INDIA DISCRIMINATION REPORT 2022

SUMMARY EDITION

ऑक्सफैम इंडिया
OXFAM
India

A movement to end discrimination

CONTENTS

CONTENTS

CONTENTS

CONTRIBUTING AUTHORS

Introduction
Amitabh Kundu

Methodology and Database
Amitabh Kundu

Discrimination in Labour Markets
Amitabh Kundu & Khalid Khan

Impact of the Pandemic on Social Groups and Minority Communities
Amitabh Kundu & Varghese K.

Caste Discrimination in Agricultural Credit Markets
S. Madheswaran and Karthick V.

Differential Access to Inpatient Care
S. Madheswaran and Anushree K N

Conclusion: Summary of Findings and Policy Implications
Amitabh Kundu

LIST OF ABBREVIATIONS

AY	Ayushman Bharat
CI	Concentration Index
CL	Casual Labour
FC	Forward Caste
FPQ	First Pandemic Quarter
GoI	Government of India
MSF	Marginal and Small Farmers
NRHM	National Rural Health Mission
NSSO	National Sample Survey Office
PFHI	Publicly Funded Health Insurance
PLFS	Periodic Labour Force Survey
PPQ	Pre-Pandemic Quarter
PSL	Priority Sector Lending
RE	Regular/Salaried Employee
R/SE	Regular and Self-Employment
RSBY	Rashtriya Swasth Bima Yojana
SC	Scheduled Castes
SE	Self-Employed
SES	Socio Economic Status
ST	Scheduled Tribes
UHC	Universal Health Coverage
YoY	Year-on-Year Basis

LIST OF TABLES

LIST OF TABLES

LIST OF FIGURES

ACKNOWLEDGEMENTS

FOREWORD

The preamble of the Indian Constitution promises justice, liberty and equality for every citizen. This gets further substantiated in Article 14 of the Constitution of India. The Preamble and Article 14 reflect the constitutional morality and the core ethos of the Indian Republic of a discrimination-free country as envisioned by Babasaheb Ambedkar. India's fundamental rights as enshrined in the constitution are justiciable and are so because their role is to ensure equal opportunities for all citizens of the country in the social, political and economic spheres of life.

Regrettably, the constitution's vision of an equal India is far from reality. Ambedkar had said, "Indians today are governed by two different ideologies. Their political ideal set in the preamble of the Constitution affirms a life of liberty, equality and fraternity. Their social ideal embodied in their religion denies them." Marginalised communities are still visibly afflicted by discrimination as a result of their socio-religious and gender identities. Globally, the discussion around discrimination is based on racial inequities. Closer home, in India, discrimination is based on the gender, religious and caste location of individuals.

The fall-out of discrimination is multi-faceted — not just social and moral but also economic — involving significant costs to society. Unfortunately, there have been very limited attempts made to measure the extent of discrimination and its impact on the lives of the marginalized in India and even fewer attempts to quantify discrimination through rigorous research methods and credible data.

Given that Oxfam India is a movement against all forms of discrimination and one that aims to contribute to the building of a discrimination-free India, it supported the production of a series of scholarly research papers on the measurement of discrimination. The scope of the report is wide and can be used to engage with multiple stakeholders. The report brings insights into discrimination faced by Scheduled Tribes/Castes, Muslims and women in employment, wages, agricultural credit market and inpatient healthcare. It also has a dedicated chapter on the impact of the pandemic on social groups and minority communities.

This abridged version of the report concisely presents the results of the anthology. I offer my gratitude to Prof. Amitabh Kundu, Prof. Panchanan Das, Prof. S. Madheswaran, Khalid Khan and K Varghese for authoring the report. I am also thankful to the Research and Knowledge Management team of Oxfam India for preparing this abridged version of the report.

Through this report, I am looking forward to the active engagement and dialogue among government and political parties, policymakers and civil societies, and all other stakeholders that are in pursuit of a just society and to collectively move towards the building of a discrimination-free India.

Amitabh Behar
CEO, Oxfam India

EXECUTIVE SUMMARY

The overall conclusion emerging from the *India Discrimination Report 2022* is that while there has been a decline in discrimination within the labour market in India over a decadal timeframe, this is characterised by high gender inequity so much so that the probability of a woman being employed in decent jobs has no bearing on her endowments. In simple terms, this means that the employment status of women does not depend on their educational qualifications. This leads to the alarming result emerging from a mathematical model that gender discrimination is almost total in the country.

The India Discrimination Report 2022 focuses on differential access to labour market (absorption and wages), factor market (access to credit) and endowment market (access to hospitalisation) for different socio-religious and gender groups. The analysis attempts to capture the extent of identity-based discrimination explaining the gaps in access to employment and in wages, credit and health facilities in the context of formation of human capital across different castes, tribal and religious identities and gender. The analysis of the labour market covers different types of jobs viz. regular, casual and self-employment and disparities in earnings following a standard framework of discrimination studies. It then extends to cover the factor market discrimination against the SC and ST population, focusing on access to credit provided to the agriculture sector through commercial and cooperative banks. Furthermore, it considers discrimination in human capital formation or building capabilities by considering access to hospitalisation facilities as a proxy indicator of general health.

Discrimination against the SC/ST population in the labour market is notably high and has gone up marginally as their level of education and other measurable endowments have improved over time due to government policies of reservation and some success in asset creation among them. Caste-based discrimination emerges as highly significant while religion based discrimination is low only because Muslims get absorbed in low-value family-based occupations wherein they face less competition. In particular, Muslims record low discrimination in access to employment and wages. One, however, must not hasten to celebrate this result. This simply shows that Muslims have certain professional skills in low-earning non-agricultural activities, acquired through family and peer group, in repair/maintenance, carpentry, construction etc.

Gender-based discrimination is found to be extremely high in all categories of employment in both rural and urban areas. The high degree of gender discrimination, emerging from the report, is best explained by the existence of a large segment of well-qualified women not 'wanting' to join the labour market because of household responsibilities or "social status" within the community (wherein norms constrain their active participation in the labour force) or in caste hierarchy. It is thus patriarchy that makes a large segment of women, who have the same or even higher qualifications as compared to men, stay outside employment, and this has shown no improvement over time.

The differential outcome of the first quarter of the pandemic focusing on three vulnerable communities, SC/ST, Muslims and women in the categories of regular workers, the self-employed and casual workers in urban and rural areas suggests that the overall impact of the pandemic has been severe in urban areas due to a national lockdown directly affecting urban business. Taking the expanded definition of unemployment (including those who reported as employed by weekly status but did not work due to certain exigencies during the reference week), the sharpest rise is noted in percentage terms for Muslims in rural areas. The increase in unemployment in the case of urban areas is alarming for all socio-religious groups, although the differences across categories are relatively less.

Women recorded a massive increase in the unemployment rate during the pandemic, similar to that of men in urban areas. In rural areas, however, this

was less than that of men. This is because a majority of rural women are engaged in agriculture and household-based activities, wherein disruption due to lockdown was relatively less severe, except for some fall in casual employment. It is important to note that many persons in regular, casual or self-employed categories, despite not doing any work during the reference week due to certain exigency, report some income, because of the nature of the contract or employer-employee relationship. One, however, notices that women workers are at a great disadvantage in this regard, both in rural and urban areas. While only 9 per cent among the self-employed men report not having any income for not doing work during the reference week in the pandemic, the figure is as high as 70 per cent for women as per PLFS 2019-20. The study shows that the lockdown disrupted employment and wages for Muslims in rural areas while SC/ST groups bore the brunt of losses in urban areas. Government machinery needs to address their specific problems, particularly in periods of such exigency.

Gender discrimination in India is structural which results in great disparities between the earnings of men and women under 'normal circumstances'. This can be inferred from the data for 2004-05, 2018-19 and 2019-20. The earning gaps are large, both in rural and urban areas for casual workers ranging between 50 per cent and 70 per cent. The range is low for regular workers with the earnings of men exceeding those of women by 20 and 60 per cent. In case of the self-employed, the disparity is much higher, with men earning 4 to 5 times that of women.

When one examines access to agricultural credit from the discrimination lens, it is noted that the percentage of agricultural households borrowing funds from formal sources in the SC/ST community has increased during the post-reform period. However, the average amount of credit received by them is about half of what the forward caste community receives. The results confirm that caste factors play an important role in determining access to credit along with economic factors. The gap in access to credit across the social groups cannot be attributed to gaps in their endowments alone. Discrimination exists in both commercial and cooperative banks. The extent of discrimination is higher in commercial banks than in cooperatives for both SC and ST.

The study in the anthology related to the healthcare system in the country shows that over the three years- 2004, 2014 and 2017 - considered in the study, the magnitude of discrimination in the utilization of inpatient care has gone down. This, in general, works out to be much less in the southern states perhaps due to a higher provision of financial risk protection through state-led programs leading to better access to hospital care among the marginalised. Uttar Pradesh records the highest inequality in the utilisation of hospital facilities and despite a decline in it over time, it remains at the top. Consumption expenditure-related differences in inpatient care are observed between SC/ST and FC. The poorer the caste group, the greater the differences in inpatient care utilisation across expenditure categories.

In terms of policy interventions, the study recommends the following:

- Actively enforce legislations for the protection of and right to equal wages and work.

- Work to actively incentivize the participation of women in the workforce including enhancements in pay, upskilling, job reservations, easy return-to-work options, particularly after maternity and the option to work from home, wherever possible.

- Work to actively challenge and change societal and caste/religion based norms around women's participation in the labour market.

- Strengthening of civil societies engaged in ensuring a more equitable distribution of household work and childcare duties between women and men.

- Implement "living wages" as opposed to minimum wages particularly for all informal workers and formalize contractual, temporary and casual labour as much as possible.

- Extend priority lending and credit access to all farmers regardless of social groups and penalize biased lending.

- Facilitate accessibility to hospitalisation for socially marginalised groups through incentives; extending insurance coverage and reservation of beds in private hospitals.

- Ensure parity in creation of endowments and capabilities, particularly linked to education and health, across socio-religious groups, focusing on the poor and vulnerable populations.

- Ensure that caste-based representativeness and affirmative action for SC/ST continue with focused and accurate welfare targeting.

I. INTRODUCTION

I. INTRODUCTION

OXFAM INDIA HAS HISTORICALLY FOCUSED ON WORKING TOWARDS A JUST SOCIETY WHERE THE LIVES OF ALL CITIZENS ARE EQUAL AS ENSHRINED IN THE CONSTITUTION OF INDIA. HOWEVER, EDUCATIONAL AND WEALTH INEQUALITY OR ACCESS TO MEANS OF EMPLOYMENT ALONE DO NOT ADDRESS THE FRACTURES IN INDIAN SOCIETY THAT PERPETUATE INEQUALITIES ACROSS AGE, GENDER, CASTES AND RELIGIONS. UNDERSTOOD THIS WAY, INEQUALITY IS NEITHER A NECESSARY NOR A SUFFICIENT CONDITION FOR DISCRIMINATION.

For instance, countries in Scandinavia have high income inequality without much discrimination. Conversely, a few countries in Eastern Europe record no earning gap between men and women but perceptible gender discrimination resulting in women receiving wages equal to that of men exists, despite the former being better endowed in terms of capabilities. To better quantify the explicit effect of discrimination on social groups in India, Oxfam India supported the production of a series of scholarly research papers on the measurement of discrimination. This abridged version presents the results of these papers.

The series adopts an economist's *weltanschauung* (worldview) to understand discrimination. It looks at two of the main factors of production – labour and capital - and examines discrimination in access to labour opportunities and wages and to agricultural credit within these. In addition, the series examines differential access of social sub-groups (castes and religions) to inpatient (hospital) healthcare as an example of discrimination in a hypothetical endowment market or endowment economy. While countries are widely known to promote endowments that condition the growth and inequalities within economies, what is less researched in the literature is the fact that individual endowments do not adequately explain the inequalities. Identities of the individuals often restrict the ability of people to do work, earn fairly, acquire assets and capabilities and live better lives. The series also includes a paper that looks at discrimination in the payment of wages/earnings of labour across various marginalised social groups in 'normal circumstances' and during the pandemic. This paper is of importance because, like endowments and nature of employment, welfare and protection of labour through state agencies, inter community relationships, social prejudices etc. play an important role in determining the wellbeing of people belonging to different socio-religious groups in periods of crisis.

Discrimination is commonly defined as a situation where individuals with identical capabilities are treated differently in the labour and capital market and have differential abilities to augment their capabilities or endowments. Discrimination is that part of disparity that exists because of considerations that are unjustified as per the prevailing law of the land, a country's generally acceptable value system or acceptable norms of functioning in society. Non-discrimination in the labour market, factor market[1] and institutions creating endowments or capabilities, therefore, does not mean equal representation of all socio-religious groups in every occupation or each level or equal earning for all; not even equal per capita credit or equal medical expenditure by the state. It implies not having access or not receiving remunerations or benefits commensurate with capabilities or necessities, owing to societal prejudices or socio-religious identities of individuals.

In this series of research papers, discrimination has been defined as that part of disparity or inequality that can be attributed to the differences in gender, caste and religion that is considered unacceptable given the prevailing ethical, moral and legal system in our country.

It is unfortunate that large segments of the population in India even after seventy-five years of independence face unequal treatment in the labour market, not because of their personal endowments alone but owing to the socio-religious subgroups to which they belong, varying across states, rural and urban areas and types of employment. The factors responsible for discrimination influence, besides the labour market, access of individuals to factors of production[2] and endowments[3]. As such it becomes important to precisely study and obtain a clear measure of discrimination being faced by vulnerable populations in India in all the three markets. Doing so will go a long way towards creating targeted welfare measures to protect the most vulnerable sections of Indian society.
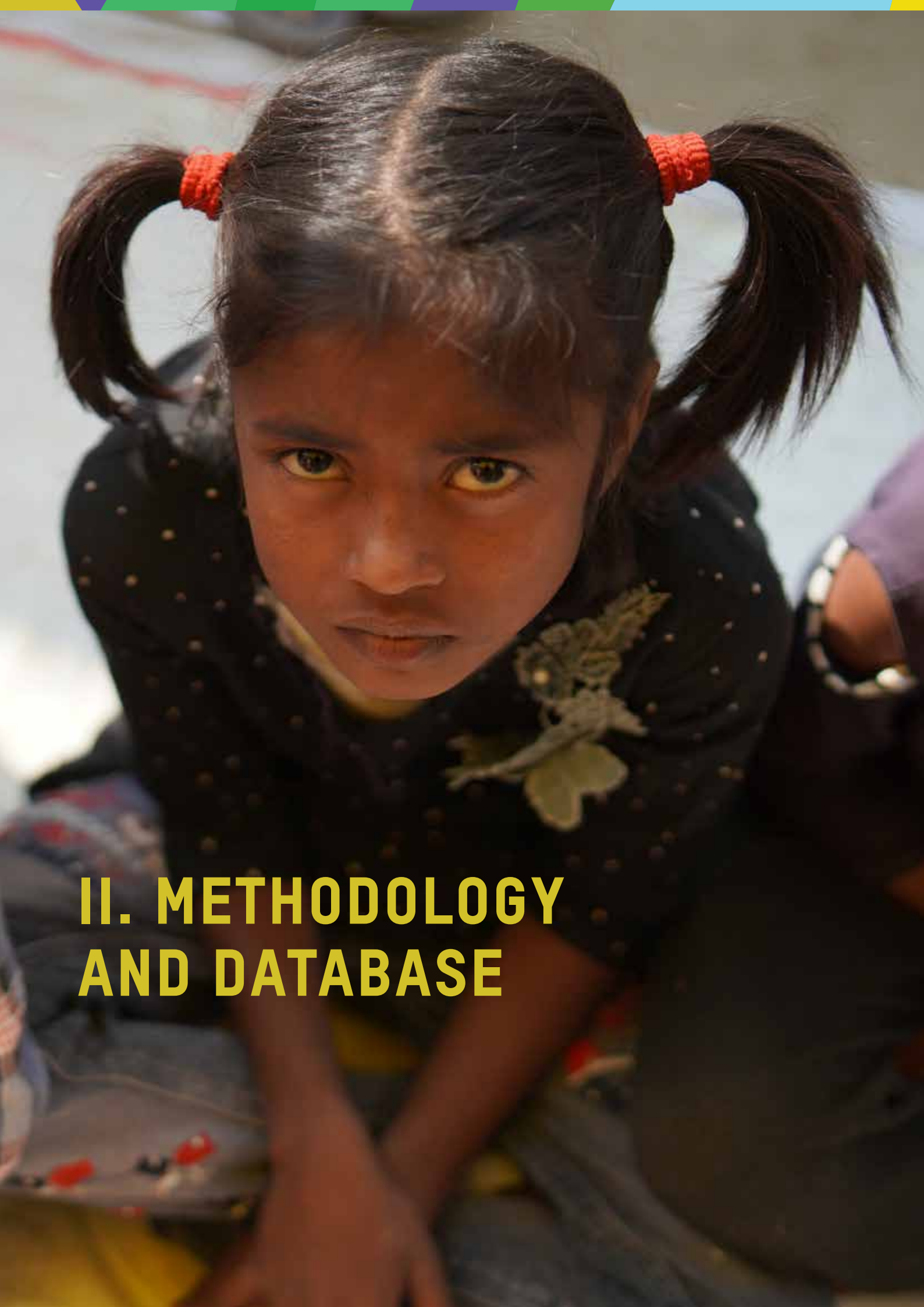
II. METHODOLOGY AND DATABASE

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In this section we explain the overall framework of discrimination analysis as undertaken in this volume. In addition, we also describe any specific methodological peculiarities undertaken by each paper to analyse the pattern of discrimination at national and state level.

Studies on measuring the levels of and changes in discrimination are scarce in India. While there has been plenty of discussion on discriminatory behaviour or practices and even voices of protest (via social movements), little of this has made it into academic discourse and literature as formal scholarship. Recently there has been an increase in interest in the subject and a few research studies have emerged from the concern in the framework of the Indian constitution that has always envisioned equal and non-discriminatory rights in the labour market, access to amenities and other socio-economic spaces. Despite the interest, most studies have borrowed methodology from the Western academia and as such have focussed far too much on discrimination in the labour market as opposed to discrimination in the social spheres that are of greater concern in Asian context.

In this study, we attempt to build indices of discrimination at the All-India level, disaggregated by the types of employment, factors behind discrimination and between rural and urban areas. "Taste-based" discrimination is rooted in the study of preferences (Becker, 1957) that are intrinsic to the individual and are not sought to be justified through rational calculation of materialistic benefits. This is different from "statistical discrimination" (Phelps, 1972; Arrow, 1973), where the differential attitude of employers or provider of services to different groups is the reasoned (termed as "rational" in economics) response to presumed information (not necessarily based on evidence in a statistical sense but can be prejudicial) about the behaviour of the members of certain group, or to benefits and loss occurring to the employer or service provider in the financial or societal context, in the short or long run.

This type of discrimination exists due to perceptions or prejudices based on factual or imagined information or lack of it about the discriminated group. It is not uncommon for people to justify their 'taste-based discrimination' as 'statistical' for securing societal acceptability. Given this, it is important to determine the level of discrimination disaggregated by the underlying factors for effective policy intervention and creation of a non-discriminatory administrative and social environment.

Three alternate empirical approaches have been employed for studying inequality and thereafter discrimination. These are commonly known as the "decomposition method[4]" and are described as such in this series:-

1. Decomposition of an inequality measure and the identification of components with factors of discrimination,
2. Decomposition method based on 'the extent of explanation' provided by factors of exclusion,
3. Decomposition method based on 'the extent of explanation' provided by endowments, the rest being attributed to discrimination.

Non-parametric methods have often been used to disaggregate standard measures of inequality such as Gini Coefficient and Theil's index by the underlying factors responsible for the inequality. Theil's index has been more commonly used due to its attractive additively separable property, implying that contribution of all the factors can be added up to obtain the sum total of inequality. Alternately, decomposition of the total inequality (i.e. gap between the average achievement scores between two groups) has been attempted through parametric methods, such as regression analysis, to directly identify the components, attributable to the different socio-religious factors of discrimination. Furthermore, the same parametric method can be used to determine the part of inequality explained by endowments, the residual being considered as discrimination.

Using non parametric method, the total number of observations can be placed in a number of groups by various combination of endowments such as a person with ten years of experience at work having an educational level above graduation and belonging to a household where the education level of the head is below primary level. Earning inequality now, for example, can be decomposed into 'within group' and 'between group' components that are mutually exclusive. One can then consider 'between group' inequality as acceptable as that can be explained in terms of differences in the capabilities or endowments. However, within group inequality cannot be explained in terms of endowments since that would be the same for all members in the group. This can, therefore, be taken as a measure of discrimination. Theil's index, thus, provides a measure of discrimination by forming groups, based on physical and monetary assets, educational levels, experience etc. Since within a group, all endowments are similar, it would be fair to consider differences within a group as being due to social prejudices.

An alternate method of computing the magnitude of discrimination would be through a parametric approach wherein the factors of discrimination such as caste, religion or gender are included as predictors in explaining the variation in outcome - the probability of securing employment or in earnings, as mentioned above. This can be attempted quite simply in a single equation regression model. This approach seeks to explain outcome variations by the variations in socio-religious factors that are generally considered to be exogenously given to the individual. Since the sources of discrimination are explanatory variables, the residuals or unexplained variations would be due to differences in endowments. This methodology could be used to estimate discrimination in employment and earning for regular/salaried workers, self-employed and casual workers separately for rural and urban areas. The explained variation in the outcome, the part of the total variation explained by the circumstance variables like caste, religion and gender, would be a measure of discrimination.

