# Intersectionality of Gender, Religion and Caste Disparities in Education, Earnings and Employment of Muslim Women in India (1999-00 to 2014) 

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# MASTER OF PHILOSOPHY 

by

## SURBHI MALHOTRA



CENTRE FOR THE STUDY OF REGIONAL DEVELOPMENT
SCHOOL OF SOCIAL SCIENCES
JAWAHARLAL NEHRU UNIVERSITY
NEW DELHI 110067

जवाहरलाल नेहरु विश्वविद्यालय
JAWAHARLAL NEHRU UNIVERSITY
Centre for the Study of Regional Development
(UGC Centre for Advanced Studies)
School of Social Sciences
New Delhi-110067, INDIA

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## DECLARATION

This dissertation zitied "Iaterseetionality of Gender, Religlon and Caste- Disparities in Education, Earnings and Employment of Muslim Women in India (1999-00 to 2014)" submiried by Sarbhi Malhotra, Centre for the Study of Regional Developenent, School of Social Sciences, Jewaharlal Nehru University, New Delhi, foe the awand of the degree of Master of Philosophy, is an original work and has not been submitted so far in part or in full, for ary other degree or diplomis of any University or Institutise.


## certificate

We reocemend that this disseration be placed before the examiners for evaluation.





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## List of Abbreviations Used

| GAR | Gross Attendance Rate |
| :--- | :--- |
| GoI | Government of India |
| IEO | Inequality of Employment Opportunity |
| IHDS | India Human Development Survey |
| LFPR | Labour Force Participation Rate |
| MPCE | Monthly Per Capita Consumption Expenditure |
| M-OBC | Muslim Other Backward Caste |
| M-Others | Muslim Others |
| MoMA | Ministry of Minority Affairs |
| NCM | National Commission for Minorities |
| NFHS | National Family Health Survey |
| NM-Others | Non-Muslim Others |
| NM-OBC | Non-Muslim Other Backward Castes |
| NM-SC | Non-Muslim Scheduled Caste |
| NM-ST | Non-Muslim Scheduled Tribe |
| NSSO | National Sample Survey Organization |
| OECD | Organization for Economic Co-operation and Development |
| OLS | Ordinary Least Square |
| SCR | Sachar Committee Report |
| UP\&SS | Usual Principal and Subsidiary Status |
| UPS | Usual Principal Status |
| WEF | World Economic Forum |
| WPR | Workforce Participation Rate |
| WWP | Wage Work Participation |

# Chapter 1 <br> Contextual Dispositions 

"Not all that lies behind the veil is to be feared"
Aksoy and Gambetta (2016:13)

### 1.1 Introduction

While mankind has made a considerable progress advancing from the age of slavery into the capitalist era, the condition of women hasn't improved in tandem with that of the rest of the society. The social engineering as it has evolved over the years has enmeshed in it patriarchal and class relations and has still pitted women below men in its hierarchy. The 'symbolic' nature of the gender identities emanating from the social structures of patriarchy and hierarchical power relations finds basis in the stereotypes relegating a woman to the private sphere while exalting a man to the public sphere. Women are perceived by the society as being housewives and mothers rather than being recognised as active participants in the labour market while men are portrayed as the breadwinners for the family. Not only do such apprehensions have implications for human capital procurement by women, it is their presumed dependence on the men built into the weft and warp of the society which gives rise to the 'social invisibility' of women's work and justifies relegating them to subordination in the labour hierarchy. To put it differently, since, women's foremost role is apparent to be performing the household chores and she is supposed to be economically dependent on her brother, father or husband, thus, her entry into the workforce does not command a remuneration equal to that of the males (Beaton 1982). Besides this, the reduction of a woman's identity of being a mother and a wife has been so deeply engrafted and normalized into her mind that the submission to this 'false consciousness'- that these are her prime roles with public participation conferred only a subsidiary position has merely assumed the status of the natural order of things. Women fail to recognize that these identities, social structures and processes reinforce the ideology of 'essentialness' or 'naturalness' of gender leading to the perpetuation of their oppression, exploitation and subordination (Beaton 1982; Henley and Freeman 1995; West and Zimmerman 1987).

Indian women are no exception to such patriarchal societal norms of the world. Women equality enshrined in the Indian constitution, enforced by law in relation to certain issues and propaganda of their inclusiveness in the development process has seldom granted them equal spaces in the private spheres (Agnes 2012; Chanana 2001; Desai and Temsah 2014; Hasan and Menon 2004; Lateef 1990; Raju 2013). Thus, transcending the optical illusion created by India's remarkable growth story, one enters its contrastive domain marred by high prevalence of child marriages, sex selective abortions, female infanticide, dowry murders, widow immolations and sexual abuse among other atrocities. Added to India's gendered inequality terrain are the ugly numbers. For instance, at least one-third of the Indian women are illiterate, approximately 33 million girl children in the age group of 5 to 19 years have not seen inside of a classroom, 75 per cent of women are not a part of India's 480 million workforce (Census 2011) and among those who participate in wage work, women receive only 65 paisa $^{1}$ for each rupee realized by men (NSSO 2011-12). Besides this, as per the McKinsey Global Institute Report (2015), $25 \%$ of all women affected by gender inequality worldwide reside in India.

The above stated outcomes broadly emulate the economic status of Indian women entailing a deeper understanding of the structures and social processes ensuing them. Of the different structures of dominance, the peculiarity of Indian case is marked by its religious customs which have largely shaped the social interactions and control processes between men and women. In this context, analogous are Manu's doctrines for Hindu women (Chakravarti 1993) and Ashraf Ali Thanvi's 'Bihishti Zewar' (published in first half of the $19^{\text {th }}$ century) for Muslim women (Minault 1998) as both portray the prototype of a woman as being custodians of a community's identity. As per these 'codebooks,' preserving her purity and performing 'righteous' duties subsumes paramount significance in Indian women's life and any departure from the norms is seen as a prominent failure. By constantly being reminded of her duties and the associated failure on non-compliance, women internalize their inferior status so thoroughly that they lose the sense of self and give in to the hierarchical power

[^0]relations. ${ }^{2}$ Thus, the ideology of patriarchy blended with ethnic-cultural norms continues to assert dominance on Indian women's life thereby "socially controlling the biological aspects of a women" (Chakravarti 1993:583).

In this context, literature propagates a shared set of concerns among women across religions such as control over women's sexuality and autonomy, restrictions on physical and social mobility having implications on their education, employment and inheritance of rights (Chanana 2001; Desai and Temsah 2014; Hasan and Menon 2004; Khan 2007; Lateef 1990). ${ }^{3}$ While acknowledging the role of different religions and their patriarchal laws in sidelining women's identities and concerns, the case of Muslim women warrants significant attention owing to the set of issues peculiar to them varying across their class and geographical affiliations (Hasan and Menon 2004; Khan 2007; Lateef 1990; Rastogi 2007). In addition, due to the presence of caste like structures among the Indian Muslims (Ahmad 1978; Misra 1964; Momin 1977; Mondal 2003); conditions of Muslim women are expected to vary across such dimensions (Stuers 1968; Das 2004; Saheb 2003). Of immense significance in this regard is the theoretical construct of intersectionality within which the Indian Muslim women can be contextualized.

### 1.2 Literature Review

### 1.2.1 Intersectionality: The Case of Indian Muslim Women

While women all across the globe are prone to one or the other form of gender disparities (WEF Gender Gap Report 2016) yet their social position is contingent upon a multitude of other dimensions ranging from their economic class, caste, religion, culture, age, language, geographical location, disability or sexual orientation. In this regard, intersectionality

[^1]offers an analytical apparatus to scrutinize the interaction of these different axis of social inequalities and in evaluating how these intersections result in distinctive domains of oppression and privileges under specific contextual and structural power relationships. Thus, at the crux of intersectionality lies the deconstruction of essentialism and homogeneity of categories of gender or race or economic class or caste (Brah and Phoenix 2004; Symington 2004).

While studying intersectionality it is important to mention that it is no novel perception. Even Crenshaw (1989) who brought the term into the public discourse acknowledged the fact that intersectionality was coterminous with the history of the struggles of black women in America. ${ }^{4}$ Crenshaw $(1989,1993)$ used the metaphor of road to parallel the situation of a black woman struggling to traverse the main crossing where she is encountered with the streets of colonialism, patriarchy, racism and classism and at the intersection of these streets there is existence of many-folded layers of unrecognizable oppression. Thus, evaluating disadvantage in a single axis framework say by analyzing sexism (where white women are the focal point) or racism (where black men are the focal point) conflates the intra-group differences as even within a group, the power relations can be differently experienced by individuals (John 2015). For instance, white women while being reprimanded by their gender were privileged on the basis of their race. Thus, sexism, patriarchy and classism form inter-dependent components of an overarching system of dominance and an individuals' position in this "matrix of domination" (Collins 2000:18) is contextually determined. While no two individuals' experience similar subjugation but intersecting oppressions make them construct a common stand. Thus, intersectionality advances the cause of social-sciences as numerable intersections can be studied in different historical contexts and settings to bring to light the previously hidden exclusions by delving into intricate complicated questions not explored before (Dhamoon 2011; Davis 2008).

[^2]Within this contextual framework, the concerns of Indian Muslim women can also be examined. On one hand, feminism in India has largely dealt with the questions of patriarchy governing the lives of Indian women while on the other, the focus on Muslim community has not exclusively addressed the dilemmas of Muslim women who are located at the precincts of the societal boundaries with their lives not just dominated by the patriarchal construct but also by religious and caste prejudices of their community which makes their realities qualitatively diverse than the sum of their constituent parts. Albeit being largely ignored in the discourses on Indian polity, Muslim women's concerns are highlighted only during debates on Muslim Personal Laws, purdah and religious fundamentalism which instead of raising their issues reinforces the stereotypical image of the Muslim community. For instance, the cases of Shahbano, Gudiya or Imrana portrays Muslim women as victims of their community and religion and hence, issues concerning their empowerment are not brought to the forefront (Agnes 2012; Hasan and Menon 2004).

In this regard, it is essential to espouse the impact of education on women's empowerment in general and Muslim women in particular. Although education might not be a sufficient determinant of women's autonomy but it remains an imperative aspect in women's struggle to cope with and embrace economic changes. Put another way, the capability of women to engage in social, economic and political structures remains conditional upon their skills necessary for this participation (Kabeer 1999; Lateef 1990). Besides this, education has a significant impact on the labour market dynamics of an individual particularly in the form of enhanced earnings (Becker 1962; Schultz 1961). Thus, women's economic freedom is also contingent upon the human capital acquired by them. At the same time, it can be argued that the prejudiced perceptions about a particular group, in the present case, Muslim women can prove to be a hindrance to their acquisition of skills (Piore 1983; Reich et al 1973; Schulman 1996). To put it differently, the identity of a veiled Muslim women in the minds of the civil society and the state alike might foster a kind of psychological discrimination among Muslim women which eventually results in lower acquisition of skills and knowledge (Das 2004).

In the present context, Muslim women's complex specificities in the education and labour market requires delving both into the questions of patriarchy which is deemed to affect
women's advances into the public spheres and the questions of identity among Indian Muslims which has had a significant effect on the education and employment dynamics of the Muslim community as a whole.

### 1.2.2 Education and Labour Market Dynamics of Women

"Literacy may be seen as dispensable for daughters but essential for sons" (Sundaram and Vanneman 2008:132). Within the patriarchal social construct, cultural mores significantly contribute to lower investments on girl's education relative to boys. For reasons such as performing domestic chores, taking care of younger siblings, restrictions on girl's mobility, lower incentives to women's education due to patrilineal marriage customs, higher dowry to be paid at the time of marriage for educated girls, female seclusion to protect her virginity etc. - women's education lags behind that of men (Borooah and Iyer 2005; Chanana 2001; Dreze and Kingdon 2001; Rastogi 2007; The Probe Team 1999). But there has been significant advances in educational access for girls over the years (Raju 2008; Rastogi 2007; Tilak 2015) with development positively contributing to women's education (Alam and Raju 2007; Borooah and Iyer 2005; Sundaram and Vanneman 2008).

While the dismal story on the other side of the spectrum is that the advances in education have not culminated into better representation of women in the Indian labour market. In this regard, three outcomes necessitate contemplation. Firstly, Indian women have considerably lower labour force participation rates than men (Abraham 2009, 2013; Bhalla and Kaur 2011; Lahoti and Swaminathan 2013; Mazumdar 2008; Neetha 2014; Raju 2013).

Secondly, India has witnessed a continual fall in female labour force participation rates (LFPR) over the years. Based on usual principal status (UPS), the rural female LFPR has tumbled from $32 \%$ in 1972-73 to $18.1 \%$ in 2011-12. While in the urban areas, female LFPR has remained stable in the range of $12.6 \%$ to $13.4 \%$ since 1980s (Abraham 2013). Various reasons have been extended for falling participation of women in the Indian labour market. For instance, expanding incomes ensuing reduced requirement on the part of women to work (Bhalla and Kaur 2011; Goldin 1994; Mammen and Paxson 2000), lack of adequate employment opportunities generated (Himanshu 2011; Klasen and Pieters 2015; Thomas 2012), ingrained gender-bias in the Indian labour market discouraging women's
participation in the labour market (Abraham 2013; Akerlof and Kranton 2000; Chanana 2001) have cumulatively contributed to the fall in LFPR. Thirdly, even if women participate; they earn considerably lower wages than men (Chakraborty 2016; Chakraborty and Chakraborty 2010; Rani 2014; Kingdon and Unni 2001; Sengupta and Das 2014).

The processes of human capital accumulation, labour market participation and gender gradient in terms of the earnings differentials are inter-linked. Put another way, women's question seeks to analyze socialization, female education and labour market participation as being dialectical processes while realizing both divergences and continuities from the past which have shaped the present contours of discrimination and disadvantage to the detriment of women.

It is not just the history of women as a group which holds significance in the Indian context, of equal importance is the socio-political construction of the identity of Muslims. Their retrogression from once being the rulers of the land to being protagonists in India's partition and finally relegated to being either the victims or agents of all communal riots in contemporary India has had significant detrimental effects on the community's socioeconomic growth (Jayaram 1990). Muslims have to continuously face the questions regarding their patriotism for the country which creates identity questions for them as Indian citizens. For instance, GoI (SCR 2006) highlighted that the Muslims face severe problems in renting a house, accessing bank credit, education, formal sector employment and even getting riot compensations from the government authorities. Such identity questions superimposed on the gender dimension results in lower schooling and employment for girls as Muslim parents find their women and daughters safe within the community and the home. In this context, before discussing the case for Muslim women, it is essential to analyze the education and labour market outcomes for Muslims.

### 1.2.3 Education and Labour Market Dynamics of Muslims

The Muslim community as a whole remains marginalized in terms of their education achievements. Various reasons have been extended for the poor educational attainments among Muslims ranging from the religious orthodoxy of the Islamic followers (Baig 1974; Hunter 1869), to their poor socio-economic conditions (Ahmad 1981; Kamat 1981) and a
minority complex emanating among the community post partition which resulted in a kind of psychological discrimination. To put it differently, fear that their children will not be able to acquire formal sector jobs eventually lowers the Muslim parent's incentives to invest in their children's education (Jeffery and Jeffery 1998; Kamat 1981; Rastogi 2007; Robinson 2007; Saxena 1983). It has also been argued that the educational attainments of Muslims vary across the spatial dimensions and hence, contextualizing them as a homogenous community is itself logically problematic (Alam and Raju 2007; Kulkarni 2002; Shariff and Sharma 2013). Various studies have also brought to light the supply-side issues. For instance less number of schools in Muslim dominated villages, high pupilteacher ratios, majority biased content of the text-books and lack of Urdu medium institutions of learning (Hasan 2016; GoI, SCR 2006).

The studies on Muslim religious orthodoxy have historical specificities with their roots in the $19^{\text {th }}$ century British India when Hunter (1869) emphasized that since Islam propagates religious teachings in 'maktabas' and 'madrassas' over modern school education, hence, Muslim students remained under-represented in formal education institutions. Even Baig (1974) asserted that Muslims had aversions to modern scientific knowledge and in the absence of community specific reforms, they will continue to lag behind others in matters of education. In this regard, table 1.1 offers useful insights. Close to $5 \%$ students in rural areas and $3 \%$ in urban areas were enrolled in madrassas in 2011-12 with little difference across gender. Since 2004-05, while the percentages have increased for the rural areas, they have fallen considerably for the urban areas. Availability of schools within reasonable distances in urban areas and poor socio-economic status of Muslim families in rural areas may be a reason for such a trend. Hasan and Menon (2004) had similar findings whereby among the individuals who ever attended school only about $2 \%$ attended a madrassa, the percentages being higher for Muslim women in the rural areas, north and among the poor families. Similarly, Robinson (2007) argues that while approximately $3 \%$ of the Muslim school going children are enrolled in madrassas, the religious preaching in maktabas is considered to be a complement rather than a substitute for mainstream teaching.

Table 1.1: Type of School Attended by Muslim Children (in \%) (6-17 Years) across Sex and Residence (2004-05 \& 2011-12)

| Sex/School Type ( $\downarrow$ ) | $2004-05-05 \& 2011-12)$ |  |  |  |  |  |  |
| :---: | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Rural | Urban | Total | Rural | Urban | Total |  |
| Male | Public | 75.37 | 50.53 | 66.53 | 69.9 | 44.73 | 59.66 |
|  | Private | 19.93 | 46.43 | 29.36 | 25.07 | 52.81 | 36.36 |
|  | Madrassa | 4.7 | 3.04 | 4.11 | 5.03 | 2.45 | 3.98 |
| Female | Public | 76.83 | 52.13 | 67.68 | 75.57 | 53.3 | 66.65 |
|  | Private | 18.9 | 42.68 | 27.71 | 19.36 | 44.08 | 29.26 |
|  | Madrassa | 4.26 | 5.19 | 4.61 | 5.08 | 2.62 | 4.09 |
| Total | Public | 76.05 | 51.3 | 67.07 | 72.73 | 48.96 | 63.14 |
|  | Private | 19.45 | 44.63 | 28.59 | 22.21 | 48.5 | 32.83 |
|  | Madrassa | 4.5 | 4.07 | 4.34 | 5.05 | 2.54 | 4.04 |

Source: Computed using unit level data from IHDS-I (2004-05) and IHDS-II (2011-12)
In addition to the above findings, the theory of religious fundamentalism has been rejected as Quran itself advocates engagement in modern knowledge by its followers (Hasan and Menon 2004; Peer 1990). Also, the theory of religious orthodoxy contextualizes Muslim community to be a monolithic one and Islam as the sole marker of their identities and social lives (Alam and Raju 2007; Hasan and Menon 2004). But Muslim community is differentiated across the caste lines (Ahmad 1981; Misra 1964; Momin 1977; Mondal 2003) and their situation varies across regions (Alam and Raju 2007; Kulkarni 2002; Shariff and Sharma 2013).

Further, progress in the domain of education is contingent upon the unceasing formation of upper, middle and lower-middle-class segments which have essential resources to undertake educational pursuits and are employed in high-end occupations. Various scholars have argued that a majority of Muslim middle-class was lost to Pakistan at the time of partition leaving behind poor Muslims (Engineer 2001; Kulkarni 2002; Lateef 1990; Saxena 1983). Muslim community even in the post-Independence India remained deployed of the processes of formation of such segments which value education resulting in their pitiable education levels (Ahmad 1981; Kamat 1981).

The hypothesis of poor socio-economic background has also been empirically tested. Borooah and Iyer (2005) based on data of rural households collected by NCAER in 199394 claimed that if parents of a student were literate, then the 'community effect' of a student's enrolment was trivial irrespective of gender. Thus, the study asserted that in addition to religious practices, other essential household characteristics also play a key role
in determining the education level among Muslims. Alam and Raju (2007) in a micro-level study of the two districts of Bihar - Patna and Purnia established that the impact of religion on the continuation decisions of students both boys and girls was insignificant. Further, a higher proportion of Muslims in the survey in comparison to Hindus were self-employed, landless and had lower participation in high-end service sector. Thus, the study asserted that Muslims in comparison to Hindus had a narrower population base that values education. Their study further argued that in addition to the impact of socio-economic characteristics, regional variations are an important element as education expansion in a particular region will proselytize positive attitudes via "demonstration effects" (2007:1617).

In this regard, Shariff and Sharma (2013) asserted that a Muslim student resident in southern India would have better higher educational access even in comparison to an upper caste Hindu in north, north-central and north-eastern states. In addition to better community efforts in southern states, a linkage has been established between the loss of Muslim middle-class to Pakistan and regional specificities in which Muslims can be contextualized. Since, the migration at the time of partition was higher from northern, eastern and central states compared to southern and western states, hence, the presence of Muslim middle class fostered progressive attitudes towards education in the southern and western states (Kulkarni 2002). In addition to the regional specificities, different educational choices of Muslims may be borne out of either their low access to good quality schools or discrimination in formal employment (Bhalotra and Zamora 2010).

Thus, the supply side issues are equally essential. It has been found that the number of schools and colleges in districts with higher concentration of Muslims is below the national average (Hasan 2016). ${ }^{5}$ Husain and Chatterjee (2009) using $61^{\text {st }}$ NSS round data for educational attainments and Census 2001 data for educational infrastructure for the state of West Bengal established that less number of schools in Muslim-concentrated districts resulted in lower primary completion rates for the community. Similar findings have been made by GoI (SCR 2006). The necessity of traversing through the villages dominated by

[^3]the majority group may result in students' refrainment from school ensuing poor acquisition of knowledge and skills (Borooah and Iyer 2005).

While an interplay of various explanations as discussed above can be extended for the poor education participation of Muslims, the impact of education on the labour market prospects of an individual cannot be undermined. In this regard, Borooah (2010) asserted the lack of higher education among Muslims as the prime reason for their lower regular wage work participation. At the same time, it can be reasoned that perception of discrimination in the labour market by certain groups may result in their internalizing the discrimination culminating into lower acquisition of education and skills. To put it differently, an individual acquires education with a view of benefits it entails via better job prospects. But if individuals with similar human capital but different group affiliations receive differential treatment in the labour market, then such a situation results in the group members placing lower emphasis on education (Piore 1983; Reich et al 1973; Schulman 1996). Analyzing the theoretical justifications for lower acquisition of human capital on Indian Muslims, one realizes that India's partition brought with itself grave "psychological identity crisis" (Kamat 1981:1032) for Muslims. Thus, their education problem was perceived to be the result of discrimination practiced against them in public employment (Kamat 1981).

Although it is difficult to measure perception, an attempt of such an exercise was made by Singh et al (2009). The study established that Muslims had lowest perceptions for fairness compared to Hindus and Christians in all the five areas - social prestige, economic, education, employment and political. Also, the results did not vary by gender, employment status or caste (classified as Muslim upper and backward castes). Thus, religion was found to be the sole maker of perceptions of fairness among the Indian Muslims.

