

# Horizontal Inequality in Urban India: A Human Development Perspective

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ABSTRACT: In the current global scenario, India stands at the 130<sup>th</sup> position in the human development ranking for 2018, wherein the major challenge highlighted is that 26% of this human development remains lost due to inequality (UNDP 2018). Even though the notion of 'vertical' inequality remains a pertinent issue across the globe, the issue of inequality across social groups in India, arising from a historical discrimination and segregation, continues to remain a deep-seated worry for India's overall development. The level of well-being of the individuals remains directly linked to the groups' standard of living. The statements mentioned are also supported by evidence on social group inequalities, wherein the India Exclusion Report 2014-15 states that 59% of the Dalits are employed as labourers in Rural India, 46.5% of the Adivasis are falling in the same category, as against the overall rural population in which only 40% of the individuals are labourers. It is also important to note that, urban inequality remains the major driver for rising inequality in India, thereby requiring an in-depth understanding of inequality (India Inequality Report 2018). This paper focuses on understanding horizontal inequalities across the major social groups in India, Scheduled Castes (SCs), Scheduled Tribes (STs), Other Backward Classes (OBCs) and the unreserved/general category in the urban spaces for India. The evidence for horizontal inequalities is scattered, and there remains a lack of quantification and consolidation of evidence for inequalities across social groups. This paper aims to measure horizontal inequalities with a human development perspective, for urban spaces in India utilizing the India Human Development Survey (IHDS) (Round 2), and therefore create actionable evidence for matters of gaps and linkages that remain in the capability's achievement for all the social groups in India.

KEYWORDS: Horizontal Inequality, social groups, human development, capabilities approach, urban

#### Introduction

As per the Report of the Backward Classes Commission, 1980, 'There is equality only among equals. To equate un-equals is to perpetuate inequality'. The narrative of equality across the world speaks of everyone deserving to be treated equally, but the very idea that all the individuals who have been deprived in their endowments to begin with, gives an unfair start to many social groups. As per 'Human Development in Unequal Spaces', the debate on inequality has focused only on the idea of income inequality, wherein the issues of social and cultural aspects continue to remain ignored. It is vital to understand that the issues of deprivation and distribution go beyond the income aspect and are spread across other non-income issues as well (Prabhu and Iyer 2019). There is a tendency for social-cultural differences to create deprivations, which pushes the expansion of horizontal inequalities, culminating into more losses of capabilities of the individuals. Especially in India, the historical segregation based on caste and tribes has created scope for uneven human development.

According to the Shastras i.e. the valid text in India, there are various categories created under which individuals fall, they are the Brahmins who cultivate knowledge, the Kshatriyas who bear the arms, the Vaishya's who trade and lastly, the Shudra's who serve to the other three. In contemporary Indian society, the shudras are known as Dalits which means 'broken men' in Marathi. There have been evidences of horizontal inequalities in private ownership, where ST's owned 4.6% of the private enterprises, but the higher castes owned 44.6% of the same in 2005 in rural India (Sadhana and Thorat 2009). The inequality starts from the economic assets to food access as well, where the Dalits are unable to access the benefits of PDS and Mid-day Meal Scheme (Thorat and Lee 2005). The economic status and the education paradigm reflects the state of SC's and ST's as being abysmal, where 59% of the Dalits were employed as labourers, and 44% of the Adivasis were self-employed, for the year 2009-10 (India Exclusion Report 2014-15). With the changing conditions of some of the Dalit Households, there is a wave of Sanskritization among them with respect to their dietary habits, dressing and other social interactions (Guru 1984). However, a composite picture reflecting the state of SC's and ST's in India has not been presented, leaving fragmented results for analysis which does not have enough clarity on how to

proceed further with the problem of horizontal inequalities There is 'a denial of access to equal opportunities imposed by certain groups of society upon others' (Thorat and Newman 2007).