A third approach would be a decomposition model based on explanation through endowments, widely known as Blinder and Oaxaca model[5]. This model incorporates attributes pertaining to physical assets, education, skills, experience and other qualifications of the individuals under consideration as independent variables for explaining inequality in access to various kinds of jobs and earnings for population in different social groups. It is important to note that the conventional Blinder-Oaxaca decomposition method uses wage as the outcome variable. Thus these cannot be used to capture the discrimination if the outcome variable is binary such as whether the person is employed or not.

For these situations, a simulation method of performing a nonlinear decomposition that uses estimates from a logit, probit or other nonlinear model was first developed by Fairlie (1999). The econometric analyses in the third chapter is based on both the Fairlie and Blinder-Oaxaca methods that decompose the differences in access to jobs and earnings taking two groups of population at a time. The Blinder-Oaxaca method and a Concentration Index are used to measure access to agricultural credit and inpatient health care in the fifth and sixth chapter, respectively.

The anthology is meant to present a focussed collection of papers reflecting the measurement of discrimination in a few focussed areas and does not make any claims about comprehensiveness in coverage. A large part of the analysis in this anthology is focussed on labour market discrimination in the context of differential access to different types of jobs and disparities in wages or earnings, following the standard framework of discrimination studies. The papers presented cover factor market discrimination against SC and ST populations and access to credit provided to the agriculture sector through commercial and cooperative banks. In addition, they cover discrimination in endowment creation or the building capabilities by considering access to hospitalisation facilities as a proxy indicator of general health.

The focus for the labour market discrimination section is SC, ST, Muslims and women population. Similarly, the coverage of endowments is limited to a few items such as education, age (as a proxy of years of employment), assets, landholding and parental education in order

to identify discrimination. In terms of access to credit the anthology looks at agricultural credit. Endowment creation, in this anthology is studied in terms of health specifically inpatient hospitalisation facilities. Given the limited coverage of themes we think there is enormous potential to probe and study the issue of discrimination beyond what has been covered here.

We begin with a discussion of the broader framework of discrimination related studies in India, we then look at the level of discrimination faced by different socio-religious groups to access different categories of employment, both in rural and urban areas. Thereafter we look at the variation in earnings across socio-religious groups. We also attempt to analyse the impact of Covid 19 (as a special case of exacerbated discrimination) on the three marginalised groups namely SC/ST, Muslims and Women in both rural and urban areas. The fourth section of this report, thus, analyses the changes in the rates of employment and earnings during the first three months of the pandemic in 2020 in comparison with the preceding three months and the corresponding quarter in the previous year, for different categories of workers and explain these in terms of social prejudices in the labour market.

The next paper identifies the determinants of access to agricultvural credit by employing a non-linear probit regression model.[6] The gross credit differential (between social groups) is decomposed into endowment linked differences and a component of "discrimination" i.e. a portion of the statistical difference between social groups that cannot be attributed to an allied difference in endowments possessed by the groups. This paper uses unit-level data from the 70th round of NSSO's debt and investment Survey. The last paper in the series assesses discrimination in the provisioning of healthcare facilities across social groups, bringing out variations across age group, income and educational categories and states, using three rounds of NSS data.

III. DISCRIMINATION IN LABOUR MARKETS

III. DISCRIMINATION IN LABOUR MARKETS

Analysis of PLFS[7] and NSSO[8] data reveals that there has been generally a decline in discrimination in access to employment the past one and a half decade. Despite this it is characterised by a high degree of gender discrimination, indicating that being in the labour force or outside it does not have much bearing on a woman's endowments. This is partly because women candidates are not selected by the employers due to their strong gender-linked prejudices. Furthermore, many employers hold that despite being fair and open, they are constrained to employ men over women due to job requirements of late hours of work, travel to remote areas, working conditions etc., which in their opinion makes women physically and socially vulnerable. Moreover, a sizeable segment of qualified women are not willing to join the labour market because of "family responsibilities" or the need to conform to social norms, status within the caste hierarchy and community, family traditions etc., that are often at odds with participation in the labour force.

Muslims, on the other hand, record a low and declining level of discrimination in access to employment corresponding to their level of education or skill. In urban areas, they often work through agencies wherein the religious identities are not revealed. Also, in professions such as carpentry, electric work, construction etc., where human-to-human physical contact is minimal, manifestation of discrimination tends to be low. The other reason for the low discrimination is their deficit in workforce participation; their low level of earnings are commensurate with their low levels of endowment like educational degree, formal years of schooling etc. If the available database in India allowed incorporation of the endowments acquired through family profession and informal training, religion-based discrimination would have emerged sharply. Furthermore, since there has been slower improvement in the educational development of the Muslim community vis-a-vis others, there has been no increasing trend of discrimination in the country. This is to note that high deficit in human capital results in low discrimination as per the model, since then the endowment gap would explain much of the gap in achievements.

The discrimination against the SC/ST population was very high at the turn of the century but has gone down marginally over time. As their level of education and other measurable endowments have improved over time, due to government policies of reservation and some success in asset creation among them, employment deficit has declined from 2004-05 to 2019-20. The reduction in discrimination across caste and religious groups demonstrate an improvement in the role of human capital and experience in bridging the gap in access to quality employment. This, unfortunately, is not happening for women.

TABLE 1 - DISCRIMINATION IN EMPLOYMENT, IN PERCENTAGES

SOCIAL GROUPS	2019-20	2018-19	2004-05
SC/ST	39.3	34.6	69.1
MUSLIMS	3.7	21.9	31.5
GENDER	100.0	99.5	100.0

Source: Based on PLFS, 2018-19 & 2019-20 and NSS, 2004-05

EMPLOYMENT DISCRIMINATION IN URBAN AREAS

India's PLFS survey classifies workers into three broad categories: (i) self-employed (SE), (ii) regular/ salaried employee (RE) and (iii) casual labour (CL). It is assumed that Regular and Self-Employment (R/SE) are preferred by the youth than casual work, given that the former provides higher earnings, greater safety and respectability.

CASTE-BASED DISCRIMINATION IN REGULAR/SALARIED EMPLOYMENT AND SELF-EMPLOYMENT

As per the PLFS, during the year 2019-20, 37.5 per cent of the SC/ST population were engaged in R/SE jobs in contrast to 41.3 per per cent of the non SC/ST population. This caste-based inequality in access to the regular/salaried jobs is not very high. The difference can largely be attributed to the differences in their endowments such as years of education and the age of workers, the latter being considered a proxy measure of experience.

Several studies have shown the existence of caste-based discrimination in hiring. Jodhka and Newman (2007) showed significant discrimination in hiring practices in India, based on qualitative data. They argue that stereotypes among managers work as hindrances against the low caste candidates entering the organised private sector. Similarly, Thorat et al. (2007) based on field data, found that low-caste applicants, who are equally or even better qualified than high-caste applicants are less likely to pass through the hiring screens in the modern, formal sector. Madheswaran and Attewell (2007) showed that discrimination against SC/ST workers is very high in both the private and public sectors in the regular urban labour market in India. The analysis in the present chapter shows that as high as 98 per cent of the difference between SC/ST and others is explained by their levels of endowments (that is differential education, experience or family background) while only 2 per cent can be attributed to identity-based discrimination. It is somewhat satisfying to note that caste-based discrimination has reduced from 2004-05 to 2019-20.

RELIGION-BASED DISCRIMINATION IN REGULAR/SALARIED EMPLOYMENT

In order to estimate religion-based discrimination, our analysis assumes that access to only regular wage employment is the preferred option for Muslims. Consequently, unlike the case of caste-based discrimination, self employment has not been included here. This assumption is based on sociological insights regarding the Muslim population in urban India that self-employment is usually the result of being forced into family businesses, despite low earnings, for lack of better options.[9] PLFS data for the year 2019-20 demonstrates that 15.6 per cent of the 15 years plus population among Muslims are engaged in regular jobs whereas the corresponding figure among the non-Muslims is 23.3 per cent, with the difference of 7.8 percentage points. Decomposition analysis shows that 68 per cent of the gap is explained by discrimination while differences in endowment explain only 32 per cent in 2019-20. We also find that discrimination accounted for only 59 per cent of the total employment gap in 2004-05 which has increased significantly by 9 percentage points. The figures, however, are not comparable with those of caste-based discrimination above since the categories of employment considered as desirable are different in the two cases.
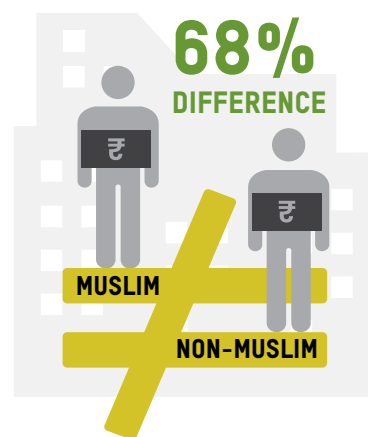
In 2019-20, 68% of the difference between Muslim and non-Muslim engaged as salaried workers in urban areas was due to discrimination.

GENDER-BASED DISCRIMINATION IN REGULAR/SALARIED AND SELF-EMPLOYMENT

PLFS data for the year 2019-20 shows that men have significant advantage in the labour market in the context of benefitting from their endowments in comparison to that of women. At the aggregative level, 60 per cent of men are engaged in R/SE categories whereas this is merely 19 per cent for women. Endowment factors improve the probability of men getting decent employment much more than women. Furthermore, although the probability of getting employment at higher ages is higher for both the genders, the improvement is greater for men. This implies that there is a disproportionately higher chance of more educated men at higher ages getting jobs than women in similar positions.

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Gender-based discrimination is the reason for 98% of the employment gap between salaried males and females in urban areas.

98% EMPLOYMENT GAP

MALE FEMALE
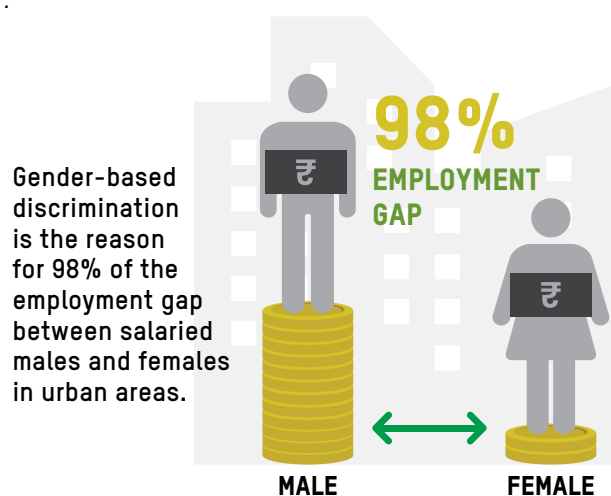
The decomposition analysis reveals that discrimination against women is so high that there is hardly any difference in this across religion- or caste-based sub-groups; i.e., all women regardless of their socio-economic location are highly discriminated. It is noted that endowment factors explain only 2 per cent of the probability of being employed for women. In other words, societal discrimination explains 98 per cent of the total gender gap in employment at all the three points of time (2004-05, 2018-19, 2019-20) for the two age groups considered in the study. The decomposition analysis, thus, reveals that the level of discrimination in accessing regular and self-employment is extremely high in urban India and has remained unchanged over the period of one and a half decade under consideration.

EMPLOYMENT DISCRIMINATION IN RURAL AREAS

CASTE-BASED DISCRIMINATION IN REGULAR/SALARIED AND SELF-EMPLOYMENT

As per the PLFS data for the year 2019-20, the share of workers in R/SE for SC/ST in rural India is 35.2 per cent while that of the non-SC/ST is 41.5 per cent, resulting in a differential of 6.3 per cent. In urban areas, endowment factors contribute significantly to this differential. Our analysis also shows that human capital (capabilities) and experience are the major factors contributing to the differential access to R/SE. Happily, the component that is attributable to discrimination has come down from 80 per cent to 59 per cent from 2004-05 to 2019-20 with a slight increase from 51 per cent to 59 per cent during 2018-19 and 2019-20. Clearly, caste-based discrimination in access to employment is more in rural areas and continues to be high, despite some decline over time.

RELIGION-BASED DISCRIMINATION IN REGULAR/SALARIED EMPLOYMENT

As per PLFS data for the year 2019-20, the gap in participation in RE between Muslims and non-Muslims is low in rural areas. Nearly 6.9 per cent of the 15+ population among the non-Muslims are absorbed in RE. The corresponding figure for Muslims is 5.8 per cent - a difference of only 1.1 percentage points. Our analysis shows that religious identity is not a factor in determining the probability of access to RE jobs in rural areas in the years 2018-19 and 2019-20. In 2004-2005, however, 29 per cent of the total gap in the probability of employment in RE jobs was explained by discrimination but the situation has improved overtime. The decline in discrimination is, however, partly due to low improvement in educational level of Muslims resulting in a larger gap in endowments.

GENDER-BASED DISCRIMINATION IN REGULAR/SALARIED AND SELF-EMPLOYMENT

PLFS data from 2019-20 demonstrates a large gender gap in R/SE in rural and urban areas alike. While 53.8 per cent of the 15+ population of men are engaged in R/SE, the figure for women is 23.3 per cent only. The data also demonstrates that all endowment variables such as *years of education, age and the household head's education correlate positively with the probability of participation of men in R/SE.* Furthermore, the magnitude of all the three coefficients are higher for men compared to women. This means that increase in the three endowment variables improves the probability of getting an R/SE by a higher magnitude for men as compared to women.

It is important to note that the coefficient (impact) for years of education of the household head is negative for women in rural areas. This suggests that any "social capital" gains in terms of the education of the head of households' *reduces* women's probability of participation in R/SE, implying that *women from such households are less likely* to seek and get jobs. Women in well educated households and economically better off households often withdraw from labour force due to socio-cultural reasons. Age improves the probability of participation but, here too, the impact is much less for women than for men. Finally, improvement in the level education of women *does not* improve the probability of participation in R/SE. This indicates that gender discrimination explains almost the total employment disparity in rural areas.

Endowment factors notwithstanding, policies aimed to boost the labour force participation of women are needed – not just education. In fact, multiple studies have shown that a large number of women with several years of education are merely sitting outside the labour force.

This is not necessarily because they have been rejected in labour market but because, many among them have "chosen" to do so.

Women do not enter the labour market due to "family reasons", a lack of safety associated with travelling and timing requirements of jobs in addition to esoteric reasons ranging from "societal norms" and practices that associate respectability with staying out of the workforce for women. While a large number of educated women are, thus, "choosing" not to work, SC/ST women start working at an early age without any formal education due to desperate socio-economic conditions. This makes education or age inconsequential in terms of explaining women's low involvement in regular jobs or self-employment. Family and societal factors are far more important for women taking up 'employment' than their personal qualifications. No wonder that the differences in endowments, as identified in the model, do not explain the differences in their probability of being a regular or self-employed person. This is more so in rural than in urban areas.

FIGURE 1 – DISCRIMINATION IN TYPES OF EMPLOYMENT
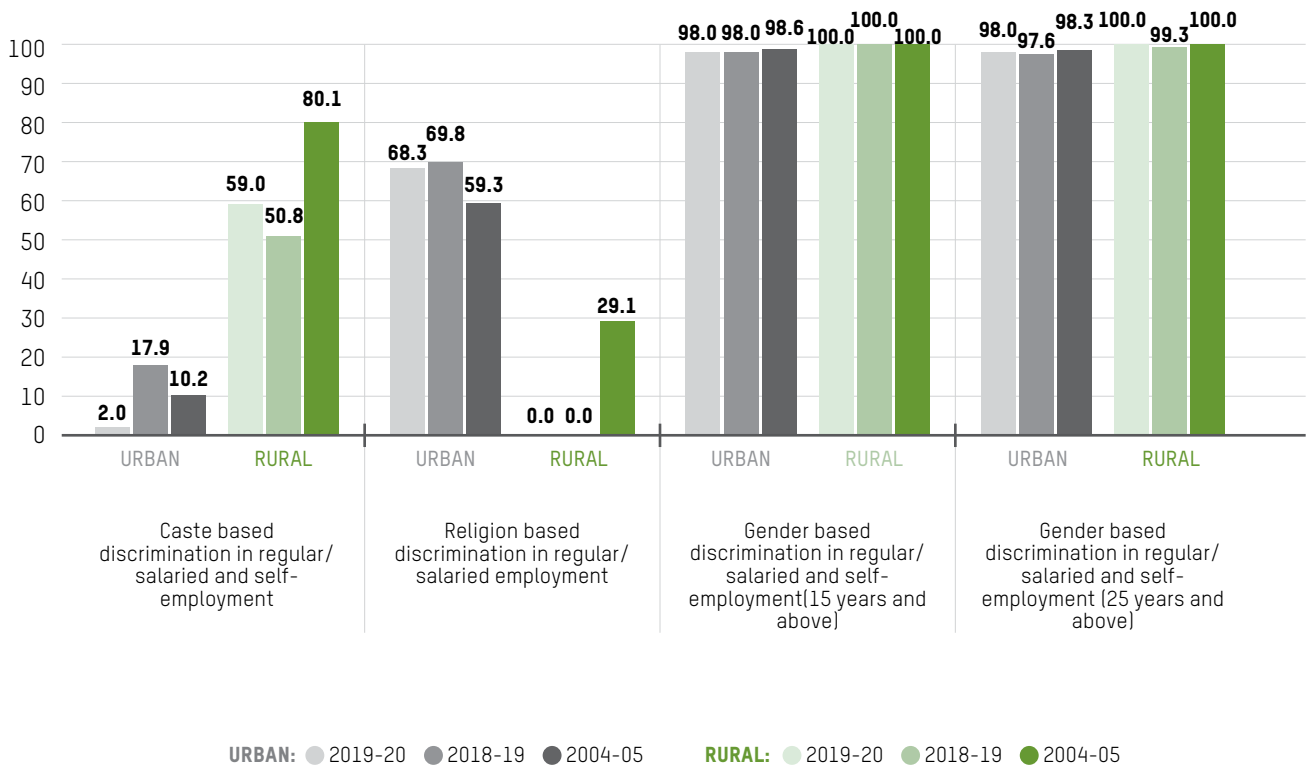
WAGE/EARNING DISCRIMINATION IN URBAN AREAS

The trend and pattern of discrimination in earnings can be explained in terms of factors similar to those in employment. Gender-based discrimination emerges as the key factor behind discrimination, much more than others. Importantly, its magnitude has gone up not only in casual work but also in regular employment. High discrimination in the latter could be due to women getting jobs at lower levels, not getting promotions, etc. This shows that their earnings are not commensurate with their human capital. A part of this is due to social prejudices of employers but low level of unionisation or the lower ability to assert one's rights individually or collectively also emerge as important explanatory factors. This is so despite several legislative and development measures taken for gender empowerment and equality by the government.

For casual workers, discrimination has gone up for the SC/ST population which is a matter of concern. Furthermore, while there is a general decline in discrimination in access to quality employment for the SC/ST, there is no such positive trend in payment of wages. This is indicative of the fact that while human capital has significantly improved, access of the SC/ST to the labour market and their earnings have not gone up commensurately.

TABLE 2 - DISCRIMINATION IN WAGES/EARNINGS, IN PERCENTAGES

VARIABLES	2019-20			2018-19			2004-05	
	RS	SE	CL	RS	SE	CL	RS	CL
SC/ST	20.7	58.1	76.6	10.9	49.7	72.7	19.4	63.5
MUSLIMS	2.0	2.6	0.0	0.0	0.0	0.0	9.1	0.0
GENDER	75.7	84.6	95.4	82.7	75.1	95.0	67.2	90.4

Source: Based on PLFS, 2018-19 & 2019-20 and NSS, 2004-05

CASTE-BASED DISCRIMINATION IN REGULAR/SALARIED EMPLOYMENT

PLFS DATA FOR THE YEAR 2019-20 SHOWS THAT THE MEAN INCOME FOR SC/ST PERSONS[10] IS INR 15,312 AGAINST INR 20,346 FOR PERSONS BELONGING TO THE GENERAL CATEGORY.

The decomposition exercise shows that endowment such as years of education, age and education of the household head significantly affect the earnings of both categories of populations.

However, the magnitude of the coefficient for education is higher for non-SC/ST than SC/ST workers, implying that with a similar level of education, the former has a slightly higher advantage in terms of earnings. The discrimination component is minute since endowment gaps between the two groups explain 96.6 per cent of the difference in their earnings. This result should not be taken to mean that there is no prejudice in the minds of the private employers against the SC/ST. Rather it reflects the fact that statutory law which mandates equal pay regardless of one's caste works for the regular workers. In other words, the possibility of paying differentially to formally employed RE workers based on their caste is small, thanks to the legal system in the country.

RELIGION-BASED DISCRIMINATION IN REGULAR/ SALARIED EMPLOYMENT

AS PER THE PLFS 2019-20, THE AVERAGE EARNING OF NON-MUSLIMS IN URBAN AREAS IN RE IS INR 20,346 WHICH IS SIGNIFICANTLY HIGHER THAN THAT OF MUSLIMS, WHICH IS INR 13,672.

Regression analysis results show that endowment variables positively affect the earnings of both the groups. Non-Muslims, however, have an advantage over Muslims on education and age i.e. *an increase in these endowments results in a higher increase for non-Muslims than Muslims.* The analysis, however, reveals that endowment differences explain 93.1 per cent of the total wage variation. Only 6.9 per cent of the earning gap can be attributed to religion-based discrimination in the urban labour market. This, once again, demonstrates that constitutional and legal guarantee of equal pay to a large extent has been effective in the country.

GENDER-BASED DISCRIMINATION IN REGULAR/SALARIED EMPLOYMENT

The advantage of being a man in the rural labour market is obvious. A significant gap in earnings between men and women is observed even for RE in 2019-20.