Discrimination against Muslims can be set up in a historical context. Chughtai (1974) argues that after the revolt of 1857 , the economic conditions of Muslims deteriorated in the Indian sub-continent owing to the discriminatory policies of the British administration particularly in the context of education and employment. When the Muslims had a perception of institutional discrimination in the hiring process, it eventually resulted in their undervaluation of the importance of education. Jeffery and Jeffery (1998) in their
study on Bijnor Muslims upheld the finding that perceptions of discrimination negatively impacted the education prospects of the Muslim community.

Besides this, the unemployment rate for the Muslim graduates was highest among the socio-religious communities for 2004-05 (GoI, SCR 2006). Also, owing to the difficulties of obtaining formal sector employment, a higher percentage of Muslims remain engaged as self-employed (Basant 2012; Das 2004; Hasan 2016; Hasan and Menon 2004; Robinson 2007; GoI, SCR 2006). In this context, Borooah et al (2007) established that $33 \%$ of the regular wage employment deficit for non-OBC Muslims and $37 \%$ for the OBC Muslims compared to forward caste Hindus could be attributed to discrimination. Also, it has been found that many Muslims have encountered disparities even in the casual labour market and have secured jobs only with fake Hindu identities (Hasan 2016).

In addition, the percentage of Muslim representation in Indian Civil Services has remained abysmally low in the bandwidth of 2.5 to $3 \%$ over the years (Zaidi 2001, 2014). Although whether Muslims meagre representation in IAS cadre it is on account of discrimination or multitude of other factors such as poor socio-economic status of Muslims resulting in modest level of secondary and higher education attainment (Kamat 1981), choice of lax subjects in higher education, dearth of educationally motivated middle class (Hameed 2000) or unsatisfactory participation in the examination (Zaidi 2001, 2014) needs further investigation.

Nepotism and social exclusion against Muslims and Dalit's were found to be prevalent even in the urban private sector companies. In a field experiment conducted in October 2005 by the Indian Institute of Dalit Studies (IIDS); three job applications - as a high caste Hindu, as a Muslim and as a Dalit were sent via mails to urban private firms. Call for an interview or test was deemed as a positive response. The econometric results of the study found that the positive response for a Muslim application was just one-third compared to a high case Hindu applicant with similar human capital. Thus, the study concluded that if even in the initial phase of hiring; social unjustness was present, then the final outcome is perceived to be prejudiced (Thorat et al 2009).

Various studies have also established earnings differentials in the Indian labour market to the detriment of Muslims (Dutta 2006; Khandker 1992; Rani 2014). But the claims of
earnings discrimination against the Muslims are repudiated by the studies of Bhaumik and Chakrabarty (2009) and Duraisamy and Duraisamy (2017) who argued that endowments instead of discrimination was a major contributor to the lower earnings among Muslims. Also, GoI (SCR 2006) maintained that the Muslims who clear the written examination of IIMs or civil services had a fair chance of getting selected. Thus, although discrimination against Muslims cannot be entirely ruled out but unabridged culpability on discrimination for educational backwardness among Muslims may result into "self-deluding despair" (Jayaram 1990:123). Instead the simultaneous working of both demand and supply side factors seems to have kept the Muslims in the lower echelons of education and employment.

### 1.2.4 Education and Labour Market Dynamics of Muslim Women

When identity of being a Muslim intersects that of being a women in India's socio-cultural milieu, it generates qualitatively different experiences for Muslim women. In this regard, the cultural constraints experienced by girls in terms of education and those endured by Muslims become compounded for Muslim girls. For instance, while poor socio-economic conditions of Muslims and perception of discrimination in formal labour market results in lower schooling of even the boys of the Muslim community with a significant proportion of them dropping out before completing class X (Hasan 2016). But the situation becomes further complex for Muslim girls as marriage perceived to be a pivotal intent of a women's life refrains Muslim parents from educating their daughters with a fear of not being able to find an appropriate husband for them (Hameed 2000; Hasan and Menon 2004). In addition, while less number of schools in Muslim dominated areas results in lower schooling of even the males of the Muslim community but the requirement of traversing areas dominated by a majority group for schooling may result in greater marginalization of Muslim girls in education (Khan 2007).

At the same time, while education expansion has had a positive impact on the advances of women in education (Alam and Raju 2007; Borooah and Iyer 2005; Sundaram and Vanneman 2008), similar scenario as discussed is not discernable in the labour market (Abraham 2013). Thus, while women's public participation in general is subdued to the patriarchal norms, Muslim women form a special case owing to both majoritarianism and
a psychological discrimination also present in the Muslim community in general. In this regard, while the literature broadly claims that religion has an impact on the labour market participation decisions of Muslim women but at the same time explicates that it is not the sole contributor to their poor representation (Das 2004; GoI, SCR 2006; Hasan and Menon 2004; Khan 2015; Neetha 2014; Rastogi 2007). Studies extend differential land ownership patterns (Das 2004; GoI, SCR 2006; Hasan and Menon 2004), paucity of networks in access to jobs (Das 2004; Neetha 2014), low education and skill levels (Basant 2012; Das 2004; Hasan and Menon 2004; Hussain and Siddiqui 2013) and communalized politics which lead to higher restrictions on Muslim females (Khan 2007; Rastogi 2007) as primary reasons for their lower participation. Besides this, it has been established that a majority of Muslim women remain self-employed with least probability of being in regular wage work (GoI, SCR 2006; Hasan and Menon 2004; Khandker 1992). In addition, the chances of income and occupational mobility were also found to be lower for Muslim women (Khandker 1992). Even among the self-employed, a significant proportion were engaged in home based industries with precarious working conditions (Bhatt 2006; GoI, SCR 2006; Hasan and Menon 2004; Khan 2015). Furthermore, even those who participate in wage work were found to earn considerably lower wages than the males of their community (Bhaumik and Chakrabarty 2009; Rani 2014; Sengupta and Das 2014).

Also, among the female participants in the labour market; GoI (SCR 2006) using NSSO $55^{\text {th }}$ and $61^{\text {st }}$ rounds established that Muslim women had high rates of unemployment particularly in comparison to Hindu upper caste women. Furthermore, they had least proportions in regular wage work both in the government enterprises and large scale private sector jobs in contrast to women of other socio-religious groups. As an extension to this argument, even labour market discrimination cannot be ruled out as an explanation of poor representation of Muslim women. In this context, Das (2004) based on her conversations with Maharashtra government officials asserted that the supposition of a veiled Muslim women is so ideologically entrenched in the government authorities that it refrains them for hiring Muslim women even for low level government positions. In this regard, Hoodfar (2001) argues that preconceived notions relating to a veiled Muslim women requires greater energies on their parts to establish themselves as rational agents particularly in the public domain. Aksoy and Gambetta (2016) using three large data sets from Turkey,

Belgium and Pew World Muslims Survey concluded that veiling may prove to be a strategic response which signals the piousness of Muslim women to their communities particularly if they acquire education or employment as it involves contacts with men from the outside world. Such a finding has been upheld by Khan (2007) in her survey of Muslim women in Mumbai.

In this regard, Chanana (2001) argues that although the processes might be different but purdah in both Hindu and Muslim cultures results in seclusion of females from public domain. Hasan and Menon (2004) in their study established that women across religions experience similar restrictions on physical mobility and autonomy. The distinctiveness of Muslim women as per their analysis was due to different asset base of their households in rural areas which prevents their participation in farm based activities where a majority of rural females remain engaged. Their study also asserted inability of Muslim women to even access casual, low paid and informal sector jobs in urban areas. They furthered the reasons to include discrimination within households leading to poor acquisition of skills and education by Muslim women which are required for being effective agents particularly in the urban labour market. Similar arguments have been put forward by Das (2004) in her study using NSS $50^{\text {th }}$ round data. In addition, she emphasized that regional variations have a significant impact on the participation decisions of females with southern and western regions being more liberal compared to central states. Verifying different participation rates of Muslim women in different regions, her study challenges the commonly held notion that religion is a sole marker of a women's identity.

Studies have also tried to establish a relationship between economic development and female LFPR (Khan 2015; Lahoti and Swaminathan 2013). Khan (2015) in her study using 1983 to 2012 NSSO rounds data and panel regression as her methodology found an inverted-U shaped relationship between LFPR of Muslim women and level of development of states measured using per capita net state domestic product (in logarithmic terms) and its square. Analogous results were obtained for Hindu women while for Christian women the relationship exhibited a U-shaped pattern. In other words, the study gives credence to the fact that for both Muslim and Hindu women, labour market participation proliferates in the initial phases of development and then after reaching a maximum point, it starts
falling. Thus, she concluded that owing to cultural synthesis; both Hindu and Muslim women experience similar restraints with their employment being majorly necessity driven.

Communal riots are also found to have an implication for the public participation of Muslim women. Rastogi (2007) in her study using NSSO data from 1983 to 1999 analysed how modernizing forces, religious disadvantage and the rise of Hindu fundamentalism and Muslim identity politics impacted Muslim women's education and employment. Her study established that despite a considerable improvement in enrolment rates over the years both Muslim girls and boys continued to have lower enrolment than non-scheduled caste Hindus. The outcomes for wage employment were found to be more disadvantageous for Muslim women in comparison to enrolment and more so in fundamentalist states in comparison to the non-fundamentalist ones. Communal and public participation linkages were also testified by Khan (2007) in her interactions with Muslim women in Mumbai. She concluded that the communal episodes in the country eventually increase the policing and imposed veiling of women by their community particularly in the Muslim dominated areas.

In this regard, less concentration of schools in Muslim dominated areas (Hasan 2016) may significantly hamper the education participation decisions of Muslim women. Using IHDS panel data for the years 1993-94 and 2004-05 for rural India, Iversen et al (2014) found that the performance of Muslim girls was negative in the villages dominated by Muslims. The aforementioned finding reinforces the fact that traversing areas dominated by the majority group for attending schools may not be administered by the parents of Muslim girl children resulting in their lower education. Imposing restrictions on Muslim women's physical mobility also has adverse implications for the kind of jobs that they can undertake. Hence, a higher percentage of Muslim women workers are reduced to home-based work. Such workers generally have low levels of education, remain outside the purview of labour laws, experience lower wages and on most accounts become the victims of sub-contracts which are exploitative in nature (Bhatt 2006; GoI, SCR 2006; Hasan and Menon 2004; Khan 2007).

Among poor representations of Muslim women and their hazardous working conditions, there are few encouraging results. Studies have found that Muslim women with higher
education have similar chances of labour market participation as that of Hindu females (Das 2004; Klasen and Pieters 2012). In addition, various micro-level studies have established that a significant proportion of Muslim women have aspirations of attaining education and becoming a part of Indian labour force (Hameed 2000; Hasan and Menon 2004; Kirmani 2013; Lateef 1990).

Thus, owing to the intersection of their gender and religion consequent upon the cultural mores of physical mobility experienced by women across religions, Muslim women also bear the brunt of discrimination and disadvantage experienced by the Muslim community as a whole (Rastogi 2007). There is a need on the part of the society to realize that these women are also rational agents and veiling is just a garb and doesn't capture their entire personalities (Das 2004; Kirmani 2013). At the same time, Muslim women must also realize that through their determination and hard work; they can break the stereotypes and advance in the educational and employment realms (Khan 2015). But the need for Muslims in general and Muslim women in particular to transcend these social and economic barriers to move towards educational and economic well-being is heightened and embrangled given the fact that the Muslim community itself is not a monolithic one and there exists divisions on the lines of caste among them (Ahmad 1978; Misra 1964; Momin 1977; Mondal 2003). Thus, it is pertinent to examine the caste based distinctions prevalent among Muslims as the public participation of Muslim women is expected to differ across such facets (Stuers 1968; Das 2004; Saheb 2003).

### 1.3 The Caste Question among Indian Muslims

Sociologists and anthropologists alike recognize that the social stratification among Indian Muslims represent a set of distinctions and similarities with that of Hinduism (Ahmad 1978; Misra 1964; Momin 1977). In this context, conscientious analysis of the Muslim castes in India as divided into Ashrafs, Ajlafs and Arzals as they are perceived to exist tantamount to examining the historical process underlying their existence.

While Islam started as a religion with egalitarian dispositions encouraging equality of status for all its followers, it borrowed consciousness of racial ascendancy from pre-Islamic Arabia (Momin 1977). When Islam spread to other nations, the proliferation of power
groups set in a system of endogamous marriages. With its arrival in India, it blended with the Turkish ruling class which placed severe emphasis on birth. Thus, the Muslim social order of the medieval ages emulated the prestige feature and became accustomed to the stratified social order (Misra 1964). Further, the beliefs of Hindu customs and traditions entered the Muslim worlds with the marriage of local Hindu women with the Arab traders and soldiers (Momin 1977:242). The process was fostered by the conversion of the hierarchically subjugated Hindu lower castes to Islam ${ }^{6}$ - either with a view of upward social mobility owing to the egalitarian structure of Islam or with a fear of torture from Muslim rulers or on account of political and material rewards from the Muslim rulers for such conversions (Ahmad 1978). ${ }^{7}$ The result was that the Muslims broadly adopted the Hindu caste system which came to be called the 'jamaats' or 'biradari' among Muslims. The caste system among Muslims got hierarchically ranked into Ashrafs, Ajlafs and Arzals. ${ }^{8}$ Ashraf's comprise the upper caste Muslims with foreign ancestors - either descenders of Arabs or of the Mughal and Afghan rulers, mostly landowners, merchants or business class individuals. Middle ranked were the Ajlaf's, the low ranked Hindu converts but with clean occupations including the peasants, craftsman, weavers, vegetable sellers etc. The lowest ranked include the Arzal's in menial occupations such as scavengers, sweeper, tanners', laundrymen etc. (Ansari 1960; Census 1901:543-544; Mondal 2003). ${ }^{9}$

Thus, while there are no ideological or religious foundations of casteism among Muslims (Momin 1977) as against the Hindus (Chakravarti 1993; Dumont 1970), three of the distinctive features of Hindu casteism find existence among the Indian Muslims -

[^4]endogamy ${ }^{10}$, occupational specialization and status hierarchy. Still the caste system among Muslims is perceived to be not as orthodox as among the Hindus, for instance, the belief in ritual purity and pollution is weak and adopts a regional picture (Momin 1977). ${ }^{11}$ Also, Muslims do not have a ceremonially pure caste as that of Brahmins among the Hindus (Ahmad 1978). Thus, various scholars trace the presence of castes among Muslims being based on other factors which varies from descent (foreign or indigenous ancestors), distance from the prophet (Ahmad 1978), women seclusion through purdah, wealth, practicing of proper Islamic prayers (Bhattacharya 1978) to the relative standing of the various Muslim groups in the political, economic and occupational structure (Dube 1978).

Although haphazard and partial (Misra 1964), Muslim caste system had bearings on their ranks even in the colonial British India. While upper caste Muslims were into administration, army, trade and commerce enjoying politically dominant positions, lower castes were into traditional occupations remaining underprivileged and oppressed (Mondal 2003). Further, the process which already started late, the formation of middle class among the Indian Muslims was severely hampered by the partition of the country which resulted in exodus of upper and middle class families to Pakistan (Engineer 2001; Kulkarni 2002; Lateef 1990; Saxena 1983) creating void spaces in Indian Muslim middle class leading to the impoverishment of the Muslim community in general and the backward castes among them in particular (Mondal 2003).

Thus, the literature highlights that Indian Muslims historically have not been a monolithic community. Even in contemporary India, various micro level studies have brought to light the quandary of the most disadvantaged among India's largest minority. In addition to endogamy (Ahmad 1978; Bhattacharya 1978; Dube 1978; Momin 1977), lower literacy (Jain 1978; Joshi and Rao 1964; Mondal 2003; Saheb 2003; Trivedi et al 2016), immobility in occupations (Bhattacharya 1978; Dube 1978; Trivedi et al 2016) and discrimination (Ahmad 1967); various studies have established the dominant position of upper caste

[^5]Muslims in political arenas resulting in little focus on the impoverished condition of the backward castes among them (Alam 2003; Mondal 2003; Trivedi et al 2016).

Jain (1978) in a study in Kabirnagar in western Uttar Pradesh found that the caste-like structures were prevalent among the Muslims in occupations, education and leadership positions. Particularly in terms of education, the upper caste Muslims had lowest rates of illiteracy and highest level of education in comparison to the lower castes of their community. Their findings corroborate the one by Joshi and Rao (1964) who in a survey in 1958-60 of 12 villages of Uttar Pradesh reported miniscule literacy levels for functional (low caste) Muslims particularly the women of their communities both in comparison to Hindu and Muslim upper castes. Ahmad (1967) in a study in the Barabanki district of eastern Uttar Pradesh during 1961-62 found that discrimination in government offices and administration between the high and low caste Muslims was a historical phenomenon. In a survey conducted by the Giri Institute of Development Studies (GIDS) in 2014-15 in Uttar Pradesh, Trivedi et al (2016) asserted that between the three generations - grandfather, father and the respondent generation, the proportion of graduates had increased across the socio-religious groups. But even for the present generation, the percentage of the graduate and above population of the Muslim OBCs and Dalit Muslims was comparable to the grandfather's generation of the upper caste Hindus. Analyzing the occupational mobility, the study found that the discrepancies remained among the upper caste Muslims, Muslim OBCs and the Dalit Muslims in terms of their occupations with a higher proportion among the upper caste Muslims being either self-employed, or in business or trade in comparison to the lower castes among them.

Dube (1978) in a study of Lakshadweep Muslims asserted that Muslims were divided into three broad groups on the basis of their castes and the religious and priestly functions were allowed to be performed solely by the upper castes. In fact any departure from the norms was encountered with social strains and discord. Bhattacharya (1978) testified the labelling of occupations among the Muslims of rural West Bengal such that revealing of occupation by the low caste Muslims resulted in a fall in their social prestige.

Alam (2003) argues that there is disproportionate representation of backward Muslims in minority educational institutions and state and government services. Even the Sachar

Committee Report (GoI, SCR 2006) recognized that although the Muslim community as a whole was lagging behind the Hindu-OBCs, the Muslim OBCs in particular fared poorly even in comparison to the general castes among them. Muslim OBCs had higher unemployment rates and lower percentage of graduates and above population than Muslim general. The report emphasized that the urban areas were more discriminatory against the Muslim OBCs while the rural areas exhibited marginal intra-community differences. Thorat (2010) in his study on rural poverty incidence among the socio-religious communities using NSSO consumption expenditure data of $61^{\text {st }}$ round asserted that while upper caste Muslims had a higher rate of poverty incidence (27.2\%) than the upper caste Hindus ( $12.7 \%$ ); Muslim SCs, OBCs and STs had still higher poverty rates of 39.6\%, 32\% and $21.7 \%$ respectively. On the basis of these findings, the study highlighted that even after conversion to a different faith, the caste based social identities are sticky and are carried along.

It has also been found that in the aspirations of upward social mobility, the low-caste Muslims have adopted a process analogous to Sanskritization referred to as "Ashrafization" by Cora Vreede de Stuers (1968:6). ${ }^{12}$ Once on the road to prosperity, these "pseudoAshraf's" (Ansari 1960:38) confine their women to private spheres where purdah subsumes obligation, a practice prevalent among the high caste Ashraf's (Ahmad 1962). Such a finding has been upheld by Das (2004) in a survey of rural and peri-urban areas of Gujarat. Her findings suggest that occupation based caste system was prevalent among the Muslims with urban women from high status families witnessing greater constraints in the form of purdah and non-participation in the labour market. Similarly, studies by Kirmani (2013) and Hussain and Siddiqui (2013) maintained that seclusion of Muslim women by purdah was a marker in well-to do families while women from lower strata worked to supplement household income. In a study conducted in Andhra Pradesh in 1987, it was found that Dudekula Muslims who were the converts to Islam oscillated between Hindu and Islamic

[^6]practices and hence, their women were ranked lower in status as they went to agricultural fields unlike the ones from upper caste Muslim families. With a view of upward social mobility, they began practicing the Islamic cultures and women started observing purdah and dress codes of Muslim women (Saheb 2003). Concisely even the process of upward social mobility renders a woman's position to subservience as they become instruments of protecting the community's identity.

Thus, the egalitarian ideological foundations of Islam are antagonistic of what we see in India - "a wide gap between text and context" (Mondal 2003:4897). In addition, the quest of Muslim leaders and Muslim conservatives to portray Islam as an egalitarian structure on one hand and the failure of the nation-state to recognize their socio-economic problems on the other has cumulatively contributed to the perpetual backwardness of Muslims in general and the backward castes among them in particular (Alam 2003; Mondal 2003; Trivedi et al 2016).

Although the post-independence Indian government adopted positive discrimination as its methodology and offered reservations in educational institutions, public sector jobs and legislative bodies to the historically disadvantaged groups - the SCs (for Hindus) and the STs in the proportion of their population, but such reservations are limited to the caste based distinctions while the other multiple axis of discrimination such as gender, religion and class are disregarded for the same. Thus, while later the SC category was broadened to include Sikhs and Buddhists in 1956 and 1990 respectively, it continues to exclude both the Dalit Muslims and the Dalit Christians (GoI, NCM 2008). Although the OBC Muslims can avail off reservations under the OBC category constructed on the recommendations of the Mandal Commission (1990), the actual benefits have not reached them; discernable from their low shares in formal sector employment both in comparison to Hindu OBCs and upper caste Muslims (GoI, SCR 2006). Further, few Indian states have designed specific quotas for the minority communities. For instance, Kerala, Karnataka, Tamil Nadu, Bihar, West Bengal and Andhra Pradesh have reservations for some Muslim groups. In Kerala, for the Muslim families earning less than Rs 2.5 lakhs per annum, $12 \%$ of the seats in government jobs and $8 \%$ in educational institutions are reserved. Muslims with an annual family income of less than Rs 2 lakh find $4 \%$ reservations in government jobs in Karnataka.

Similarly, Tamil Nadu and Bihar have 3.5\% and 3\% reservations respectively for the poor backward Muslims. West Bengal too has 10\% quota for backward Muslim families earning less than Rs 4.5 lakhs annually. Andhra Pradesh announced a 4\% quota for Muslims with an annual family income of less than Rs 4 lakhs (TNN 2010). In this respect, Hasan (2005) argues that catering both to the caste stratification and class distinctions among the Muslims, some of these states have been able to improve the communities' participation in public employment and government jobs. Thus, particularly in the Indian context, religion and caste cannot be considered to be mutually exclusive (Desai and Kulkarni 2008).