The concern here arises that there is plethora of fragmented analysis of the condition of the SC's and the ST's in India, yet no concrete quantification of horizontal inequality has been done, especially with reference to urban India. A human development approach has been taken to understand the problem of horizontal inequalities to identify the basic norms across which comparisons can be made. This paper explains the framework of horizontal inequalities that has been adopted and moves to the existing evidence of social inequalities that prevail in India. The paper then talks about the methodology adopted in order to show evidence of multiple layers of deprivations and inequalities that exist within the urban spaces of India, and how the historical segregation has its roots seated so deeply that the human development outcomes of social groups remain unequal. The paper creates evidence for action and explains the silos in which inequality prevails and creates losses for human development.

### Horizontal Inequality

The presence of vast inter-generational and intra-generational inequalities, hinder possibilities of equal opportunities for individuals in society. 'HIs are inequalities among groups of people who share a common identity. Such inequalities have economic, social, political and cultural status dimensions. Horizontal inequality differs from vertical inequality (VI) in that the latter is a measure of inequality among individuals or households, not groups- furthermore, measurement of VI is often confined to income or consumption'. The pervasive presence of any form of inequality: (vertical/horizontal) causes inequality traps, wherein, inequalities in one form of capability would accentuate inequalities in other parameters (Stewart 2005).

Inequalities can exist due to multiple reasons, as per Frances Stewart in the paper 'The Dynamics of Horizontal Inequality', wherein if a group starts off with a lower surplus, it prevents them of having that initial head start to save and accumulate resources, both physical and human. The initial starting position prevents them from catching up, creating a cumulative effect in the absence of affirmative policies. The inability to earn enough, leads to lower accumulation and therefore lesser education, poor access to education, keeping the groups in a vicious cycle, unless state intervenes for their betterment. The other prominent reason is the presence of social capital, wherein a larger social connect happens within their own religious/cultural group rather than with others, limiting their opportunities if they reside in an area with a different majority of religion/culture/language. The third reason is that the same there exists complementing capabilities, wherein education capabilities have a tendency to have higher returns if there is financial capability. Similarly, evidence from Peru has also shown that for indigenous groups, the return for education have been the lowest. The fourth source of such inequalities is the inherent discrimination in the society, via informal, formal and/or government organizations, wherein formal discrimination is not allowed, yet informal forms of discrimination continue to persist. Lastly, political inequalities also have an effect on other economic/non-economic opportunities available for the politically subordinate group (Stewart 2011).

Group-based inequalities have many sources, wherein it comes from race, gender, age, ethnicity or religion. Besides the mentioned sources, inequalities also arise from the spatiality, wherein location of individuals in a particular location also determines their socio-economic status. Existence of a fully autonomous individual is a myth, which implies that individuals are affected by institutions and norms. This dependence implies that one cannot simply rely on the individuals, therefore the state needs to step in since individuals on their own will not be able to have a human development, capability enhancing approach to actions. Complete autonomy of the state is a viable option, but it is not feasible for a democratic nation. To ensure the elimination of horizontal inequalities, there is a need to evaluate the kind of impact these policies will have, wherein a direct policy or targeted policies are designed for special groups, whereas indirect policies are more universal in nature and have an impact on the population in its entirety. Educational quotas or reservations in jobs for specific groups are examples of direct / affirmative policies, wherein there is an increase salience of the fact that certain groups are targeted specifically, because of their identity, but they can be very effective. The condition for effective direct policy is also that the identities for the group remain unambiguous and uncontroversial. In the

presence of strong grievances that lead to friction in the society, it is better to resort to affirmative policies which also reflect an act taken for the section of the society, taken as a symbol that resolves the friction to some extent (Stewart 2013).

### Policy and Horizontal Inequalities in India

Affirmative policy has been at the heart of public policy which is directed towards the socially disadvantaged in India. The policies have largely focused on increasing the access to education and employment in a developing country like India. These policies were earlier restricted to the scheduled castes and the Scheduled tribes, but now they have been expanded to include the other backward classes. The process of incorporation of the excluded communities has been constitutionalized in India, and dates to the 1950s, wherein the Article 46 pronounces the following:

"The State shall promote with special care the educational and economic interests of the weaker sections of the people, and, in particular, of the scheduled castes (SC's) and the scheduled tribes (ST's) and shall protect them from social injustice and all forms of exploitation."