THE AVERAGE EARNING OF MEN IS INR 19,779 AS AGAINST INR 15,578 FOR WOMEN.

Within this differential, the discrimination component is 67 per cent. Importantly, this has gone down to 54 per cent when the age group of 25 years and above is considered – suggesting that young women tend to get more discriminated against and that age or experience improves their ability to bargain for better pay. The main reason could be that younger women report disruption in their jobs due to marriage, childbearing etc. that weaken the strength of their endowments. In 2018-19, as high as 72 per cent of the earning gap for persons aged 15 years and above and over 55 per cent in the age group of 25+ years and above were explained by gender discrimination, shockingly in regular employment, and this has only reduced marginally in 2019-20.

CASTE-BASED DISCRIMINATION IN SELF EMPLOYMENT

Low earnings from self-employment compared to regular work is an indication of the lower quality of work in the former.

THE AVERAGE SE EARNING OF NON-SC/ST WORKERS IS INR 15,878 AND FOR SC/ST THIS IS INR 10,533.

All the three endowment factors *(education of worker, age of the worker and education of the head of the household)* positively affect the earnings of both the groups. The non-SC/ST, however, have an advantage over SC/ST owing to their identity. The decomposition analysis confirms the presence of discrimination, explaining 35 per cent (in 2019-20) of the gap in the earnings, much higher than what was observed among the regular/salaried employment.

RELIGION-BASED DISCRIMINATION IN SELF-EMPLOYMENT

India's Muslim population in urban India is highly concentrated in SE compared to other communities, as noted in the previous section. This is largely because of the low-quality family professions and attendant difficulties of finding other options in the labour market. Even here, the average earning of non-Muslims in self-employment is INR 15,878 while that of Muslims is Rs 11,421. As with all previous categories, endowment play a positive role in improving the earnings of both groups. The coefficients of *years of education and workers' age* are higher for non-Muslims than Muslims implying that the former have a relative advantage.

Muslims do have a relative advantage in the *head of the household's education* over non-Muslims which should not be surprising. A family profession and its turnover is determined by the reputation in the market and that in turn would be determined by the educational level of the head of the household. On the whole, a large part of the gap in the earnings of the self-employed between the two groups can be attributed to the differences in their endowments. Discrimination explains only 11.9 per cent of the total gap in 2019-20 which was 18 per cent in 2018-19. This suggests that investing in the education and upskilling of Muslim populations help in uplifting their entire families out of poverty.

GENDER-BASED DISCRIMINATION IN SELF-EMPLOYMENT

The advantage men have over women in the labour market is revealed overwhelmingly by the gap in the earnings of the self-employed.

THE AVERAGE EARNING IS INR 15,996 FOR MEN AND MERELY INR 6,626 FOR WOMEN – MEN'S EARNING BEING NEARLY 2.5 TIMES THAT OF WOMEN.

The analysis reveals the presence of severe gender discrimination in urban self-employment. In 2019-20, the endowment differentials explain only 17 per cent of the earning gap, while 83 per cent can be attributed to gender discrimination. The discrimination component is equally high for the age group 25 years and above while these were about 72 per cent for both the age categories in 2018-19. Clearly, self employed women do extremely poorly than men in urban areas due to social, cultural and mobility constraints.

2.5 TIMES HIGHER EARNING

Self-employed males earn 2.5 times more than females, 83% of which is attributed to gender-based discrimination.

MALE   FEMALE

CASTE-BASED DISCRIMINATION IN CASUAL WORK

The average monthly earning for the SC/ST workers in casual work is INR 8,004 below the corresponding figure of INR 8,626 for the non-SC/ST. The decomposition analysis reveals that caste-based discrimination impacts the earnings of casual workers differently for different communities. *In 2019-20, the differences in endowments explain only 21 per cent of the earning gap while 79 per cent can be attributed to discrimination!* This figure has remained roughly the same from 2004-05 to 2019-20 indicating a significant and persistent existence of caste-based wage discrimination in urban areas. High discrimination with low wage gap is due to the fact that endowment differences are very small between the two groups.

RELIGION-BASED DISCRIMINATION IN CASUAL WORK

The average earning in casual wage work was slightly higher among non-Muslims than Muslims in 2018-19. The analysis shows that 55 per cent of this gap is due to discrimination. Furthermore, this component of

discrimination has increased from 41 per cent to 55 per cent during 2004-05 and 2018-19. In 2019-20, however, the average casual wages of Muslims in urban areas was INR 8,772, slightly higher than that of non-Muslims which is INR 8,626. This can be explained in terms of somewhat specialised jobs undertaken by the Muslims and the skills acquired by them through family and peer groups. These don't get reflected in their endowments due to the non availability of quantitative data at the national level.

GENDER-BASED DISCRIMINATION IN CASUAL WORK

THE AVERAGE EARNINGS OF MEN (INR 9,017) ARE SIGNIFICANTLY HIGHER THAN WOMEN (INR 5,709) EVEN IN CASUAL EMPLOYMENT. OUR ANALYSIS SHOWS HOW DISCRIMINATION EXPLAINS 95 PER CENT OF THE GAP BETWEEN MEN AND WOMEN IN 2019-20

and reduces to about 93 per cent when ages above 25 are taken into account. As observed in the previous sections, young women are particularly discriminated against due to their family or childbearing needs or them having lower levels of education than men of the same age. The component of discrimination has not changed notably from 2004-05 to 2019-20.

WAGE/EARNING DISCRIMINATION IN RURAL AREAS

CASTE BASED DISCRIMINATION IN REGULAR/SALARIED EMPLOYMENT

The average earning of a non-SC/ST person in regular employment is INR 13,440 as against INR 11,463 for a SC/ST worker in 2019-20, resulting in a gap of INR 1,977. The decomposition analysis shows that *19 per cent of the total gap in the earnings between the two groups is due to discrimination*. Furthermore, the discrimination factor is statistically significant (i.e. has not occurred by random chance) in 2019-20 - and we see a worsening of the situation from 2018-19. One may not dismiss the discrimination component of about 20 per cent as trivial since this is reported in case of regular employment comprising largely of the organised sector in rural areas.

RELIGION-BASED DISCRIMINATION IN REGULAR/SALARIED EMPLOYMENT

Non-Muslims in rural areas earn INR 13,440 per month while Muslims earn INR 12,796 recording a difference of INR 644 in 2019-20. The impact of education of the household head on the earnings is higher for Muslims than the others. The deficit in the earnings can however be fully attributed to endowment gaps. This is observed in all the three years viz. 2019-20, 2018-19 and 2004-05. This result is in conformity with that noted in urban areas wherein over 93 per cent gap in the earnings could be attributed to endowments. This is because of the specific nature of activities in which Muslims are engaged both in rural and urban areas wherein they don't face much competition. Also, the discrimination would be high if the decomposition model could consider family-based training and experience as part of their endowments.

GENDER-BASED DISCRIMINATION IN REGULAR/SALARIED EMPLOYMENT

The earnings of men are higher than women in regular jobs in rural areas as in urban areas, but the magnitude of difference here is much higher. The average monthly earning is INR 13,600 for rural men and INR 9,757 for rural women. Decomposition reveals the presence of severe gender discrimination in rural areas.

AS HIGH AS 91.1 PER CENT OF THE GAP (94.8 PER CENT IN 2018-19) IN EARNINGS IN THE 15+ AGE GROUP IS EXPLAINED BY DISCRIMINATION.

However, discrimination explains 77 per cent (84.8 per cent in 2018-19) of the total gap in the earnings for the age-group of 25 years and above. This is similar to what is observed in urban areas. Sadly, the extent of discrimination has increased since 2004-05 in rural areas when there has been no decline in urban areas.

CASTE-BASED DISCRIMINATION IN SELF-EMPLOYMENT

THE AVERAGE EARNING OF NON SC/ST SELF-EMPLOYED PERSONS IN RURAL AREAS IS INR 9,174 WHILE IT IS INR 7,337 FOR SC/ST IN 2019-20.

An increase in all endowment factors enhances the earnings for both the group of workers and about 78 per cent of the earning gap can be attributed to differences in endowments. The data shows that earnings when a person has zero endowment is much higher for the non-SC/ST than the SC/ST. Consequently, despite the impact of endowments on earnings being positive and higher for the SC/ST, their average earnings turn out to be low. This is because fewer persons from their educated families or with high endowments go for self-employment in rural areas. They prefer to go into regular employment or shift to urban areas, resulting in a few self-employed SC/ST with high endowments and high earnings. There is indeed a high concentration of SC/ST with low endowments at the lower end of the job market both in rural and urban areas. A temporal comparison of discrimination over the period from 2004-05 is not possible as information on earnings for the self-employed is not available in the 61st round data of NSS.

93% of the gap in earnings of rural self-employed males and females is due to discrimination. Rural Self-employed males earn twice of what females earn in rural areas.

2X MORE EARNINGS

MALE **FEMALE**

RELIGION-BASED DISCRIMINATION IN SELF EMPLOYMENT

The average earnings of non-Muslims in rural areas is INR 9,174 which is more than that of the Muslims at INR 8,357. For both the groups, the coefficients of the endowments are positive, implying increased earnings as a result of increases in endowments. Discrimination explains 40 per cent of the total gap in earnings between the two groups in 2019-20. In 2018-19, however, there was no discrimination since the gap was fully explained by the endowments. This change can be attributed to the effect of COVID-19. During the first three months of the outbreak of the pandemic, earnings of self-employed Muslims had taken a nosedive, particularly in rural areas as explained in the following chapter.

GENDER-BASED DISCRIMINATION IN SELF EMPLOYMENT

The advantage of men over women in the labour market is quite obvious in case of the rural self-employed as well. *The average earning for men in this category is INR 9,348 with merely INR 4,383 for women, the latter being less than half of the former.*

THE ANALYSIS SHOWS THAT THE ENDOWMENT GAP ACCOUNTS FOR ONLY 7 PER CENT OF THE GAP IN EARNING WHILE GENDER DISCRIMINATION EXPLAINS THE REST!

This discrimination factor remains about the same even when the age group of 25 years and above is considered.

CASTE-BASED DISCRIMINATION IN CASUAL WORK

In 2019-20, the average monthly earning for SC/ST workers in casual employment is INR 6736 while non-SC/ST workers earn INR 6464. The decomposition results show a slightly lower extent of discrimination in rural than urban areas. There has been an increase in discrimination in rural areas since 2004-05 wherein discrimination explained only 45.7 per cent of the gap.

RELIGION-BASED WAGE DISCRIMINATION IN CASUAL WORK

In 2019-20, the average earning of Muslims in rural areas in casual work is INR 7405 which is higher than that of the non-Muslims,i.e., INR 6,736. Since, earning is higher for Muslims one would argue that the specialised nature of their work gives them an advantage in rural labour market for casual workers. So, discrimination is not present in this very special case.

GENDER-BASED DISCRIMINATION IN CASUAL WORK

The earning gap in rural areas shows that men have a significant advantage over women in casual jobs - their average earning being INR 7,463 whereas it's INR 4,604.6 for women. Decomposition results show that discrimination explains 96 per cent of the wage gap in 2019-20. The discrimination component reduces marginally to 95 per cent when the age group of 25 years and above is considered. Discrimination seems to have increased over time since it explained 92 per cent and 90 per cent of the total gap for the two age groups respectively in 2004-05.

3000 RUPEES MORE

Male casual workers earn INR 3000 per month more than females, 96% of which is due to discrimination.

MALE **FEMALE**
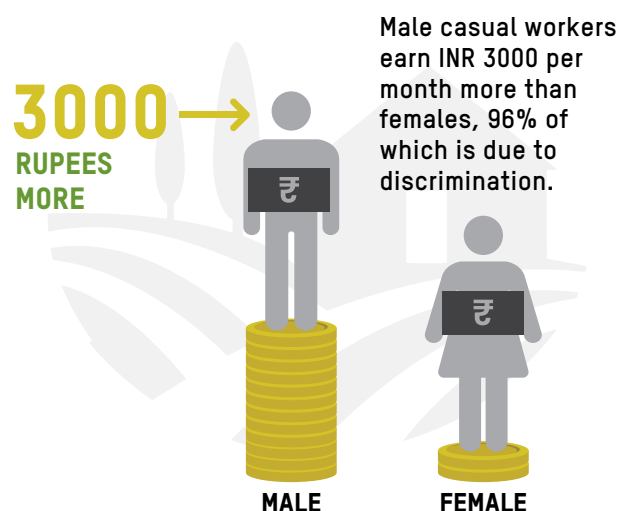
TABLE 3 – DISCRIMINATION IN WAGES/EARNINGS IN TYPES OF EMPLOYMENT

CATEGORIES	19-20	18-19	04-05
URBAN INDIA			
CASTE BASED WAGE DISCRIMINATION IN REGULAR/SALARIED EMPLOYMENT	3.4	1.8	12.3
RELIGION BASED WAGE DISCRIMINATION IN REGULAR/SALARIED EMPLOYMENT	6.9	0.26	12.3
GENDER BASED WAGE DISCRIMINATION IN REGULAR/SALARIED EMPLOYMENT FOR THE AGE GROUP OF 15+	66.9	71.9	68.7
GENDER BASED WAGE DISCRIMINATION IN REGULAR/SALARIED EMPLOYMENT FOR THE AGE GROUP OF 25+	54.3	55.3	58.3
CASTE BASED EARNING DISCRIMINATION IN SELF EMPLOYMENT	41.2	34.8	NA
RELIGION BASED EARNING DISCRIMINATION IN SELF-EMPLOYMENT	11.9	17.9	NA
GENDER BASED EARNING DISCRIMINATION IN SELF-EMPLOYMENT (AGE 15 AND ABOVE)	83.0	72.1	NA
GENDER BASED EARNING DISCRIMINATION IN SELF-EMPLOYMENT (AGE 25 AND ABOVE)	82.4	71.5	NA
CASTE BASED WAGE DISCRIMINATION IN CASUAL WORKS	79.3	80.5	79.9
RELIGION BASED DISCRIMINATION IN CASUAL WORKS	0.0	55.1	41.2
GENDER BASED DISCRIMINATION IN CASUAL WORKS (AGE 15 AND ABOVE)	95.4	96.4	95.2
GENDER BASED DISCRIMINATION IN CASUAL WORKS (AGE 25 AND ABOVE)	92.7	93.1	90.8
RURAL INDIA			
CASTE BASED DISCRIMINATION IN REGULAR/SALARIED EMPLOYMENT	19.2	0.0	23.7
RELIGION BASED WAGE DISCRIMINATION IN REGULAR/SALARIED EMPLOYMENT	0.0	0.0	0.0
GENDER BASED DISCRIMINATION IN REGULAR/SALARIED EMPLOYMENT (AGE 15 AND ABOVE)	91.1	94.8	70.9
GENDER BASED DISCRIMINATION IN REGULAR/SALARIED EMPLOYMENT (AGE 25 AND ABOVE)	77	84.8	62.1
CASTE BASED DISCRIMINATION FOR SELF-EMPLOYMENT	78	67.8	N/A
RELIGION BASED EARNING DISCRIMINATION FOR SELF-EMPLOYMENT	39.5	0.0	N/A
GENDER BASED EARNING DISCRIMINATION FOR SELF-EMPLOYMENT (AGE 15 AND ABOVE)	93.1	88.3	N/A
GENDER BASED EARNING DISCRIMINATION FOR SELF-EMPLOYMENT (AGE 25 AND ABOVE)	93.2	87.4	N/A
CASTE BASED WAGE DISCRIMINATION IN CASUAL WORKS	72.7	62.4	45.7
RELIGION BASED WAGE DISCRIMINATION IN CASUAL WORKS	0.0	0.0	0.0
GENDER BASED WAGE DISCRIMINATION IN CASUAL WORKS (AGE 15 AND ABOVE)	96.1	95.6	91.7
GENDER BASED WAGE DISCRIMINATION IN CASUAL WORKS (AGE 25 AND ABOVE)	95	93.9	89.6

IV. IMPACT OF THE PANDEMIC ON SOCIAL GROUPS AND MINORITY COMMUNITIES

IV. IMPACT OF THE PANDEMIC ON SOCIAL GROUPS AND MINORITY COMMUNITIES

The unemployment rate[11] in rural areas doubled from 6.8 per cent in Jan-March 2020 (Q3, Pre Pandemic Quarter, henceforth PPQ) to 12.1 per cent in April-June 2020 (Q4, the First Pandemic Quarter, henceforth FPQ). In urban areas, the rate went from 9.0 per cent in PPQ to 20.8 per cent in FPQ - about two and a half times more than that of rural areas (Table 6). PLFS defines unemployment as those seeking or available for work. As per this definition, a segment of the regular/salaried workers and self-employed who reported no work during the reference week were considered employed.

Many of them had no work and no earnings, but since they were not seeking or available for work, they were considered as employed. However, when one broadens the definition and considers persons reporting no work during the reference week as unemployed along with the persons seeking/available for work, the increase in the unemployment rate becomes alarming[12]. In rural areas, the overall rate of unemployment goes up from 10.5 to 22.2 per cent. The increase in urban areas is more alarming with a rise from 15 per cent to 50.3 per cent (Table 7).

FIGURE 2 – UNEMPLOYMENT RATES AS PERCENTAGES OF LABOUR FORCE BY ALTERNATE DEFINITIONS IN RURAL AND URBAN AREAS

17%

INCREASE IN UNEMPLOYMENT

UNEMPLOYED

MUSLIMS

In rural areas, sharpest increase in unemployment was for Muslims by 17% in the first quarter of the pandemic.
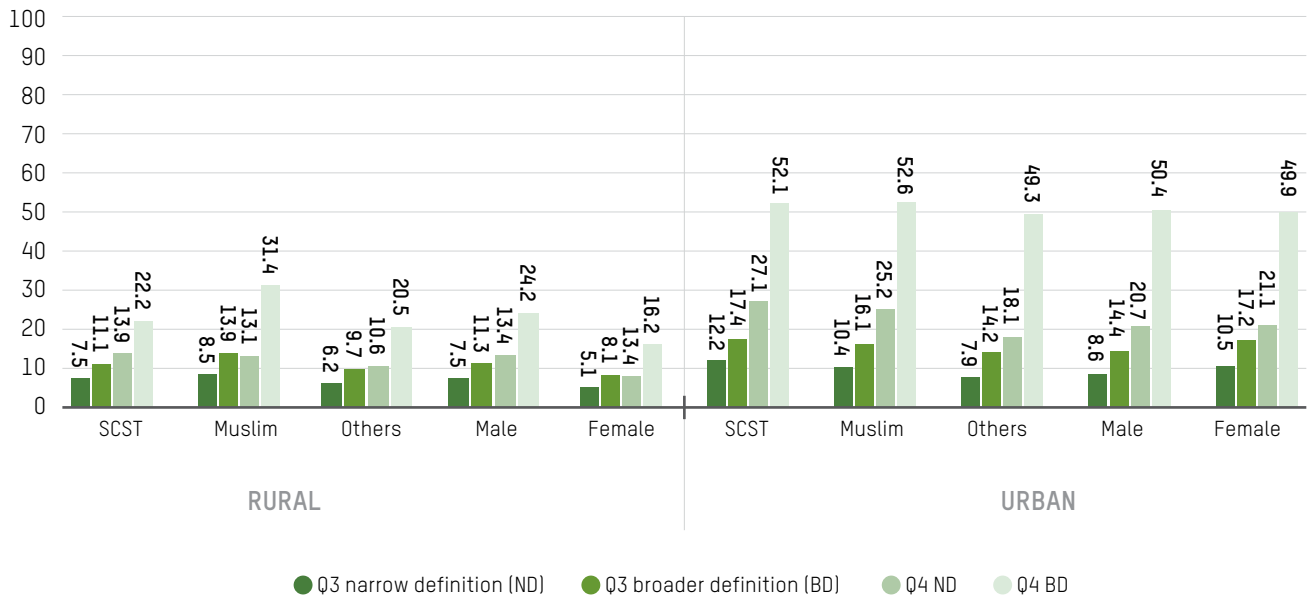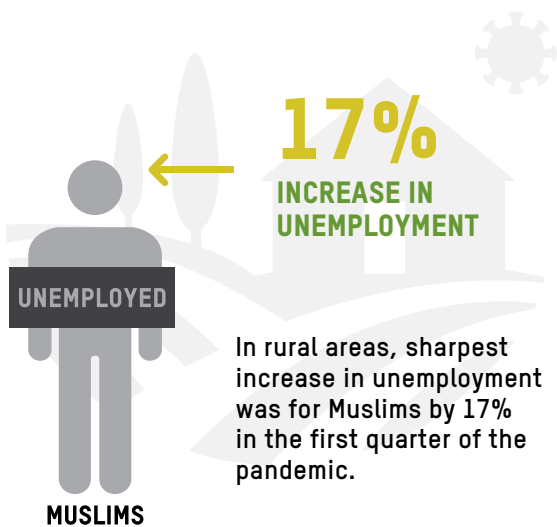
The increase in the unemployment rate has been higher for the SC/ST and Muslims than the non-SC/ST, non-Muslim population (noted as "Others" in the Graphs and Tables in this Chapter), as per both the definitions of unemployment. While the rate of unemployment for the Muslims increased from about 9 per cent in PPQ to 17 per cent in FPQ, the same increased from 7 per cent to 13 per cent for the general category population (Table 6). Taking the broader definition of unemployment, one notices that the sharpest rise in the percentage of unemployed is for Muslims in rural areas (from 14 to 31 per cent), whereas it rose from 11 per cent to 22 per cent for SC/ST, and from 10 per cent to 20 per cent in the case of the general category (Table 7).