### 1.4 Statement of the Problem

There has been a significant education expansion in the country over the last few decades (Borooah and Iyer 2005; Desai and Kulkarni 2008; Tilak 2015) but the same has not percolated down to the historically disadvantaged groups (Borooah 2012; Desai and Kulkarni 2008). These structural disadvantages in education are presumed to have a profound influence on the labour market outcomes both in terms of participation and earnings. Put another way, low human capital accumulation results in lower earnings in the labour market. But the relationship between earnings and education is not as straightforward as it appears. The prejudices against a particular group prevalent in the civil society and the state is presumed to have an impact on their acquisition of education i.e. the perceptions of discrimination in the labour market may limit desires of an individual or group for upward mobility and hence, they acquire low human capital. Thus, there is a vicious cycle of low human capital culminating into poor representation in the labour market which furthers the identity of a group as not having inclinations to be a part of the labour market which consequently results in their low education levels (Piore 1983; Reich et al 1973; Schulman 1996).

Given the prevalence of disparities in education, employment and earnings for the historically underprivileged groups, it becomes pertinent to investigate the situation of those at the intersection of multiple disadvantages. In this regard, the linchpin of the present analysis are the subaltern Indian Muslim women located at the intersection of their gender and religion. Such an analysis can assist not only in exploring how gender and religion culminate into mutually reinforcing structures of oppression but also how continuities from
the past which posited identity questions for the Indian Muslims have set in a system of power relations which has had a significant impact on the education and labour market dynamics of the women of their communities.

In India, there has been a proliferation of studies on Muslim women (Das 2002, 2004; Hasan and Menon 2004; Lateef 1990; Rastogi 2007; Khan 2015; Kirmani 2013) which suggest that gender differential cutting across religious spaces becomes even steeper. But Muslim community transpires to be a heterogeneous one with varied caste, regional and class dimensions. In this regard, the gender and the religious gradient becomes further complex with Muslim women positioned at the intersection of not just their gender and religion but also at their caste, class, and region. Such a contestation has not been adequately addressed in the scholarly writings on the question of Muslim women, a lacuna which the present study purports to analyse. Therefore, while addressing the concerns of Muslim women in terms of their education, employment and earnings, the study purposes to answer both the woman's question and the socio-religious question while at the same time not failing to anatomize the intra-socio-religious dimensions.

In the present context, given the paucity of NSSO data on several caste structures prevalent among the Muslims, the present analysis combines the Muslim SCs, Muslim STs and Muslim OBCs ${ }^{13}$ under the head of Muslim Other Backward Castes labelled M-OBCs from here on. On the other hand, the upper castes of Muslims have been referred to as the Muslim Others or M-Others. ${ }^{14}$ For comparison purposes, the upper castes of Hindus have been combined with the upper caste of other religious minorities - Sikhs, Buddhists, Christians, Jains, Zoroastrians and other religious minorities and have been named Non-Muslim

[^7]Others (NM-Others). ${ }^{15}$ Similarly, NM-SCs, NM-STs and NM-OBCs are the SCs, STs and OBCs respectively from all other religions except Islam.

### 1.5 Spatial-Socio-Economic Profile of Communities

Muslims are the second major religious community in India and hence, constitute its largest minority. According to Census (2011), out of India's total population of 1210 million, the share of Muslims was 172 million i.e. $14.23 \%$ of the total population. Further, while $31.14 \%$ of India's total population lived in urban areas, $39.9 \%$ of the Muslims were urbanized.

The concentration of Muslims also varies considerably across Indian states. Since, Census does not provide information on the basis of socio-religious categories, the spatial dimensions are reported using NSSO $68^{\text {th }}$ (2011-12) round (table A1.1). The NM-Others had highest concentration in the state of Maharashtra (14.69\%) followed by Uttar Pradesh (13.66\%), West Bengal (12\%), Gujarat (7.09\%) and Andhra Pradesh (6.17\%). NM-Others had lowest concentration in the north-eastern states which also have minutest share of the country's total population followed by the southern states. ${ }^{16}$ Commensurate with being the most populous state, Uttar Pradesh had the highest proportion of Muslim residence (24\%) tailed by West Bengal (15.16\%), Bihar (11.59\%) and Maharashtra (7.46\%). Besides Kerala, Assam and Andhra Pradesh also had more than 5\% of the total Muslim population. Thus, eastern ( $27.1 \%$ ), central ( $27 \%$ ) and southern (18.6\%) regions had greater Muslim absorption. Further, while upper caste Muslims had a profound presence in the states of West Bengal (28.99\%), Uttar Pradesh (15.76\%), Maharashtra (12.34\%), Assam (11.38\%), Andhra Pradesh (7.42\%) and Jammu and Kashmir (5.99\%); the OBCs among them had greater presence in the states of Uttar Pradesh (31.6\%), Bihar (16.99\%), Kerala (11.26\%), Karnataka (6.97\%) and Rajasthan (6.53\%). Thus, while M-Others had higher existence in

[^8]the eastern ( $35.31 \%$ ) and central ( $17.85 \%$ ) regions, M-OBC were concentrated more in the central ( $35.43 \%$ ) and southern states ( $26.41 \%$ ).

Further, table A1.2 depicts the proportion of population of socio-religious groups in each state. Lakshadweep, Jammu and Kashmir, Assam, West Bengal and Kerala had more than $25 \%$ of their total population as Muslims. But among them, there are variations with regard to the populations of M-Others and M-OBCs. While a higher percentage of Muslims in Jammu and Kashmir, Assam and West Bengal are M-Others, they constitute a miniscule share of the states' population in Lakshadweep and Kerala. In Kerala, where Mapillas comprise of more than $90 \%$ of the states' Muslim population have been included in the Central list and have been granted quotas (GoI, SCR 2006). Thus, Kerala has almost its entire Muslim population as M-OBCs. Northern, central and southern states had higher percentage of OBC Muslims in comparison to the 'Others' with opposite presence in Eastern, north-eastern and western states.

Table 1.2: Average MPCE (in Rs.) across Socio-Religious Groups by Residence
(2011-12)

| Regions ( $\downarrow$ ) | NM- <br> Others | NM-SC | NM-ST | NM- <br> OBC | M- <br> Others | M- <br> OBC | All <br> Muslims | Total |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| North | 2671 | 1470 | 1096 | 1742 | 1586 | 1403 | 1482 | 1910 |
| Central | 1886 | 917 | 877 | 1080 | 1275 | 996 | 1084 | 1160 |
| East | 1633 | 1003 | 812 | 1013 | 1113 | 928 | 1043 | 1138 |
| Northeast* | 1423 | 1184 | 1344 | 1175 | 971 | 1190 | 979 | 1216 |
| West | 2553 | 1616 | 1086 | 1687 | 2004 | 1536 | 1850 | 1906 |
| South | 2593 | 1415 | 1379 | 1848 | 1752 | 1836 | 1814 | 1861 |
| Total | 2219 | 1197 | 1032 | 1441 | 1371 | 1288 | 1328 | 1514 |

Note: *Population share of M-OBC less than 5\%
Source: Computed using unit record data of Employment-Unemployment ( $68^{\text {th }}$ ) Round of NSSO

Not only are there spatial variations in the patterns of residence of socio-religious groups, instead their economic situation varies considerably across regions. NSSO household level data facilitates one to examine the relative position of socio-religious groups in terms of the expenditure incurred by them. The overall spending patterns unravel that while Muslim OBCs had least MPCE ${ }^{17}$ after NM-SCs and NM-STs at all-India level, they were

[^9]marginally better off in southern states in comparison to the 'Others' among them (table 1.2). On the other hand, in the northern, eastern and western states, the M-OBCs had lower expenditures even in comparison to the NM-SCs. Thus, OBC Muslims residing in southern states would be better off than their counterparts in any other region of the country.

Table 1.3: Population Share (in \%) in MPCE Quintiles across Socio-Religious Groups in Rural Areas (2011-12)

| Quintiles $(\downarrow)$ | NM- <br> Others | NM-SC | NM-ST | NM- <br> OBC | M- <br> Others | M-OBC | Total |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Bottom | 7.25 | 25.18 | 19.44 | 36.13 | 5.34 | 6.66 | 100 |
| Second | 12.17 | 23.81 | 12.30 | 37.99 | 5.98 | 7.76 | 100 |
| Middle | 15.40 | 21.37 | 9.24 | 39.92 | 7.50 | 6.56 | 100 |
| Fourth | 20.40 | 19.25 | 7.54 | 40.91 | 6.25 | 5.66 | 100 |
| Richest | 32.02 | 13.57 | 4.81 | 39.15 | 4.75 | 5.70 | 100 |
| Share in Rural <br> Population | 17.45 | 20.63 | 10.67 | 38.82 | 5.96 | 6.47 | 100 |

Source: As in table 1.2

Table 1.4: Population Share (in \%) in MPCE Quintiles across Socio-Religious Groups in Urban Areas (2011-12)

| Quintiles ( $\downarrow$ ) | NM- <br> Others | NM-SC | NM-ST | NM- <br> OBC | M- <br> Others | M-OBC | Total |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Bottom | 13.05 | 21.80 | 4.79 | 31.54 | 11.46 | 17.36 | 100 |
| Second | 21.75 | 18.25 | 3.52 | 35.10 | 9.86 | 11.52 | 100 |
| Middle | 31.36 | 13.96 | 3.18 | 35.28 | 7.90 | 8.32 | 100 |
| Fourth | 40.57 | 10.76 | 2.67 | 33.69 | 7.16 | 5.15 | 100 |
| Richest | 56.40 | 6.86 | 2.09 | 26.99 | 4.71 | 2.94 | 100 |
| Share in Urban <br> Population | 32.62 | 14.32 | 3.25 | 32.52 | 8.22 | 9.06 | 100 |

Source: As in table 1.2
Further, with a view to discern the socio-religious disparities in economic terms in the rural and urban areas, the total population has been divided into five quintiles. Table 1.3 and table 1.4 depicts the under/over-representation of socio-religious groups in comparison to their shares in rural and urban population respectively. While NM-Others had considerably lower representation than their share in rural population in the lowest three quintiles, their population was disproportionately higher in the fourth and richest quintiles. Rural Muslims both M-Others and M-OBC had marginally higher shares in the bottom quintiles and lower

[^10] is used as a proxy for income (Desai and Kulkarni 2008).
shares in the richest quintiles. But urban areas seem to withhold higher disparities for Muslims. Starting with higher proportions, the population in each successive wealth quintile falls for Muslims and the opposite effect is realized for NM-Others. Thus, while $56.4 \%$ of the richest belonged to the NM-Others in urban areas inexplicably higher than their share in urban population unveiling their high economic status; analogous figures of $4.7 \%$ for M-Others and $2.9 \%$ for M-OBC were significantly lower than their population shares of $8.2 \%$ and $9 \%$ respectively.

Table 1.5: Proportion of Land Cultivated per Household (in \%) for each class size by
Socio-Religious Groups in Rural Areas, 2011-12

| Land <br> Classes ( $\downarrow$ ) | NM- <br> Others | NM-SC | NM-ST | NM- <br> OBC | M- <br> Others | M- <br> OBC | All <br> Muslims | All |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Landless | 40.12 | 62.57 | 39.66 | 44.62 | 60.80 | 59.53 | 60.17 | 48.75 |
| Less than <br> 0.4 <br> Hectares | 17.64 | 17.72 | 16.11 | 17.39 | 17.86 | 20.77 | 19.31 | 17.58 |
| 0.4-1 <br> Hectares | 15.75 | 11.81 | 21.06 | 16.93 | 12.16 | 10.67 | 11.42 | 15.49 |
| 1-2 <br> Hectares | 13.08 | 5.37 | 14.33 | 12.04 | 5.23 | 5.41 | 5.32 | 10.33 |
| 2-4 <br> Hectares | 8.77 | 1.88 | 7.16 | 6.11 | 2.89 | 2.54 | 2.72 | 5.44 |
| Greater <br> than 4 <br> Hectares | 4.63 | 0.65 | 1.68 | 2.92 | 1.06 | 1.08 | 1.07 | 2.41 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

Note: Landless households are those with less than 0.01 hectares of cultivable land and includes households with missing information on land cultivated. The figures correspond to the land cultivated during 2010-11.
Source: As in table 1.2

Ownership of cultivable land is a vital yardstick for measuring the asset holdings in rural settings (Trivedi et al 2016). ${ }^{18}$ Table 1.5 depicts that while approximately $40 \%$ of the NMOthers households were landless in 2011-12, the corresponding proportion was $60 \%$ for the Muslims being only slightly less than those of NM-SC households. Further, there were meagre intra-community differences in terms of land cultivated with only about $1 \%$ of the

[^11]households among M-Others and M-OBC having greater than 4 hectares of land. Thus, there were differential land cultivating patterns between NM-Others and Muslims and a major proportion of Muslim households remain landless, the proportions of which has increased by 20 percentage points in the last 30 years (Rawal 2013).

Thus, the spatial socio-economic profile of Muslims reveal that firstly, there were regional differences in the economic position of Muslims with stark intra-community differences observed with OBCs among them having higher per capita expenditures only in the southern states. But such differences remain huge for both the M-Others and M-OBC in comparison to the NM-Others across all regions. Secondly, urban areas had higher socioreligious and intra-religious disparities than rural settings. Thirdly, cultivable land ownership patterns in rural settings unveils approximately $20 \%$ higher landlessness among the Muslims in comparison to the NM-Others with miniscule intra-community differences.

### 1.6 Objectives, Hypothesis, Data Sources and Methodology of the Study

Considering Muslim women to be a placed at the intersection of their gender, religion, caste, region and class, further introspection with sophisticated questions needs to be addressed in greater detail. Thus, the religious based discrimination in India's labour market studied through the lens of a Muslim women taking into consideration their caste affiliations will probably add a new dimension to India's labour market discrimination discourse. In this regard, the most important dimension to be studied is the relationship between earnings and education. Thus, the present analysis starts with the disparities in education and move on to their employment and earnings gaps. With this backdrop, the study proposes three hypothesis which are discussed as follows:

## (a) Education Levels and Attendance Deficit

Objective 1: To examine the educational attainments and attendance of Muslim women analyzing M-Others and M-OBCs separately both in comparison to the males of their respective communities and NM-Others females over time (1999-00 to 2014).

Hypothesis 1 (a): The transitions from school enrollment to completion of primary, primary to completion of middle, and middle to completion of secondary are challenging
for both M-Others and M-OBC females compared to the males of their respective communities and NM-Others females.

Hypothesis 1 (b): The attendance in higher education is skewed in favor of firstly, Muslim males and secondly, to the advantage of NM-Others females compared to M-Others and M-OBC women.

Data Source: For the first objective, unit level data from five NSSO rounds has been used. Out of which three are Employment-Unemployment Rounds - $55^{\text {th }}$ Round (1999-00) (Schedule 10), $61^{\text {st }}$ (2004-05) (Schedule 10) and $68^{\text {th }}$ Round (2011-12) (Schedule 10) and two are Social Consumption: Education rounds $-64^{\text {th }}$ (2007-08) (Schedule 25.2) and $71^{\text {st }}$ Round (2014) (Schedule 25.2). ${ }^{19}$

Methodology: To accomplish the present objective, the study uses both the descriptive statistics and Logistic Regressions. Deficits in terms of gender, inter- and intra-community educational attainment and attendance levels have been analyzed.

## (b) Employment Deficit

Objective 2: To scrutinize the differential patterns and trends of the labour force participation rates of Muslim women - both M-Others and M-OBCs during 1999-2011. The analysis takes gender, socio-religious and intra-socio-religious gaps into contemplation.

Hypothesis 2: Muslim women both M-Others and M-OBC have lower participation rates in the labour market than males of their respective group and NM-Others females.

Data Source: Unit level data from $55^{\text {th }}, 61^{\text {st }}$ and $68^{\text {th }}$ Employment-Unemployment Rounds of NSSO has been used for the current objective.

Methodology: To accomplish the aforementioned objective, the study has made use of the descriptive statistics.

[^12]
## (c) Earnings Disparities and Discrimination in the Labour Market

Objective 3: To scrutinize the earnings disparities of M-Others and M-OBC women in the combined labour market (regular and casual) compared to M-Others and M-OBC males respectively and NM-Others females.

Hypothesis 3: M-Others and M-OBC women earn lower wages in the labour market both compared to the males of their respective groups and NM-Others females.

Data Source: Unit level data from NSSO $68{ }^{\text {th }}$ Employment-Unemployment Round has been used for the hypothesis.

Methodology: Augmented Mincer Equation and Heckman procedure has been used to measure the earnings disparities. Further, Blinder-Оaxaca decomposition has been used to decompose the earnings differential of M-Others and M-OBC women in comparison to the NM-Others females.

### 1.7 Structure of the Study

In order to highlight the marginalized conditions of Muslim women, particularly those of M-OBCs in terms of their education, employment and earnings, the study is organized into five chapters. The second chapter deals with the first objective and addresses the educational gaps both in terms of attainment and attendance of the Muslim women in comparison to their male counterparts and females of NM-Others households. The third chapter builds up on the issue of differential patterns and trends in labour market participation of the Muslim females predominantly in contrast to the females of other socioreligious groups. The fourth chapter addresses the third objective and gauges at the earnings inequality of the Muslim females in comparison to the males of their community and NM-Others females. The final chapter offers conclusions from the analysis. In all the chapters, the analysis has been undertaken separately for M-Others and M-OBC women.

## Chapter 2

## Education Trajectories of Muslim Women

"You educate a man; you educate a man. You educate a woman; you educate a generation."

Brigham Young

### 2.1 Introduction

While social structures have evolved over time in tandem with the changing world, the existing social engineering continues to be blighted by some remnants of the past. Insofar gender constitutes an important part of every narrative of this evolution it accounts for a substantially important place in it. The gendered notion of functioning in general and their intellectual abilities in particular has been one of the most mooted aspects of this process. It is woven around the question of education and gender. The subjugation of women within the confines of the household and the legitimization of their exploitation within the unequal power relations constitutes the first blow in giving rise to the social construct of a "housewife" and further restrain women within the household. Thus, it is in a multitude of ways related to the question of education among women. The answer to this question remains entwined in the two associated yet segregated processes. On one hand, a macro outlook confers education of females not only as an essential ingredient of economic growth (Klasen 2002; World Bank 2001) but also as a potent tool of lowering fertility, infant and child mortality rates, improving health and nutrition and facilitating intergenerational transfer of education and skills (Borooah and Iyer 2005; Sengupta and Guha 2002). On the other hand, when viewed from the micro perspective, the notions of economic and social efficiency accruing to women becomes dwarfed in the patrilineal social construct which undervalues women's economic worth (Chanana 2001).

Thus, instead of the intellectual capabilities, a girl's education becomes dependent on the cost-benefit analysis within the gender biased set up of the household where benefits are measured in terms of the expected additional earnings after attaining a higher level of education in comparison to the previous level. On the other hand, the costs are either the direct costs of schooling such as expenditure on tuition fees, books, stationary etc. or the indirect costs in terms of the earnings forgone by an individual for attending school (Dreze
and Kingdon 2001). On account of various mutually reinforcing factors, the opportunity cost of a girl's education is deemed to be higher in comparison to that of a male; hence, girls are less likely to be enrolled in comparison to boys.

Added to this are the matrimonial reasons specific to a patriarchal society in which the female child is believed to confer costs of marriage and dowry on the parents. Given the patrilineal structure, girls are likely to get married and eventually leave their parental household. Since, the natal family is not going to reap any benefits even if their daughter engages in wage work, thus, parents especially those with less economic resources do not have a direct incentive to invest in their daughters' education. The belief is reinforced owing to the prevalent dowry norms whereby parents do not want to undertake the double burden of educating their daughters and then arranging dowry for them. On the other hand, boys are likely to be a financial support to their parents in their old age and hence, human capital is of utmost importance to them. On the other hand, in high class families, marriage market ensures that women just have sufficient education to be able to find a perfect groom (Borooah and Iyer 2005; Dreze and Kingdon 2001; The Probe Team 1999).

This is furthered by the stereotyped claims of the 'naturalness' or 'essentialness' of the sexual division of labour. Women are expected to be engaged in household chores, taking care of siblings or helping older women in domestic work such that less value is attached to their education (Chanana 2001; Rastogi 2007). Also, a girl's physical mobility is restricted at the time of menarche which negatively contributes to female enrolment. Such a problem would be compounded if the schools are located at a distance. This is because it not only increases the opportunity cost of time but at the same time reduces the parent's willingness to send their daughters to school with a view to protect her chastity (Chanana 2001, The Probe Team 1999).

Despite these cultural mores, there has been a considerable education expansion over the years (Borooah and Iyer 2005; Desai and Kulkarni 2008; Tilak 2015) with a fall in gender gap in enrolment (Raju 2008; Rastogi 2007; Tilak 2015). But still huge education gaps in terms of the historically disadvantaged socio-religious groups remain to be eliminated (Borooah 2012; Borooah and Iyer 2005; Desai and Kulkarni 2008; Rastogi 2007). In addition, when patriarchy intersects with religion, region, caste and class, it creates
multiple layers of oppression for a woman. The interplay of these multiple realities reinforces lower participation of women in public life with a consequence of underinvestment in female education relative to their male counterparts.

Specifically, education of other socio-religious groups has outpaced the education of Muslim women (Borooah 2012; Hasan and Menon 2004; Lateef 1990; Rastogi 2007; Sengupta and Guha 2002). As one moves up the education ladder, Muslims are less likely to be found in educational institutes and in certain cases their participation remains lower even in comparison to those of the SCs (Hasan and Menon 2004). In a study of education transitions using NSS data for 1983 to 2000 rounds, Desai and Kulkarni (2008) asserted that while there has been a significant education expansion in the country but the education gaps between upper caste Hindus and Muslims for both males and females have persisted over time and in fact have increased particularly for the completion of the college level. Further Shariff (2013) found that even after more than half a-decade of Sachar Committee Report, there has been little progress among the education levels of Muslims particularly for higher education.

Thus, despite an expansion in higher education over the few decades (Azam and Blom 2008; Tilak 2015); the same benefits have not percolated down to the lower strata. With greater economic rewards to higher education based professions, its participation is likely to increase. Hence, the "funnel effect" (Deshpande 2006:2440) would remain quite high which would perpetuate the elitism in higher education. In other words, not all who want education would be accommodated. In such circumstances, the historically disadvantaged groups are more likely to be kept out of the system. The literature also gives credence to the principle of maximally maintained inequality whereby disparity in any educational level would remain unchanged until at least $95 \%$ of the population attains that level of education (Raftery and Hout 1993).

With this backdrop, the present chapter aims to address the educational disparities of Muslim women analyzing the condition of M-Others and M-OBCs separately for each level of education over time and space. In this regard, section 2.2 delves into the disparities - gender, socio-religious and intra-socio-religious in educational parameters. Section 2.3 and 2.4 analyzes the probabilities of education transitions and higher education attendance
respectively using logistic regressions. Section 2.5 examines the descriptive statistics on higher education across cohorts such as class, region, choice of subjects and reasons for dropping out and section 2.6 presents the summary of the results.

