Caste and Development: Contemporary Perspectives on a structure of discrimination and advantage", *World Development*, Vol. 110, pp. 422-436.

Pai, S. (2013). Dalit Assertion. New Delhi: OUP.

Palshikar, S. (2004). "Revisiting State Level Politics', *Economic and Political Weekly*, Vol. 39, pp. 1477-1480.

Prakash, S. (1997). "Reservation Policy for Other Backward Classes: Problem and Perspectives", In V.A. Pai Pandekar (ed.), *The Politics of Backwardness: Reservation Policy in India*, New Delhi: Konark, pp. 29-87.

Rudolph, L. and S. Rudolph. (1960). "The Political Role of India's Caste Associations", *Pacific Affairs*, Vol. 33, pp. 5-22.

Sharma, S. (2015). "Caste-based crimes and economic status: Evidence from India", *Journal of Comparative Economics*, Vol.43, pp.204-226.

Thorat, S. and O. Joshi. (2015). "The continuing practice of untouchability in India: Patterns and mitigating influences". Working Paper No. 2015-2. IHDS, NCAER, and University of Maryland.

Waghmore, S. (2019). "Community, not Humanity: Caste Associations and Hindu Cospolitanism in Contemporary Mumbai", *South Asia: Journal of South Asian Studies*, Vol. 42, pp. 375-393.

Yadhav, Y. (1999). "Electoral Politics in the Time of Change: India's Third Electoral System, 1989-99", *Economic and Political Weekly*, Vol. 34, pp. 2393-2399.