In rural areas, caste and religious identities become important, particularly, in periods of crisis. People are likely to increase their dealings within their social circles. Due to the social and economic vulnerability of the SC/ST and Muslim populations, the protection they can give or seek from their group would be relatively poor. One would, therefore, expect the impact of discrimination is much more in the rural than the urban labour market. While the overall impact of the pandemic has been severe in urban areas due to a series of national and state lockdowns which directly affected urban business – social discrimination has been less as people's professional identities tend to blur their caste or religious identities, as opposed to rural areas.

In terms of the distribution of workers across various forms of employment, the biggest hit of the pandemic was on casual employment, which was relatively severe

in urban areas due to the closure of non-agricultural activities (Table 8). This emerges clearly through a comparison of the data of Q4 of 2019-20 with the preceding quarter or comparison by year on year (YoY)[13] basis. Correspondingly, self-employment went up (more by YoY comparison) suggesting that people took up self-employment as a part of their survival strategy during the period of the crisis. In contrast, the share of regular employment remained stable or had a marginal decline. This can be attributed to no major short-term fall in regular employment (perhaps due to the nature of contracts) and because the total number of workers going down with the onset of the pandemic. Desperate to find livelihood for survival, large segments of casual wage workers among the general as well as SC/ST population shifted to self-employment, particularly into retail selling of essential commodities and services, that were permitted as per the Covid norms. The fall in casual employment was higher in urban than in rural areas (Table 9).

Against the significant rise in self-employment for SC/ST and general population, the increase was very small for Muslims. They possibly had lower acceptability to deal directly with consumers at the household level and hence were pushed from casual employment to unpaid family labour or the unemployed category. There was also a fall in their share of self-employment in rural areas. Interestingly, the share of Muslims in regular employment has increased, both in rural and urban areas. This relative increase can be attributed to the total number of Muslim labour force going down while the total salaried workforce remaining stable due to legal provisions. The significant increase in the share of regular workers among SC/ST workers in urban areas can also be explained by the same rationale.

The self-employed segment of the labour market, where a lot of the workforce was absorbed due to a dearth of regular employment opportunities, had to bear the brunt of hidden unemployment. The percentage of people among the self-employed who did not report work during the reference week went up from 4.3 per cent in PPQ to 11.3 in FPQ in rural areas. The corresponding increase in urban areas was even more alarming – it went up from 7.5 per cent to 39.8 per cent (Table 11). Across communities, the sharpest increase was observed in Muslims for

whom the figures went up from 6.9 per cent to 22.9 in rural and from 7.8 per cent to 40.7 in urban areas. The corresponding increases in the case of SC/ST were also very high but less than that of the Muslims.

A similar pattern emerges in the case of the percentage of regular/salaried workers who did not report work during the reference week. Their figures went up from 5.9 per cent to 29.7 per cent. The increase in urban areas was more alarming (6.9 per cent to 39.4 per cent). Muslims, once again, emerge as the most affected group (11.8 per cent to 40.9 per cent). The "no-work" rates in urban areas were extremely high. Furthermore, the increase in it was higher than in rural areas but there were not much difference among the Muslims, SC/ST and the general population. The rise in unemployment would be even sharper if we consider the change YoY basis since the figures of Q3 of 2018-19 was higher than PPQ.

The percentage of self-employed persons who received no income during the FPQ to the total persons who reported no work during the reference week was as high as 52 per cent and 57 per cent in rural and urban areas respectively, clearly underlining the point that their absence in work was non-voluntary. The increase in these figures in urban areas is higher - but relatively equal across the social groups - than in rural areas where it is slightly less for Muslims due to the nature of the services provided by them (Table 12).

Among regular workers, it is shocking that as high as 22 per cent and 27 per cent in rural and urban areas respectively reported no work and received no salary in the first quarter of the pandemic, despite appeals by political leaders, government functionaries and civil society activists not to deny people their income. *The regular workers without payments are observed to be higher for Muslims and SC/ST than the general population in urban areas.*

In rural areas, even for Muslim regular workers who were in occupations wherein there was no case of non-payment for not working during the reference week in PPQ, there was a 10 per cent increase (in non-payment) in FPQ.

FIGURE 2 – PERCENTAGE OF SELF-EMPLOYED WHO DID NOT WORK AND REPORTED NO INCOME IN THE REFERENCE WEEK FOR AGE GROUP OF 15 YEARS AND ABOVE
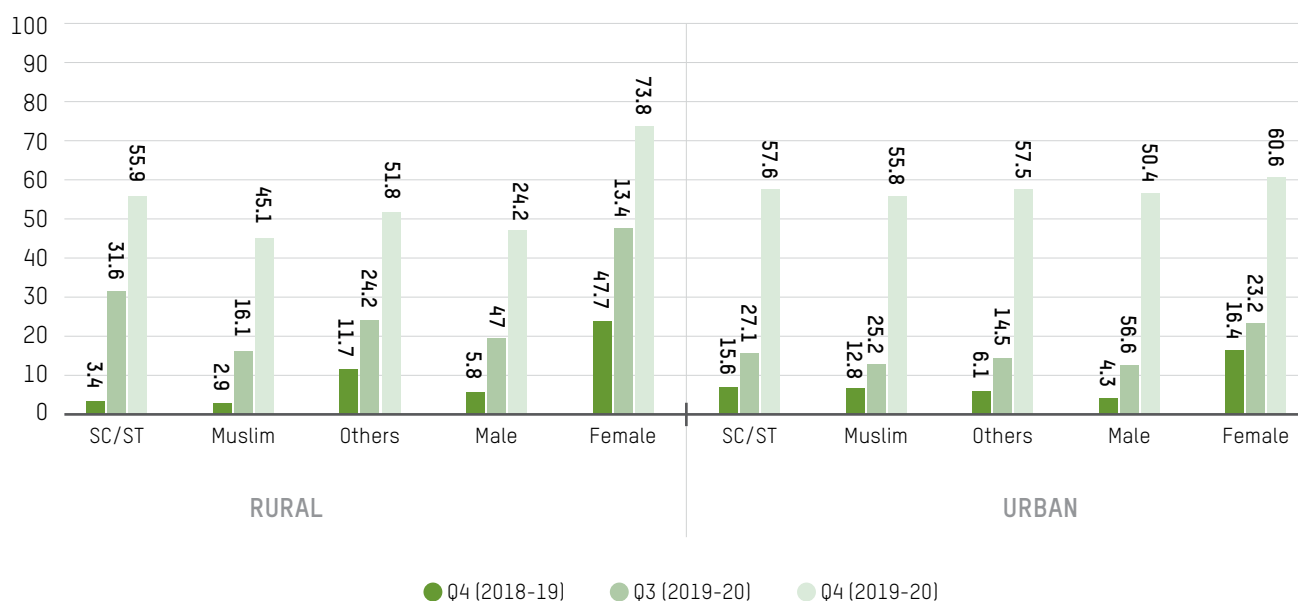
THE GENDER DIMENSION

Unemployment figures both by its restricted and expanded definition are similar for men and women in urban areas but women record lower unemployment in rural areas in FPQ. This can be explained in terms of the larger share of women employed in agriculture and household-based activities where disruption (of work) was relatively less. Interestingly, with the fall in casual employment, there was no increase in the share of self-employment for women in urban areas in the FPQ compared to PPQ, as opposed to that of men (Table 10). In rural areas, there is some increase but it is less than that of men.

The low share of women in regular employment in rural areas is likely to be disadvantageous at the time of any crisis. Interestingly, there was an increase of women in regular employment during FPQ on the face of its decline for men. In urban areas, a large segment of women regular workers are engaged as domestic help and in unskilled jobs. Many among them provided daily support services at a relatively low cost which the upper and middle class found convenient to maintain with either a full or partial payment.

The percentage of people who reported no work during the reference period was higher for self-employed men than women in FPQ. Also, it went up much more sharply than that of women, both in rural and urban areas. For the regular-employed, however, the opposite is the case (Table 11). One may thus get a mixed picture regarding the predicament of women in the labour market compared to men, although most of the individual indicators are unfavourable to women.

One significant factor which puts women workers at a great disadvantage both in rural and urban areas is the situation of not having any income at all - especially in periods of high unemployment.

WHILE ONLY 9 PER CENT OF SELF-EMPLOYED MEN HAVE THIS DISADVANTAGE, THE FIGURE IS AS HIGH AS 70 PER CENT FOR WOMEN,

even under normal circumstances, as inferred from the PLFS data for Q3 of 2018-19. The figure went up from 48 per cent in PPQ to 74 per cent in FPQ in rural areas whereas the corresponding figures in urban areas were 23 per cent and 61 per cent (Table 12). Much of this is attributable to the nature of activities and undefined working conditions in sectors that absorb most of the female labour in the country.

The picture is somewhat different for regular/salaried workers where non-payment of salaries due to lack of work and gender discrimination is low due to legal stipulations. However, the share of regular workers in rural areas who did not receive wages due to an absence of work rose to 24 per cent for men compared to 14 per cent for women in FPQ. In urban areas, the figures were higher but the gender gap was less - the figures being 29 per cent for men and 22 per cent for women (Table 13). While the no-work, no-earning situation during the pandemic was alarming for women in self-employment both in rural and urban areas, as noted above, this was not so for those in regular employment, many of whom continued to receive some payment despite not being employed in the reference week.

FIGURE 3 – REGULAR/SALARIED WORKERS WHO DID NOT WORK AND REPORTED NO SALARY IN THE REFERENCE WEEK FOR 15 YEARS AND ABOVE

Q4 (2018-19)   Q3 (2019-20)   Q4 (2019-20)
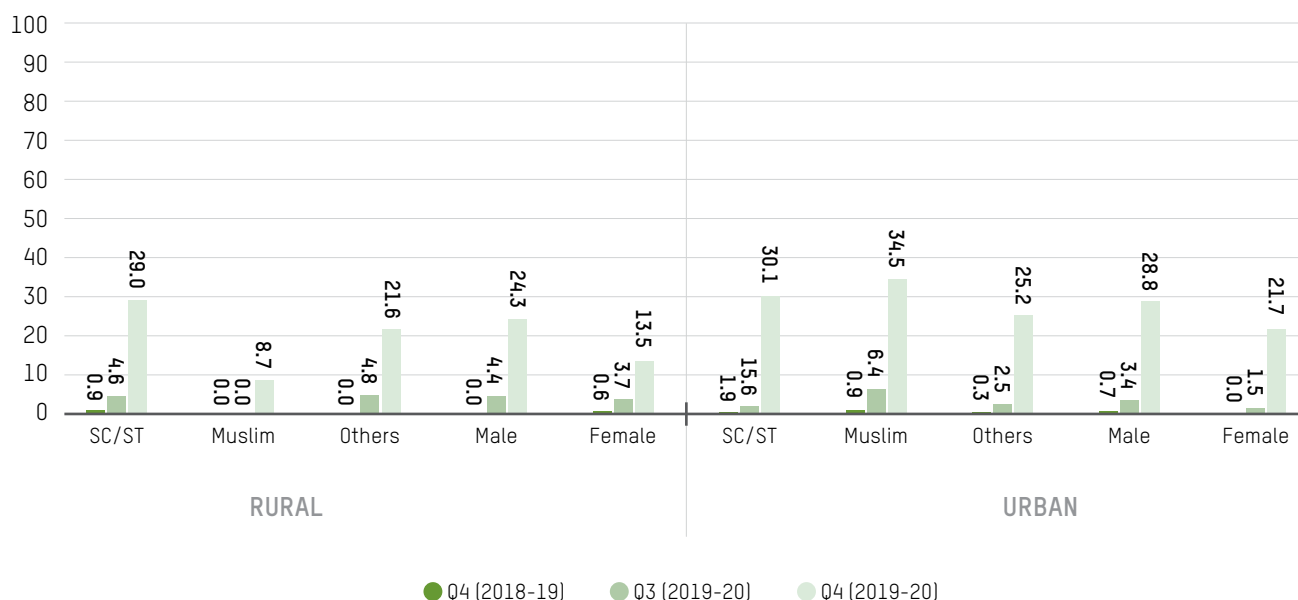
IMPACT ON WAGES/EARNINGS

The average earnings for workers in all social groups and employment categories came down significantly in the Covid quarter. The fall in the average earnings followed a similar pattern in rural and urban areas. In rural areas, monthly earnings during the Covid quarter were 9 per cent below the average for the year 2019-20. The deficit, however, was 21 per cent in urban areas. Muslims, in rural areas, recorded the maximum decline of 13 per cent but it was close to the average for the rest. The SC/ST suffered the least damage possibly due to the indispensable nature of their services – it is worthwhile remembering that most of the SC/ST population in India are employed in essential services which are low paying in any case.

The income impact was extremely uneven across socio-religious groups as presented in the tables 16, 17 and 18. In rural areas, within the self-employed category, Muslims had the highest fall of about 18 per cent whereas

the fall was below 10 per cent for the SC/ST and others, at current prices. The predicament of Muslim regular workers was even more alarming - their deficit compared to the preceding quarter was 24 per cent as against 10 per cent for the SC/ST. The fall in the earnings of regular Muslim workers reveals that the increase in their share in employment is not a reflection of an improvement in their conditions in the labour market. It is only in casual work that the Muslims record no significant fall in earnings, even after adjusting for the inflation factor for the three months. Although there has been a drastic fall in the share and the absolute number of casual workers, the average income of those who could seek and find employment in FPQ was not much below those of PPQ in all social groups. Combining rural and urban figures for all employment categories the fall in the earnings in FPQ for Muslims has been 16 per cent compared to the preceding quarter. The corresponding fall for SC/ST and others are 10 per cent and 11 per cent respectively.

18%
FALL IN EARNINGS

In rural areas, within self-employed category Muslims had the highest fall in earnings by about 18 per cent against that of below 10 per cent for the SC/ST and others.
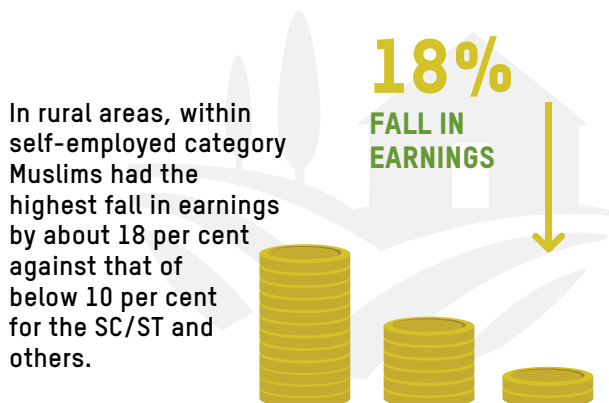
In urban areas, the income deficits in FPQ compared to PPQ for the self-employed work out as a third or more in all the three social groups viz. SC, STs and OBCs. This corresponds to the increase in unemployment rate which is around 40 per cent. The fall in income in real terms for the regular workers is low due to labour law compliance. The fall in casual workers is around 10 per cent in all categories, hitting the unorganised daily workers severely with a significant drop in their employment rate.

In the context of gender differentials, the earning deficits for women in rural areas are not significant across the employment categories, owing to the pandemic. In fact, there is a marginal increase – of less than 2 per cent among regular and casual workers. For men, the reduction is low but more than that of women. Self-employed women, however, emerge as a vulnerable category in rural areas, if we consider the reduction in earnings in FPQ year on year basis.

In urban areas, the fall in the earnings of both men and women is very high. The FPQ earnings for the self-employed are 36 per cent less than the PPQ for men, the corresponding figure for women being 26 per cent. The decline computed at constant prices would be negligible for regular workers and there is no gender differential. Similarly, casual workers, both men and women, suffered income deficits of about 10 per cent at current prices. Understandably, the lockdown constrained the mobility of women resulting in high employment losses among them in urban areas, much more than men. The earning loses, however was less, because of their engagement in the low-paying domestic services sector wherein the middle class did not dispense with their services.

Gender discrimination in India is structural which manifests in the high ratio of earnings of men to that of women under *normal circumstances.* This may be inferred from the data for Q4 of 2018-19, a year before the pandemic, or for Q3 of 2019-20 (PPQ). Earning gaps are relatively less for casual workers both in rural and urban areas, ranging between 50 per cent and 70 per cent.

EVEN FOR REGULAR WORKERS, MALE EARNINGS EXCEED THOSE OF WOMEN BY 20 AND 60 PER CENT.

In the case of the self-employed, the disparity is much higher with male earnings being 4 to 5 times that of women (Table 16). Interestingly, these ratios did not go up in any category of employment in rural or urban areas during the pandemic. Self-employed women, however, emerge as a distinctly vulnerable category in the context of disparity in earnings and their reduction in FPQ. This is further confirmed by the fact that the percentage of self-employed women, who have no earning if there is no work in the reference week, is much larger than that of men, even under 'normal circumstances'.
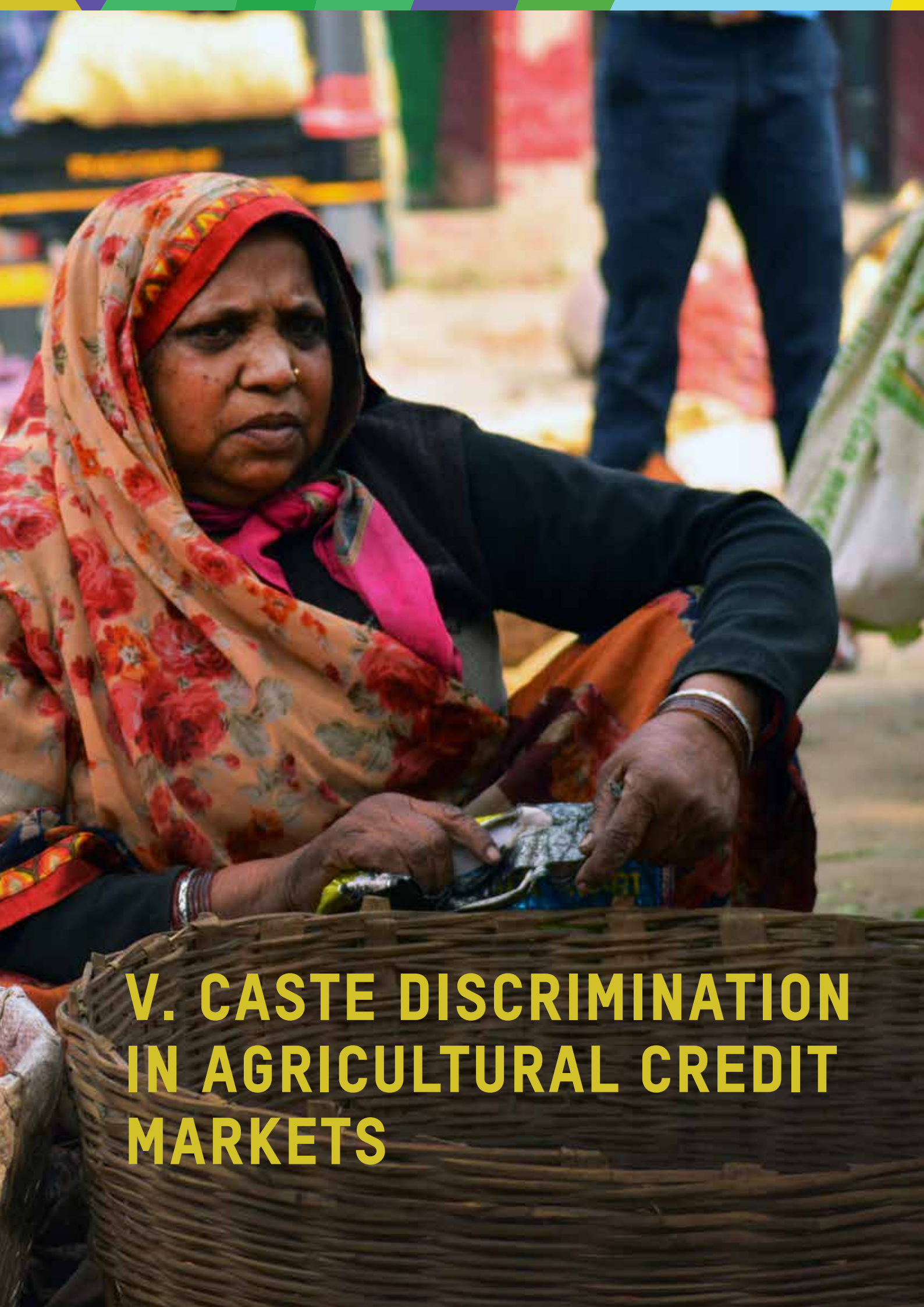
V. CASTE DISCRIMINATION IN AGRICULTURAL CREDIT MARKETS

V. CASTE DISCRIMINATION IN AGRICULTURAL CREDIT MARKETS

Access to credit is noted to have a significant positive impact on agricultural productivity and household income (Narayanan 2015) by helping farmers purchase or hire critical factors of production (Conning and Udry 2007) - about 85 per cent of the agricultural credit being used to procure inputs for farming and allied activities (Narayanan 2016). Despite the importance of access to credit in the agricultural community, a look at the past reveals an unfortunate reality. A third of the Indian population did not have a savings bank account at the end of the fiscal year 2013. The figure for rural India's population without access to formal banking services or credit is even higher (Gounasegaran et al. 2013). According to a CRISIL study (cited in Shah 2015), only one in seven persons had access to credit until the fiscal year 2015.

The two major formal sources of lending to the agriculture sector are commercial and cooperative banks that together account for approximately 90 per cent of the disbursed loan amount (NSSO 2013). Commercial banks are large and centralised entities under the RBI's regulation while cooperative banks are decentralised and independent entities functioning under the Cooperative Societies Act, 1912 until recently.