For this both descriptive statistics and logistic regressions have been utilized using unit level data from the $55^{\text {th }}, 61^{\text {st }}$ and $68^{\text {th }}$ Employment-Unemployment and $64^{\text {th }}$ and $71^{\text {st }}$ Education rounds of NSSO.

### 2.2 Descriptive Statistics-I

### 2.2.1 Literacy Rates

Despite being a crude indicator, literacy rate ${ }^{20}$ provides a basic echelon for the different levels of education (Alam and Raju 2007). As depicted in appendix tables A2.1 and A2.2, there has been significant improvement in literacy rates over the years. Urban literacy rates were higher than those of their rural counterparts for all socio-religious groups across the years although owing to a smaller base, growth has been higher in the rural segment. But even in 2014, the rural-urban divide in literacy was prominent with 9 percentage point gap in male literacy and $19 \%$ in female literacy to the privilege of the urban individuals. In fact for all socio-religious categories, the rural-urban dichotomy was more evident for females in contrast to their male counterparts. Further, the socio-religious gaps were striking. While approximately $84 \%$ of NM-Others rural males were literate in 1999; even after a decade both M-Others and M-OBC could not attain that literacy level with about a quarter of them remaining illiterate in 2011. Similar situation was prevalent in urban settings. In addition, even in 2014, rural male M-OBC literacy rate was equivalent to NM-Others female literacy rate while M-Others males were marginally ahead than both. In the urban settings, both MOthers and M-OBC males had lower literacy even in comparison to NM-Others females.

Although the trends in literacy rates illustrates an improvement over the years but they explain little about how the disparities between the two sexes has changed. For this, as suggested by Vaid (2004) odds ratio of the relative access to literacy of males and females taking into consideration their socio-religious affiliation has been computed. Also, the odds

[^13]of the NM-Others females with respect to those of Muslim females has been computed over the years. In this regard, table 2.1 portrays that gender disparities have fallen over the years in terms of access to education in both rural and urban areas. The odds of educational access for a NM-Others male in comparison to their female counterparts residing in rural areas has shown a decline from 3.24:1 to 2.80:1 between 1999 and 2011. Also, the odds have marginally fallen between the two education rounds. The odds of access with respect to gender are lower among M-Others and M-OBC in comparison to NM-Others. This may be on account of the lower literacy rates among the Muslim community as a whole. Further, the gender disparities for Muslim community as a whole is higher in rural settings in contrast to urban ones.

Table 2.1: Odds Ratio for Male-Female and Socio-Religious (Females) Literacy Rates by Residence (1999-2011 \& 2007-2014)

| Socio- <br> Religious <br> Groups ( $\downarrow)$ | 1999 | 2004 | 2011 | $2007^{*}$ | $2014^{*}$ | 1999 | 2004 | 2011 | $2007^{*}$ | $2014^{*}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |
| Gender Disparity |  |  |  |  |  |  |  |  |  |  |
| NM-Others | 3.24 | 2.91 | 2.80 | 2.86 | 2.85 | 3.20 | 3.09 | 2.81 | 3.33 | 2.90 |
| NM-SC | 2.74 | 2.61 | 2.46 | 2.41 | 2.32 | 2.65 | 3.01 | 2.82 | 2.57 | 2.47 |
| NM-ST | 2.50 | 2.47 | 2.24 | 2.48 | 2.28 | 2.47 | 2.87 | 2.93 | 2.77 | 2.75 |
| NM-OBC | 3.06 | 2.98 | 2.69 | 2.92 | 2.83 | 2.88 | 2.86 | 2.91 | 2.93 | 2.77 |
| M-Others | 2.33 | 2.04 | 1.94 | 2.00 | 1.96 | 2.18 | 1.93 | 2.05 | 2.02 | 2.11 |
| M-OBC | 2.46 | 2.26 | 2.13 | 2.20 | 2.25 | 1.69 | 1.85 | 1.88 | 1.81 | 1.70 |
| All <br> Muslims | 2.36 | 2.13 | 2.04 | 2.08 | 2.12 | 1.99 | 1.90 | 1.96 | 1.92 | 1.85 |
| All | 2.72 | 2.63 | 2.46 | 2.56 | 2.47 | 2.48 | 2.53 | 2.52 | 2.51 | 2.41 |
| Socio-Religious Disparity (Females) |  |  |  |  |  |  |  |  |  |  |
| NM-Others <br> \& M- <br> Others | 2.16 | 1.84 | 1.72 | 1.75 | 1.72 | 3.48 | 3.41 | 3.12 | 3.31 | 2.82 |
| NM-Others <br> \& M-OBC | 2.09 | 2.21 | 2.09 | 2.59 | 2.25 | 3.95 | 4.41 | 3.91 | 4.28 | 3.25 |
| M-Others <br> \& M-OBC | 0.96 | 1.20 | 1.21 | 1.48 | 1.31 | 1.13 | 1.29 | 1.26 | 1.29 | 1.15 |

Note: Owing to the different structure of data collection and sampling design, the figures of the Employment and Education rounds are not directly comparable.
Source: Based on Appendix tables A2.1 and A2.2

The disparities in educational access are highest between NM-Others females and those of M-OBC closely followed by the disparities between NM-Others females and M-Others
females particularly in the urban areas although the odds ratio has shown a decline over the years.

The intra-community differentials in educational access in both rural and urban areas have shown a decline between 2007 and 2014 and presently the odds of a rural M-Others female having greater access to education in association with M-OBC stands at $1.31: 1$ while the corresponding figure in urban settings is 1.15:1.

### 2.2.2 Educational Attainment

Education level attained is a stock variable as it furnish evidence related to the exact grade completed of the population taking into consideration those who might have dropped out of education (Basant and Sen 2014). As the level of education increase, the proportion of population contracts both for M-Others and M-OBC irrespective of sector and gender (appendix tables A2.3 and A2.4). Over the years (1999 to 2011 and 2007 and 2014), there has been an improvement in the percentage of the population with secondary and above level of education across gender, socio-religious categories and sector. Despite substantial improvements in the percentage of the population with graduate and above level of education; a miniscule $1 \%$ of both M-Others and M-OBC women in rural areas were graduates in 2014 less than those for NM-Others females and all-India rural average. The corresponding figures in urban settings were $6 \%$ and $3 \%$ for M-Others and M-OBC women respectively. On the other hand, among NM-Others urban females approximately $23 \%$ had graduate and above level degrees. Besides this, even the males of the Muslim community had miniscule percentage of graduate and above individuals particularly in rural settings.

The disparities ${ }^{21}$ in terms of the completed level of education were in the favor of the Muslims for primary level of education in rural settings and up to middle level in the urban areas which was true for both the males and females (table 2.2 and 2.3). This is implicative

[^14]of the fact that Muslim community as a whole has higher concentration in the lower levels of education in comparison to NM-Others. Further, across sectors both the gender disparities and socio-religious disparities increase with each subsequent level of education attained. Although the rise in gender disparities was observed for NM-Others and all-India average but remains substantially higher for the Muslims both M-Others and M-OBC across sectors. While the gender disparities were higher for M-Others in comparison to MOBC in rural areas, the opposite phenomenon was realized in urban settings. This may be explained on account of substantially lower levels of education for the M-OBC community in rural settings. Also, the intra-socio-religious differences in educational attainments for the Muslim community in rural areas were miniscule while urban sector M-OBC experienced greater disparities in contrast to the 'Others' of their community.

Table 2.2: Gender, Socio-Religious and Intra-Socio-Religious Disparities in General Educational Attainment in Rural Areas (2014) (All Ages)

|  | Gender Disparity |  |  |  |  | Socio-Religious Disparity |  |  |  | Intra-Socio- <br> Religious <br> Disparity <br> M-Others Vs <br> M-OBC |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | NM-Others Vs M-Others |  | NM-Others Vs M-OBC |  |  |  |
|  | NMOthers | MOthers | $\begin{gathered} \text { M- } \\ \text { OBC } \end{gathered}$ | $\begin{gathered} \hline \text { All } \\ \text { Mus- } \end{gathered}$ lims | All | M | F | M | F | M | F |
| Pri | -0.15 | 0.18 | 0.24 | 0.21 | 0.13 | -0.49 | -0.15 | -0.20 | 0.20 | 0.29 | 0.35 |
| Mid | 0.11 | 0.32 | 0.29 | 0.30 | 0.31 | 0.27 | 0.47 | 0.29 | 0.47 | 0.03 | 0.00 |
| Sec | 0.34 | 0.37 | 0.28 | 0.32 | 0.40 | 0.80 | 0.83 | 0.96 | 0.89 | 0.16 | 0.07 |
| HS | 0.39 | 0.53 | 0.61 | 0.58 | 0.48 | 1.08 | 1.22 | 0.97 | 1.20 | -0.11 | -0.03 |
| Grad | 0.67 | 0.59 | 0.53 | 0.55 | 0.68 | 1.54 | 1.46 | 1.55 | 1.41 | 0.01 | -0.05 |

Note: (1) M-Males, F-Females; Pri- Primary, Mid-Middle, Sec-Secondary, HS-Higher Secondary, Grad-Graduate \& Above;
(2) "All" represents the all-India average for each sector separately unless otherwise specified.
Source: Based on Appendix table A2.3
In addition, the socio-religious disparities were substantially higher than the gender disparities irrespective of sex and place of residence. For instance, while gender disparities in rural settings was 0.59 for M-Others for graduate and above level of education; the socioreligious disparity was as high as 1.46 for M-Others females with respect to their NMOthers counterparts. No strict pattern is observed in rural areas for intra-socio-religious disparities for education attainment. But for urban areas, disparities increase with the
increase in the level of education for both males and females but remains higher for the females. For instance, while the differential for graduation and above level between M-Others-M-OBC urban males was 0.44 , the analogous figure was 0.70 for females.

The analyzed patterns exhibit that while gender and socio-religious disparities were higher in the rural settings; the intra-socio-religious disparities were large in the urban settings to the detriment of the OBCs among the Muslims particularly the women of their community.

Table 2.3: Gender, Socio-Religious and Intra-Socio-Religious Disparities in General Educational Attainment in Urban Areas (2014) (All Ages)

|  | Gender Disparity |  |  |  |  | Socio-Religious Disparity |  |  |  | Intra-SocioReligious Disparity M-Others Vs M-OBC |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | NM-Others Vs M-Others |  | NM-Others Vs M-OBC |  |  |  |
|  | NMOthers | $\begin{gathered} \text { M- } \\ \text { Others } \end{gathered}$ | $\begin{gathered} \mathrm{M}- \\ \mathrm{OBC} \end{gathered}$ | All Muslim | All | M | F | M | F | M | F |
| Pri | -0.13 | 0.08 | 0.12 | 0.10 | 0.02 | -0.57 | -0.36 | -0.64 | -0.39 | -0.07 | -0.03 |
| Mid | -0.01 | 0.02 | 0.26 | 0.16 | 0.11 | -0.13 | -0.09 | -0.20 | 0.07 | -0.07 | 0.17 |
| Sec | 0.01 | 0.14 | 0.05 | 0.10 | 0.14 | 0.26 | 0.38 | 0.42 | 0.46 | 0.16 | 0.08 |
| HS | 0.14 | 0.16 | 0.22 | 0.19 | 0.13 | 0.65 | 0.67 | 0.88 | 0.96 | 0.23 | 0.30 |
| Grad | 0.21 | 0.29 | 0.55 | 0.42 | 0.29 | 1.32 | 1.40 | 1.77 | 2.10 | 0.44 | 0.70 |

Note: M-Males, F-Females; Pri- Primary, Mid-Middle, Sec-Secondary, HS-Higher
Secondary, Grad-Graduate \& Above;
Source: Based on Appendix table A2.4

### 2.2.3 Trends, Patterns and Disparities in Gross Attendance Rates (GAR)

Gross Attendance Rates (GAR) $)^{22}$ is a flow variable as it furnish information relating to the current attendance levels of the individuals. Although there has been substantial education

[^15]expansion in the country over the span of a decade (1999-2011) ${ }^{23}$ reflective in the improvements in gross attendance rates across education levels but there are substantial rural-urban, socio-religious and gender differentials (appendix tables A2.5, A2.6, A2.7 and A2.8). For instance, the GAR in primary education in 1999 was least for the M-OBC females both in the rural and urban segments in contrast to males and females of other socio-religious categories which depicted a steady increase from $55.9 \%$ in 1999 in rural areas to $90.63 \%$ in 2011; while the corresponding improvement for urban M-OBC females was $69.24 \%$ to $102.9 \%{ }^{24}$ Although for primary education, the percentages remain greater than 100 both at all-India level and for NM-Others students, M-Others females and both M-OBC male and female in rural areas remain behind (2014).

Further, from one education ladder to the next, there is a substantial fall in the gross attendance rates. In rural areas, while 3 in every 4 persons were attending secondary level of education in 2014; only 1 in every 5 was attending graduate and above level. In the urban sector, while GAR in secondary education was approximately $83 \%$; the figures fell to $35 \%$ for graduate and above levels. Also, compound annual growth rate of gross attendance (1999-2011) has been higher in rural areas for all levels of education. This may be owing to the smaller base in comparison to urban areas but there is no refuting the claim that more rural persons are going for education than previously. At the same time, rural sector witnessed lower attendance for secondary and higher education levels in 2014 for both males and females which may be on account of better infrastructural facilities for these levels in urban areas.

Further, discerning the gender disparities in attendance rates, tables 2.4 and 2.5 exhibit that while in rural areas, the gender disparities are pervasive for both secondary and higher levels of education; urban areas have been able to bring more women into education even for the secondary level. One of the most striking observation was that in rural areas, M-

[^16]Others women had a marginally higher attendance in graduation and above education levels than the males of their community. For graduate and above levels in urban areas, while NM-Others women have greater participation than their male counterparts, disparities remain for the Muslim women with greater disparities observed for the OBCs of the Muslim community.

Table 2.4: Gender, Socio-Religious and Intra-Socio-Religious Disparities in GAR in Rural Areas (2014)

|  | Gender Disparity |  |  |  |  | Socio-Religious Disparity |  |  |  | Intra-Socio- <br> Religious <br> Disparity <br> M-Others Vs <br> M-OBC |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | NM-Others Vs M-Others |  | NM-Others <br> Vs M-OBC |  |  |  |
|  | $\begin{aligned} & \text { NM- } \\ & \text { Others } \end{aligned}$ | $\begin{gathered} \text { M- } \\ \text { Others } \end{gathered}$ | $\begin{gathered} \mathrm{M}- \\ \mathrm{OBC} \end{gathered}$ | All Muslim | All | M | F | M | F | M | F |
| Pri | -0.02 | 0.24 | -0.01 | 0.10 | 0.04 | 0.01 | 0.27 | 0.17 | 0.18 | 0.16 | -0.09 |
| Mid | -0.03 | -0.09 | 0.07 | 0.00 | 0.07 | -0.05 | -0.11 | 0.30 | 0.40 | 0.35 | 0.51 |
| Sec | 0.18 | 0.11 | 0.19 | 0.15 | 0.07 | 0.78 | 0.71 | 0.80 | 0.81 | 0.02 | 0.10 |
| Grad | 0.10 | -0.03 | 0.56 | 0.30 | 0.26 | 1.39 | 1.26 | 0.87 | 1.33 | -0.52 | 0.07 |

Note: M-Males, F-Females; Pri- Primary, Mid-Middle, Sec-Secondary, Grad-Graduate \& Above.
Source: Based on Appendix tables A2.5, A2.6, A2.7 and A2.8
Table 2.5: Gender, Socio-Religious and Intra-Socio-Religious Disparities in GAR in Urban Areas (2014)

|  | Gender Disparity |  |  |  |  | Socio-Religious Disparity |  |  |  | Intra-Socio <br> Religious Disparity <br> M-Others Vs M-OBC |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | $\begin{gathered} \text { NM-Others } \\ \text { Vs M- } \\ \text { Others } \end{gathered}$ |  | NM-Others Vs M-OBC |  |  |  |
|  | NMOthers | MOthers | $\begin{gathered} \mathrm{M}- \\ \mathrm{OBC} \end{gathered}$ | All Muslim | All | M | F | M | F | M | F |
| Pri | 0.03 | 0.15 | 0.03 | 0.08 | -0.01 | -0.10 | 0.01 | 0.02 | 0.02 | 0.12 | 0.01 |
| Mid | -0.12 | -0.11 | 0.26 | 0.15 | 0.08 | 0.37 | 0.37 | 0.38 | 0.76 | 0.01 | 0.39 |
| Sec | 0.07 | 0.18 | -0.15 | -0.02 | -0.05 | 0.58 | 0.69 | 1.02 | 0.80 | 0.44 | 0.11 |
| Grad | -0.05 | 0.08 | 0.20 | 0.14 | 0.00 | 1.06 | 1.18 | 1.30 | 1.55 | 0.24 | 0.37 |

Note: M-Males, F-Females; Pri- Primary, Mid-Middle, Sec-Secondary, Grad-Graduate \& Above.
Source: Based on Appendix tables A2.5, A2.6, A2.7 and A2.8
Further, post the middle level of education, striking socio-religious disparities are observed across sectors. The disparities in comparison to the NM-Others females were higher for the women of the OBC caste Muslims than for the upper caste. Another observation stemming
from the data is that while socio-religious disparities are higher for M-Others in rural areas in comparison to the urban sector, the lower caste Muslims in urban areas bear grander inequalities. Again the intra-religious disparity was more pronounced in the urban areas in contrast to the rural areas for all levels of educational attendance with the highest being for the graduate level.

The above discussion escorts us to believe that while education expansion in the country has had a significant impact on literacy, educational attainments, and attendance of girls, such that the gender disparities were low across sectors, being still smaller in the urban settings. On the other hand, the socio-religious inequalities are still highly prevalent. Although the disparities remain higher for all levels of education in the rural settings to the detriment of both M-Others and M-OBC in comparison to NM-Others irrespective of gender but they increase for higher level of education attainment and attendance in the urban settings particularly for the M-OBC. Thus, although the theory that areas with better education facilities (urban areas in the present context) have lower disparities (Alam and Raju 2007; Borooah and Iyer 2005; Sundaram and Vanneman 2008) largely hold for the present study but the effects reverses for higher educational levels.

Further, the intra-socio-religious disparities were virtually non-existent in rural settings but the urban areas were highly unequal particularly for the females of the OBC caste Muslims in association with the 'Others' of their communities. The above results vindicate the claim that locational specificities have a significant association with the educational disparities observed.

### 2.2.4 Age at discontinuance

There has been an increase in the age at drop out or discontinuance. In 2007, while approximately half of the rural females dropped out or discontinued education by the age of 13 years; the analogous figure in 2014 was one-third (tables 2.6 and 2.7). Similarly, in the urban settings, while close to one-third women at all-India level refrained from further education by the age of 13 years in 2007, close to three-fourth of the urban women in 2014 managed to continue studies after that age. The improvement in the age at discontinuance or drop out was observed for all socio-religious categories and gender irrespective of the
sector. But the age at drop-out remained higher in the urban settings in comparison to the rural ones.

A higher proportion of the Muslims both males and females and across place of residence dropped out or discontinued education at the time when the NM-Others students were expected to be busy with their secondary or higher education in 2014. In this regard, Hasan (2016) argues that perception of discrimination in public employment is deep-rooted even among the boys of the Muslim communities and they drop out by class X to pursue service trade, family trade or self-employment.

Further, the situation becomes perplexed for the Muslim parents who with a fear of not being able to find a suitable match for their daughters find it convenient and refrain them from education (Hameed 2000; Hasan and Menon 2004). Thus, while approximately 55\% of the NM-Others males and $56 \%$ of their females dropped out of education in the age group of 18 to 23 in urban settings, close to $80 \%$ of the males and females of the Muslim community were already out of the education system. Further, no striking intra-community or gender differences were observed for the Muslim community.

Table 2.6: Percentage Distribution of persons by age at drop-out/discontinuance for
Socio-religious Groups, Sex and Residence (2007)

| Sector/Age <br> -Group ( $\downarrow$ ) | NM-Others |  | M-Others |  | M-OBC |  | All Muslims |  | All |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | M | F | M | F | M | F | M | F | M | F |
| RURAL |  |  |  |  |  |  |  |  |  |  |
| 6-10 | 7.22 | 9.75 | 23.26 | 21.74 | 15.98 | 21.38 | 20.15 | 21.6 | 15.22 | 19.33 |
| 11-13 | 17.39 | 22.54 | 32.69 | 37 | 35.89 | 29.14 | 34.05 | 34.03 | 26.38 | 30.15 |
| 14-17 | 47.72 | 48.32 | 34.77 | 35.55 | 40.74 | 41.21 | 37.32 | 37.69 | 43.6 | 40.1 |
| 18-23 | 27.67 | 19.39 | 9.28 | 5.72 | 7.39 | 8.27 | 8.47 | 6.68 | 14.80 | 10.42 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| URBAN |  |  |  |  |  |  |  |  |  |  |
| 6-10 | 5.99 | 5.93 | 20.46 | 14.79 | 19.42 | 16.59 | 20.03 | 15.54 | 11.68 | 11.39 |
| 11-13 | 13.88 | 12.1 | 28.47 | 29.15 | 31.82 | 26.44 | 29.86 | 28.02 | 20.19 | 19.69 |
| 14-17 | 40.1 | 36.71 | 37.44 | 41.09 | 38.19 | 44.51 | 37.75 | 42.51 | 41.92 | 41.83 |
| 18-23 | 40.03 | 45.25 | 13.62 | 14.97 | 10.58 | 12.46 | 12.36 | 13.92 | 26.21 | 27.09 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

Note: M-Males, F-Females
Source: Computed using unit record data from Social Expenditure: Education ( $\left.64^{\text {th }}\right)$ Round of NSSO

Table 2.7: Percentage Distribution of persons by age at drop-out/discontinuance for Socio-religious Groups, Sex and Residence (2014)

| Sector/Age <br> -Group ( $\downarrow$ ) | NM-Others |  | M-Others |  | M-OBC |  | All Muslims |  | All |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | M | F | M | F | M | F | M | F | M | F |
| RURAL |  |  |  |  |  |  |  |  |  |  |
| 6-10 | 5.14 | 5.63 | 10.91 | 17.84 | 17.06 | 16.02 | 14.02 | 16.89 | 11.12 | 12.68 |
| 11-13 | 11.51 | 17.63 | 33.46 | 31.19 | 28.97 | 28.16 | 31.19 | 29.61 | 22.65 | 24.74 |
| 14-17 | 45.59 | 47.59 | 40.4 | 38.83 | 38.09 | 43.17 | 39.23 | 41.10 | 44.07 | 44.68 |
| 18-23 | 37.76 | 29.15 | 15.22 | 12.13 | 15.88 | 12.65 | 15.56 | 12.4 | 22.16 | 17.89 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| URBAN |  |  |  |  |  |  |  |  |  |  |
| 6-10 | 4.05 | 4.67 | 12.99 | 10.94 | 13.46 | 10.55 | 13.25 | 10.72 | 7.53 | 7.05 |
| 11-13 | 10.55 | 8.15 | 25.93 | 23.54 | 28.32 | 25.51 | 27.27 | 24.65 | 18.12 | 16.61 |
| 14-17 | 30.35 | 30.69 | 41.97 | 47.01 | 38.83 | 44.34 | 40.21 | 45.51 | 38.58 | 39.04 |
| 18-23 | 55.05 | 56.49 | 19.11 | 18.51 | 19.4 | 19.6 | 19.27 | 19.12 | 35.77 | 37.3 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

Note: M-Males, F-Females
Source: Computed using unit record data from Social Expenditure: Education (71 ${ }^{\text {st }}$ ) Round of NSSO

### 2.2.5 Education Detachment: Case of Never Enrolled Students

While the age at discontinuance provide information on those students who were enrolled and who either dropped out or discontinued education, it is equally important to examine the proportion of individuals who have never enrolled for education. Between 2007 and 2014 (table 2.8), there has been a substantial reduction in the proportion of never enrolled individuals ${ }^{25}$ for both males and females and across sectors. While a miniscule proportion of both males and females of NM-Others irrespective of sector had never attended educational institutions in 2014, Muslims had the highest percentage of males and females across socio-religious categories who have never been to school.