The paper 'Was the Mandal Commission right?', states that even though there have been clear identification and definitions of the Scheduled Castes and Scheduled Tribes, however, there were some grey areas regarding the definition of 'depressed classes' or the 'socially or educationally classes of citizens', which also spills into the clear demarcation and definition of the 'Other backward classes' (Gang, Sen, Yun 2011). The Mandal Commission was established in 1979 under the Janata Party government, under the Prime Minister ship of Morarji Desai, to identify 'the socially or educationally backward'. In 1980, the commission report reaffirmed the affirmative action practice wherein the lower castes, which included the SCs, STs and OBCs, have been given a portion of the government jobs and slots in public universities, and altered the quota and increased it to 49.5 % as opposed to 27% previously.

#### **Data & Methodology**

In terms of determining the right measure of inequality, the paper 'Monitoring and Measuring Horizontal Inequalities', states that for vertical inequality there are given three desirable properties, independence of the distribution from the mean, Pigou-Dalton principle of transfers, and transfer sensitivity. However, the third principle remains questionable for the measurement of horizontal inequality, wherein two other proprieties need to be considered; firstly, the measure should be descriptive more than evaluative so that the inequalities can be observed, secondly, and the measure should quantify the group inequality rather than understanding the contribution of that group to social welfare or to the society, as a whole (Stewart 2010).

The most suitable measure, therefore, becomes the ratio of one group to another, but the measure remains limited to two groups only. However, there remains a need for synthetic measure which incorporates all group inequalities in one reflective variable reflecting HI. Possible measure for HI are:, Group Gini, and the Group Theil. The GGINI is also a suitable measure for calculating horizontal inequalities, however, the groups are calculated as per the economic category (interest/ income), but HI requires calculation via religion/ethnicity/ social groups. GTheil is sensitive to the lower end of the distribution and is decomposable to capture the within and across group inequalities. The measures of horizontal inequality utilized in the paper are GGINI and Theil's T Index, the formulae for which are stated below:

GGINI = 
$$\frac{1}{2\bar{y}} \sum_{r}^{\mathcal{R}} \sum_{s}^{\mathcal{S}} p_{r} p_{s} |\bar{y}_{r} - \bar{y}_{s}|$$

$$\text{GTHEIL} = \sum_{r}^{\mathcal{R}} p \frac{\bar{y}_{r}}{\bar{y}} log(\frac{\bar{y}_{r}}{\bar{y}})$$

$$\tag{2}$$

Where,  $\bar{y}_r = \frac{1}{n_r} \sum_{i}^{n_r} y_{ir}$  is group r mean value,  $\mathcal{R}$  is group r's population size,  $p_r$  is the group r's population share;  $y_{ir}$  is the quantity of the variable of interest (e.g.: income or years of education) of

the *i*th member of the group r, and y is the grand total value of the variable y in the sample (Stewart 2010). STATA commands have been used for calculation of Theil T Index (Burnette, Zhang 2019) as well as for Group Gini Index (Dollar, Glewwe, Agrawal 2004) to arrive at the evidence stated in the paper. In order to fully comprehend the within as well as between group inequalities, a graphical representation of Lorenz curves is taken for each social group. The Lorenz curves are created in STATA and estimating the concentration of outcomes of human development (Jann 2016).

To capture the horizontal inequalities that exist across a socio-cultural milieu can be captured across multiple types of indicators that reflect the state of human development in urban India. To capture the scenario of horizontal inequalities in India, the data source used is India Human Development Survey (IHDS) 2012-13 Round 2 for Individuals. With the context of horizontal inequalities in urban India, this paper will only look at the inequalities across social groups i.e. scheduled caste, scheduled tribe, other backward classes and the unreserved category (Unreserved = Brahmin + Forward/General, except Brahmin).