The caste identity of households have an effect on their access to capital in general (Kijima 2006; Madheswaran and Attewal 2007) and to agricultural credit in the Indian social polity. (Kumar et al. 2015; Rao 2018). The amount of credit available per household to the SC/ST is much smaller than the forward caste (FC) (Rao 2018; Karthick and Madheswaran 2021). Again, within the caste groups, large farmers have an advantage in access to credit over small farmers (Vaidyanathan 2006; Jeromi 2007). It is, therefore, important to design programmatic interventions which bridge the gap between FCs and SC/STs and between big and small farmers. Since agricultural credit is a *sine qua non*[14] for profitable and sustainable agricultural growth and

LESS THAN 20 CRORES OUT OF OVER 1.2 BILLION POPULATION HAS ACCESS TO CREDIT FROM FORMAL INSTITUTIONS

analysing discrimination in its access is extremely important or improving the productivity in the agricultural sector.

ROLE OF CASTE IN ACCESS TO CREDIT

The available literature on the rural credit market shows that access to credit is influenced by both demand and supply-side factors. The supply of formal credit to agriculture has declined substantially in recent years. It is generally believed that commercial banks don't discriminate based on caste whereas cooperative banks do, due to the influence of large farmers' lobby at the ground level. (Kumar, 2013). However, the studies by Rao (2018) and Karthick and Madheswaran (2021) have revealed that even commercial banks discriminate against the SC/ST. The other factors that affect access

to credit range from the size of landholdings (NSSO 2013), land-owning status (Duy et al. 2012), irrigation facilities, asset holdings, distance to the credit market and geographical locations, social status, age, education of the household head (Karthick and Madheswaran 2018) to gender (Rajeev et al. 2011). Of all the factors that influence access to credit, caste identity has emerged as a distinct and significant influence - most of the MSF belong to the SC/ST community (Dev 2012) with low access to agricultural credit.

DISTRIBUTION OF RESOURCES

Inequality in access to credit arises due to inequality of economic resources, especially in the distribution of land holdings. The share of MSF is 86 per cent but they own only 47 per cent of the operated area (Gulati and Juneja 2019). Among all the MSF, the resources are less in the hands of the SC/ST than the others (Dev 2012). Four major resources that determine the unequal access to credit across the social groups are the sizes of the agricultural and irrigated area, average asset value and net worth. Annexure C provides the complete dataset for the distribution of agricultural resources by social groups. The data reveals that:

THE AVERAGE SIZES OF AGRICULTURAL LAND HOLDINGS HAVE BEEN RELATIVELY LOWER AMONG THE SC DURING 1991 TO 2012 (0.92 HECTARES IN 1991, 0.66 HECTARES IN 2003, AND 0.58 HECTARES IN 2012) WHEREAS THE FC HAVE ALL ALONG HAD MORE THAN ONE-HECTARE OF LAND DURING THIS PERIOD.

• The average irrigated area for the SC/ST has also remained consistently low from 1991 to 2012 whereas the FC (in lakhs) always had more than one hectare of irrigated land.

• Average asset values[15] per AHHs[16] were uneven among the social groups from 1991 to 2012. For instance, the average asset values of the SC, ST, OBC and FC were INR 6.46, INR 8.32, INR 14.83, and INR 22.32 lakhs respectively in 2012.

• Finally, the net worth per AHH of the FC (in lakhs) has been significantly higher. It was INR 7.16, INR 18.9 and INR 21.09 in the years 1991, 2003 and 2012 respectively. For the ST, it was merely INR 2.64, INR 5.28 and INR 5.86 in the years 1991, 2003 and 2012 respectively.

The lack of wealth among SCs and STs creates a weak 'initial condition' or unequal the provisioning of formal credit as compared to the FC.

DISTRIBUTION OF FORMAL CREDIT

The shares of the SC/ST agricultural households (AHH) have increased during the post-reform periods, while their shares among the households borrowing funds (BHH)[17] from all formal sources have reduced in comparison with FC. It is observed that there has been an overall reduction in reliance on agriculture as an occupation across households of all castes, but borrowings (agricultural) have reduced more for SC/ST agricultural households when compared to FC households – indicating credit constraints.

The SC/ST also received less than one-fourth of the FC received. Both the AHH-Credit gap and BHH-Credit gap are higher among the former than the latter irrespective of credit sources. From 1991 to 2012, the AHH-Credit gaps of boththe ST/SC have increased, whereas their BHH-Credit gaps decreased in all formal credit, commercial, and cooperative credit sources. Although the BHH-Credit gap decreased, the mean amount of credit was still lower among the vulnerable groups than the FC irrespective of credit sources during the past two decades. The SC AHH are the most deprived groups in accessing credit from commercial banks while the ST are the most deprived group in accessing credit from cooperatives during the past two decades. The OBCs' AHH- and BHH-Credit gaps are zero or negligible but their average amount of credit is less than that of FCs irrespective of credit sources. Thus, regardless of sources of borrowing, caste-based disparities exist in access to credit in India (Kumar et al. 2015; Rao 2018).

CASTE DISCRIMINATION IN ACCESS TO FORMAL CREDIT

Calculations based on the Probit model in the study revealed that social factors such as one's caste identity influence their ownership of economic resources such as irrigated area, asset values, and land ownership that in turn impact the amount of credit that they receive.

The Blinder–Oaxaca decomposition (1973) result indicates that the discrimination components for the SC in all formal, commercial bank, and cooperative bank credit are 37 per cent, 34 per cent, and 9 per

cent respectively whereas the corresponding figures for the ST are 49 per cent, 31 per cent, and 29 per cent respectively. The extent of discrimination is higher in commercial banks (34 per cent for SCs and 31 per cent for STs) than in the cooperatives (9 per cent for SCs and 29 per cent for STs). There is, thus, a clear evidence of discrimination in formal credit markets against the SCand ST. A large endowment difference (viz. irrigation land, asset values, and education level of the head of the household) between the FC and the SC/ST indicates that there is a need to increase endowments for the latter to improve their access to credit.

The extent of discrimination is higher in commercial banks (34% for SCs and 31% for STs) than in the cooperatives (9% for SCs and 29% for STs).

HIGHER DISCRIMATION IN COMMERCIAL VERSUS COOPERATIVE BANKS
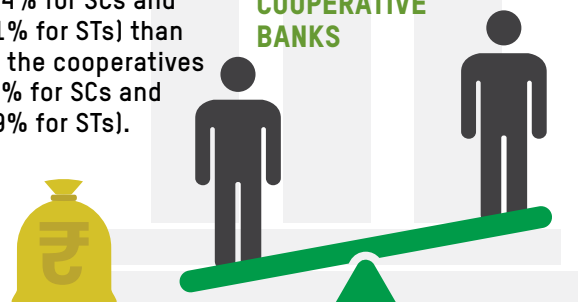
TABLE 4 – DISCRIMINATION RESULTS FOR FORMAL CREDIT DURING 2012, IN PERCENTAGES

COMPONENTS OF DECOMPOSITION	FC VS SC	FC VS ST
ALL FORMAL CREDIT		
EXPLAINED BY ENDOWMENT DIFFERENCE	62.9	51.4
UNEXPLAINED DIFFERENCE (DISCRIMINATION COMPONENT)	37.1	48.6
COMMERCIAL BANK CREDIT		
EXPLAINED BY ENDOWMENT DIFFERENCE	65.6	68.8
UNEXPLAINED DIFFERENCE (DISCRIMINATION COMPONENT)	34.4	31.2
COOPERATIVE BANK CREDIT		
EXPLAINED BY ENDOWMENT DIFFERENCE	90.6	70.6
UNEXPLAINED DIFFERENCE (DISCRIMINATION COMPONENT)	9.4	29.4

Source: The authors' calculation based on unit-level data (AIDIS), NSSO, and 70th (2013) round.
Note: The figures within parentheses are standard errors.

RESULTS AND RECOMMENDATIONS

AFFIRMATIVE POLICIES FOR PROVIDING ACCESS TO CREDIT

Countries like the USA follow a system of reservation in credit lending by implementing the Equal Credit Opportunity Act to prohibit various forms of discrimination such as race, colour, religion, national origin, sex, marital status, and age in securing credit. Though caste-based reservation in educational institutions and jobs is provided to marginalised groups in India, there is an absence of targeted policy to provide reservation in access to credit. This study provides evidence in favour of implementing a caste-based credit policy in the agricultural sector to make credit accessible to those who need it the most. It is also necessary to revamp the priority sector lending scheme[18] either by creating a separate fund for SCs/STs or by increasing the allocation of funds from 10 per cent to reduce the AHH- and BHH-Credit gaps.

REVIVAL OF LAND REFORM POLICIES/LAND PURCHASE SCHEME

Redistribution of lands may promote both equity and efficiency (Banerjee 1999) in the agrarian system. Despite the abolition of the Zamindari system in 1955, the better-off groups continue to control agricultural land due to their high social and political position (Bandyopadhyay 2003). In most cases, the land distributed to the landless are not fertile. Studies have also established the inverse relationship between land size and productivity (Banerjee 1999; Chand et al. 2011). Therefore, the credit supply for the MSFs' should be improved. There is a need to revive land redistribution policies to improve access to credit for ST and SC groups in the country. In 2013, the GoI drafted a new land reform policy to revive land distribution to address the landlessness problem, but it has remained in limbo since (Draboo 2015).

IMPROVING LITERACY AT FARM LEVEL

The econometric results show that access to credit is high if the head of the household is well educated and vice versa. The impact of human capital on agricultural productivity is already well-established in literature (Ram and Shultz 1979; Adams and Bumb 1979; Lio and Liu 2006; Fuglie and Schimmelpfennig 2010; Fuglie 2010). It would, therefore, be important to develop human capital among SCs and STs through education to reduce asymmetric information, distress sale of farm products to increase access to agricultural credit.

VI. DIFFERENTIAL ACCESS TO INPATIENT CARE

VI. DIFFERENTIAL ACCESS TO INPATIENT CARE

Health is defined as a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity. Improving the health of the population, therefore, is considered important not only for its welfare implications but also as an endowment in the society for economic growth. However, variations in health are observed across socio-economic groups, both in developed and developing countries. Reducing systemic variations in health across socioeconomic groups has become an important health policy agenda at the global level. It is considered important to provide uniform healthcare services to all instead of being based on their socioeconomic status or affordability (Wagstaff and van Doorslaer 2000). In several countries, access to basic health services has been considered a matter of human right. Given this perspective, any inequality in the provisioning of health services across different social groups can be taken to be the outcome of discrimination.

Studies on the Indian medical system indicate that healthcare services are increasingly being based on one's ability to pay. This has become more so with the increase in privatization and liberalisation of the economy and declining public spending on health (Gupta 2013). To address the growth of user fees in healthcare and move towards Universal Health Coverage (UHC) programmes such as the National Rural Health Mission (NRHM) and Rashtriya Swasth Bima Yojna (RSBY), Ayushman Bharat (AY) etc. have been introduced over the past couple of decades (GOI 2017).

Despite these initiatives, utilization of healthcare services (especially those privately provided for) continues to be based on one's ability to pay, with higher income groups cornering much of the services (Borooah 2010). A study by Joe, Rudra and Subramanian (2015) shows that the elderly need standardised outpatient health care facilities and hence should be pro-poor in approach. The outpatient health care system, however, is utilised largely by higher-income groups. Another study by Borooah (2010) concludes that only 26 per cent of Dalit women can access prenatal healthcare services whereas the corresponding figure for non-Dalit women is much higher. Similarly, studies (Anushree and Madheswaran& & Madheswaran 2018) have shown that the inequity in the utilization of outpatient services has gone up over time. The use of government healthcare services, on the other hand, has been concentrated among poorer sections of the population.

This paper explores discrimination in the context of inpatient health service utilisation in the pre-initiative period (2004) and post-initiative period (2014 and 2017-18) using three rounds of nationally representative data from the NSS. The paper addresses the following questions:

- Does the magnitude of hospitalization differ by socio-economic class?
- If so, what are the factors associated with these?
- Is the provision and utilisation of hospital care services tending towards greater equity over time?

The evidence on inequalities in hospitalization and identification of underlying factors, as attempted in the study should help the state governments in provisioning universal healthcare services that are affordable, accessible and cost-effective.

OVERVIEW OF TRENDS

TRENDS IN HOSPITAL CARE UTILIZATION

Figure 5 captures the rate of hospitalisation (per 1000 population in the last 365 days) for the period 2004-2017. It is observed that the rate increased between 2004 (24 per 100 population) and 2014 (44 per 1,000

population) but declined to 38 per 1,000 population in 2017. The decline observed in rural and urban areas is similar. A similar pattern of declining hospitalisation is observed across the majority of states except a few North-Eastern states, Goa, Chhattisgarh, and Uttar Pradesh where the rate of hospitalisation has increased between 2014 and 2017-18.

FIGURE 4 – TRENDS IN HOSPITALIZATION IN INDIA, 2004-2017
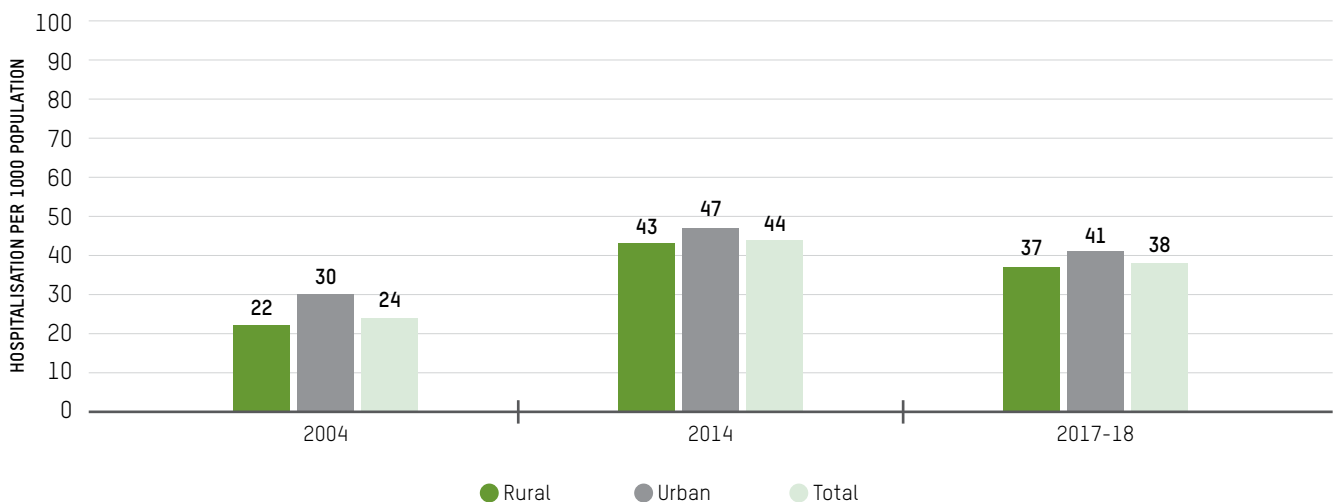
Source: Authors' calculation from NSS, Using 75th (2017-18) 71st (2014) and 60th (2004) round data.

The empirical literature suggests that economic factors (such as consumption expenditure, education), social factors (such as caste, religion) and demographic characteristics (such as gender) affect the decision of individuals to use as well as their access to healthcare services. Table 21 in Annexure C presents the percentage utilisation of inpatient healthcare services across socioeconomic and demographic groups for India. The utilisation of these services among persons belonging to the SC/ST groups increased from 2.0 per cent in 2004 to 4.2 per cent in 2014 and then declined to 3.6 per cent in 2017. For the OBC group, it increased from 2.5 per cent in 2004 to 4.4 per cent in 2014 and then declined to 3.8 per cent in 2017 while, for the FC the figures were 2.7, 4.6 and 4.1 respectively. Between 2004 to 2017, the utilisation of inpatient care was lower among the persons belonging to SC/ST communities as compared to persons belonging to the OBC. Furthermore, no difference in inpatient care was observed across gender in 2004. Significant differences were observed with women utilising more inpatient care as compared to males in the year 2014 and 2017 largely due to

hospitalisation for child birth and related issues.

Likewise, the utilisation of inpatient care among persons belonging to the poorest expenditure group (bottom 20 per cent of the population) increased from 1.4 per cent in 2004 to 3.2 per cent in 2014 and declined to 3.1 per cent by 2017; the utilisation of inpatient care among persons belonging to the second poorest expenditure group (second 20 per cent of the population) increased from 1.8 per cent in 2004 to 3.9 per cent in 2014 and declined to 3.3 per cent by 2017; the utilisation of inpatient health care services among persons belonging to the middle expenditure group increased from 2.2 per cent in 2004 to 4.2 per cent in 2014 and declined to 3.9 per cent by 2017; and it was 2.9 per cent in 2004, 4.9 per cent in 2014 and 4.2 per cent in 2017 for those belonging to the next higher expenditure group (fourth 20 per cent of the population). Persons belonging to the top 20 per cent of the population i.e., those in the largest expenditure group, the inpatient care has increased from 3.7 per cent in 2004 to 5.9 per cent in 2014 and declined to 4.5 per cent by 2017.

Table 21 in Annexure C presents expenditure-based hospitalisation by gender across major Indian states. *The results suggest that at an All-India level in 2014 and 2017 women belonging to the bottom 20 per cent expenditure class utilised inpatient care three times than men belonging to the same group.* This gap in the rate of utilisation of inpatient care between the genders belonging to the same expenditure class decreases as one moves from the lower to higher expenditure classes.

The state-wise variations in the SES related hospital care utilisation are observed across states in all three years. For instance, in 2017 in Bihar females belonging to the bottom 20 per cent expenditure class utilised 6.4 times more hospital care than male members belonging to the same income group while it was 4.1 in Uttar Pradesh, 3.9 in Telangana, 2.6 in Karnataka and 1.1 in Kerala. For the same period, females belonging to the top 20 per cent of the expenditure class in Punjab utilised 2.3 times more hospital care compared to male members belonging to the same expenditure class.

Women belonging to the bottom 20 per cent of the expenditure group in Kerala (137 per 1000 population) used the highest level of inpatient hospital care use while it was lowest in Andhra Pradesh (43 per 1000 population). Whereas, men belonging to the bottom 20 per cent in Kerala (86 per 1000 population) used the highest level of inpatient care use while it was lowest in Bihar (8 per 1000 population). For the same period, among those who belonged to the top 20 per cent of the expenditure group, Kerala (female: 101 per 1000 population; male: 92 per 1000 population) had the highest utilisation of inpatient care while it was the lowest in the state of Bihar (female: 42 per 1000 population; male: 16 per 1000 population).

Expenditure-based inpatient care utilisation by social group across the major Indian States is presented in Annexure C. The results suggest that the persons belonging to the bottom 20 per cent in the SC/ST group utilised 1.7 times lesser inpatient care compared to the forward castes including the OBC (henceforth Forward Castes) of the same expenditure class in 2017. No such difference was observed between the two caste groups belonging to the higher expenditure classes.

In 2017, persons belonging to bottom 20% income group who were from Scheduled Caste and Schedules Tribe utilized 1.7 times lesser hospital care compared to OBC & others in the same income group.

1.7
TIMES LESS HOPSITAL CARE
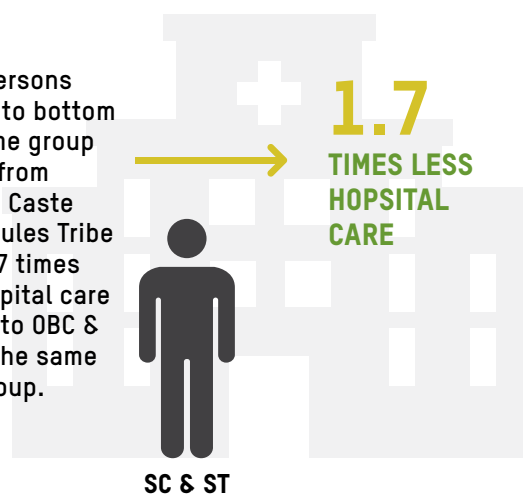
SC & ST

The state-wise variations in the SES related inpatient care utilisation among social groups are observed across states in all the three years.

SC/ST PERSONS BELONGING TO THE BOTTOM 20 PER CENT UTILISED 2.0 TIMES LESS INPATIENT CARE COMPARED TO THE FORWARD CASTES BELONGING TO THE SAME EXPENDITURE GROUP IN RAJASTHAN IN 2017 WHILE IT WAS 1.4 IN MADHYA PRADESH AND BIHAR AND 1.2 IN KARNATAKA AND ANDHRA PRADESH.

For the same period in Punjab, the SC/ST belonging to the top 20 per cent utilised 1.04 times less inpatient care than the Forward Castes. Further, among the SC/ST, Kerala (115 per 1000 population) used the highest level of inpatient care while it was lowest in Bihar (22 per 1000 population). Among those belonging to the Forward Castes, Kerala (110 per 1000 population) had the highest level of hospital care use while it was lowest in Punjab (17 per 1000 population).

TRENDS IN PUBLIC/ GOVERNMENT INPATIENT CARE IN PUBLIC/GOVERNMENT HOSPITALS

At the All-India level, about 40 per cent of those who sought inpatient care utilized government health facilities in 2004. In 2014, 45 per cent of them used public healthcare facilities while the figure was as high as 51 per cent in 2017. However, significant variation in the utilisation of public inpatient care was observed across states.