Further, the intra-community differences are high in terms of the never enrolled students. While $12 \%$ of M-Others rural females had remain exterior to the school system, the corresponding figure for $\mathrm{M}-\mathrm{OBC}$ was $15 \%$. M-OBC males had close to $11 \%$ among them who haven't been to school, with analogous figure for the M-Others being 7\%. In urban

[^17]areas too, a higher proportion of M-OBC females in association with their M-Others counterparts were not considered by their parents to be ever enrolled. Further, the proportions of never-enrolment were higher in the rural areas in contrast to the urban ones which is reflective of the better infrastructural facilities in the urban settings.

Table 2.8: Proportion of Never Enrolled Students by Socio-religious Groups, Sex and Residence (2007 and 2014)

| Socio- <br> Religious Group <br> ( $\downarrow$ ) | 2007 |  |  |  | 2014 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Rural |  | Urban |  | Rural |  | Urban |  |
|  | Male | Female | Male | Female | Male | Female | Male | Female |
| NMOthers | 2.80 | 5.27 | 1.78 | 2.81 | 1.70 | 2.37 | 1.43 | 1.80 |
| NM-SC | 10.62 | 17.71 | 8.39 | 10.99 | 7.26 | 10.60 | 4.15 | 6.80 |
| NM-ST | 11.19 | 22.83 | 4.98 | 9.68 | 6.94 | 13.11 | 5.38 | 8.01 |
| $\begin{aligned} & \text { NM- } \\ & \text { OBC } \end{aligned}$ | 6.64 | 14.74 | 3.84 | 5.63 | 4.50 | 8.12 | 2.56 | 2.96 |
| M-Others | 11.59 | 17.34 | 7.56 | 11.20 | 6.83 | 11.97 | 5.28 | 6.56 |
| M-OBC | 18.81 | 30.85 | 15.27 | 17.61 | 11.01 | 15.08 | 10.34 | 10.81 |
| $\begin{aligned} & \hline \text { All } \\ & \text { Muslims } \end{aligned}$ | 15.08 | 23.64 | 11.08 | 14.09 | 9.17 | 13.76 | 8.28 | 9.26 |
| All | 8.38 | 15.88 | 5.35 | 7.45 | 5.63 | 9.24 | 3.78 | 4.73 |

Source: Computed using unit record data from Social Expenditure: Education ( $64^{\text {th }}$ and $71^{\text {st }}$ ) Rounds of NSSO

Thus, while no significant intra-community and gender differentials were observed for the Muslim community in terms of the age at discontinuance or drop out; the proportions of never enrolment remains higher for the M-OBC irrespective of the sector. Thus, the foremost issue for the Muslim community particularly for the women of the M-OBC castes is to bring them into the education system.

### 2.3 Econometric Exercise-I

With a purview to examine the changes in the probability of an individuals' completion of a particular level of education conditional on the completion of the previous level, data from the $55^{\text {th }}, 61^{\text {st }}$ and $68^{\text {th }}$ NSS rounds was pooled ${ }^{26}$ and separate logistic regressions for each transition were analyzed. The method used in the present part is drawn from the one

[^18]used by Desai and Kulkarni (2008). There are four transition equations: (1) enrollment of a student in the age-group of 6-11 years in school (2) conditional on a student's enrollment in school, the probability of his/her completing primary education (12-17 years) (3) probability of completing middle school in the age group of 14 to 19 years conditional on completing primary level and (4) completion of secondary level schooling for the children aged 18 to 23 years conditional on completing middle level. Thus, the sample size gets reduced for each successive transition as the students who weren't able to complete a particular level were not considered for the next.

Thus, each equation is estimated on a set of independent variables - student's age, sex, socio-religious exclusion, sector, region ${ }^{27}$, household size and $\ln$ (MPCE). While it is expected that individuals in large households are less likely to be in education as they have more responsibilities - economic for men and domestic for women but it is equally likely that large households tend to share the burden of responsibilities leading to higher education participation (Basant and Sen 2014). ln (MPCE) is the natural logarithm of inflation adjusted ${ }^{28}$ monthly per capita consumption expenditure in rupees used as a proxy of household's income. It has been included in the regression analysis as an individuals' participation in education is severely impacted by the economic resources of the household (Alam and Raju 2007; Borooah and Iyer 2005; Desai and Kulkarni 2008; Tilak 2015).

## Model Specification

The basic logistic model takes the following form:

$$
\mathrm{P}\left(\mathrm{Y}_{\mathrm{i}}=1 / \mathrm{X}=\mathrm{x}\right)=\frac{\exp \left(\beta_{0}+\sum_{\mathrm{j}} \beta_{\mathrm{j}} \mathrm{X}_{\mathrm{ij}}\right)}{1+\exp \left(\beta_{0}+\sum_{\mathrm{j}} \beta_{\mathrm{j}} \mathrm{X}_{\mathrm{ij}}\right)}
$$

[^19]where $Y_{i}$ is a dichotomous dependent variable taking the value of 1 if a student in the specified age group is currently attending educational institutions contingent upon the completion of the previous level and 0 otherwise, $\mathrm{P}_{\mathrm{i}}$ is the probability of a student ' i ' making a successful transition to the next level, $\ln (\mathrm{P} / 1-\mathrm{P})$ is the log odds of the likelihood of participation, $\mathrm{X}_{\mathrm{ij}}$ is a set of explanatory variables, $\beta \mathrm{s}$ are the parameters to be predicted and $\exp$ is the exponential function.

As shown in appendix table A2.9 ${ }^{29}$, the overall probability of completing each education transition has increased considerably between 1999 and 2011 as depicted by the year dummies. Further, in comparison to males, females had a lower probability of making each transition. All other control variables had expected signs. For instance, household size had a positive significant impact for making each transition which was easier for individuals with higher per capita consumption expenditure. Furthermore, the probability of completing middle and secondary level of education was higher in urban areas while for the earlier transitions, there were no significant sectoral differences.

Further, predicted probabilities for each transition have been computed using the results of the logistic regressions detailed out in table 2.9. It depicts that the probabilities of completing each education transition has increased over the period 1999 to 2011 for both males and females and across socio-religious groups. In 1999, the probability of a NMOthers male of completing primary education was $95.4 \%$. The NM-Others male probability has been computed by assuming all the individuals in the sample were NM-Others males when the values of other variables was set equal to their observed values. The predicted probabilities depict that even for the primary education transition, the probabilities were lowest for M-OBC males in comparison to those of NM-Others males and for M-OBC females in comparison to NM-Others females, females of other socio-religious categories and males of their own community. The similar gaps are observed across each transition and for each year depicting the educational deficits of the Muslim community particularly the women of the OBCs among them. Thus, even after controlling for individual and

[^20]geographic location factors, the logistic regressions broadly vindicate the claims of the descriptive statistics.

Table 2.9: Predicted Probabilities of Education Transitions by Socio-Religious Groups and Sex (1999-2011)

| Variables | School Enrollment | Primary | Middle | Secondary |
| :---: | :---: | :---: | :---: | :---: |
| 1999 |  |  |  |  |
| Male |  |  |  |  |
| NM-Others | 0.917*** | 0.954*** | 0.902*** | 0.647*** |
|  | (0.00170) | (0.00136) | (0.00193) | (0.00369) |
| NM-SC | 0.840*** | 0.912*** | 0.830*** | 0.547*** |
|  | (0.00226) | (0.00222) | (0.00310) | (0.00528) |
| NM-ST | 0.816*** | 0.904*** | 0.847*** | 0.590*** |
|  | (0.00293) | (0.00280) | (0.00353) | (0.00595) |
| NM-OBC | 0.861*** | 0.931*** | 0.862*** | 0.581*** |
|  | (0.00180) | (0.00158) | (0.00230) | (0.00404) |
| M-Others | 0.816*** | 0.880*** | 0.805*** | 0.557*** |
|  | (0.00304) | (0.00333) | (0.00412) | (0.00612) |
| M-OBC | 0.765*** | 0.872*** | 0.794*** | 0.464*** |
|  | (0.00423) | (0.00445) | (0.00537) | (0.00753) |
| Female |  |  |  |  |
| NM-Others | 0.887*** | 0.941*** | 0.872*** | 0.574*** |
|  | (0.00216) | (0.00168) | (0.00242) | (0.00401) |
| NM-SC | 0.792*** | 0.890*** | 0.785*** | 0.471*** |
|  | (0.00272) | (0.00277) | (0.00377) | (0.00553) |
| NM-ST | 0.763*** | 0.881*** | 0.805*** | 0.515*** |
|  | (0.00347) | (0.00346) | (0.00428) | (0.00625) |
| NM-OBC | 0.817*** | 0.913*** | 0.823*** | 0.506*** |
|  | (0.00223) | (0.00203) | (0.00290) | (0.00443) |
| M-Others | 0.763*** | 0.852*** | 0.755*** | 0.481*** |
|  | (0.00360) | (0.00389) | (0.00482) | (0.00640) |
| M-OBC | 0.704*** | 0.842*** | 0.743*** | 0.389*** |
|  | (0.00485) | (0.00531) | (0.00631) | (0.00744) |
| 2004 |  |  |  |  |
| Male |  |  |  |  |
| NM-Others | 0.956*** | 0.972*** | 0.909*** | 0.639*** |
|  | (0.00106) | (0.000936) | (0.00191) | (0.00394) |
| NM-SC | 0.911*** | 0.945*** | 0.842*** | 0.538*** |
|  | (0.00153) | (0.00151) | (0.00287) | (0.00517) |
| NM-ST | 0.896*** | 0.940*** | 0.857*** | 0.582*** |
|  | (0.00201) | (0.00191) | (0.00329) | (0.00587) |
| NM-OBC | 0.924*** | 0.957*** | 0.872*** | 0.573*** |
|  | (0.00120) | (0.00106) | (0.00208) | (0.00383) |
| M-Others | 0.896*** | 0.924*** | 0.817*** | 0.548*** |
|  | (0.00211) | (0.00237) | (0.00390) | (0.00607) |
| M-OBC | $0.862^{* * *}$ | 0.918*** | 0.807*** | 0.455*** |
|  | (0.00298) | (0.00303) | (0.00497) | (0.00739) |


| Variables | School Enrollment | Primary | Middle | Secondary |
| :---: | :---: | :---: | :---: | :---: |
| Female |  |  |  |  |
| NM-Others | $\begin{aligned} & 0.939 * * * \\ & (0.00140) \end{aligned}$ | $\begin{aligned} & 0.964 * * * \\ & (0.00116) \end{aligned}$ | $\begin{aligned} & 0.881^{* * *} \\ & (0.00238) \end{aligned}$ | $\begin{aligned} & 0.566^{* * *} \\ & (0.00420) \end{aligned}$ |
| NM-SC | $\begin{aligned} & 0.880 * * * \\ & (0.00191) \end{aligned}$ | $\begin{aligned} & 0.931 * * * \\ & (0.00189) \end{aligned}$ | $\begin{aligned} & 0.799 * * * \\ & (0.00347) \end{aligned}$ | $\begin{aligned} & 0.462 * * * \\ & (0.00536) \end{aligned}$ |
| NM-ST | $\begin{aligned} & 0.860 * * * \\ & (0.00249) \end{aligned}$ | $\begin{aligned} & 0.925 * * * \\ & (0.00238) \end{aligned}$ | $\begin{aligned} & 0.818^{* * *} \\ & (0.00399) \end{aligned}$ | $\begin{aligned} & 0.506 * * * \\ & (0.00611) \end{aligned}$ |
| NM-OBC | $\begin{aligned} & 0.896 * * * \\ & (0.00153) \end{aligned}$ | $\begin{aligned} & 0.946 * * * \\ & (0.00136) \end{aligned}$ | $\begin{aligned} & 0.835 * * * \\ & (0.00261) \end{aligned}$ | $\begin{aligned} & 0.497 * * * \\ & (0.00417) \end{aligned}$ |
| M-Others | $\begin{aligned} & 0.860 * * * \\ & (0.00262) \end{aligned}$ | $\begin{aligned} & 0.904 * * * \\ & (0.00282) \end{aligned}$ | $\begin{aligned} & 0.770 * * * \\ & (0.00456) \end{aligned}$ | $\begin{aligned} & 0.472 * * * \\ & (0.00628) \end{aligned}$ |
| M-OBC | $\begin{aligned} & 0.818 * * * \\ & (0.00364) \end{aligned}$ | $\begin{aligned} & 0.898 * * * \\ & (0.00370) \end{aligned}$ | $\begin{aligned} & 0.759 * * * \\ & (0.00587) \end{aligned}$ | $\begin{aligned} & 0.381 * * * \\ & (0.00725) \end{aligned}$ |
| 2011 <br> Male |  |  |  |  |
| NM-Others NM-SC | $\begin{gathered} 0.978 * * * \\ (0.000684) \\ 0.954 * * * \end{gathered}$ | $\begin{gathered} 0.987 * * * \\ (0.000529) \\ 0.975 * * * \end{gathered}$ | $\begin{aligned} & 0.959 * * * \\ & (0.00115) \\ & 0.924 * * * \end{aligned}$ | $\begin{aligned} & 0.758^{* * *} \\ & (0.00368) \\ & 0.670^{* * *} \end{aligned}$ |
| NM-ST | $\begin{aligned} & (0.00115) \\ & 0.946 * * * \end{aligned}$ | $\begin{gathered} (0.000931) \\ 0.972 * * * \end{gathered}$ | $\begin{aligned} & (0.00189) \\ & 0.932 * * * \end{aligned}$ | $\begin{aligned} & (0.00484) \\ & 0.709^{* * *} \end{aligned}$ |
| NM-OBC | $\begin{aligned} & (0.00143) \\ & 0.961 * * * \end{aligned}$ | $\begin{aligned} & (0.00111) \\ & 0.981^{* *} \end{aligned}$ | $\begin{gathered} (0.00196) \\ 0.940 * * * \end{gathered}$ | $\begin{aligned} & (0.00528) \\ & 0.701^{*} * * \end{aligned}$ |
| M-Others | $\begin{gathered} (0.000937) \\ 0.946^{* *} * \end{gathered}$ | $\begin{gathered} (0.000669) \\ 0.964^{*} * * \end{gathered}$ | $\begin{aligned} & (0.00136) \\ & 0.910^{* * *} \end{aligned}$ | $\begin{aligned} & (0.00365) \\ & 0.679 * * * \end{aligned}$ |
| M-OBC | $\begin{aligned} & (0.00151) \\ & 0.926 * * * \\ & (0.00207) \end{aligned}$ | $\begin{aligned} & (0.00146) \\ & 0.961 * * * \\ & (0.00174) \end{aligned}$ | $\begin{gathered} (0.00253) \\ 0.904 * * * \\ (0.00309) \end{gathered}$ | $\begin{aligned} & (0.00562) \\ & 0.593 * * * \\ & (0.00723) \end{aligned}$ |
| Female |  |  |  |  |
| NM-Others | $\begin{gathered} 0.970 * * * \\ (0.000924) \end{gathered}$ | $\begin{gathered} 0.984 * * * \\ (0.000654) \end{gathered}$ | $\begin{aligned} & 0.945 * * * \\ & (0.00147) \end{aligned}$ | $\begin{aligned} & 0.695 * * * \\ & (0.00408) \end{aligned}$ |
| NM-SC | $\begin{aligned} & 0.937 * * * \\ & (0.00151) \end{aligned}$ | $\begin{aligned} & 0.968 * * * \\ & (0.00115) \end{aligned}$ | $\begin{aligned} & 0.899^{* * *} \\ & (0.00237) \end{aligned}$ | $\begin{aligned} & 0.599 * * * \\ & (0.00526) \end{aligned}$ |
| NM-ST | $\begin{aligned} & 0.925 * * * \\ & (0.00186) \end{aligned}$ | $\begin{aligned} & 0.965^{* * *} \\ & (0.00138) \end{aligned}$ | $\begin{aligned} & 0.910^{* * *} \\ & (0.00248) \end{aligned}$ | $\begin{aligned} & 0.641 * * * \\ & (0.00579) \end{aligned}$ |
| NM-OBC | $\begin{aligned} & 0.946 * * * \\ & (0.00124) \end{aligned}$ | $\begin{gathered} 0.975^{* * *} \\ (0.000836) \end{gathered}$ | $\begin{aligned} & 0.920 * * * \\ & (0.00174) \end{aligned}$ | $\begin{aligned} & 0.632 * * * \\ & (0.00407) \end{aligned}$ |
| M-Others | $\begin{aligned} & 0.925^{*} * * \\ & (0.00197) \end{aligned}$ | $\begin{aligned} & 0.954 * * * \\ & (0.00176) \end{aligned}$ | $\begin{aligned} & 0.882 * * * \\ & (0.00312) \end{aligned}$ | $\begin{aligned} & 0.609^{* * *} \\ & (0.00615) \end{aligned}$ |
| M-OBC | $\begin{aligned} & 0.899 * * * \\ & (0.00266) \end{aligned}$ | $\begin{aligned} & 0.951 * * * \\ & (0.00215) \end{aligned}$ | $\begin{aligned} & 0.875 * * * \\ & (0.00386) \end{aligned}$ | $\begin{aligned} & 0.517 * * * \\ & (0.00754) \end{aligned}$ |
| Observations | 218,205 | 169,372 | 134,821 | 80,924 |

Robust Standard Errors in parentheses
*** $p<0.01$, ** $p<0.05$, * $p<0.1$

### 2.4 Econometric Exercise-II

Whether educational expansion has been inclusive or still deficits remain in Higher Education? The previous analysis depicts that the transition rates have narrowed for the school enrolment, primary, middle and secondary education on whose completion relies the enrolment in the higher education. The focus of the present part is to analyze the probabilities of being in higher education.

## Model Specification

Following form of the logistic regression has been used:

$$
\mathrm{P}\left(\mathrm{Y}_{\mathrm{i}}=1 / \mathrm{X}=\mathrm{x}\right)=\frac{\exp \left(\beta_{0}+\sum_{\mathrm{j}} \beta_{\mathrm{j}} \mathrm{X}_{\mathrm{ij}}\right)}{1+\exp \left(\beta_{0}+\sum_{\mathrm{j}} \beta_{\mathrm{j}} \mathrm{X}_{\mathrm{ij}}\right)}
$$

where $\mathrm{Y}_{\mathrm{i}}$ is a dichotomous dependent variable taking the value of 1 if a student in the age group of 18 to 23 years is attending higher educational institutions and 0 otherwise, $\mathrm{P}_{\mathrm{i}}$ is the probability of a student ' i ' being enrolled in higher education, $\ln (\mathrm{P} / 1-\mathrm{P})$ is the $\log$ odds of the likelihood of participation, $\mathrm{X}_{\mathrm{ij}}$ is a set of explanatory variables, $\beta \mathrm{s}$ are the parameters to be predicted and exp is the exponential function.