Here, the unreserved category refers to all the other social groups that do not fall under the social groups that have been excluded in the processes of human development. The Scheduled Castes and the Scheduled Tribes are defined as per the Article 341 and 342 of the Constitution and have been at the receiving end of social exclusion. The constitution obligates the government under section 340(1), 340(2) and 16(4) to promote the welfare of the Other Backward Classes (OBCs) (Ramaiah 1992). Given that the constitutional coverage for promotion of welfare remains directed towards only SCs, STs and OBCs, the other sub-categories can all be clubbed into 'Others' as defined by Census India for all social groups besides SCs and STs. (Census (2011) considers 'Others' to be all the social group categories besides Scheduled Castes and Scheduled Tribes. This paper refers to 'Others' as a narrower category and refers to all the social group categories and sub-categories that do not fall under the SCs, STs and OBCs). The paper looks specifically at the human development reflectors for the social groups. For the purpose of the analysis of horizontal inequality across the mentioned social groups, an indicator selection process has been carried. Given the methodology of horizontal inequality that has been mentioned above, only the variables which are continuous in nature have been selected across the human development perspective.

Under the human development perspective, it is important to highlight and analyse a representative indicator for each pillar of human development i.e. income, education and health, taken with reference from the human development framework (UNDP 2018). The indicators chosen are stated below:

Human Development	Indicator
Dimension	
Economic	Consumption Expenditure per capita (INR) Annual Earnings for the individual per annum (INR)*
Education	Number of years of education completed (for the age group above 25 years)
Health	Total Expenditure on short term morbidities over the Household Consumption Expenditure (INR)**  Total Expenditure on major morbidities over the Household Consumption Expenditure (INR)***

Table 1. Human Development Indicators

<sup>\*</sup>The indicator has only been taken for individuals who are 15 years of age or more. The source is IHDS 2.

<sup>\*\*</sup>The total expenditure on the short-term morbidities has been calculated by adding all the key points of expenditure on short term morbidities (costs associated with outpatient and in-patient costs in visiting doctor, medicine costs and travel costs). The source of the indicators is IHDS 2.

<sup>\*\*\*</sup>The total expenditure on the major morbidities has been calculated by adding all the key points of expenditure on major morbidities (costs associated with outpatient and in-patient costs in visiting doctor, medicine costs and travel costs). The source of the indicators is IHDS 2.

Rationale for indicators: The indicators have been selected keeping in mind the human development dimensions, and ensuring only continuous indicators are chosen, given the limitations of the horizontal inequality measures. The household consumption expenditure per capita is reflective of the economic status and their standard of living. The annual individual earnings are important to take note of to understand the economic opportunities of the individuals above the age of 15 years, that is also reflective of how individuals are able to convert their capabilities into functionings. For the purpose of capturing the extent of human development, the completed years of education has been taken as an indicator, reflective of the human development opportunities, and how individuals from all social groups are able to access educational opportunities and utilize the potential to convert their endowments into human development. The third factor taken into consideration is the aspect of health and well-being, wherein the representative variables used are the expenditures on short term as well as major morbidities. The rationale being that there is limited access to health care, as stated before, and there continues to remain inequality in terms of well-being across social groups. A representative variable for health is an adjusted variable i.e.the ratio or proportion of expenditure done by the individual over the household expenditure. The adjustment has been done, since the expenditure in itself will not be representative of the state of human development, as the expenditure will be a function of the household income. However, once a proportion of health expenditure over the total expenditure is taken, it is reflective of the value attached/monetary investment done to health and well-being, by different social groups.

In order to see the statistical strength of the indicators, a principal component analysis was done to understand how the indicators are reflective of the state of human development. A Principal Component Analysis is carried out to identify structure within a set of variables, and to reduce the number of variables that are reflective of the theoretical framework taken into consideration. The focus is to extract the minimum number of factors that are representative of the maximum proportion of the variable's total variance. The principal components result when carried out for all the 5 indicators show that the eigenvalues are approximately 1 or greater than 1 for the first three components. Therefore, as per the Kaiser Criterion, the analysis can utilize the first three components, wherein they explain 76% of the variation in the data. The scree plot of the principal component analysis is given below:

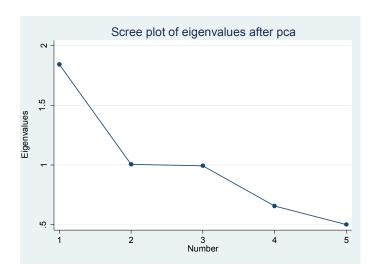


Figure 1. Postestimation Scree plot for Principal Component Analysis

The scree plot also shows a slight kink/elbow after component 3, indicating that the first 3 components must be considered. The eigenvectors of the first component when taken into consideration shows that the principal component coefficients for the first three indicators (consumption expenditure, education and earnings) are the highest. The PCA coefficients or the eigenvectors explain the correlation between the component and the indicator, therefore the first three components remain more representative of the state of human development. The Kaiser-Meyer-Olkin measure of sampling adequacy (overall) is 0.6502, which remains mediocre but acceptable.

#### **Evidence of Horizontal Inequality**

To be able to capture the basic state of human development, an overall economic picture is to be taken across the social groups. The state of monthly household expenditure per capita for all the social groups is reflected in the graph given below. The nuances of human development as represented in the economic dimension of urban India are showing visible horizontal inequalities across the historically segmented social groups. Here, it is evident that the mean of monthly household consumption per capita for the unreserved category is INR 38806. It is evident that the economic status or the state of economic well-being as one of the barometers for human development is higher for unreserved categories, wherein the urban narrative for Scheduled castes remains the worst with reference to the monthly household consumption expenditure per capita. The distribution shows that the mean household expenditure per capita for all the historically segregated social groups remains below the overall average, reflected by the red line.

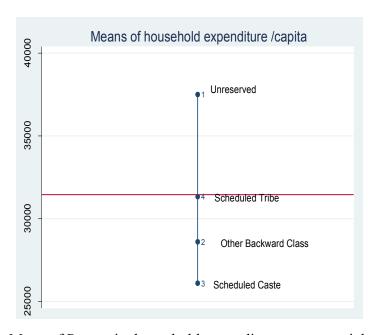


Figure 2. Mean of Per capita household expenditure across social groups

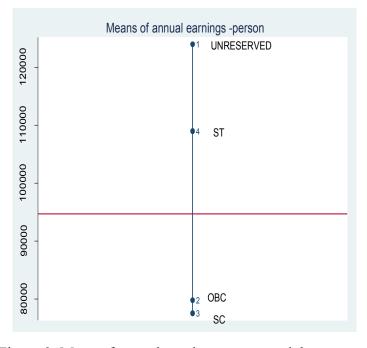


Figure 3. Mean of annual earnings across social groups

To understand the economic status from a point of view of the availing of economic opportunities by different social groups, a similar pattern is noted as in the state of economic well-being. The state of horizontal inequalities remains evident in the deprivation of conversion of the existing opportunities into a state of well-being, in terms of generating income at the individual level, wherein the order of mean annual earnings is – unreserved, STs, OBCs, SCs. The state of economic well-being of the individuals across social groups remains alarming, as the social groups mean annual earnings of the Unreserved category remains 1.5 times that of SCs and OBCs. This is reflective of the dire state of economic deprivation as well as an inability to convert their current state of opportunities and capabilities into functionings. The economic dimension of human development shows severe differences in the earnings of the individuals across social groups, which necessitate affirmative action. This also highlights that the intensity of inequality for social groups that are historically discriminated has not changed even till date, wherein the SC's and OBCs in the urban spaces across India continue to remain excluded from economic well-being, and thus differ in their state of human development. Even though the current reservation policy in India obligates 15%, 7.5% and 27% reservation in direct employment, it is important to note that there still continues to be severe horizontal inequalities across social groups, wherein the issues of within group inequalities remain unnoticed.