Between 2014 and 2017, the percentage utilisation of public inpatient care increased from 39 per cent to 53 per cent in the state of Tamil Nadu while it increased from 33 per cent to 37 per cent in Kerala. Its utilisation in Karnataka increased from 32 per cent to 35 per cent. This could be due to the increasing share of patients being covered under the Publicly Funded Health Insurance (PFHI) schemes utilising public facilities in addition to the increasing cost of care provided by private facilities (Muraleedharan, V. R. et al, 2020).

Variations in the percentage of persons utilising inpatient public care was observed between rural and urban areas. For instance, at an All-India level in 2004, 41 per cent of rural residents sought public inpatient care as compared to 38 per cent of urban residents.

Between 2004 and 2017, the percentage of persons seeking public inpatient care sharply increased to 57 per cent for rural residents while it merely increased to 39 per cent for the urban residents.

Furthermore, state-wise variations in the use of inpatient public care by place of residence was also observed. For instance, in 2004 in Karnataka, 39 per cent of rural residents sought care from public inpatient healthcare facilities while it was only 26 per cent for urban residents. However, by 2017, the percentage utilisation of public healthcare increased to 41 per cent in rural areas while it declined to 23 per cent in urban areas. Similar trends were also observed in other states.

EXPLAINING DISCRIMINATION

DETERMINANTS OF PUBLIC/ GOVERNMENT INPATIENT CARE UTILIZATION

The poorest expenditure class had a significantly higher probability of utilising public inpatient care than the richest expenditure class in all periods. *Persons belonging to the poorest expenditure class were 37.6 per cent more likely to use public inpatient care than the richest expenditure class* in 2004; this gap increased to 66.9 per cent by 2014 and declined to 50.4 per cent by 2017. Moreover, persons with secondary and above level of education were less likely to use inpatient care as compared to those with no education (illiterate).

In 2004, persons belonging to the OBC were (47.1 per cent and 31.3 per cent) less likely to use public inpatient care than those belonging to the SC/ST. This gap declined to 46.7 per cent for the OBC as well. In 2014, rural residents were 4.8 per cent more likely to use public inpatient care than urban residents; this gap increased by 2017 where 13.6 per cent of rural residents were more likely to use public inpatient care than urban residents.

Furthermore, the younger population (0-14 years) were 8.7 per cent less likely than the older population (60 years and above) to use public inpatient care in 2004. While this gap declined to 6.5 per cent for those aged between 0-14 years, individuals aged 45-59 years were 3.2 per cent more likely to use public healthcare compared to the elderly population in 2017. For the same period, persons reporting some infectious diseases were 20.7 per cent more likely to opt for public inpatient care as compared to those persons reporting other diseases. Importantly, in 2014 and 2017, females were 6.4 percent and 8.6 percent more likely to use public healthcare facilities compared to men. Moreover, those covered under some insurances were 8.3 per cent less likely to opt for public healthcare compared to those not covered under any insurance.

SOCIOECONOMIC GRADIENTS OF INPATIENT HEALTHCARE UTILISATION

To understand consumption expenditure-related differences in inpatient care utilization, a bivariate inequality measure (the Concentration Index, abbreviated to CI henceforth) was used. The results show that the line for hospitalisation lies below the line of equity and has a pro-rich bias, indicating the presence of consumption expenditure-related inequalities in inpatient care use at the All-India level. This, however,

has tended more towards equality in the last decade implying that the inequality in hospital care utilisation is declining at over one decade.

The table below presents inequality in the utilisation of hospitalisation care services across state. Among the 14 larger states of India, hospitalisation services were utilised significantly more by the rich in all three years. *The concentration indices were positive and statistically significant, signifying a pro-rich distribution in all states.* However, the magnitude of inequality in hospital care use is declining over the years except in the states of Andhra Pradesh (CI in 2014: 0.057 v/s CI in

2017: 0.058), Rajasthan (CI in 2014: 0.044 v/s CI in 2017: 0.060) and), Telangana (CI in 2014: 0.021 v/s CI in 2017: 0.032) wherein inequalities in hospital care utilisation has marginally increased.

We also found significant interstate variations in terms of hospitalisation rate by consumption expenditure. For instance, in 2017 Kerala had the lowest levels of pro rich inequality in hospital care use (CI: 0.009) followed by Maharashtra (CI: 0.045) and), Karnataka (CI: 0.021); while states such as Uttar Pradesh (CI: 0.101), Orissa (CI: 0.100), Rajasthan (CI: 0.024) have relatively higher pro rich inequality in hospitalisation.

TABLE 5 - CONCENTRATION INDEX FOR HOSPITAL CARE UTILIZATION IN THE MAJOR STATES, 2004-2017

MAJOR STATES	2004	2014	2017	RANK- 2004	RANK- 2014	RANK 2017
ANDHRA PRADESH	0.183	0.057	0.058	11	7	11
BIHAR	0.135	0.103	0.023	7	13	4
GUJARAT	0.127	0.07	0.051	4	9	10
KARNATAKA	0.127	0.009	0.021	4	1	3
KERALA	0.095	0.081	0.009	2	11	1
MADHYA PRADESH	0.181	0.055	0.045	10	6	9
MAHARASHTRA	0.127	0.053	0.011	4	5	2
ORISSA	0.15	0.091	0.1	9	12	13
PUNJAB	0.204	0.061	0.024	12	8	5
RAJASTHAN	0.138	0.044	0.06	8	3	12
TAMIL NADU	0.094	0.074	0.031	1	10	7
TELANGANA		0.021	0.032		2	8
UTTAR PRADESH	0.244	0.125	0.101	13	14	14
WEST BENGAL	0.118	0.05	0.03	3	4	6
OVERALL (ALL INDIA)	0.199	0.118	0.08			

Source: Authors' calculation from NSS, Using 75th (2017-18) 71st (2014) and 60th (2004) round data.

The study findings show an increasing trend in the utilization of inpatient care between 2004-2014, a declining trend between 2014-2017 and an increasing trend in the utilisation of public inpatient care over the last decade (2004- 2017) at the All-India level. A similar trend is observed over the last decade even across the major states.
It is also evident that in recent times, the differences in utilization of inpatient care between rural and urban

areas are narrowing down and could be partly attributed to the effective implementation of the NRHM. The inequality in the utilization of inpatient care favoured the rich throughout the study period at an All-India level and a similar pattern was observed even among the major states. However there has been a reduction in the magnitude of inequities in the utilization of inpatient care over a decade at the national level and across the major states.

RESULTS

Three prominent findings related to discrimination emerge from this study;

First, in all the three years, the magnitude of inequality in the utilization of inpatient care was the highest in Uttar Pradesh when compared to All-India estimates. The magnitude of discrimination in inpatient care use was lower in all the south-Indian states compared to the others. The reasons for such low levels of discrimination may be attributed to the higher provision of financial risk protection through state-led programs leading to better access to hospital care, especially among the marginalised.

Second, between men and women belonging to the same consumption expenditure groups, women utilised higher inpatient care than men. The reasons for this remain unclear although one can surmise that childbirth related hospitalizations and higher institutional delivery rates account for much of this along with the fact that when womens' healthcare issues do surface often they are serious enough to merit hospitalisation. Furthermore, there are quality issues in the provisioning of inpatient facilities in public and private hospitals in terms of quantity and quality of manpower and more importantly, the level of infrastructure. In such circumstances, even higher utilisation of inpatient care among women may lead to suboptimal provision of health services and thus reinforce discrimination in terms of quality care for women in the public sector.

Third, consumption expenditure related differences in inpatient care use were observed between the SC/ ST, OBC and other castes. The differences in inpatient care use between caste groups was higher within the lower consumption expenditure groups i.e. there were greater inter caste differences in the utilisation of public health facilities in the lower expenditure categories. This could also be explained in terms of quality differences in the public and private facilities.

Systemic socioeconomic inequalities in healthcare utilization with a better-off population having higher levels of healthcare use are a common phenomenon in low and middle-income countries (Makinen et al, 2000; Mullachery, Silver and Macinko, 2016). Even in countries like Canada and Thailand with UHC, even after adjusting for the differences in healthcare needs, the utilization of healthcare services was found to be unduly concentrated among the wealthier groups (Dunlop, Coyte and McIsaac, 2000; Allin, 2008; Yiengprugsawan et al, 2010). In India, lower levels of insurance penetration and the high cost of inpatient treatment, many among the poor are not in a position to seek care though hospitalisation.

The study results suggest pro-rich inequality in the utilization of inpatient care services and this result is consistent with the evidence from other studies, including those from India and China (Shankar Prinja et al, 2013; Li et al, 2017). *Despite such inequality, the evidence shows that the utilisation of inpatient healthcare is tending towards an equitable provision as observed by the decline in the magnitude of inequality over a decade.* An increase in awareness about treatable medical conditions and in the availability of healthcare facilities especially in rural areas through various government schemes and the purchase of private healthcare services by the government through strategic financing in recent times seem to have contributed to an overall increase in inpatient care among the marginalised groups.

VII. CONCLUSION: SUMMARY OF FINDINGS AND POLICY IMPLICATIONS

VII. CONCLUSIONS: SUMMARY OF FINDINGS AND POLICY IMPLICATIONS

This anthology of research papers focuses on differential access to employment (opportunities and wages), the factor market (access to credit) and human capital among different socio-religious and gender groups. The analysis attempts to capture the extent of identity-based discrimination explaining the gaps in access to employment, wages, credit as a factor of production and health facilities in the context of the formation of human capital across different castes, tribal and religious identities as well as gender. The analysis of the labour market covers different types of jobs and disparities in earnings following a standard framework of discrimination studies. It extends to cover the factor market discrimination against the SC and ST population by focusing on access to credit provided to the agriculture sector through commercial and cooperative banks. It also considers discrimination in human capital formation or building capabilities by considering access to hospitalisation facilities as a proxy indicator of general health. Methodological details over and above those mentioned in the methodology chapter are in Annexure D.

The overall conclusion emerging from the analysis in different sections is that there has been a marginal decline in discrimination within the labour market in India over the past one and a half decade. However, this is characterised by high gender inequity, so much so that the probability of a woman being employed in decent jobs have no bearing on her endowments. This leads to the alarming result emerging from the mathematical model that gender discrimination is almost total in the country. The high degree of discrimination, estimated through the model, is best explained by the existence of a large segment of well-qualified women unable to or not 'wanting' to join the labour market due to a variety of factors.

Muslims record a decline in discrimination in access to employment. One, however, must not hasten to celebrate this result or the underlying trend. *This low discrimination is the result of the ability of the Muslim*

population to specialise professionally in low-earning non-agricultural activities, acquired through family and peer groups such as domestic and industrial services in repair/maintenance, carpentry, construction etc., which require little social interaction. Often Muslims work through agencies wherein their religious identities are not revealed. The main reason for low discrimination is a low level of formal endowment like years of schooling etc. that explains the deficit in work participation and earnings. The high gap in human capital leads to a low magnitude of discrimination within the framework of the model since endowment gaps explain much of the employment gap of Muslims with persons belonging to other communities.

Discrimination against the SC/ST population in the labour market is notably high but has shown slight decline at the macro level from 2004-05 to 2019-20. However, in certain spheres, this has shown a marginal increase as their level of education and other measurable endowments have improved over time due to government policies of reservation and some success in asset creation among them. How can an increase in educational level, other things remaining constant, result in an increase in discrimination? If educational endowments of a deprived community improve over time, a given gap in employment or earning becomes less acceptable, suggesting an increase in identity-based discrimination. It is unfortunate that despite significant improvements in the educational levels of women, their work participation rates have not gone up perceptively in the different segments of the labour market.

The trend and pattern of discrimination in earnings are similar to that observed in employment. Gender-based discrimination, yet again, emerges as the key factor behind discrimination, much more than the others. Importantly, its magnitude has gone up not only for the casual workers but also for the regular/salaried employees. High discrimination in the RE could be due to women getting lower level jobs, not getting promotions,

or not being able to access better pay scales etc. In fact, this shows that their earnings are not commensurate with their human capital.

For casual workers, discrimination has gone up for the SC/ST population which again is a matter of concern. While there is a general decline in discrimination in access to quality employment for the SC/ST, as noted above, there is no such positive trend in the payment of wages. This is indicative of the fact that while improvement in endowments improves access of the SC/ST to labour markets, their earnings do not go up commensurately. Disaggregation of results by rural and urban areas reveals an interesting pattern, particularly, for caste and religious groups. In employment, discrimination is higher for SC/ST than Muslims in rural areas while it is the opposite in urban areas. The low discrimination for Muslims in rural areas is because they are mostly in non-agricultural activities where they have certain skill advantages due to family professions which don't require much personal interaction, unlike those of the SC/ST. In earnings, too, high discrimination is observed against the SC/ST more than Muslims in rural areas in all types of employment viz RE, SE and CL.

High caste discrimination in rural areas is because the institution of caste is more rigid than in urban areas. Discrimination is observed, particularly, in business and self-employment. Low discrimination in RE is due to the system of reservation and this is supported by a number of studies including those in the present anthology.

In urban areas, employment and wage discrimination is less for the SC/ST than Muslims. Low discrimination in urban RE is clearly because the former have access to public sector jobs through reservation. The opposite is the case for SE and CL. Thus, the most important concern for Muslims is employment and wage discrimination in regular/salaried jobs in urban areas. The exclusionary factors affecting Muslims in the urban labour market, however, emerge clearly which is supported by other studies as well. The urban poor Muslims are bearing the brunt of the problem of modern production process and technology as these have adversely affected their occupation and livelihood. The econometric model, however, does not record high discrimination since their high outcome deficits are explained largely by

their lack of formal endowments. During 2004-05 and 2019-20, discrimination against the SC/ST in access to employment has gone down in both rural and urban areas. For Muslims, discrimination has increased marginally in urban areas but reduced in rural areas. However, no notable change is observed for women with discrimination remaining high at every point of time.

The most welcoming result in the context of wage/ earning is observed in R/SE jobs in urban areas wherein all forms of discrimination have reduced during 2004-05 and 2019-20. This improvement is observed for caste and religious identities in R/SE jobs in rural areas also. The extent of discrimination has reduced for the SC/ST and no evidence of religion-based discrimination is observed in rural areas. *Gender discrimination remains the most important concern in R/SE jobs as it has increased in rural areas and marginally reduced in urban areas.* Wage discrimination in casual work is another aspect demanding serious attention, particularly, for gender and caste identities in both rural and urban areas. Nonetheless, there has been a reduction in religion based discrimination in both rural and urban areas. This is largely due to the specialisation of Muslims in certain traditional-skill based occupations.

An attempt has been made to assess the differential impact of the pandemic focusing on three vulnerable communities - SC/ST, Muslims and Women – on the basis of the type of employment – RE, SE and CL in urban and rural areas separately. The overall impact of the pandemic has been severe in urban areas due to the national lockdown bringing urban businesses to a grinding halt. The percentage of the unemployed rose from 15 per cent to 50 per cent, within a period of three months. In rural areas, the increase was modest, going up from 10.5 per cent to 22.2 per cent. The increase, however, was higher for the SC/ST and Muslims than the rest of the populations. Taking the expanded definition of unemployment *(those reported as employed by weekly status but who did not work due to certain exigencies), the sharpest rise in percentage terms is noted among Muslims in rural areas from 14 to 31 against the figures of 11 to 22 for the SC/ST and from 10 to 20 in the general category.* It is important to note that although Muslims generally don't face discrimination in the labour market in rural areas, the pandemic upturned the situation

where they were the worst affected. The increase in unemployment in urban areas during the pandemic was more alarming for all the segments, although the differences across socio-religious categories were relatively small.

The major impact of the pandemic has been in terms of reduction of casual employment which was extremely high in urban areas since the lockdown led to closure of non-agricultural activities. Correspondingly, self-employment went up as people shifted to it as a part of their survival strategy. In contrast, the share of regular employment remained stable or showed marginal increase, partly due to regulations, governing the formal organised sector and partly due to fall in total workforce.

With loss of jobs, self-employment became the last resort for the destitute. The percentage of self-employed who did not report work during the reference week went up from 4.3 in PPQ to 11.3 in FPQ in rural and from 7.5 per cent to 39.8 per cent in urban areas. The rise was extremely uneven across communities in the rural areas. The sharpest increase was observed in Muslims for whom the percentage figures went up from 6.9 to 22.9 the increase for other communities being relatively less. In urban areas, the figure went up from 7.8 to 40.7. The corresponding increases of the SC/ST and the OBC categories were equally high. The percentage of people who did not report work during the reference week increased even among the regular/salaried employees. The pattern of increase across communities was similar to that of self employed, both in rural and urban areas.

The percentage of self-employed persons who received no income was as high as 52 and 57 in FPQ in rural and urban areas respectively, clearly underlining the point that their absence from work was non-voluntary. The increase in these figures in urban areas is higher. *Among regular workers reporting no work, as high as 22 per cent received no salary in the first quarter of the pandemic, despite appeals by political leaders, government functionaries and civil society activists not to deny normal income. The non-payment figures are higher for Muslims and SC/ST than the general population in urban areas.*

Women during the first quarter of the pandemic recorded massive increase in their unemployment rate, similar to

4-5 TIMES HIGHER EARNING

Self-employed males earned four to five times higher than females.

MALE   **FEMALE**
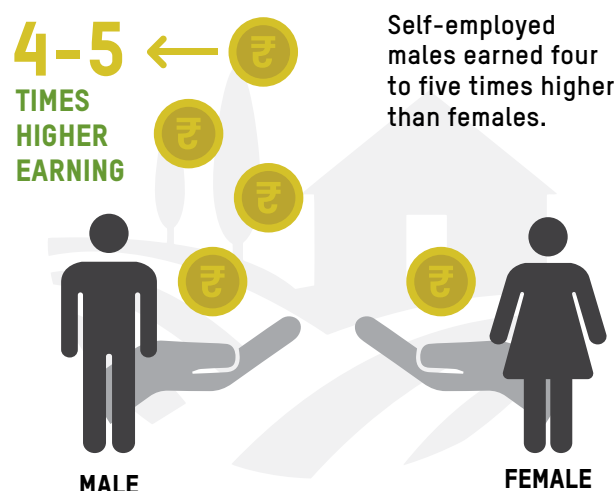
that of men in urban areas, but in rural areas this was less than that of men. This can be explained in terms of a larger share of women being engaged in agriculture and home-based activities in rural areas that were not seriously affected during the pandemic. There was, nonetheless, a massive fall of casual employment for them in urban areas but this didn't lead to an increase in the share of self-employment, unlike the trend among men. And yet, the urban unemployment rate for women did not rise above men because a large segment of women workers were engaged as domestic help and in unskilled jobs on a regular basis where the impact was less.

It is a matter of small satisfaction that many persons in regular, casual or self-employed categories, despite not doing any work during the reference week due to certain exigency, reported some income because of the nature of the contract or work done previously. One notices that women workers are at a great disadvantage in this regard both in rural and urban areas. While only 9 per cent among the self-employed men reported not having any income during the period of no work, the figure is as high as 35 per cent for women in the pre-pandemic quarter. The pandemic made their predicament critical since the figure went up from 48 per cent to 74 per cent in FPQ in rural areas and from 23 and 61 in urban areas. For men, the percentage figures for such workers were much less and the increases were modest.

The average earnings for those who found employment in FPQ were much less than those of PPQ in all social groups and employment categories both in rural and urban areas. *In rural areas, it was 9 per cent below the average for the*

year 2019-20, the deficit being 21 per cent in urban areas. Self-employed Muslims had the highest fall of about 18 per cent against a 10 per cent fall for the SC/ST and others, at current prices. The deficit of Muslim regular workers compared to the preceding quarter was 24 per cent against a 10 per cent decline for the SC/ST while there was no deficit for the others. It is only in the case of casual workers that Muslims record no significant fall in earnings, even after adjusting for the inflation factor in the FPQ. Although there has been a drastic fall in the number of casual workers, the average income of those who could find employment during the FPQ was much below those of the PPQ, for all social groups. In urban areas, however, the income deficits in FPQ compared to PPQ for the self-employed work out as very high - a third or more for the SC/ST and OBC. This corresponds to their actual unemployment rate which is around 40 per cent.

The earning deficits for women in rural areas are not extremely high across employment categories but are significant in relation to those of men in the pre-pandemic quarters. Self-employed women, emerge as a vulnerable category wherein men earned four times that of women. In the other two employment categories, men earned 50 per cent more than that of women. The fall in the earnings of both men and women was very high in urban compared to rural areas in FPQ. The earnings for self-employed men declined by 36 per cent while the corresponding figure for women was at 26 per cent. *The lockdown constrained the mobility of women much more than men resulting in high employment losses in urban area. The earning loses, however was less, because of their engagement in the low paying service sector whose services were retained at a full or partial payment.*

Gender discrimination in India is structural which manifests in a high ratio of the earnings of men to that of women under 'normal circumstances'. This can be inferred from the data for 2004-05, 2018-19 and 2019-20. The earning gaps are alarming, both in rural and urban areas for casual workers ranging between 50 per cent and 70 per cent. The range is higher for regular workers - earnings by men exceed those of women by 20 and 60 per cent. In the case of self-employed, the disparity is much higher, with men earning 4 to 5 times more than that women. Interestingly, these ratios did not go up in any category of employment in rural or urban

areas during the period of the pandemic. Self-employed women, however, emerge as a distinctly vulnerable category in the context of disparity in earnings in general and their reduction in the pandemic quarter.

To understand discrimination in the factor market, access of the SC/ST population to agricultural credit in rural areas has been examined using national-level data. The analysis shows that the wealth of marginal, small, SC and ST agricultural households are meagre compared to large and forward caste farmers. This disparity can be attributed to the historical denial of rights to these vulnerable sections of the population to acquire and possess factors of production. The lack of physical assets and other resources undoubtedly reduces their capacity or entitlement to procure credit from formal sources.