All the independent variables used in part I have been included in the present analysis. As depicted in appendix table A2.10, females had a lower probability of being in higher education but over the years there has been an improvement in the odds ratio. Similarly, all across the years - southern states, urban areas, households with large members and those with high per capita expenditures had better prospects of being in higher education. On the basis of the logistic regressions, predicted probabilities of being in higher education have been computed for the males and females of all socio-religious groups across years. ${ }^{30}$

[^21]Table 2.10: Predicted Probabilities of Higher Education Attendance by Socio-Religious Groups and Sex (1999-2011 \& 2007-2014)

| Variables | Employment Rounds |  |  | Education Rounds |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1999 | 2004 | 2011 | 2007 | 2014 |
| Males |  |  |  |  |  |
| NM-Others | $\begin{aligned} & 0.173 * * * \\ & (0.00283) \end{aligned}$ | $\begin{aligned} & 0.147 * * * \\ & (0.00288) \end{aligned}$ | $\begin{aligned} & 0.306 * * * \\ & (0.00472) \end{aligned}$ | $\begin{aligned} & 0.133 * * * \\ & (0.00342) \end{aligned}$ | $\begin{aligned} & 0.414 * * * \\ & (0.00520) \end{aligned}$ |
| NM-SC | $\begin{aligned} & 0.104 * * * \\ & (0.00360) \end{aligned}$ | $\begin{aligned} & 0.101 * * * \\ & (0.00338) \end{aligned}$ | $\begin{aligned} & 0.211 * * * \\ & (0.00502) \end{aligned}$ | $\begin{gathered} 0.0878 * * * \\ (0.00352) \end{gathered}$ | $\begin{aligned} & 0.312 * * * \\ & (0.00589) \end{aligned}$ |
| NM-ST | $\begin{aligned} & 0.0904 * * * \\ & (0.00451) \end{aligned}$ | $\begin{gathered} 0.0893 * * * \\ (0.00407) \end{gathered}$ | $\begin{aligned} & 0.229 * * * \\ & (0.00622) \end{aligned}$ | $\begin{gathered} 0.0668^{* * *} \\ (0.00409) \end{gathered}$ | $\begin{aligned} & 0.298 * * * \\ & (0.00715) \end{aligned}$ |
| NM-OBC | $\begin{aligned} & 0.118 * * * \\ & (0.00272) \end{aligned}$ | $\begin{aligned} & 0.119 * * * \\ & (0.00257) \end{aligned}$ | $\begin{aligned} & 0.264 * * * \\ & (0.00398) \end{aligned}$ | $\begin{gathered} 0.0948 * * * \\ (0.00269) \end{gathered}$ | $\begin{aligned} & 0.366 * * * \\ & (0.00452) \end{aligned}$ |
| M-Others | $\begin{aligned} & 0.0924^{* * *} \\ & (0.00375) \end{aligned}$ | $\begin{gathered} 0.0987 * * * \\ (0.00406) \end{gathered}$ | $\begin{aligned} & 0.237 * * * \\ & (0.00665) \end{aligned}$ | $\begin{gathered} 0.0580^{* * *} \\ (0.00381) \end{gathered}$ | $\begin{aligned} & 0.306 * * * \\ & (0.00848) \end{aligned}$ |
| M-OBC | $\begin{gathered} 0.0501 * * * \\ (0.00377) \end{gathered}$ | $\begin{gathered} 0.0757 * * * \\ (0.00441) \end{gathered}$ | $\begin{aligned} & 0.174 * * * \\ & (0.00625) \end{aligned}$ | $\begin{gathered} 0.0480^{* * *} \\ (0.00376) \end{gathered}$ | $\begin{aligned} & 0.254 * * * \\ & (0.00745) \end{aligned}$ |
| Females |  |  |  |  |  |
| NM-Others | $\begin{aligned} & 0.140 * * * \\ & (0.00256) \end{aligned}$ | $\begin{aligned} & 0.124^{* * *} \\ & (0.00264) \end{aligned}$ | $\begin{aligned} & 0.265 * * * \\ & (0.00442) \end{aligned}$ | $\begin{aligned} & 0.121 * * * \\ & (0.00329) \end{aligned}$ | $\begin{aligned} & 0.396 * * * \\ & (0.00537) \end{aligned}$ |
| NM-SC | $\begin{aligned} & 0.0821 * * * \\ & (0.00305) \end{aligned}$ | $\begin{gathered} 0.0843 * * * \\ (0.00299) \end{gathered}$ | $\begin{aligned} & 0.179 * * * \\ & (0.00454) \end{aligned}$ | $\begin{gathered} 0.0793 * * * \\ (0.00324) \end{gathered}$ | $\begin{aligned} & 0.295 * * * \\ & (0.00590) \end{aligned}$ |
| NM-ST | $\begin{gathered} 0.0707 * * * \\ (0.00366) \end{gathered}$ | $\begin{gathered} 0.0740^{* * *} \\ (0.00348) \end{gathered}$ | $\begin{aligned} & 0.195 * * * \\ & (0.00563) \end{aligned}$ | $\begin{gathered} 0.0601 * * * \\ (0.00374) \end{gathered}$ | $\begin{aligned} & 0.282 * * * \\ & (0.00697) \end{aligned}$ |
| NM-OBC | $\begin{aligned} & 0.0933 * * * \\ & (0.00239) \end{aligned}$ | $\begin{aligned} & 0.0997 * * * \\ & (0.00229) \end{aligned}$ | $\begin{aligned} & 0.226 * * * \\ & (0.00376) \end{aligned}$ | $\begin{gathered} 0.0858^{* * *} \\ (0.00252) \end{gathered}$ | $\begin{aligned} & 0.348 * * * \\ & (0.00467) \end{aligned}$ |
| M-Others | $\begin{aligned} & 0.0724 * * * \\ & (0.00312) \end{aligned}$ | $\begin{aligned} & 0.0820 * * * \\ & (0.00354) \end{aligned}$ | $\begin{aligned} & 0.202 * * * \\ & (0.00602) \end{aligned}$ | $\begin{gathered} 0.0521^{* * *} \\ (0.00348) \end{gathered}$ | $\begin{aligned} & 0.289 * * * \\ & (0.00842) \end{aligned}$ |
| M-OBC | $\begin{gathered} 0.0385 * * * \\ (0.00299) \end{gathered}$ | $\begin{gathered} 0.0624 * * * \\ (0.00376) \end{gathered}$ | $\begin{aligned} & 0.146 * * * \\ & (0.00552) \end{aligned}$ | $\begin{gathered} 0.0430 * * * \\ (0.00343) \end{gathered}$ | $\begin{aligned} & 0.239 * * * \\ & (0.00731) \end{aligned}$ |
| Observations | 68,118 | 68,839 | 50,385 | 49,025 | 41,480 |

Standard errors in parentheses
*** $\mathrm{p}<0.01$, ** $\mathrm{p}<0.05$, * $\mathrm{p}<0.1$
As depicted in table $2.10^{31}$, the probability of being in higher education has shown substantial improvements both between the employment rounds (1999-2011) and the education rounds (2007-2014). There was a clear hierarchy in higher education attendance in 1999 - NM-Others males followed by the females of their community followed by MOthers males, their females, M-OBC males and finally the females of their socio-religious group. Similar hierarchies were prevalent all across the years. Thus, even the males of the Muslim community have lower educational attendance than the females of NM-Others. In

[^22]the present case, NM-Others females seem to be privileged in terms of their socio-religious affiliation. Also, the M-OBC females were located at the bottommost ladder in terms of higher educational attendance.

### 2.5 Descriptive Statistics-II

### 2.5.1 Average Expenditure by Type of Higher Educational Institutions Attended

While the above discussion explicates the likelihood of higher educational attendance for different socio-religious groups, it is also pertinent to examine its quality. One of the ways is to estimate the gendered differentials in the expenditure on higher education by families on the basis of the type of educational institution attended. ${ }^{32}$

The gender disparities in average expenditure incurred on higher education were pervasive across sectors, socio-religious groups and type of institution (table 2.11). Particularly for the Muslim families across sectors, the relative gap in higher education spending was quite high. For instance, M-Others males in rural areas in private institutions spent approximately 3 times more than the females of their community, the corresponding figure for M-OBC was 1.3 . On the other hand, NM-Others women in private institutes had a slightly higher spending than the males of their community.

While the hierarchies are clear in urban areas for private educational institutions for females whereby females of NM-Others (Rs. 70190) spent more on higher education than the M-Others (Rs. 58513) which in turn had higher spending than the M-OBC (Rs. 39006). But in rural areas, M-OBC females had higher spending than the M-Others females. Although these differences appear to be significant but on scrutiny, the sample size of MOthers women in private institutions in rural areas was found to be critically low compared to their M-OBCs counterparts. As observed the difficulty with rural M-OBC women is to bring them into education, once into education they have a higher age at drop out. Thus, it

[^23]might be a possibility that only those women who have resources are continuing in higher education.

Table 2.11: Average Expenditure (in Rs.) by Type of Educational Institution Attended, Socio-religious Groups, Sex and Residence (2014)

| Sector/Socio- <br> Religious <br> Groups ( $\downarrow$ | Public |  | Private |  | Total |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male | Female | Male | Female | Male | Female |
| Rural |  |  |  |  |  |  |
| NM-Others | 19005 | 15022 | 44280 | 49403 | 27103 | 24593 |
| M-Others | 17243 | 12286 | 35999 | 10562 | 20466 | 12079 |
| M-OBC | 14839 | 13530 | 55704 | 40562 | 25286 | 22196 |
| All Muslims | 15730 | 12921 | 50538 | 34056 | 23619 | 17895 |
| Total |  |  |  |  |  |  |
| Urban |  |  |  |  |  |  |
| NM-Others | 15109 | 13572 | 37202 | 37395 | 22009 | 20703 |
| M-Others | 32896 | 28818 | 83493 | 70190 | 54514 | 42314 |
| M-OBC | 24993 | 16457 | 85738 | 58513 | 47128 | 27830 |
| All Muslims | 28494 | 16863 | 51306 | 39006 | 33181 | 23244 |
| Total | 32005 | 24264 | 72286 | 5989 | 39157 | 25606 |

Source: Computed using unit record data from Social Expenditure: Education (71 ${ }^{\text {st }}$ ) Round of NSSO

### 2.5.2 Subject Choice in Higher Education

Women of the Muslim community both M-Others (78\%) and M-OBC (56\%) had higher inclinations for humanities subject in rural areas, the proportions remaining greater than both the NM-Others (53\%) and all-India rural female average (55\%). Even urban Muslim women both M-Others (40\%) and M-OBC (48\%) choose humanities as their preferred subject but the proportions albeit remaining higher in association to NM-Others females ( $27 \%$ ) and all-India urban average ( $30 \%$ ) were smaller than those observed in rural areas. Science was a preferred choice among the M-OBC women in comparison to both NMOthers and M-Others females, while M-Others females had higher inclinations for medicine which was factual across sectors. Also, M-OBC women had greater preferences for engineering courses in comparison to the upper castes of their community irrespective of the sector (table $2.12 \& 2.13$ ).

Although rural males irrespective of socio-religious affiliation had highest participation in humanities subject, but the percentages were higher for the females. Further males had higher inclinations for science, followed by commerce and engineering. On the other hand,
urban males had highest participation in engineering followed by commerce, humanities, science, management and IT courses.

Table 2.12: Subject Choice in Higher Education across Socio-religious Groups and Sex
in Rural Areas (2014)

| Subjects ( $\downarrow$ ) | NM-Others |  | M-Others |  | M-OBC |  | All Muslims |  | All |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | M | F | M | F | M | F | M | F | M | F |
| Humanities | 45.01 | 53.44 | 64.22 | 78.41 | 31.54 | 57.59 | 42.74 | 66.44 | 46.7 | 55.3 |
| Science | 16.26 | 12.47 | 21.91 | 6.99 | 21.07 | 19.18 | 21.36 | 14 | 17.43 | 15.51 |
| Commerce | 15.35 | 15.61 | 0.46 | 0.92 | 18.88 | 2.13 | 12.57 | 1.61 | 14 | 11.37 |
| Medicine | 1.55 | 3.49 | 2.25 | 6.64 | 1.41 | 3.1 | 1.7 | 4.6 | 1.08 | 3.06 |
| Engineering | 12.86 | 4.49 | 6.31 | 0.05 | 9.63 | 7.11 | 8.49 | 4.11 | 10.84 | 4.81 |
| Management | 1.49 | 2.17 | 1.26 | 0 | 2.4 | 1.24 | 2.01 | 0.72 | 1.42 | 1.48 |
| Education | 1.31 | 2.05 | 1.01 | 0.8 | 0.08 | 0.86 | 0.4 | 0.84 | 1.31 | 2.34 |
| IT | 2.85 | 3.82 | 2.17 | 1.68 | 6.02 | 1.92 | 4.7 | 1.82 | 2.64 | 2.42 |
| Others | 3.32 | 2.47 | 0.41 | 4.51 | 8.96 | 6.85 | 6.03 | 5.87 | 4.58 | 3.71 |

Note: M-Males, F-Females
Source: As in table 2.11
Table 2.13: Subject Choice in Higher Education across Socio-religious groups and Sex in Urban Areas (2014)

| Subjects $(\downarrow)$ ) | NM-Others |  | M-Others |  | M-OBC |  | All Muslims |  | All |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | M | F | M | F | M | F | M | F | M | F |
| Humanities | 14 | 27.35 | 21.77 | 40.07 | 24.16 | 47.92 | 23.13 | 43.85 | 19.23 | 29.91 |
| Science | 10.19 | 11.89 | 8.64 | 14.95 | 15.39 | 17.23 | 12.48 | 16.05 | 12.62 | 15.74 |
| Commerce | 23.88 | 24.43 | 26.21 | 16.05 | 21.98 | 10.53 | 23.81 | 13.39 | 20.91 | 22.16 |
| Medicine | 2.05 | 4.36 | 4.71 | 4.49 | 1.07 | 3.78 | 2.64 | 4.15 | 2.12 | 3.9 |
| Engineering | 29.51 | 12.87 | 20.72 | 9.53 | 21.37 | 10.48 | 21.09 | 9.99 | 29.17 | 12.72 |
| Management | 6.08 | 4.41 | 4.75 | 3.48 | 8.09 | 2.58 | 6.65 | 3.05 | 4.87 | 3.72 |
| Education | 0.34 | 2.36 | 1.2 | 4 | 0.21 | 1.43 | 0.64 | 2.76 | 0.54 | 2.12 |
| IT | 6.47 | 5.97 | 2.33 | 0.48 | 2.28 | 1.09 | 2.31 | 0.77 | 4.66 | 4.7 |
| Others | 7.48 | 6.35 | 9.66 | 6.97 | 5.45 | 4.96 | 7.26 | 5.99 | 5.86 | 5.02 |

Source: As in table 2.12
Although not much subject differences were observed for the males across socio-religious categories but male-female differences in subject choice were stark with females having higher engagement in humanities and medicine subjects than the males of their respective communities across sectors. This again highlights the gender based nature of subject choices whereby females choose feminine subjects which have lower labour market returns in comparison to engineering, management and other technical courses (Abraham 2013). This problem is exacerbated for the women of the Muslim community as they have highest participation in humanities courses even in comparison to the NM-Others females and allIndia average.

### 2.5.3 Reasons for Never Enrolling/Discontinuance/Dropping-Out of Higher Education

Let us further gauge at the reasons for which women drop out of higher education after completing higher secondary levels. Of the most prominent reasons for females discontinuing or dropping out of higher education was the engagement in domestic activities, followed by marriage and financial constraints in rural areas (table 2.14). There were variations across women belonging to different socio-religious categories. While for M-OBC women financial constraints and marriage formed a considerable hindrance, the percentages for it remaining lower for M-Others and NM-Others. Educational institution being far off and non-availability of female teachers was also among the important reasons for M-OBC rural women to drop out of the system. This may be on account of lack of resources for parents and good quality educational institutions in rural areas. These supplyside issues point towards the government efforts to set up good quality institutes of higher education in rural areas. But for males, affiliations with economic activities, no interest in studies and financial constraints were prominent reasons for dropping out post higher secondary levels. Similar to the females of their community, the proportion of M-OBC males citing financial constraints as a reason for dropping out was higher than those of the NM-Others and M-Others males.

The socio-religious differences were more profound in urban areas where approximately $46 \%$ of the M-OBC females stated marriage as a major barrier to higher education while the parallel figures for NM-Others females was $32 \%$ and for M-Others females it was $40 \%$ (table 2.15). Engagement in economic activities (6.3\%) and completion of desired level of education ( $10 \%$ ) in urban areas among NM-Others females also constitutes a major proportion of the reasons for not participating in higher education. The similar figures for M-OBC caste females were $1 \%$ and $6 \%$ respectively while for M-OBC both reasons were expressed by approximately $8 \%$ of the respondents. For males, engagement in economic activities remained a major reason for discontinuing or dropping out of education. NMOthers women along with M-Others and M-OBC also stated educational institution being far off as a deterrent to their participation in higher education.

Table 2.14: Reasons for Never Enrolling/Discontinuance/Drop-Out by Socio-Religious Groups and Sex in Rural Areas (2014)

| Reasons ( $\downarrow$ ) | NM-Others |  | M-Others |  | M-OBC |  | All Muslim |  | All |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | M | F | M | F | M | F | M | F | M | F |
| Demand Side Factors |  |  |  |  |  |  |  |  |  |  |
| Not Interested in Education | 17.22 | 5.30 | 8.12 | 12.08 | 5.99 | 2.40 | 6.92 | 6.30 | 12.61 | 6.80 |
| Financial Constraints | 16.66 | 15.55 | 29.89 | 13.82 | 30.70 | 20.34 | 30.35 | 17.71 | 25.57 | 14.99 |
| Engaged in Domestic Activities | 7.98 | 35.46 | 3.47 | 36.25 | 4.93 | 28.49 | 4.29 | 31.62 | 6.72 | 29.97 |
| Engaged in Economic Activities | 47.23 | 3.18 | 52.55 | 4.50 | 47.45 | 0.82 | 49.67 | 2.30 | 42.07 | 4.16 |
| Unable to cope up with studies/failure in studies | 1.91 | 2.47 | 2.06 | 3.88 | 0.00 | 0.00 | 0.90 | 1.56 | 1.98 | 1.96 |
| Completed desired level/class | 5.81 | 6.08 | 0.00 | 11.86 | 6.44 | 8.87 | 3.63 | 10.08 | 5.91 | 6.55 |
| Preparation for competitive Examination | 1.20 | 0.57 | 0.13 | 0.00 | 0.41 | 0.09 | 0.29 | 0.05 | 1.02 | 0.71 |
| Marriage | NA | 22.92 | NA | 15.14 | NA | 27.98 | NA | 22.80 | NA | 25.47 |
| Supply Side Factors |  |  |  |  |  |  |  |  |  |  |
| School is far off | 0.00 | 5.44 | 0.00 | 0.14 | 0.00 | 5.48 | 0.00 | 3.33 | 0.39 | 4.85 |
| Nonavailability of female teacher | NA | 0.00 | NA | 0.00 | NA | 3.38 | NA | 2.02 | NA | 0.16 |
| Others | 2.00 | 3.03 | 3.78 | 2.31 | 4.09 | 2.15 | 3.96 | 2.21 | 3.73 | 4.37 |

Note: (1) As per Schedule 25.2 ( $71^{\text {st }}$ Round), questions regarding marriage and nonavailability of female teacher were collected only for female students.
(2) Others include timings of educational institution not suitable, language/medium of instruction used unfamiliar, inadequate number of teachers, quality of teachers not satisfactory and unfriendly atmosphere at school (NSSO 2014).
(3) The figures are for those individuals who have completed higher secondary level of education and are currently not attending educational institutions.
Source: As in table 2.12

Thus, traditional gender division of labour appears to be significant whereby men drop out of higher education to supplement household income while women to take care of the domestic chores which is true irrespective of socio-religious affiliations and place of
residence. Further, urban women particularly the OBC women of the Muslim community find it more difficult to continue their studies owing to marriage in comparison to the rural women.

Table 2.15: Reasons for Never Enrolling/Discontinuance/Drop-Out by Socio-Religious Groups and Sex in Urban Areas (2014)

| Reasons ( $\downarrow$ ) | NM-Others |  | M-Others |  | M-OBC |  | All Muslim |  | All |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | M | F | M | F | M | F | M | F | M | F |
| Demand Side Factors |  |  |  |  |  |  |  |  |  |  |
| Not Interested in Education | 14.08 | 9.00 | 20.80 | 9.96 | 15.93 | 4.81 | 18.30 | 7.14 | 14.40 | 8.38 |
| Financial Constraints | 26.96 | 10.35 | 12.13 | 11.69 | 22.92 | 9.90 | 17.67 | 10.71 | 25.52 | 13.45 |
| Engaged in Domestic Activities | 3.52 | 22.82 | 4.72 | 24.30 | 1.30 | 14.14 | 2.97 | 18.74 | 2.73 | 20.66 |
| Engaged in Economic Activities | 40.25 | 6.30 | 57.59 | 0.83 | 37.35 | 7.71 | 47.20 | 4.59 | 43.57 | 9.29 |
| Unable to cope up with studies/failure in studies | 4.97 | 1.06 | 0.44 | 1.80 | 5.84 | 0.74 | 3.21 | 1.22 | 3.43 | 0.96 |
| Completed desired level/class | 4.04 | 9.89 | 3.44 | 6.19 | 13.14 | 8.24 | 8.42 | 7.31 | 3.97 | 6.93 |
| Preparation for competitive Examination | 2.02 | 1.49 | 0.00 | 0.21 | 0.47 | 0.87 | 0.24 | 0.57 | 1.92 | 0.88 |
| Marriage | NA | 31.54 | NA | 40.03 | NA | 45.53 | NA | 43.03 | NA | 31.99 |


| Supply Side Factors |  |  |  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| School is far <br> off | 0.14 | 2.19 | 0.00 | 2.40 | 0.00 | 4.54 | 0.00 | 3.57 | 0.20 | 1.73 |
| Non- <br> availability of <br> female teacher | NA | 0.00 | NA | 0.00 | NA | 0.00 | NA | 0.00 | NA | 0.00 |
| Others | 4.03 | 5.36 | 0.87 | 2.60 | 3.04 | 3.52 | 1.98 | 3.10 | 4.25 | 5.74 |

Note: (1) As per Schedule 25.2 ( $71^{\text {st }}$ Round), questions regarding marriage and nonavailability of female teacher were collected only for female students.
(2) Others include timings of educational institution not suitable, language/medium of instruction used unfamiliar, inadequate number of teachers, quality of teachers not satisfactory and unfriendly atmosphere at school (NSSO 2014).
(3) The figures are for those individuals who have completed higher secondary level of education and are currently not attending educational institutions.
Source: As in table 2.12

### 2.5.4 Expenditure Classes and Higher Education

Further, the educational attainments of the population are expected to vary across their income levels (proxied by MPCE). As depicted in tables 2.16 and 2.17, the proportion of the adult population with higher education attainments in the richest quintile across socioreligious groups was substantially greater than that of the lower consumption quintiles which was true irrespective of sectors albeit with a varying intensity.

The proportion of higher educated women of both M-Others and M-OBCs in the rural sector in the fourth quintile was comparable to the proportion of the higher educated NMOthers women in the bottommost quintile. Gender disparities were pervasive across socioreligious groups and quintiles in the rural sector. But Muslims - both M-Others and MOBCs had lower gender disparities which may be because of the overall lower levels of higher education in their community. Both Muslim men and women across their caste dimensions had lower levels of higher educated adult population than both the NM-Others and all-India rural average.

Table 2.16: Higher Educational Attainment (Age-Group 15-65 Years) across
MPCE Quintiles, Socio-Religious Groups and Sex in Rural Areas (2014)

| Socio- <br> Religious <br> Groups $(\downarrow)$ | Sex $(\downarrow)$ | Bottom | Second | Middle | Fourth | Richest |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| NM-Others | Male | 7.47 | 8.02 | 9.89 | 11.3 | 17.65 |
|  | Female | 2.56 | 3.26 | 3.04 | 5.45 | 10.44 |
| NM-SC | Male | 1.51 | 2.49 | 3.46 | 4.68 | 9.81 |
|  | Female | 0.94 | 0.92 | 1.33 | 1.32 | 5.9 |
| NM-ST | Male | 1.31 | 1.75 | 1.57 | 4.48 | 11.48 |
|  | Female | 0.41 | 0.93 | 1.49 | 2.87 | 5.17 |
| NM-OBC | Male | 2.25 | 3.69 | 5.47 | 6.15 | 13.19 |
|  | Female | 0.93 | 1.96 | 3.19 | 2.5 | 6.67 |
| M-Others | Male | 1.9 | 0.67 | 1.56 | 5.55 | 7.83 |
|  | Female | 0.99 | 1.62 | 0.98 | 2.35 | 3.14 |
| M-OBC | Male | 1.06 | 1.32 | 2.53 | 4.65 | 7.09 |
|  | Female | 0.43 | 0.31 | 1.19 | 2.64 | 4.65 |
| All <br> Muslims | Male | 1.49 | 1.01 | 2.02 | 5.1 | 7.37 |
|  | Female | 0.7 | 0.93 | 1.09 | 2.5 | 4.15 |
| All | Male | 2.2 | 3.31 | 4.87 | 6.59 | 13.38 |
|  | Female | 0.92 | 1.59 | 2.31 | 2.9 | 7.41 |

Source: As in table 2.12

The urban areas had slightly better higher educational attainments of Muslims across quintiles compared to their rural compeers. The adult women of M-Others had higher proportions ( $33.69 \%$ ) among them with higher educational attainments than their male counterparts ( $31.17 \%$ ). Although the percentage of M-Others adults with higher education belonging to the richest quintile appear to be significantly greater but relatively even they remain behind those of NM-Others and all-India urban average. Furthermore, the intra-socio-religious disparities were highly evident even in the richest quintile where M-OBCs had approximately half the percentage of M-Others females with higher educational attainments.