The education dimension is also indicative of similar results, wherein the unreserved category remains far above the overall average, and stands at about 10 years of completed education, as opposed to SCs only having complete 6.7 years of schooling on an average. The terrifying reality of certain social groups unable to complete as many years of education as the unreserved category, stated as the benchmark category, and even unable to earn as high an income as them shows that there are inherent gaps and flaws in the way human development opportunities are made available to all sections of the society. The urban picture for education as a dimension of human development, shows intense inequality, wherein on an average the historically discriminated do not have the same state of well-being or educational opportunities as the unreserved. The current educational outcomes of the SCs, OBCs and STs, collectively remain below the average across individuals, and largely below unreserved category. There is a need to understand that the inequalities in the outcomes of education and employment showcase that the inherent structural inequalities based on history have not been removed. All the individuals across social groups deserve to be exposed to the opportunity to attain education and to earn decent income, however, this narrative speaks of the deprivations of the SCs, OBCs and STs, who continue to remain relatively deprived (Bourguignon 1999), further feeding into the inequalities in the urban spaces. India also has policies for education, wherein Right To Education section 12(1)(C) obligates reservation for economically weaker and socially disadvantaged weaker sections of the society, especially in high income private schools. The higher education arena in India also provides spaces for reservations, yet the tangible outcomes of such affirmative action continue to remain missing. There is a gap of about 3 years in the educational outcomes between unreserved and SCs which highlights issues that are entrenched far too deep in history, and that the economic deprivations of certain social groups also prevents them from converting such opportunities into outcomes of human development.

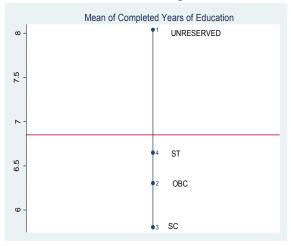


Figure 4. Mean of completed years of education across social groups

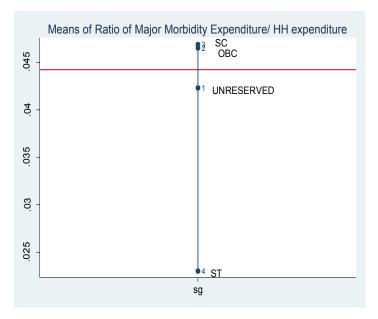


Figure 5. Mean of Ratio of Major Morbidity expenditure to household consumption expenditure per capita

In terms of the health aspect, the paper has attempted to look at the human development investment done to cater to short term morbidities and major morbidities. The indicators have looked at the ratio of costs incurred to the overall monthly household expenditure for the individuals. The results for ratio of expenditure on short term morbidity expenditure remains highest for OBCs, and SCs, followed by STs and then unreserved. This is assuming that the same type of morbidities affects all social groups. The interesting evidence is that the expenditure ratios and even the overall expenditure on short term morbidities, remains highest for OBCs and SCs, wherein these groups remain the most deprived in their earnings and their overall consumption expenditure per capita. A different story follows in major morbidities, wherein the overall absolute expenditure is the maximum by unreserved, followed by OBCs, SCs and finally STs. However, once the ratio of expenditure on major morbidities is considered, it is noted that the SCs and OBCs are spending far more in proportion to the unreserved individuals.

The health outlook is taken in terms of expenditure, adjusted to their per capita household expenditure to see the proportion of resources invested in attaining a decent level of health and well-being for better human development. Even though certain social groups remain deprived in their economic aspirations, the level of expenditure ratios highlight that there is an inherent health inequality across social groups, wherein the SCs and OBCs are not only struggling to maintain their level of human development, but have been spending disproportionately more than the unreserved category to attain that level of well-being. Even though the occurrence of short-term morbidities (fever, cough diarrhoea) remains very similar across the social groups (this has been verified using IHDS 2 data), for each short-term morbidity, the ratio of expenditure highlights that SCs and OBCs are pushing their economic boundations to resolve their health concerns and be at par with the benchmark of the unreserved category. There is a need for affirmative action in the health scenario, necessitating targeted health policies for socially excluded groups in urban India. Even though India has recently created one of the biggest healthcare schemes in the world, there continues to remain a need for targeted affirmative action that caters to the fact that certain social groups have never had the equal starting point. So even though there are government policies for welfare across all social groups, the inherent horizontal inequality of opportunity and access needs policy change and a direct policy rather than a sole reliance on universal policy.