It is noted that the percentage of agricultural households borrowing funds from formal sources in the SC/ST community has increased during the post-reform period. However, the average amount of credit received by them is about half of what the FCs receive. The probit model also confirms that the probability of accessing formal credit for the SC and ST is much less than that of the FC due to the lack of endowments. Moreover, the probability of access to formal credit among marginal and small farmers is lower than large landholders. Education also emerges as an instrumental factor in improving access to credit. Agricultural households with a relatively higher level of education are, thus, more likely to access credit than the illiterates. The amount of credit availed improves with the level of education among SC and ST also. Agricultural households in the western region of India, which are economically better off than the other regions of the country are more likely to get agricultural credit than those in the other regions.

The results confirm that caste factors play an important role in determining access to credit along with economic factors. The gap in the access to credit across the social groups, thus, cannot be attributed to gaps in their endowments that, alone, in general, are expected to determine credit-worthiness. Nearly 37 per cent and 49 per cent of gap in access to credit for the SC/ST and the FC can be attributed to discrimination. The extent of discrimination is higher in commercial banks than in the cooperatives for the SC/ST.

The study related to the healthcare system in the country shows that the hospitalisation rate has increased from 24 to 44 per 1000 population during the period from 2004 to 2014 but it declined to 38 per 1,000 population in 2017. The decline is observed both in rural and urban areas. A similar pattern of declining hospitalisation rate is observed across majority of the states except a few such as Goa, Chhattisgarh, and Uttar Pradesh where the rate has increased between 2014 and 2017-18.

The econometric exercise establishes that the poorest expenditure class had significantly higher probability of utilising public inpatient care than the richest expenditure class at all the three points of time. Furthermore, persons with secondary and above level of education were less likely to utilise public inpatient care as compared to those with no education. Persons belonging to forward caste (FC) and OBC groups were also less likely to use this facility than those belonging to the SC and ST groups. Opting for public facility seems to be due to not having the affordability to go for private facilities. These gaps in the rate of utilisation of public facilities increased during 2004 and 2014 but was subsequently reduced in 2017. Also, rural residence, higher age etc. increase the chance of utilizing public inpatient care while insurance coverage increases the chance of utilising private inpatient care.

The major findings in this paper may be summarised as follows:

One, the magnitude of inequality in the utilization of inpatient care was the highest in Uttar Pradesh when compared to All-India estimates in all the three years, The discrimination in inpatient care was less in all the southern Indian states compared to the others. The reasons for such low levels of discrimination may be attributed to the higher provision of financial risk protection through state-led programs leading to better access to hospital care, especially among the marginalised segments of population. Two, between men and women belonging to the same consumption expenditure groups, women utilised public care more than men. The difference, however, becomes small when childbirth related hospitalizations cases are excluded. Also, it must be noted that opting for public facility is often due to lack of affordabiity and the level and quality of services here could be below those of private hospitals.

Three, consumption expenditure related differences in inpatient care use were observed between the SC/ST, OBC and other castes. The differences in inpatient care use between caste groups was higher in the lower consumption expenditure groups. This implies that lower the expenditure category, higher is the untilisation of public care among the SC/ST, resulting in higher intercaste differences in the utilisation of public facility.

In terms of policy interventions, the study recommends the following:

- Actively enforce legislations for the protection and right to equal wages and work.

- Work to actively incentivize the participation of women in the workforce including enhancements in pay, upskilling, job reservations, easy return-to-work options, particularly after maternity and the option to work from home, wherever possible.

- Work to actively challenge and change societal and caste/religion based norms, especially in rural areas, around women's participation in the labour market.

- Work to ensure a more equitable distribution of household work and childcare duties between women and men.

- Implement "living wages" as opposed to minimum wages particularly for all informal workers and formalize contractual, temporary and casual labour as much as possible.

- Extend priority lending and credit access to all farmers regardless of social groups, penalize biased lending and extend credit facilities using a positive credit extension correction policy.

- Ensure that wages and endowments (particularly those for education and health) are extended on war footing to those belonging to minority religions, especially Muslims.

- Ensure that caste-based representativeness and affirmative action (in employment and earning) particularly for ST/SC continue with focused and accurate welfare targeting.

ANNEXURE A

TABLE 6 - UNEMPLOYMENT RATES (PERSONS SEEKING AND AVAILABLE FOR WORK AS PERCENTAGES OF LABOUR FORCE) ACROSS SOCIO RELIGIOUS AND GENDER GROUPS AS PER CURRENT WEEKLY STATUS FOR 15 YEARS AND ABOVE AGE GROUPS FOR QUARTER 3, 4 AND ALL QUARTERS: PLFS 2018-19 & 2019-20

	QUARTER	SC/ST	MUSLIM	NON-MUSLIM	MALE	FEMALE	ALL
2018-19							
Rural	Q3	9.3	6.8	6.9	7.9	7.1	7.7
	Q4	10.1	8.2	7.9	8.9	7.9	8.6
	All	9.5	8.4	7.5	8.6	7.3	8.3
Urban	Q3	11.6	8.9	8.6	8.6	11.6	9.2
	Q4	11.8	9.1	7.9	8.2	11.3	8.8
	All	11.4	9.3	8.7	8.6	11.9	9.3
Rural + Urban	Q3	9.7	7.6	7.5	8.1	8.4	8.2
	Q4	10.4	8.6	7.9	8.7	8.8	8.7
	All	9.9	8.8	7.9	8.6	8.5	8.6
2019-20							
Rural	Q3	7.5	8.5	6.2	7.5	5.1	6.8
	Q4	13.9	13.1	10.6	13.4	8.1	12.1
	All	9.0	8.2	6.9	8.6	5.5	7.8
Urban	Q3	12.2	10.4	7.9	8.6	10.5	9.0
	Q4	27.1	25.2	18.1	20.7	21.1	20.8
	All	15.3	12.4	10.1	11.0	12.6	11.4
Rural + Urban	Q3	8.4	9.3	6.8	7.8	6.5	7.5
	Q4	16.2	17.5	13.2	15.6	11.4	14.6
	All	10.1	9.9	8.0	9.4	7.3	8.9

Note: Persons who are seeking employment and available for work (codes 81 and 82) are considered as unemployed.

TABLE 7 – UNEMPLOYMENT RATES (NOT WORKING FOR ANY REASON BUT AVAILABLE FOR WORK DURING THE REFERENCE WEEK AS PERCENTAGE OF THE LABOUR FORCE) AS PER CURRENT WEEKLY STATUS FOR 15 YEARS AND ABOVE AGE GROUPS FOR QUARTER 3, 4 AND ALL QUARTERS: PLFS 2018-19 & 2019-20

	QUARTER	SC/ST	MUSLIM	NON-MUSLIM	MALE	FEMALE	ALL
				2018-19			
Rural	Q3	10.7	8.9	8.6	9.4	8.9	9.3
	Q4	12.4	10.8	10.6	11.4	10.5	11.2
	All	11.3	10.6	9.4	10.5	9.2	10.2
Urban	Q3	12.8	10.0	10.0	9.8	13.4	10.5
	Q4	13.7	10.8	9.8	9.8	14.1	10.7
	All	13.0	10.9	10.5	10.2	14.1	11.0
Rural + Urban	Q3	11.1	9.3	9.0	9.5	10.1	9.7
	Q4	12.6	10.8	10.3	10.9	11.5	11.0
	All	11.6	10.7	9.8	10.4	10.5	10.4
				2019-20			
Rural	Q3	11.1	13.9	9.7	11.3	8.4	10.5
	Q4	22.2	31.4	20.5	24.2	16.2	22.2
	All	12.8	15.2	11.0	13.1	9.1	12.0
Urban	Q3	17.4	16.1	14.2	14.4	17.2	15.0
	Q4	52.1	52.6	49.3	50.4	49.9	50.3
	All	24.0	21.0	20.2	20.7	22.4	21.0
Rural + Urban	Q3	12.4	14.9	11.2	12.3	10.7	11.9
	Q4	27.4	39.1	30.3	32.1	24.9	30.4
	All	14.8	17.5	14.1	15.4	12.5	14.7

Note: Self-employed, regular/salaried and casual workers who did not work in the week due to sickness or other reasons along with those who are seeking employment and available for work - persons with codes 61, 62, 71, 72, 81, 82 and 98 - are considered as unemployed.

TABLE 8 – QUARTER-WISE PER CENT SHARE OF WORKERS IN EACH EMPLOYMENT CATEGORY AS PER CURRENT WEEKLY STATUS FOR 15 YEARS AND ABOVE AGE GROUPS: 2018-19 & 2019-20

QUARTER	CATEGORY	2018-19			2019-20		
		RURAL	URBAN	TOTAL	RURAL	URBAN	TOTAL
Q3	Self Employed	56.5	37.6	50.8	60.1	38.2	53.5
	Regular/Salaried	14.4	49.8	25.0	13.5	50.4	24.6
	Casual Workers	29.1	12.6	24.2	26.4	11.4	21.9
	Total	100.0	100.0	100.0	100.0	100.0	100.0
Q4	Self Employed	55.8	37.5	50.3	63.9	40.9	57.7
	Regular/Salaried	15.1	49.8	25.6	13.1	52.5	23.7
	Casual Workers	29.1	12.6	24.1	23.0	6.6	18.6
	Total	100.0	100.0	100.0	100.0	100.0	100.0
All quarters	Self Employed	57.4	37.7	51.6	60.6	38.7	54.3
	Regular/Salaried	14.4	49.5	24.8	13.3	50.4	24.0
	Casual Workers	28.2	12.7	23.6	26.1	10.9	21.7
	Total	100.0	100.0	100.0	100.0	100.0	100.0

Note: Self-employed, regular/salaried and casual workers who did not work as per weekly status due to sickness or other reasons are counted here as worker.

TABLE 9 – PER CENT OF WORKERS BY TYPE OF EMPLOYMENT AND SOCIAL GROUP FOR SELECT QUARTERS FOR 15 YEARS AND ABOVE AGE GROUPS

SECTOR	TYPE OF EMPLOYMENT	SC/ST			MUSLIMS			OTHERS		
		Q4 (2018-19)	Q3 (2019-20)	Q4 (2019-20)	Q4 (2018-19)	Q3 (2019-20)	Q4 (2019-20)	Q4 (2018-19)	Q3 (2019-20)	Q4 (2019-20)
Rural	Self Emp	45.5	48.3	54.6	55.1	62.1	60.4	62.4	66.2	70.6
	Regular	13.3	14.3	11.7	14.2	11.7	16.9	16.3	13.5	13.4
	Casual	41.2	37.4	33.7	30.7	26.2	22.6	21.3	20.4	16.0
	All Workers	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Urban	Self Emp	26.7	27.4	31.1	45.8	45.9	51.8	38.4	39.7	41.4
	Regular	51.4	52.8	57.6	36.5	37.4	38.8	52.4	52.1	53.6
	Casual	21.9	19.8	11.2	17.7	16.7	9.4	9.1	8.2	5.0
	All Workers	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Rural + Urban	Self Emp	42.2	44.3	51.0	51.0	55.3	57.6	54.2	57.4	61.3
	Regular	20.0	21.7	18.7	24.0	22.6	24.1	28.7	26.2	26.3
	Casual	37.8	34.0	30.2	25.0	22.2	18.3	17.1	16.4	12.5
	All Workers	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 10 – PER CENT OF WORKERS BY TYPE OF EMPLOYMENT AND GENDER FOR 15 YEARS AND ABOVE AGE GROUPS

SECTOR	TYPE OF EMPLOYMENT	MALE			FEMALE		
		Q4 (2018–19)	Q3 (2019–20)	Q4 (2019–20)	Q4 (2018–19)	Q3 (2019–20)	Q4 (2019–20)
Rural	Self Emp	55.7	59.2	63.9	56.2	62.5	64.1
	Regular	15.5	14.7	13.8	13.8	10.3	11.0
	Casual	28.7	26.1	22.3	30.1	27.1	24.9
	All Workers	100.0	100.0	100.0	100.0	100.0	100.0
Urban	Self Emp	38.6	39.2	42.7	33.3	34.7	33.9
	Regular	47.8	48.4	50.2	58.2	57.5	61.1
	Casual	13.6	12.4	7.1	8.5	7.8	5.0
	All Workers	100.0	100.0	100.0	100.0	100.0	100.0
Rural + Urban	Self Emp	50.3	52.8	57.9	50.1	55.5	57.2
	Regular	25.7	25.4	24.1	25.5	22.2	22.5
	Casual	24.0	21.8	18.0	24.4	22.3	20.3
	All Workers	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 11 – PER CENT OF SELF EMPLOYED AND REGULAR/SALARIED WORKERS WHO DID NOT WORK DUE TO SICKNESS OR OTHER REASONS AS PER CURRENT WEEKLY STATUS BY SOCIAL GROUPS AND GENDER FOR 15 YEARS AND ABOVE AGE GROUPS: PLFS 2018-19 & 2019-20

	QUARTER	SC/ST	MUSLIMS	OTHERS	MALE	FEMALE	ALL
	SELF EMPLOYED 2018-19						
RURAL	Q3	2.2	2.8	1.8	1.9	2.3	2.0
	Q4	3.1	3.4	3.1	3.5	2.0	3.1
	All	2.4	2.8	2.2	2.4	1.9	2.3
URBAN	Q3	1.6	1.5	1.9	1.5	2.8	1.8
	Q4	2.7	2.2	1.8	2.0	1.9	2.0
	All	2.2	2.0	2.2	2.0	2.9	2.2
TOTAL	Q3	2.1	2.4	1.8	1.8	2.4	1.9
	Q4	3.1	3.0	2.8	3.1	2.0	2.9
	All	2.4	2.5	2.2	2.3	2.1	2.3
	SELF EMPLOYED 2019-20						
RURAL	Q3	4.8	6.9	3.8	4.8	3.0	4.3
	Q4	10.5	22.9	10.0	12.6	7.6	11.3
	All	4.9	8.2	4.3	5.4	3.5	4.9
URBAN	Q3	8.8	7.8	7.3	7.9	6.2	7.5
	Q4	40.4	40.7	39.5	41.5	32.1	39.8
	All	13.9	12.0	12.2	13.0	10.0	12.4
TOTAL	Q3	5.2	7.2	4.6	5.6	3.5	5.0
	Q4	13.3	28.1	16.4	18.7	10.9	16.8
	All	5.8	9.4	6.1	7.1	4.4	6.4
	REULAR/SALARIED 2018-19						
RURAL	Q3	1.6	0.8	1.6	1.6	1.3	1.5
	Q4	2.9	2.3	3.9	2.7	6.3	3.5
	All	2.0	2.2	2.3	1.9	3.1	2.2
URBAN	Q3	1.0	0.9	1.2	0.9	1.8	1.1
	Q4	1.8	1.1	2.1	1.3	4.1	2.0
	All	1.3	1.3	1.6	1.2	2.4	1.5
TOTAL	Q3	1.3	0.9	1.3	1.2	1.6	1.3
	Q4	2.4	1.5	2.8	1.9	5.0	2.6
	All	1.7	1.6	1.9	1.5	2.7	1.8
	REULAR/SALARIED 2019-20						
RURAL	Q3	5.6	11.8	5.4	5.2	8.5	5.9
	Q4	28.3	40.9	28.1	29.1	32.0	29.7
	All	8.8	17.8	8.7	9.1	11.0	9.5
URBAN	Q3	5.7	7.1	7.2	6.3	8.9	6.9
	Q4	36.9	39.3	40.1	38.7	41.6	39.4
	All	11.0	10.6	11.8	11.1	12.9	11.5
TOTAL	Q3	5.7	8.5	6.6	5.8	8.8	6.5
	Q4	32.3	40.1	36.0	34.8	38.0	35.5
	All	9.9	13.2	10.7	10.3	12.2	10.7

TABLE 12 – PER CENT OF SELF-EMPLOYED WHO DID NOT WORK AND REPORTED NO INCOME IN THE REFERENCE WEEK FOR 15 YEARS AND ABOVE

		SC/ST	MUSLIM	OTHERS	MALE	FEMALE	ALL
2018-19							
Rural	Q3	16.5	2.0	35.0	9.5	69.5	25.1
	Q4	3.4	2.9	11.7	5.8	23.9	8.5
	All	11.0	3.0	16.3	7.5	36.9	13.3
Urban	Q3	0.0	6.9	4.6	2.6	9.5	4.5
	Q4	6.9	6.8	6.1	4.3	16.4	6.3
	All	4.5	5.4	6.3	4.0	12.4	5.9
Rural + Urban	Q3	15.0	3.1	27.7	8.2	56.9	21.0
	Q4	3.7	4.1	10.8	5.6	22.7	8.2
	All	10.3	3.7	13.9	6.8	31.1	11.7
2019-20							
Rural	Q3	31.6	16.1	24.2	19.6	47.7	25.4
	Q4	55.9	45.1	51.8	47.0	73.8	51.7
	All	45.3	35.4	41.3	36.5	61.7	41.6
Urban	Q3	15.6	12.8	14.5	12.7	23.2	14.4
	Q4	57.6	55.8	57.5	56.6	60.6	57.2
	All	45.1	44.9	47.0	45.8	49.4	46.4
Rural + Urban	Q3	28.4	14.8	20.7	17.3	40.9	21.9
	Q4	56.4	49.7	54.7	51.5	68.5	54.2
	All	45.2	39.3	43.9	40.3	57.6	43.5

TABLE 13 – PER CENT OF REGULAR/SALARIED WHO DID NOT WORK AND REPORTED NO SALARY IN THE REFERENCE WEEK FOR 15 YEARS AND ABOVE

		SC/ST	MUSLIM	OTHERS	MALE	FEMALE	ALL
2018-19							
Rural	Q3	0.0	0.0	0.0	0.0	0.0	0.0
	Q4	0.9	0.0	0.0	0.0	0.6	0.3
	All	0.4	0.0	0.4	0.0	1.3	0.4
Urban	Q3	0.0	0.0	2.0	2.4	0.0	1.5
	Q4	0.5	0.9	0.3	0.7	0.0	0.4
	All	0.2	0.2	0.9	0.8	0.7	0.8
Rural + Urban	Q3	0.0	0.0	1.2	1.1	0.0	0.8
	Q4	0.8	0.4	0.1	0.3	0.3	0.3
	All	0.3	0.1	0.7	0.4	0.9	0.6
2019-20							
Rural	Q3	4.6	0.0	4.8	**4.4**	**3.7**	4.2
	Q4	29.0	8.7	21.6	**24.3**	**13.5**	21.7
	All	24.1	6.6	16.8	**19.5**	**11.7**	17.5
Urban	Q3	1.9	6.4	2.5	**3.4**	**1.5**	2.8
	Q4	30.1	34.5	25.2	**28.8**	**21.7**	27.0
	All	24.5	27.3	20.2	23.6	16.4	21.6
Rural + Urban	Q3	3.3	3.7	3.2	3.8	2.3	3.3
	Q4	29.6	22.0	24.2	27.2	19.1	25.2
	All	24.3	17.3	19.2	22.2	14.8	20.2

TABLE 14 – AVERAGE EARNING BY TYPE OF EMPLOYMENT AND SOCIAL GROUP: A COMPARISON BETWEEN QUARTER 4 (APRIL TO JUNE, 2019, QUARTER 3 (JANUARY TO MARCH, 2020) AND QUARTER 4 (APRIL TO JUNE, 2020) FOR 15 YEARS AND ABOVE

SECTOR	TYPE OF EMPLOYMENT	SC/ST			MUSLIMS			OTHERS		
		Q4 (2018-19)	Q3 (2019-20)	Q4 (2019-20)	Q4 (2018-19)	Q3 (2019-20)	Q4 (2019-20)	Q4 (2018-19)	Q3 (2019-20)	Q4 (2019-20)
Rural	Self Emp	5727	5262	4821	7755	7324	6024	6918	6723	6076
	Regular	12125	12413	11169	12850	15463	11785	12975	13196	13437
	Casual	5988	6608	6265	7366	7111	7344	6231	6717	6612
Urban	Self Emp	10197	10116	6485	10687	11123	7417	15797	14793	9839
	Regular	15421	15637	14972	13515	13301	13000	20241	20481	19808
	Casual	7375	7981	7214	7830	8925	7858	8073	8710	7698
Rural + Urban	Self Emp	6221	5843	4976	8915	8655	6433	9075	8562	6890
	Regular	13606	13927	12961	13295	13950	12424	17524	17973	17603
	Casual	6128	6762	6319	7511	7686	7431	6569	7047	6751

Note: Self-employed, regular/salaried and casual workers who did not work in the week due to sickness or other reasons are also included in the estimation

TABLE 15 – AVERAGE EARNING BY TYPE OF EMPLOYMENT AND GENDER: A COMPARISON BETWEEN QUARTER 4 (APRIL TO JUNE, 2019, QUARTER 3 (JANUARY TO MARCH, 2020) AND QUARTER 4 (APRIL TO JUNE, 2020) FOR 15 YEARS AND ABOVE

SECTOR	TYPE OF EMPLOYMENT	MALE			FEMALE		
		Q4 (2018-19)	Q3 (2019-20)	Q4 (2019-20)	Q4 (2018-19)	Q3 (2019-20)	Q4 (2019-20)
Rural	Self Emp.	8057	8348	7117	2115	1631	1628
	Regular	13795	14034	13178	8571	9371	10040
	Casual	6865	7583	7203	4178	4467	4712
Urban	Self Emp.	16126	15725	10090	4927	5315	3917
	Regular	19537	19974	19054	15670	15617	15688
	Casual	8191	8980	8013	5337	5852	5243
Rural + Urban	Self Emp.	10002	10083	7737	2608	2212	1939
	Regular	17157	17617	16635	12848	13446	13554
	Casual	7102	7835	7293	4285	4589	4742