Table 2.17: Higher Educational Attainment (Age-Group 15-65 Years) across MPCE Quintiles, Socio-Religious Groups and Sex in Urban Areas (2014)

| Socio- <br> Religious <br> Groups ( $\downarrow)$ | Sex ( $\downarrow$ ) | Bottom | Second | Middle | Fourth | Richest |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| NM-Others | Male | 11.68 | 18.16 | 22.67 | 31.85 | 55.65 |
|  | Female | 9.65 | 12.41 | 17.01 | 26.76 | 48.62 |
| NM-SC | Male | 2.29 | 4.43 | 11 | 18.96 | 42.07 |
|  | Female | 1.75 | 3.17 | 7.04 | 15.63 | 27.6 |
| NM-ST | Male | 2.87 | 10.38 | 22.91 | 30.38 | 41.31 |
|  | Female | 1.49 | 5.16 | 10.78 | 18.87 | 32.34 |
| NM-OBC | Male | 5.53 | 7.73 | 16.23 | 22.39 | 43.93 |
|  | Female | 3.75 | 6.46 | 10.35 | 15.92 | 33.98 |
| M-Others | Male | 3.6 | 7.24 | 11.98 | 15.44 | 31.17 |
|  | Female | 2.31 | 4.72 | 7.94 | 13.37 | 33.69 |
| M-OBC | Male | 2.54 | 5.41 | 10.38 | 15.04 | 29.77 |
|  | Female | 1.83 | 2.21 | 4.98 | 12.27 | 18.1 |
| All <br> Muslims | Male | 2.92 | 6.19 | 11.07 | 15.26 | 30.57 |
|  | Female | 2.01 | 3.24 | 6.2 | 12.81 | 26.33 |
| All | Male | 4.91 | 9.17 | 16.57 | 25.54 | 49.17 |
|  | Female | 3.62 | 6.5 | 11.02 | 20.19 | 41.38 |

Source: As in table 2.12

### 2.5.5 Regional Variations

Regional variations have a significant impact on the educational parameters of the socioreligious groups (Alam and Raju 2007; Kulkarni 2002; Hasan and Menon 2004; Shariff and Sharma 2013). In this regard, table 2.18 explicates that an M-OBC women resident in
southern states ${ }^{33}$ would have better higher educational prospects than in any other region of the county. The region for the superior higher educational prospects of the M-Others women was west. The findings corroborate a fact that the higher average MPCE (as discussed in section 1.5) of M-Others in the western regions while that of M-OBCs in the southern states has an impact on their educational attainments. While Muslim women were doing better in these states in comparison to other regions, but their relative deprivation when compared to the women of NM-Others and all-India average remains pervasive.

Table 2.18: Regional Dimensions of Higher Educational Attainment (Age-Group 15-65 Years) across Socio-Religious Groups and Sex (2014)

| Socio- <br> Religious <br> Groups ( $\downarrow$ ) | Sex ( $\downarrow$ ) | North | Central | East | Northeast | West | South | Total |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NM-Others | Male | 23.2 | 28.9 | 20.0 | 13.8 | 23.0 | 22.1 | 23.2 |
|  | Female | 19.5 | 19.3 | 12.6 | 8.8 | 18.4 | 16.3 | 16.9 |
| NM-SC | Male | 5.1 | 5.3 | 4.0 | 7.5 | 8.6 | 8.1 | 5.9 |
|  | Female | 2.8 | 2.8 | 2.0 | 1.9 | 5.5 | 4.9 | 3.4 |
| NM-ST | Male | 7.2 | 3.7 | 3.0 | 8.3 | 4.7 | 8.2 | 5.1 |
|  | Female | 2.7 | 3.0 | 2.0 | 4.6 | 2.5 | 3.6 | 2.9 |
| NM-OBC | Male | 10.8 | 8.5 | 6.4 | 9.5 | 9.5 | 13.8 | 10.0 |
|  | Female | 5.8 | 5.0 | 2.2 | 6.1 | 6.7 | 9.2 | 6.1 |
| M-Others | Male | 10.4 | 6.6 | 4.9 | 2.9 | 8.7 | 7.6 | 6.3 |
|  | Female | 7.3 | 6.4 | 2.4 | 1.9 | 6.6 | 3.9 | 4.2 |
| M-OBC | Male | 3.5 | 4.2 | 4.0 | 6.3 | 6.1 | 8.4 | 5.3 |
|  | Female | 0.8 | 2.8 | 1.4 | 0.9 | 2.1 | 5.6 | 3.0 |
| All Muslims | Male | 6.7 | 5.0 | 4.5 | 3.1 | 7.7 | 8.2 | 5.8 |
|  | Female | 3.8 | 3.9 | 1.9 | 1.8 | 4.7 | 5.2 | 3.5 |
| All | Male | 13.0 | 10.8 | 8.2 | 8.0 | 13.0 | 13.2 | 11.2 |
|  | Female | 9.3 | 6.9 | 4.4 | 4.7 | 9.6 | 8.9 | 7.4 |

Source: As in table 2.12

### 2.6 Summary of the Findings

To sum up, while there has been substantial education expansion in the country; the benefits of it have not been equally distributed particularly across sectors and socioreligious groups. In general, there is a clear hierarchy in terms of educational attainment of the population with higher education being skewed in favor of NM-Others males followed

[^24]by NM-Others females, M-Others males, M-Others females and eventually the males and females of M-OBC households respectively which is true irrespective of sector. A positive development which emanates from the above analysis is an improvement in higher educational access for women in comparison to the males of their respective groups. But such a positive development bypassed the Muslim OBC women who faced severe gender disparities in terms of participation in higher education (GAR) and more so in the rural settings as depicted by high values of Kundu and Rao Index (1985). In addition, education expansion has disproportionately benefitted the NM-Others individuals both males and females of their communities in comparison to the Muslims evident from high socioreligious disparities across sectors. Further, the intra-community differentials were evident in the urban settings where M-OBC in general and women of their communities in particular faced severe higher educational deficits both in terms of access and attainments in comparison to the 'Others' among them. Another important observation is the utmost difficulty to bring M-OBC women into education discernable from the fact that while approximately 1 in every 50 NM-Others urban females in the age-group of 6 to 23 years had never been to school, for M-OBC females the corresponding figure was 1 in every 10 .

In addition, higher educational attainments were found to significantly vary across the income levels of individuals (proxied by MPCE) with particularly M-Others adult women belonging to the richest MPCE group having greater proportions of those with higher education among them in comparison to the lower quintiles. But even in the richest quintile, M-OBC women were lagging behind the men and women of other socio-religious groups. Besides this, M-OBC women in southern states and M-Others in western ones were better placed than their counterparts in any other region.

What the present discussion still reveals is the expansion in higher education over the years for all social strata and gender in comparison to their previously attained levels. In this regard, arises another question - whether these benefits have culminated into higher participation in the labour market which is the thrust area of the next chapter.

## Chapter 3

# Re-Examination of the Muslim Women's Dimension in the Indian Labour Market 

"The labour market has internalized the so-called seclusion ethic of Muslim women. This may translate into a situation where the prevailing notion that Muslim women are secluded may prevent them from being hired - leading to something of a self- fulfilling prophecy."
(Das 2004:203)

### 3.1 Introduction

According to McKinsey Global Institute Report (2015), if India could bring 68 million more women into the labour force i.e. increase its labour force participation rate by 10 percentage points by 2025, it will be able to improve its GDP by $\$ 700$ billion in 2025 which means an incremental $1.4 \%$ per year than usual. Despite such alluring gains to the economy and fall in fertility levels ${ }^{34}$ which is expected to improve female's participation in the labour force (Bhalla and Kaur 2011), India has witnessed a continual "de-feminisation" (Abraham 2013:99) of the labor force with the spurts if any been guided by distress conditions. For instance, the farming sector of the mid 2000s ailing with low productivity, unstable prices, stagnation (Abraham 2009) and modest public and private investment (Chand and Parappurathu 2012) required women to supplement the earning capability of the 'typical' income earners. The result was an escalation in LFPR in 2004 which was mainly agrarian-distress driven (Abraham 2009, 2013; Himanshu 2011; Klasen and Pieters 2012; Thomas 2012). Later improvements in terms of trade in favor of farming, rise in public and private investment in agriculture (Chand and Parappurathu 2012) and government initiatives such as MNREGA ${ }^{35}$ resulted in expansion of employment

[^25]opportunities thereby improving the household income (Thomas 2012). Spurge in income has had a negative impact on the paid work participation of women evident from a significant fall in female labour force participation in the second half of the 2000s (Abraham 2013). At this juncture, a question arises that why is India witnessing a continual fall in female LFPR despite high growth?

The major explanation of the declining trend in women's labour force participation finds evidence in the form of U-shaped Feminization hypothesis in the literature. The hypothesis postulates an initial fall in female labour force participation with an increase in economic growth which starts rising after reaching its minima. The line of argument states that in a low subsistence economy marked by high fertility rates and low educational attainment levels among females, women generally work to support household income. Further, economic growth and industrialization results in improvements in household income and reduced need for females to offer their labour in low paid manual jobs created during the initial phase of industrialization. Hence, with income effect dominating their decisions, women withdraw themselves from the labour market. Later owing to further developments in the society in the form of increased opportunities for education, fall in fertility rates, institutionalized child care amenities, and provision of service sector jobs; the opportunity cost of being in domestic work increases and substitution effect drives women into the labour market (Bhalla and Kaur 2011; Goldin 1994; Mammen and Paxson 2000). In the Indian context, it was observed that approximately $80 \%$ of the jobs created after 2004 were in rural construction work which were mainly casual in nature (Himanshu 2011). In addition, women accounted for a meagre percentage of employment opportunities generated in the financing, real estate, business and computer related services in comparison to their male counterparts (Klasen and Pieters 2015; Thomas 2012). Thus, rising incomes coupled with inadequate working opportunities for women reinforced the prevalent gender norms resulting in a decline in female labour force participation.

Further, U-shaped feminization hypothesis subsumes a correspondence between advances in educational attainments and female LFPR. In this regard, it has been claimed that a substantial increase in the enrolment of girls in higher education post 2004 has been responsible for tumbling female LFPR (Thomas 2012; Mehrotra et al 2012) but such a
proposition has been repudiated as the plunge is not in the age cohorts that normally go for education (Kannan and Raveendran 2012). At the same time, it has been maintained that education doesn't guarantee women's autonomy particularly participation in paid work (Abraham 2013). Instead, India forms a peculiar case where along with educational qualifications and economic opportunities, cultural patriarchal norms intersect the social status in dictating the public participation of women (Lahoti and Swaminathan 2013). In this regard, it has been argued that there also exists a U-shaped relationship between education and female labour force participation. Women who are illiterate generally belong to households' with poor economic conditions and are distress workers with high participation in the labour market. Moving from one education ladder to the next, there is a fall in women's participation which starts rising only after she reaches graduate level. Kingdon and Unni (2001) extends Sanskritization hypothesis as an explanation for downward sloping portion of the curve. Just as preserving one's social status prevents women from higher social strata to participate in the labour market while women among lower caste can work, similarly, women with no education can work while women with some education face social and cultural restraints on account of safeguarding the household status. Higher education brings with itself higher expected earnings in white collar jobs thereby increasing the opportunity cost of women's unpaid domestic work. Thus, the pull factors drive women with higher education into the labour force resulting in rising portion of the curve (Klasen and Pieters 2012). But Abraham (2013) observed that women's participation in labour market albeit remaining higher among women with graduate level in comparison to secondary level has witnessed a fall over the period 1983 to 2009-10. He asserts that such a trend is indicative of the fact that education has little to do with enhancing a women's comparative advantage in the labour market, instead it is a modern way of the Indian patriarchal society to maintain "domestication" (2013:100) of women.

Another plausible explanation of low female participation could be the "discouraged worker effect" (Abraham 2013:106) owing to both wage and occupational segregation in the labour market. Due to stereotyped female attributes, women are induced to enroll in humanities and medicine streams which receive less remuneration in the labour market than technical degrees. In other words, education prepares women for jobs that reverberate the patriarchal societal norms. Thus, women remain confined to feminine occupations such
as being secretaries, elementary school teachers or nurses thereby vindicating their statusquo of a subordinate role both in the public and the private domains (Abraham 2013; Akerlof and Kranton 2000; Chanana 2001). Hence, probably cumulative effect of advancing incomes along with presumption of being discriminated in the labour market keeps educated women out of the labour force.

In addition, neo-liberal regime has brought with itself changes in production relations and internationalization of capital which has resulted in escalation in poverty, inequality, agrarian distress and unemployment (Islam 2012; Nagraj 2000). Such changes are deemed to have a greater impact on women particularly of minority religions and low castes owing to their poor educational and skill endowments leading to their further marginalization (Basant 2012; Madheswaran and Attewell 2007; Neetha 2014). Thus, although women's work in general is a social and cultural construct but huge variations are witnessed across the lines of caste, religion, region, class and education. Such affiliations produce multiple layers of subjugation for women altering her public participation and significantly influencing both the demand and supply of female labour (Das 2006; Neetha 2014).

With this backdrop, the present chapter analyzes how religious affiliations superimposed on the caste structures have impacted the public participation of Muslim women at the intersection of these identities. In this regard, following issues have been examined in the specified sub-sections of the chapter:

1. Section 3.1 delves into the spatial and inter-temporal variations of Muslim women's labour force participation both M-Others and M-OBC compared to the males of their respective communities and the females of other socio-religious groups.
2. Sections 3.2 to 3.5 analysis the relationship between expenditure classes (MPCE) and female LFPR, educational attainment and female LFPR, nature of employment and the conditions of work for women across socio-religious groups.
3. Sections 3.6 to 3.10 examine the distribution of women workers by type of industry and occupation, prevalence of Informalization among women workers, role of family as a facilitator or hindrance to women's participation in the labour market and regional variations across socio-religious groups. Section 3.11 discusses the summary of the findings.

To achieve the aforementioned objectives, the chapter draws out unit level data from the $55^{\text {th }}, 61^{\text {st }}$ and $68^{\text {th }}$ rounds of NSSO. The descriptive statistics based on the Usual Principal Status ${ }^{36}$ (UPS) of individuals in the age-group of 15 to 65 years has been used for the analysis.

### 3.2 Gender, Socio-Religious and Intra-Socio-Religious Disparities in LFPR

To gauge at the differences in the LFPR between men and women, Inequality of Employment Opportunity (IEO) has been computed as the ratio of male LFPR to female LFPR separately for rural and urban areas. ${ }^{37}$ On an average, female LFPR was three times lower than men in rural areas while the corresponding ratio was approximately four in urban settings (table 3.1). Higher inequalities in the urban areas reflects that women in rural areas are distress workers while those in urban areas have less need to work due to greater incomes. Another salient observation is that after a marginal fall in 2004 when owing to agrarian distress women's participation increased in the labour market, the inequalities started rising again to transcend their previously reached levels in rural areas while remaining marginally lower than their preceding levels in urban areas. Thus, only about a quarter of women in rural areas and less than one-fifth in urban areas had labour market affiliations in 2011.

Although women in general have been affected by the economic situations in the country but the severity varies across socio-religious categories. For instance, the fluctuations in FLPR of Muslim women both M-Others and M-OBC post 1999 was less in comparison to women of other socio-religious groups. This may be because of their lower involvement in farm activities than the women of other backgrounds (Das 2004; Hasan and Menon 2004). Also, when distress situations forced women into the labour market, the sub-group to benefit the most were the NM-Others women both in the rural and the urban sectors which may be due to their education premium and better access to job market (Neetha 2014).

[^26]Table 3.1: LFPR (in \%) and IEO (Ratio) by Socio-Religious Groups, Sex and Residence (UPS: 15-65 Years), 1999-2011

| Sector/SocioReligious Groups ( $\downarrow$ ) | 1999 |  |  | 2004 |  |  | 2011 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male | Female | IEO | Male | Female | IEO | Male | Female | IEO |
| Rural |  |  |  |  |  |  |  |  |  |
| NM-Others | 83.10 | 26.17 | 3.18 | 84.49 | 30.70 | 2.75 | 79.58 | 20.72 | 3.84 |
| NM-SC | 87.61 | 40.48 | 2.16 | 88.15 | 39.65 | 2.22 | 83.24 | 27.52 | 3.02 |
| NM-ST | 89.77 | 60.09 | 1.49 | 89.82 | 60.27 | 1.49 | 86.47 | 44.15 | 1.96 |
| NM-OBC | 87.52 | 39.34 | 2.22 | 86.99 | 41.67 | 2.09 | 82.12 | 27.54 | 2.98 |
| M-Others | 87.50 | 19.45 | 4.50 | 87.50 | 18.39 | 4.76 | 84.51 | 15.05 | 5.62 |
| M-OBC | 86.59 | 19.90 | 4.35 | 85.04 | 20.75 | 4.10 | 81.38 | 16.35 | 4.98 |
| All Muslims | 87.37 | 19.60 | 4.46 | 86.64 | 19.36 | 4.48 | 82.58 | 15.72 | 5.25 |
| All | 86.83 | 36.68 | 2.37 | 86.94 | 38.55 | 2.26 | 82.28 | 26.64 | 3.09 |
| Urban |  |  |  |  |  |  |  |  |  |
| NM-Others | 78.05 | 14.76 | 5.29 | 78.25 | 17.66 | 4.43 | 76.82 | 17.10 | 4.49 |
| NM-SC | 82.25 | 24.48 | 3.36 | 83.08 | 26.35 | 3.15 | 79.50 | 22.31 | 3.56 |
| NM-ST | 78.01 | 29.51 | 2.64 | 77.85 | 33.09 | 2.35 | 77.93 | 26.13 | 2.98 |
| NM-OBC | 82.30 | 22.87 | 3.60 | 82.89 | 25.62 | 3.24 | 78.92 | 20.88 | 3.78 |
| M-Others | 82.66 | 12.76 | 6.48 | 84.65 | 14.16 | 5.98 | 81.18 | 13.06 | 6.21 |
| M-OBC | 84.14 | 15.27 | 5.51 | 83.11 | 15.07 | 5.52 | 82.21 | 12.01 | 6.84 |
| All Muslims | 83.33 | 13.55 | 6.15 | 84.62 | 14.46 | 5.85 | 81.62 | 12.52 | 6.52 |
| All | 80.60 | 18.65 | 4.32 | 81.11 | 21.22 | 3.82 | 78.51 | 18.60 | 4.22 |

Note: 'All' represents the all-India average for rural and urban areas separately unless otherwise specified
Source: Computed using unit record data of Employment-Unemployment Rounds (55 ${ }^{\text {th }}$, $61^{\text {st }}$ and $68^{\text {th }}$ ) of NSSO

Further, the IEO ratio was lowest for the NM-STs followed by NM-OBCs and NM-SCs in rural areas. NM-Others women face stringent restrictions to labour force participation which is evident from a high IEO ratio irrespective of residence. But the most subjugated relative to the men of their communities were the M-Others women in rural areas closely followed by the women of M-OBC. Starting from roughly a similar base, the male-female inequalities have widened considerably over the years for M-Others women compared to M-OBC women in rural areas. M-Others women handled severe restrictions in the urban areas too reflective in their lowest participation in the public sphere over the years except in 2011 when M-OBC women succumbed to the bottommost seat. This may be on account of a significant fall in artisanal manufacturing (Neetha 2014) where a major chunk of the M-OBC women in urban India are concentrated as discussed later. It can also be attributed
to the lack of other employment opportunities generated during the period or on account of the income effect reducing the need for women's work. ${ }^{38}$

Such trends can also be reflective of the 'Ashrafization process,' i.e. an interesting possibility where the $\mathrm{M}-\mathrm{OBC}$ households in urban areas are adopting the behaviors of those of M-Others who impose greater restrictions on their women in outside employment. To understand the concept better, the next section discusses the female LFPR across socioreligious communities on the basis of their consumption expenditures.

### 3.3 Expenditure Classes and Female LFPR

As discussed, U-shaped feminization hypothesis postulates an initial fall in female LFPR with a rise in household income which at later stages starts improving. In this regard, figure 3.1 depicts that in rural areas, female LFPR falls steeply after the first quintile and then increases until the fourth quintile and finally experiences a sharp fall in the final quintile. ${ }^{39}$ LFPR of M-OBC women in rural areas roughly follows the pattern at the all-India level. On the other hand, for the rural NM-Others and M-Others, the LFPR falls marginally after the third quintile and remains roughly stable afterwards. In addition, the LFPR of M-OBC remains higher than those of M-Others in the richest quintile. This pattern probably highlights the caste distinction among the Muslims whereby M-Others women of high income families have greater restrictions to work as in the case of Hindus where women of lower castes can work but not of high castes. The above scenario is indicative of the fact that the poorest women are mostly distress workers who work to support their families. With an improvement in the standard of living, substitution effect causes the LFPR to rise but at high levels of income socio-religious norms and stigma associated with women's public participation results in a fall in LFPR.

[^27]Figure 3.1: Female LFPR (UPS: 15-65 Years) across MPCE Quintiles by Residence, 2011


Note: 1 denotes the lowest and 5 depicts the richest quintile, Source: Computed using unit record data of Employment-Unemployment ( $68^{\text {th }}$ ) Round of NSSO

On the other hand, in urban areas, the relationship between LFPR and MPCE broadly follows a U-shaped pattern at least for NM-Others females. At the all-India level in urban areas, LFPR increases up to the second quintile before registering a decline and then starts increasing after the third quintile. Similar is the pattern for M-Others females. The participation of M-OBC women is lower than that of M-Others women until the second quintile but becomes greater than them afterwards. This may be indicative of more pronounced gender norms on women of M-Others. Also, the LFPR of the richest class women is less than that of the lowest class for both M-Others and M-OBC households. Of all the observations, the most striking one is the equivalence of participation rates of 'Others' and OBC Muslim women for the richest quintile. This raises an interesting possibility that the M-OBC households are practicing the norms and behaviors of the MOthers in urban areas restricting the mobility of the women at the top end of the distribution with stigmas related to women's work. Thus, the present analysis gives some credence to the 'Ashrafization hypothesis.'

Ostensibly, plunge in female LFPR in the highest quintile for M-OBC females across sectors refutes the presence of U-shaped feminization pattern for them. In this regard, it appears interesting to analyze the corollary to the U-shaped feminization hypothesis in terms of the liaison postulated between education and female LFPR.