The urban spaces are a model for creating more equal opportunities, but the evidence proves otherwise for India, wherein social segregation has seeped into the economic and educational outcomes. There is a need to understand that the urban setting must be watched closely and worked

on with a sensitivity attached to the social groups. The historical discrimination does not end with the urbanization process here, instead the urban spaces have showcased an evident gap between the different social groups, highlighting horizontal inequalities. In order to further create stronger evidence on the existence of horizontal inequalities, the paper attempts to look at the two key measures of group GINI and Theil T Index. The analysis of the inequality measure is carried out, with reference to within group and between group inequalities, with a specific mention on the within the group inequality via Lorenz curves for each social group.

# Inequality - Theil

The value of Theil's T index can vary from 0 to infinity. The human development dimensions and indicators taken into consideration showcase existing horizontal inequalities across social groups, as represented in the table below. The Theil index shows that the major horizontal inequalities arise in the annual individual earnings as well as in the ratio of health expenditure (both short term and major morbidity). In all the dimensions across the human development space, it is noteworthy to see that even though the Theil T Index is ranging from 0.29 to 3.3, there is an evident higher inequality between these groups in the urban spaces as compared to between the group inequality. In terms of per capita household expenditure, about 4% of the inequality is explained via between groups, wherein 96% of the inequality exists within the groups. Similarly, the between group inequality is limited to 4-5% for annual earnings as well as completed years of education, wherein 95% of the inequality in the given dimensions of human development arises from within the group inequalities.

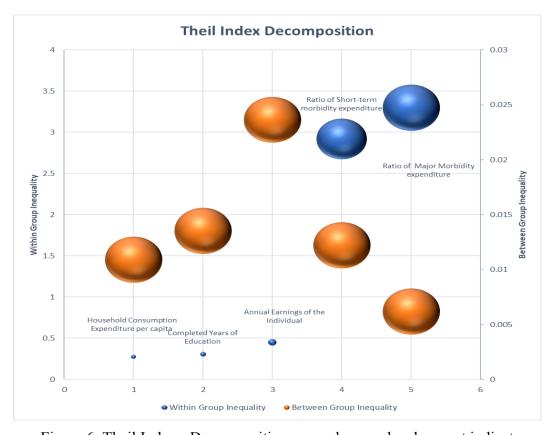


Figure 6. Theil Index - Decomposition across human development indicators

The graph above showcases that the Theil T index remains high for health expenditure ratios but remains adequately high for other dimensions of human development. The evidence reflects the domination of within group inequality over the between group inequality, wherein the 'within group inequality' has the width reflected by the Theil index overall. The Theil index decomposition has also highlighted that for per capita household expenditure, the scheduled tribes form 3.5 % of the population, and have the share of expenditure as 3.5% as well. However, for the unreserved who form 36% of the population, they have 43% of the share of expenditure. Similarly, for annual

earnings (taken for the urban individuals who are 15 years or above), even though the unreserved category forms 31% of the population, their share of annual earnings is 42%, wherein OBCs form 40% of the population, but are only able to attain 34% of the annual earnings. 22.8% of the population belongs to the SCs, wherein they are only earning 18.6% of the total earnings. A gross horizontal inequality remains visible in terms of their population share and the share of the indicator which has been received by every social group.

# Inequality – GGINI

The following table looks at the decomposition and the Gini coefficient of all indicators in the human development spectrum. The results of GGINI are similar to the ones reflected by the Theil T Index.

Indicator	GINI	Within	Between Group	Residual
		Group	Inequality	
		Inequality		
Household Consumption		0.12991	0.07802	0.17635
Expenditure per capita	0.38428			
Completed Years of	0.38454	0.12749	0.08716	0.16989
Education				
Annual Earnings of the	0.51827	0.16078	0.10985	0.24765
Individual				
Total Short-term morbidity	0.95113	0.31960	0.08307	0.54846
expenditure				
Total Major Morbidity	0.96760	0.33434	0.03898	0.59429
expenditure				

Table 2. Group Gini Decomposition across human development indicators

Both the measure, GGINI, and Theil T Index showcase that the highest inequalities exist in the domain of health expenditure ratios, followed by the annual earnings of the individuals, and lastly in the household consumption expenditure and completed years of education.