TABLE 16 – RATIO OF THE EARNINGS OF MEN TO WOMEN IN DIFFERENT QUARTERS

TYPE OF EMPLOYMENT	Q4 (2018-19)		Q3 (2019-20)		Q4 (2019-20)	
	R	U	R	U	R	U
Self Employed	3.8	3.3	5.1	3.0	4.4	2.6
Regular	1.6	1.3	1.5	1.3	1.3	1.2
Casual	1.6	1.5	1.7	1.5	1.5	1.5

Note: Self-employed, regular/salaried and casual workers who did not work in the week due to sickness or other reasons are also included in the estimation

TABLE 17 - PER CENT INCREASE OF AVERAGE EARNING BY TYPE OF EMPLOYMENT AND SOCIAL GROUP FOR WORKERS AGED 15 YEARS AND ABOVE

SECTOR	TYPE OF EMPLOYMENT	SC/ST		MUSLIMS		OTHERS	
		Q4 (18-19) Q4 (19-20)	Q3 (19-20) Q4 (19-20)	Q4 (18-19) Q4 (19-20)	Q3 (19-20) Q4 (19-20)	Q4 (18-19) Q4 (19-20)	Q3 (19-20) Q4 (19-20)
Rural	Self Emp	-15.8	-8.4	-22.3	-17.7	-12.2	-9.6
	Regular	-7.9	-10.0	-8.3	-23.8	3.6	1.8
	Casual	4.6	-5.2	-0.3	3.3	6.1	-1.6
Urban	Self Emp	-36.4	-35.9	-30.6	-33.3	-37.7	-33.5
	Regular	-2.9	-4.3	-3.8	-2.3	-2.1	-3.3
	Casual	-2.2	-9.6	0.4	-12.0	-4.6	-11.6
Total	Self Emp	-20.0	-14.8	-27.8	-25.7	-24.1	-19.5
	Regular	-4.7	-6.9	-6.6	-10.9	0.5	-2.1
	Casual	3.1	-6.6	-1.1	-3.3	2.8	-4.2

TABLE 18 - PER CENT INCREASE OF AVERAGE EARNING BY TYPE OF EMPLOYMENT AND GENDER FOR WORKERS AGED 15 YEARS AND ABOVE

SECTOR	TYPE OF EMPLOYMENT	MALE		FEMALE	
		Q4 (18-19) Q4 (19-20)	Q3 (19-20) Q4 (19-20)	Q4 (18-19) Q4 (19-20)	Q3 (19-20) Q4 (19-20)
Rural	Self Emp	-11.67	-14.75	-23.0	-0.2
	Regular	-4.47	-6.10	17.1	7.1
	Casual	4.92	-5.01	12.8	5.5
Urban	Self Emp	-37.43	-35.83	-20.5	-26.3
	Regular	-2.47	-4.61	0.1	0.5
	Casual	-2.17	-10.77	-1.8	-10.4
Total	Self Emp	-22.65	-23.27	-25.7	-12.3
	Regular	-3.04	-5.57	5.5	0.8
	Casual	2.69	-6.92	10.7	3.3

ANNEXURE B

TABLE 19 – DISTRIBUTION OF AGRICULTURAL RESOURCES BY SOCIAL GROUPS

NSS SURVEY ROUNDS	1991[A]					2003					2012				
PARTICULARS	ST	SC	OBC	FC	ALL	ST	SC	OBC	FC	ALL	ST	SC	OBC	FC	ALL
Average area (hectare)	1.39	0.92	–	1.61	1.47	1.09	0.66	1.23	1.62	1.21	0.87	0.58	0.92	1.22	0.92
Average irrigated area (hectare)	0.92	0.61	–	1.24	1.12	0.94	0.54	0.97	1.41	1.01	0.76	0.49	0.76	1.02	0.77
Average asset value (Rs./AHH)b	285	329	–	760	633	562	693	1260	1954	1261	646	832	1483	2232	1426
Net worth (Rs./AHH)b	264	304	–	716	595	528	666	1210	1894	1213	586	769	1396	2109	1334

Source: The authors' calculation.
a The figures represented in 1991 are irrespective of religion, where the FC category includes the OBC as well.
b Rs. in thousands at 2012 prices.

ANNEXURE C

TABLE 20 – NUMBER AND PERCENTAGE OF HOSPITALISATION BY SOCIO-ECONOMIC AND DEMOGRAPHIC GROUPS

FACTORS	2004 Total number of Hospitalised Cases	2004 Total Population	2004 Percentage of Hospitalised Cases	2014 Total number of Hospitalised Cases	2014 Total Population	2014 Percentage of Hospitalised Cases	2017 Total number of Hospitalised Cases	2017 Total Population	2017 Percentage of Hospitalised Cases
AGE									
0–14	4500867	334255273	1.3	5798851	325086861	1.8	4676254	301230284	1.6
15–29	4894473	251910681	1.9	18931414	303056170	6.2	17502039	318770313	5.5
30–44	4928273	190692317	2.6	9969754	242431683	4.1	9125166	251801974	3.6
45–59	4615512	115685414	4.0	7684918	162961139	4.7	6823340	189392724	3.6
60+	4075707	66377948	6.1	6992785	87565755	8.0	5280726	79317600	6.7
GENDER									
Male	11980122	491255787	2.4	16756292	577018653	2.9	14075161	589257319	2.4
Female	11034710	467665846	2.4	32621430	544082956	6.0	29328884	551189341	5.3
CASTE									
SC/ST	5444943	270614700	2.0	13347396	315005398	4.2	11776585	327394671	3.6
Other Backward Caste	9508939	386754787	2.5	21801889	496066189	4.4	19346945	512315174	3.8
Forward Caste	8059306	301335225	2.7	14228437	310030021	4.6	12283995	300803049	4.1
EDUCATION									
Illiterate	12218644	562257101	2.2	16543332	360136240	4.6	14075161	589257319	4.0
Primary	6816761	262847156	2.6	194256	4598377	4.2	29328884	551189341	2.7
Secondary and Above	3967561	133151912	3.0	32640134	756351728	4.3			3.8
CONSUMPTION EXPENDITURE QUINTILES									
Q1 (Bottom 20%)	2755953	193287811	1.4	7317576	229763999	3.2	7072520	228134591	3.1
Q2	3444810	191983912	1.8	8560483	218645980	3.9	8276165	249443059	3.3
Q3	4093520	189529540	2.2	9367805	221302838	4.2	7349343	186751609	3.9
Q4	5658961	192087923	2.9	11492112	235806674	4.9	10393516	247762880	4.2
Q5 (Top 20%)	7061589	191999211	3.7	12637958	215517618	5.9	10315981	228420756	4.5
PLACE OF RESIDENCE									
Rural	15761825	715076541	2.2	33493979	784954357	4.3	29614305	804486287	3.7
Urban	7253008	243845093	3.0	15883743	336147252	4.7	13793220	336026607	4.1

Source: Authors' Calculation from NSS, Using 75th (2017–18) 71st (2014) and 60th (2004) Round Data

TABLE 21 – TRENDS IN HOSPITAL CARE RELATED EXPENDITURE BY GENDER IN MAJOR STATES, 2004-2017

STATES	2004										2014										2017-18									
	Male					Female					Male					Female					Male					Female				
	Q1	Q2	Q3	Q4	Q5	Q1	Q2	Q3	Q4	Q5	Q1	Q2	Q3	Q4	Q5	Q1	Q2	Q3	Q4	Q5	Q1	Q2	Q3	Q4	Q5	Q1	Q2	Q3	Q4	Q5
Andhra	15	17	23	30	32	11	17	22	28	32	17	30	57	33	73	79	66	67	53	73	31	34	28	30	43	43	60	44	59	67
Bihar	9	8	11	15	18	8	9	12	14	20	12	11	16	30	29	43	51	55	57	76	8	11	12	17	16	51	46	42	61	42
Gujarat	25	22	25	30	39	25	17	26	35	34	24	20	19	39	41	57	63	56	67	66	14	14	16	20	25	48	41	49	51	56
Karnataka	13	21	25	20	31	15	22	25	22	29	34	27	35	45	32	75	58	69	63	66	18	20	32	36	31	47	48	56	49	43
Kerala	104	117	94	108	100	66	96	95	89	93	21	85	69	93	100	91	119	93	108	131	86	88	88	78	92	137	98	123	94	101
Madhya Pradesh	13	18	19	24	37	14	15	21	28	30	18	23	21	30	30	55	61	59	67	66	16	15	26	22	30	48	46	50	52	57
Maharashtra	25	27	28	44	39	21	23	22	33	39	20	31	39	44	37	56	56	54	69	71	20	26	30	27	31	53	50	60	59	47
Orissa	22	27	21	45	38	15	21	26	27	37	21	30	33	42	48	55	68	68	63	65	18	30	47	31	35	51	61	72	61	63
Punjab	20	13	20	35	33	17	7	11	24	43	6	18	15	31	30	40	41	72	58	55	17	33	13	17	24	32	70	49	53	54
Rajasthan	17	19	15	19	27	10	15	13	17	28	15	25	21	27	30	53	73	66	64	71	11	18	19	22	31	57	55	50	59	66
Tamil Nadu	24	37	33	41	42	26	28	27	41	44	29	43	32	46	56	56	74	54	63	79	25	24	33	26	35	48	48	44	46	50
Telangana											32	33	31	39	33	67	100	45	45	78	12	17	16	27	26	47	40	43	48	45
Uttar Pradesh	9	10	11	17	27	7	11	15	17	32	10	14	20	23	39	43	51	50	59	69	12	15	19	23	40	49	45	57	62	62
West Bengal	21	23	24	27	34	18	19	26	24	37	32	28	29	39	45	61	56	60	70	72	28	28	33	40	41	56	55	72	64	56
Overall (All India)	15	19	21	30	36	14	17	22	29	37	16	22	27	36	44	49	57	58	63	74	14	19	25	28	35	50	48	55	57	56

Source: Authors' calculation from NSS, Using 75th (2017-18) 71st (2014) and 60th (2004) round data.

TABLE 22 – TRENDS IN HOSPITAL CARE RELATED EXPENDITURE BY CASTE IN MAJOR STATES, 2004-2017

MAJOR STATES	2004 SC/ST					2004 OBC & Others					2014 SC/ST					2014 OBC & Others					2017-18 SC/ST					2017-18 OBC & Others				
	Q1	Q2	Q3	Q4	Q5	Q1	Q2	Q3	Q4	Q5	Q1	Q2	Q3	Q4	Q5	Q1	Q2	Q3	Q4	Q5	Q1	Q2	Q3	Q4	Q5	Q1	Q2	Q3	Q4	Q5
Punjab	15	9	17	28	38	23	12	14	32	37	29	25	39	43	43	9	42	46	45	42	43	42	22	33	38	17	67	44	34	37
Rajasthan	14	18	13	18	35	13	16	14	18	26	38	53	45	49	56	30	46	42	44	48	25	33	34	46	46	50	38	34	38	48
Uttar Pradesh	6	8	12	18	19	9	11	13	17	31	31	38	31	32	64	23	30	36	42	52	30	35	36	47	54	29	28	38	41	50
Bihar	9	7	11	23	9	8	9	11	13	20	35	41	39	111	81	24	29	32	34	47	22	32	16	56	61	31	27	29	35	26
West Bengal	19	23	26	25	38	20	20	24	26	35	45	41	38	53	59	46	42	47	54	58	35	43	52	44	42	46	42	52	54	49
Orissa	18	26	16	46	71	19	23	27	33	33	34	49	51	71	55	42	47	49	48	56	30	49	60	51	57	39	43	59	44	46
Madhya Pradesh	11	13	24	25	40	16	19	18	26	33	31	35	29	71	63	41	44	45	41	43	27	31	36	36	36	38	29	38	36	44
Gujarat	23	18	20	40	45	27	21	29	29	36	30	41	50	45	61	56	44	29	56	51	43	26	43	36	40	26	30	28	35	39
Maharashtra	16	24	22	28	49	27	26	26	41	37	34	42	52	57	51	43	43	45	56	53	37	31	46	57	46	36	40	43	39	37
Andhra	14	20	25	27	34	12	15	22	29	32	31	52	68	45	80	82	48	59	42	72	33	43	38	41	61	41	48	36	46	54
Karnataka	14	28	19	17	21	14	19	27	22	31	45	46	71	56	66	62	41	48	54	45	28	43	45	40	43	34	31	43	43	36
Kerala	89	90	112	79	81	80	111	91	100	97	57	66	85	88	156	60	120	81	103	114	115	72	62	99	109	110	99	115	85	96
Tamil Nadu	22	36	26	47	44	27	31	32	39	43	42	55	42	54	90	45	62	44	55	65	38	39	41	42	41	35	33	38	34	43
Telangana											132	87	46	53	118	37	53	36	39	50	28	33	33	40	63	26	25	29	36	32
Overall (All India)	14	17	20	27	37	15	18	22	30	37	33	42	43	49	62	31	38	42	49	58	28	35	38	43	45	33	32	40	42	45

ANNEXURE D – METHODOLOGY NOTES

In labour market discrimination, SC, ST, Muslims and Women are taken as the deprived groups. Here, the coverage of endowments is limited to a few items such as education of workers, household head's education and age of worker (as a proxy of years of employment) to identify discrimination. An attempt has also been made to analyse the impact of Covid 19 on the three marginalised groups of population, namely SC/ST, Muslims and Women in both rural and urban areas. The study also analyses the changes in the rates of employment and earnings during the first three months of the onset of the pandemic in 2020, in comparison with the preceding three months and the corresponding quarter in the previous year, for different categories of workers and explains these in terms of social prejudices in labour market. Investigation into the factor market is restricted to agricultural credit to SC/ST vis-a-vis the remaining population. Human capital or endowment creation is brought in only in terms of health and that too is restricted to inpatient hospitalisation facilities. This limited coverage of the study suggests significant gaps and enormous possibilities of probing into the issue of discrimination beyond what has been covered here.

The analysis of employment is based on the non-linear decomposition method under the framework of Oaxaca and Blinder as extended by Fairlee. In the analysis, RE and SE jobs are considered desirable occupations. The two categories are combined for gender and caste group based analysis. For religious groups, however, only regular or salaried jobs have been considered desirable since self-employment in family occupation is the last resort for unemployed Muslims. A large number of the Muslim population in India are concentrated in low quality self-employment and consequently, self-employment has not been considered for analysis of discrimination across religious groups. The earning discrimination has been analysed by employing Oaxaca and Blinder method for the three types of works namely self-employment, regular/salaried and casual employment.

The analysis pertains to the information obtained from the 61st round national sample survey (NSS) data on employment-unemployment (2004-05) and the Periodic Labour Force Survey (PLFS) in 2018-19 and 2019-20. Oaxaca (1973) and Blinder (1973) decomposition method, separates the component of discrimination from the part that can be attributed to differences in endowments across social groups, estimated via the Ordinary Least Squares method (OLS)19. The independent variables used in this model determine the contribution of three endowments - *education, experience of workers and education of the household head.*

The impact of Covid 19 on employment and earnings at the individual level for different quarters is analysed primarily based on PLFS data from 2019-20, as noted above, covering the period from July 2019 to June 2020. The unit level data of the survey permit a macro level assessment of the employment status and earnings for different communities to determine the changes in employment pattern and earnings during the April-June 2020 (Q4) from the quarter immediately preceding it (Q3) and also the corresponding period in the previous year (Q4, 2018-19). In this chapter, we assess the differential impact of the pandemic focusing on three vulnerable communities - SC/ST, Muslims and Women, considering the regular workers, self-employed and casual workers in urban and rural areas separately for persons aged 15 years and above. It is important to note that the results presented here are based on the data collected through a single visit of the PLFS survey in the case of rural areas. For urban areas, however, there were four visits and the information collected in all the visits of the survey have been combined and analysed for temporal and cross sectional comparisons.

The NSS unit-level data from All India Debt and Investment Survey (AIDIS) has been used for the analysis of the agricultural credit. Three rounds of AIDIS, namely, 48th (1991), 59th (2002) and 70th (2012) are used to analyse trend in

access to credit during the past two decades. The econometric analysis, however, is based only on the 70th round data. Access to agricultural credit is analysed by employing a non-linear probit regression model.

The impacts of the independent variables on the amount of credit have been estimated using a sub-sample of households having access to credit. Normally the usage of this sub-sample would result in sample selection bias as it excludes households that do not have access to credit. However, to address this problem, Heckman (1979) developed a two-step procedure which has been used. The Oaxaca (1973) and Blinder (1973) decomposition model to estimate bias against gender in labour market is used to measure the caste discrimination in the credit market. It decomposes the gross amount of credit differential into two parts, a component attributed to endowment differences and the other due to discrimination.

NSS Unit level data on "Morbidity Health Care and Condition of the Aged" and "Social Consumption: Health" for 2004, 2014 and 2017-18 have been used in the study for analyzing inpatient health care services. Two aspects of healthcare-seeking behaviour are analysed; namely, the volume of inpatient health care services and types of health service utilisation during the reference period of 365 days. The analysis is based on the indicators of hospitalisation rate, defined as the number of hospitalised persons per thousand person and the percentage of hospitalized cases in public hospitals to total hospitalised cases. A concentration index is estimated as a measure of inequality in access to health care services across expenditure categories. For analysing the determinants of inpatient healthcare utilization, a probit model is used considering this as the dependent variable. The model incorporates age, gender, residence, education, monthly per capita consumption expenditure, caste, disease type and insurance as an independent explanatory variables.

ENDNOTES

1   "Factor market" is a term economists use to refer to institutions and businesses that deal with purchasing, renting, hiring of the things needed in order to produce goods or services. Those include raw materials, land, labor, and capital. The factor market is also called the input market.

2   The factors of production in the present study are the goods and services including the resources that people use to produce goods and services.

3   In addition to the factors of production that enhance the productivity of labour, her/his physical wealth, duration and quality of schooling, special training, family background etc. contribute to enhancement of productivity as personal endowments. Discrimination in factor market and endowment market have been analysed separately from that in labour market in the present study.

4   In labor economics, the seminal papers of Oaxaca (1973) and Blinder (1973) on decomposition methods have been extensively used Oaxaca-Blinder (OB) decomposition is now a standard tool in the toolkit of applied economists. A large number of methodological papers aimed at refining the OB decomposition and expanding it have been written over the last three decades.

5   See an endnote further down that explains this in detail.

6   A non-linear regression is used to explain the nonlinear relationship between a response variable and one or more than one predictor variable. A probit model is a type of regression where the dependent variable can take only two values, for example married or not married.

7   The Periodic Labour Force Survey (PLFS) was designed with two major objectives for measurement of employment and unemployment. The first was to measure the dynamics in labour force participation and employment status in the short time interval of three months for only the urban areas in the Current Weekly Status (CWS). Second one was, for both rural and urban areas, to measure the labour force estimates on key parameters in both usual status (ps+ss) and Current Weekly Status, see: https://mospi.gov.in/web/plfs

8   The NSSO was set up in 1950 to conduct large-scale sample surveys throughout India.

9   For one such paper read "Education and Employment Among Muslims in India: An Analysis of Patterns and Trends" by Rakesh Basant, 2012 – access here: https://iimahd.iimahd.ernet.in/assets/snippets/workingpaperpdf/12051717332012-09-03.pdf

10   The reference period is the time frame for which survey respondents are asked to report activities or experiences of interest. Many surveys intend to measure frequencies of events or instances within a given period of time; for example, how many times did you consult a medical practitioner during the last two months? Or think about the 2 weeks ending yesterday—have you cut down on any of the things you usually do about the house, at work, or in your free time because of illness or injury? Most of the time, the reference period starts at some point in the past and ends at the time of the survey. However, there are fixed reference periods as well—for example, a calendar year or a calendar quarter. The Background paper for a workshop on conceptual issues in measurement of employment - unemployment by P C Mohanan of NSC Secretariat explains more.

Access here: https://mospi.gov.in/documents/213904/0/nsc_background_paper_12jan09.pdf/73c272a9-65e7-87e5-1136-3029ae0a0bde?t=1595168349347

11   Seeking and available for work as percentage of total labour force.

12   This overestimates unemployment as some of these workers reported positive earnings in the reference period.

13   As compared with the corresponding figure from a year earlier.

14   An essential condition; a thing that is absolutely necessary.

15   Average asset values consist of agricultural land, buildings and other constructions, agricultural machinery and implements, livestock and poultry, transport equipment, bullions and ornaments, and other financial assets.

16   Households that possess area for irrigated crops, unirrigated crops, orchards and plantation crops, forest crops, and aquaculture purposes in rural.

17   Agricultural households (AHH) that borrowed loans for agrarian activities.

18   Priority Sectors Lending is a mandate specified by the RBI to banks imploring them to dedicate funds for specific sectors of the economy like agriculture and allied activities, education and housing and food for the poorer population. According to this mandate, different lenders and banks are required to honour and extend timely credit to agriculture too with the following provisions (as on date) viz. 18 per cent of ANBC or Credit Equivalent Amount of Off-Balance Sheet Exposure, whichever is higher and/or Within the 18 per cent target for agriculture, a target of 8 per cent of ANBC or Credit Equivalent Amount of Off-Balance Sheet Exposure, whichever is higher is prescribed for Small and Marginal Farmers.

19   In statistics, ordinary least squares (OLS) or linear least squares is a method for estimating the unknown parameters in a linear regression model. This method minimizes the sum of squared vertical distances between the observed responses in the dataset and the responses predicted by the linear approximation.

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