# Inequality – Lorenz Curve – Within Group Inequality

To understand the within group inequalities, the paper has also highlighted the group-wise Lorenz curves, largely of the economic and education dimensions. The following two graphs indicate that there is an evident inequality between groups as well as within each group. The Lorenz curves here are showcased for 4 social groups (Unreserved 2- OBC 3 – SC 4 – ST are the meanings of the social group Lorenz curves here).

Across the economic dimension, the household consumption expenditure per capita, all social groups tend more towards the line of equality, except for Scheduled Tribes, implying that an existence of relatively more within-group inequality in STs in urban India. In terms of annual earnings as well, there is a huge gap between the Lorenz curve of unreserved and STs from the line of equality, implying that there is yet another layer of inequality that prevails in social groups in India. It is not only limited to the horizontal inequalities that remain pervasive between historically discriminated social groups, but it is the engrained within group inequality in economic dimensions that creates losses for human development. The educational outcomes of completed years of education also showcase inequality within SCs and STs, which is pictorially also clear to see. The evidence from Lorenz curves for all the social groups also indicate that the inherent horizontal inequality also comes attached with layers, wherein the between group inequality is a concern, but adding to it there is within group inequalities across the historically segregated social groups in India, which necessitates affirmative action on a much deeper level.

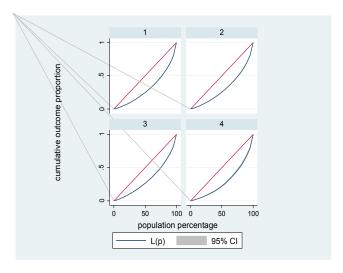


Figure 7. Lorenz Curve for per capita household consumption expenditure across social groups

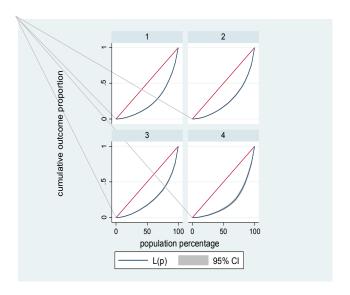


Figure 8. Lorenz Curve for Annual Earnings across social groups

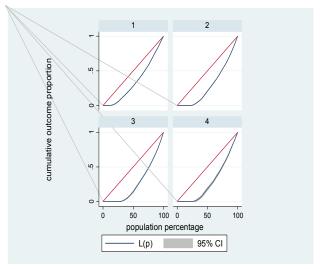


Figure 9. Lorenz Curve for completed years of education across social groups

#### Conclusion

This paper has made an attempt to understand and quantify the extent of horizontal inequalities that exist across the urban spaces in India. Even though there is evidence of inequities and unequal access to human development opportunities, a consolidated evidence of horizontal inequalities across SCs, STs, OBCs and unreserved category remained missing. The paper has identified indicators across dimensions of human development and has laid out a framework for horizontal inequality measurement across continuous variables.

The evidence of horizontal inequality in urban India shows the presence of not only between group inequalities, but highlights that there exist multiple layers of relative deprivations, horizontal inequalities as well as inequalities that prevail within historically discriminated social groups in urban India. Even though there are policies designed to cater to the concerns of SCs, STs and OBCs, depth of the historical social exclusion has prevented the social groups to be on the same level as the unreserved category. The human development outcomes showcase a need for targeted affirmative action in the space of employment opportunities, their access, enhanced educational opportunities and access to health and well-being. The socio-cultural milieu in urban India has prevented an equal starting point for all social groups, thereby requiring special attention to be given to the historically discriminated social groups, in order to bring every individual, across all groups, at the same state of human development. There is a need for direct policy action that uproots the historical discrimination and eliminates horizontal inequality, allowing for an even human development across all sections of the society.

The extension to this paper would be assimilating more indicators and creating a more representative take on horizontal inequalities across human development indicators in urban India.

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