### 3.4 Enigma of High Human Capital and Tumbling Female LFPR

Education widely being recognized as a potent instrument of women's empowerment remains imperative yet inadequate condition for their participation in the labour market. The strictly positive relationship between educational attainment and female LFPR upheld by the corollary of U-shaped feminization hypothesis doesn't appear to hold in the Indian case (figures 3.2 and 3.3).

All-India rural female LFPR has followed an inverted v-shaped trend across education levels from 1999 to 2011. To put it differently, female participation increased for all education levels in 2004 compared to 1999 and exhibited a declining trend post 2004. Similar were the trends for NM-Others rural females. For the women of M-Others, the participation of illiterate women has shown a steep fall over the years while those with primary and higher secondary education have shown an increasing trend. The trends have been broadly similar for the OBC women among the Muslims. Women across socioreligious groups have experienced a steep decline in the participation of women with graduate and above education levels after 2004. Although the relationship between female LFPR and education levels broadly exhibits a U-shaped curve across years and socioreligious categories but with a varying intensity. For the women of NM-Others and allIndia rural average, the participation of women falls until the higher secondary level and then starts rising, while for the women of the Muslim community, the lowest point is the secondary level of education after which their participation starts rising. The participation of M-Others females remains higher than those of the M-OBCs until only the primary level of education. Post primary, the LFPR of M-OBCs dominate across education levels with the most significant differential observed for the graduate and above level where their participation is higher even in comparison to all-India average and NM-Others females. Thus, while the labour market engagements of NM-Others females and all-India rural females with graduate and above level of education is similar to those of the illiterates in their communities, the analogous figures are quite high for the Muslim community. To put it differently, the shape of ' $U$ ' is highly skewed to the right for M-OBC and M-Others with a typical contour for NM-Others and all-India average.

Figure 3.2: Female LFPR by Education Level in Rural Areas (UPS: 15-65 Years), 1999-2011


Note: Illiterate includes those with no formal education and those with below primary level of education
Source: As in table 3.1
On the other hand, for urban females the U-shaped relationship experiences its minima at the secondary level of education irrespective of socio-religious categories. Further, the most striking relationship between LFPR and education levels is that there has been a steady decline in the participation of women with secondary and above level of education with a substantial decline witnessed for graduate and above level females after 2004. Another important observation is that the participation of M-OBC women is greater than
those of M-Others across all education levels except for graduate and above levels where the participation of M-Others females becomes higher than even that for all-India average and NM-Others.

Figure 3.3: Female LFPR by Education Level in Urban Areas (UPS: 15-65 Years), 1999-2011


Note: Illiterate includes those with no formal education and those with below primary level of education
Source: As in table 3.1

Thus, once the women of Muslim community attain graduation and above degrees, their participation becomes substantially greater than at all other levels and becomes close to women at all-India level and those of NM-Others regardless of the place of residence. The
results are in line with studies such as that of Klasen and Pieters (2012) who using NSSO employment rounds for the years 1987-88, 1999-00 and 2004-05 found that participation of Muslim women was lower in comparison to their Hindu counterparts but employment gap becomes alleviated for Muslim women with higher educational attainments. Similar results were found by Das (2004) using NSS $50^{\text {th }}$ (1993-94) round. Further, the intracommunity differences are evident across the rural-urban sector. While in rural areas OBCs among the Muslims dominate the participation rates for graduate and above level females, the urban sector observes the supremacy of the M-Others women.

While LFPR discloses an individual's inclination towards the labour market, the unemployment rates might be advantageous in examining the labour market response to women with similar education levels but different socio-religious affiliations. In this context, table 3.2 divulges on the unemployment rates for the graduate and above females.

Table 3.2: Female WPR and Unemployment Rate (in \%) with Graduate \& Above Level of Education by Residence (UPS: 15-65 Years), 1999-2011

| Socio-Religious <br> Group /WPR ( $\downarrow)$ | 1999 | 2004 | 2011 | 1999 | 2004 | 2011 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Graduate \& Above WPR (\%) |  |  |  |  |  |  |
| NM-Others | 22.35 | 27.47 | 21.41 | 24.94 | 25.48 | 25.97 |
| M-Others | 43.62 | 26.32 | 13.85 | 26.88 | 25.11 | 22.92 |
| M-OBC | 15.28 | 37.25 | 31.74 | 16.04 | 18.43 | 18.54 |
| All Muslims | 31.97 | 31.04 | 22.45 | 24.52 | 23.49 | 21.02 |
| All | 26.70 | 28.48 | 24.36 | 25.53 | 26.71 | 26.52 |
| Total WPR (\%) <br> NM-Others |  |  |  |  |  |  |
| M-Others | 25.35 | 29.12 | 19.84 | 13.26 | 15.47 | 15.73 |
| M-OBC | 19.15 | 17.59 | 14.32 | 11.79 | 13.12 | 12.15 |
| All Muslims | 19.94 | 18.69 | 15.01 | 13.67 | 13.40 | 11.26 |
| All | 18.03 | 14.67 | 12.38 | 13.18 | 11.69 |  |
| Unemployment Rate for Graduate \& Above Females (\%) | 17.27 | 19.23 | 17.38 |  |  |  |
| NM-Others | 33.53 | 28.95 | 22.75 | 13.66 | 16.28 | 10.92 |
| M-Others | 11.50 | 49.95 | 46.33 | 14.27 | 29.94 | 11.64 |
| M-OBC | 53.57 | 49.91 | 25.61 | 40.76 | 31.88 | 26.70 |
| All Muslims | 24.87 | 49.93 | 33.80 | 19.40 | 30.31 | 18.08 |
| All | 34.67 | 34.45 | 23.56 | 16.53 | 19.66 | 13.92 |

Source: As in table 3.1
In general, the WPR of NM-Others females along with all-India average is lower among the graduate and above in comparison to the total WPR for the community in rural areas while urban areas have exhibited an opposite trend over the years. On the other hand,
starting with a substantially higher base, graduate and above WPR for women of M-Others has shown a significant decline over the years analogous to the fall in total WPR. The decline has been more prominent in the rural areas. Except for 1999, the WPR for graduate and above females of the OBCs among Muslims has remained substantially higher than the total workforce participation for the community regardless of the sector. At the same time, 2004, the year of agrarian distress observed approximately 50 percent of the rural Muslim women with at least graduation level of education being unemployed while the corresponding figures in urban areas were $32 \%$ for $\mathrm{M}-\mathrm{OBC}$ and $30 \%$ for M-Others. It is indicative of the fact that during the periods of employment scarcity, even the most educated among the Muslim women were unable to secure jobs. On the other hand, the unemployment rates among the NM-Others females were substantially lower than even the all-India average in both rural and urban areas. Further, substantial intra-community differences were observed in the unemployment rates particularly in 2011. Rural M-Others females had higher rates of unemployment than the women of M-OBC while the urban areas experienced a reverse pattern.

High unemployment rates among the graduate and above females can be explained on account of three intertwined factors. First of the explanations is that women in general receive low quality schooling in comparison to men (Klasen and Pieters 2015; Lahoti and Swaminathan 2013). Azam and Kingdon (2011) using IHDS-I data found that the expenditure by households on education of girl children was substantially lower than that of males, a major proportion of which could be attributed to the fact that females attended government schools while boys were sent to private schools. Thus, even with a similar level of education, females may be acquiring lower quality schooling.

Secondly, there has been a dearth of adequate employment opportunities generated in the manufacturing and service sector post 2004 and majority of the jobs have been created in low-skilled service sector or have been concentrated in the construction works (Himanshu 2011; Klasen and Pieters 2015; Thomas 2012). This coupled with income effect may have resulted in women not undertaking low-quality jobs while remaining in the labour force. Thus, the interplay of sectoral changes in the economy and expanding incomes can probably explicate higher unemployment rates among urban M-OBC females. In other
words, graduate women of M-OBCs may not have acquired available low-skilled jobs particularly in the urban areas. The above discussion also indicate towards the process of Ashrafization occurring among the urban M-OBC households. Finally, high unemployment rates among the graduates of Muslim community females may be on account of the lack of networks, contacts and access to job markets (Das 2004; Hasan and Menon 2004; Neetha 2014).

Reciprocity of poor quality schooling, sectoral changes, income effect and paucity of networks manifests chronic under-representation of Muslim women from the public domain. Furthermore, intertwined disposition of the aforementioned aspects not only determine their public participation but also substantially impact the type of work she assumes.

### 3.5 Nature of Employment and Conditions of Work

### 3.5.1 Structural Variations by the Type of Work Undertaken

It has been argued that during the period of distress as was the case in India during 200405, people find it difficult to obtain wage work and hence, small farmers switch from casual labour to being self-employed on their marginal landholdings (Abraham 2009). The above fact is evident from the data as the proportion of self-employed increased significantly between 1999 and 2004 even among the women workers both in the rural and the urban areas. At the same time, there was a significant fall in the proportion of women workers engaged in casual labour in rural areas, while the urban areas saw an improvement in the proportion of regular workers. After 2004, self-employment fell and regular wage employment increased in both the sectors (figures 3.4 and 3.5).

Further, socio-religious dimensions have a significant sway on the type of work undertaken by women (Das 2006; Neetha 2014). Muslim women workers both M-Others and M-OBC have the highest affiliations with self-employment activities which can be seen from the maximum proportions among them being self-employed both in rural and urban areas. This probably can be the result of greater mobility and cultural restrictions on Muslim women (Desai and Temsah 2014; Neetha 2014; Sengupta and Das 2014) on account of majoritarianism which raises identity questions among Muslims and they find their
womenfolk safe within their homes and community (GoI, SCR 2006). This line of argument derives its basis on the finding that a major proportion of Muslim women among the self-employed are home-based, a point in consideration which I will revert to in the subsequent sub-section. Equally this can be the result of exiguous networks restricting their entry to regular or even casual jobs (Das 2004; Hasan and Menon 2004). While the finding of maximum engagements in self-employment is in line with both the all-India figures and those for NM-Others in rural areas, the urban women find more involvement in regular work as against the Muslim women.

Figure 3.4: Type of Work Undertaken by Rural Women (UPS: 15-65 Years), 1999-2011


Source: As in table 3.1

Another important observation is that for rural M-OBC women, there has been a noteworthy decline in the self-employment activities and increased participation in both
regular and casual work after 2004. At the same time, for M-Others involvement in selfemployment activities stagnated, casual labour fell with an augmentation in regular work.

In the urban areas, a secular increase in regular wage work was witnessed for M-Others women over the years. Post 2004, fall in self-employment was accompanied with increase in casual employment. For the M-OBC women, decline in casual work has been supplemented with an improvement in regular wage work after 2004. The perceived decline in self-employment may have been the result of a fall in artisanal manufacturing activities in which most of these women were engaged (Neetha 2014).

Figure 3.5: Type of Work Undertaken by Urban Women (UPS: 15-65 Years), 1999-2011


Source: As in figure 3.1
Despite increase in regular wage work participation, a major proportion of Muslim women both M-Others and M-OBC remain engaged in self-employment irrespective of the place of residence. Various micro level studies have established similar results whereby Muslim women have greater probability of working as casual labour or being self-employed (GoI,

SCR 2006; Hasan and Menon 2004; Khandker 1992). Most of the Muslim women are engaged in petty production activities in home based enterprises which during the phase of changing consumer demands may not prove out to be a viable option (Basant 2012). Lack of skills and parental discrimination coupled with cultural restrictions which prevent the enhancement of skills among these women make it difficult for them to switch to better avenues of work (Das 2004; Hasan and Menon 2004; Neetha 2014). In this regard, the focus of the next section is to analyze the working conditions of the self-employed and regular workers to gauge at the socio-religious differences in the same.

### 3.5.2 Contextualizing the Self-Employed Women Workers

Self-employment is itself a diverse category where workers are further classified as ownaccount workers, employers and helpers in household enterprises. ${ }^{40}$ A miniscule proportion of women are employers regardless of the place of residence and socio-religious status with NM-Others women relishing a slightly better share (table 3.3).

In the rural areas, where a majority of women are unpaid helpers in the family enterprises predominately in agriculture (Mazumdar 2008), M-Others and M-OBC women have higher percentage of women as own account workers. Further, the share of own account workers among the self-employed is highest for women of M-Others across the socioreligious categories. The intra-community differences in the categorization of selfemployed workers are quite evident. While the proportion of own account workers is highest for M-Others in rural areas, a greater percentage of the M-OBC are unpaid family workers.

On the other hand, a higher proportion of own account workers in the Muslim community in urban areas broadly mirrors the trends at the all-India level and across socio-religious categories with the share of own account workers being the highest for M-Others followed by NM-Others and M-OBC.

[^28]Table 3.3: Type of Self-Employed Women Workers by Socio-Religious Groups and Residence (UPS: 15-65 Years), 2011

| Sector/ <br> Type of Self- <br> Employment <br> ( $\downarrow$ ) | NM- <br> Others | NM- <br> SC | NM- <br> ST | NM- <br> OBC | M- <br> Others | M- <br> OBC | All <br> Muslims | All |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rural |  |  |  |  |  |  |  |  |
| Own Account <br> Worker | 30.33 | 40.34 | 19.77 | 27.48 | 57.52 | 47.54 | 52.81 | 30.21 |
| Employer | 1.96 | 0.46 | 0.07 | 0.84 | 0.01 | 1.18 | 0.56 | 0.82 |
| Helper (Unpaid <br> Family <br> Worker) | 67.71 | 59.20 | 80.16 | 71.68 | 42.46 | 51.28 | 46.62 | 68.97 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Urban | 65.75 | 58.54 | 52.72 | 57.87 | 67.37 | 61.39 | 63.93 | 60.91 |
| Own Account <br> Worker | 1.91 | 0.98 | 0.28 | 1.05 | 0.10 | 0.26 | 0.19 | 1.12 |
| Employer | 32.35 | 40.48 | 47.00 | 41.08 | 32.53 | 38.35 |  |  |
| Helper (Unpaid <br> Family <br> Worker) | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Total |  |  |  |  |  |  |  |  |

Source: Computed using unit record data of Employment-Unemployment ( $68^{\text {th }}$ ) Round of NSSO

The above analysis conceals an important dimension of the Indian labour market. Juxtaposed to the western societies, the self-employed female workers in India are not autonomous empowered ones. Instead the home-based women workers remain at the intersection of the social construct of patriarchy on one hand which fosters their primary location within the four walls of the home and the capitalist drive of accumulation on the other which exploits them as a source of cheap labour (Raju 2013).

In this regard, table 3.4 depicts the preponderance of home-based women workers among the self-employed across socio-religious categories and sector. The proportion of homebased workers was highest for M-Others women in the rural areas. Approximately $89 \%$ of the M-Others women and $81 \%$ of the M-OBC women among the self-employed were home-based workers. On the other hand, the Muslim community in urban areas experience immoderate disparities compared to women of other the socio-religious categories and allIndia average. While at the all-India level, about two-third of the women were home-based workers, the corresponding figures were $79 \%$ and $82 \%$ respectively for the M-Others and M-OBC women. A higher percentage of M-OBC women in urban areas as home based
workers in comparison to M-Others women may be on account of covert cultural restrictions on these women to participate in wage work following the norms practiced in upper caste Muslim families. It may also be due to their lower networks depending entirely on the sub-contracted work and middlemen remaining at the lowest hierarchy of the assembly line or their lack of access to formal jobs. In the absence of adequate data, it is difficult to adequately discern the principal reasons for the same.

Table 3.4: Location of Workplace of Self-Employed Women Workers by SocioReligious Groups and Residence (UPS: 15-65 Years), 2011

| Sector/Location of Workplace ( $\downarrow)$ | NMOthers | $\begin{gathered} \text { NM- } \\ \text { SC } \end{gathered}$ | $\begin{gathered} \text { NM- } \\ \text { ST } \end{gathered}$ | $\begin{aligned} & \mathrm{NM}- \\ & \mathrm{OBC} \end{aligned}$ | MOthers | $\begin{gathered} \text { M- } \\ \text { OBC } \end{gathered}$ | All Muslim | All |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rural |  |  |  |  |  |  |  |  |
| Home-Based Workers among SelfEmployed | 77.60 | 78.29 | 66.05 | 81.88 | 89.14 | 81.00 | 85.65 | 79.98 |
| Away from Home | 15.78 | 9.28 | 9.81 | 9.77 | 5.93 | 8.07 | 6.85 | 10.10 |
| Street-Fixed <br> Location | 1.59 | 3.23 | 3.54 | 1.46 | 0.34 | 0.39 | 0.36 | 1.79 |
| No Fixed Location | 0.39 | 0.66 | 1.66 | 1.20 | 0.92 | 5.51 | 2.89 | 1.29 |
| Others | 4.64 | 8.56 | 18.95 | 5.71 | 3.67 | 5.02 | 4.25 | 6.84 |
| Urban |  |  |  |  |  |  |  |  |
| Home-Based Workers among SelfEmployed | 69.71 | 56.06 | 49.31 | 68.56 | 79.01 | 81.61 | 80.54 | 68.76 |
| Away from Home | 22.41 | 11.49 | 32.80 | 17.30 | 12.63 | 6.13 | 8.81 | 17.01 |
| Street-Fixed <br> Location | 0.77 | 9.13 | 9.56 | 3.59 | 2.19 | 1.38 | 1.72 | 3.34 |
| No Fixed Location | 2.49 | 16.21 | 4.73 | 4.98 | 0.96 | 0.87 | 0.91 | 5.03 |
| Others | 4.63 | 7.11 | 3.59 | 5.57 | 5.20 | 10.01 | 8.02 | 5.86 |

Note: Home-based workers are workers with workplace as own dwelling unit, structure attached to own dwelling unit, open area adjacent to own dwelling unit, detached structure adjacent to own dwelling unit.
Source: As in table 3.3

The findings are in line with various other studies which have brought to light the marginalized condition of home-based self-employed Muslim women workers engaged in manufacturing of tobacco, textile and textile products such as tailoring, embroidery etc.

Some of them are also engaged in assembling electronic parts, toys etc. (Bhatt 2006; Das 2004; Hasan and Menon 2004; Khan 2007; GoI, SCR 2006). Thus, the cultural restraints coupled with low education and skill levels among Muslim women reinforced by discrimination in the families (Hasan and Menon 2004) relegates their locus to being semiworkers remaining at the intersection of the home and the market.

### 3.5.3 Conditions of Women Workers In 'Decent' Regular Wage Work

By generalizing regular wage employment as being a better prospect for women, one fails to recognize the differential working conditions across women of different socio-religious groups.

Table 3.5 brings to light the fact that the women of Muslim community are the ones having a high share in no contract agreements remaining only marginally ahead of the women of NM-SCs in rural areas and at the bottommost position in urban areas. But the averages generally abridge its constituent parts. A closer scrutiny of the data reveals that the percentage share of M-OBC women in no contract agreements was two times higher than those for their M-Others counterparts in rural areas while a 10 percentage point difference remained in the urban areas. Similar was the situation in terms of eligibility for paid leaves where the condition of M-Others women was reflective of those of NM-Others women at least in rural areas while M-OBC remained at the lowermost ladder. The urban structures remain worse for the Muslim women in general and M-OBC in particular for whom the proportion of three year contracts was a miniscule proportion of the total contracts. The eligibility for paid leaves in urban areas reflect significant upper caste benefits where approximately three-fifth of NM-Others women being eligible for them. On the other hand, only a small portion of the M-Others and an even smaller percentage of M-OBC women were eligible for the same.

Table 3.5: Distribution of Regular Women Workers across Socio-Religious Groups by Contract Type and Eligibility for Paid Leaves (UPS: 15-65 Years), 2011

|  | NM- <br> Others | $\begin{gathered} \hline \text { NM- } \\ \text { SC } \end{gathered}$ | $\begin{gathered} \hline \text { NM- } \\ \text { ST } \end{gathered}$ | $\begin{aligned} & \hline \text { NM- } \\ & \mathrm{OBC} \end{aligned}$ | $\begin{gathered} \text { M- } \\ \text { Others } \end{gathered}$ | $\begin{gathered} \mathrm{M}- \\ \mathrm{OBC} \end{gathered}$ | All <br> Muslims | All |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rural |  |  |  |  |  |  |  |  |
| No written Contract | 53.16 | 68.05 | 52.94 | 63.6 | 38.29 | 83.17 | 65.9 | 61.09 |
| One Year Contract | 8.57 | 4.58 | 1.81 | 4.4 | 13 | 3.52 | 7.17 | 5.49 |
| Two Year Contract | 2.04 | 2.21 | 1.02 | 2.45 | 1.01 | 0 | 0.39 | 1.99 |
| Three Year Contract | 36.23 | 25.16 | 44.23 | 29.55 | 47.7 | 13.31 | 26.55 | 31.43 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Eligible For Paid Leaves | 58.53 | 51.12 | 54.69 | 53.41 | 55.4 | 32.61 | 41.38 | 53.31 |
| Not Eligible For Paid Leaves | 41.47 | 48.88 | 45.31 | 46.59 | 44.6 | 67.39 | 58.62 | 46.69 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Urban |  |  |  |  |  |  |  |  |
| No written Contract | 55.74 | 69.36 | 63.86 | 71.86 | 66.59 | 79.99 | 72.43 | 64.93 |
| One Year Contract | 4.97 | 3.94 | 1.85 | 3.27 | 1.46 | 5.24 | 3.11 | 3.99 |
| Two Year Contract | 3.8 | 1.96 | 0.56 | 3.98 | 0.16 | 2.55 | 1.2 | 3.21 |
| Three Year Contract | 35.49 | 24.74 | 33.74 | 20.89 | 31.78 | 12.21 | 23.26 | 27.87 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Eligible For Paid Leaves | 61.01 | 42.78 | 56.62 | 48.36 | 46.47 | 35.59 | 41.73 | 52 |
| Not Eligible For Paid Leaves | 38.99 | 57.22 | 43.38 | 51.64 | 53.53 | 64.41 | 58.27 | 48 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

Source: As in table 3.3

Further analyzing the social security benefits accruing to the regular workers (tables 3.6 and 3.7), both M-Others and M-OBC had a lower percentage of women who were eligible for all types of benefits both in comparison to the women of NM-Others and all-India average in rural areas. In addition, the condition of $\mathrm{M}-\mathrm{OBC}$ remain relegated even in comparison with the upper caste women of their religion. At the same time, M-OBC women had the highest percentage in terms of non-eligibility of any type of benefits which means the women in Muslim community in general and M-OBC in particular did not even receive the health care and maternity benefits. The analysis in urban areas reveals a similar
pattern where the Muslim community as a whole had the lowest share in case of all benefits received and highest share in terms of being non-eligible for any of the benefits. Again the condition of OBCs among the Muslims remained relegated and there was approximately a 10 percentage point difference between the M-Others and M-OBC women in terms of being eligible for all kinds of social security benefits.

Table 3.6: Distribution of Regular Women Workers across Socio-Religious Groups by Social Security Benefits in Rural Areas (UPS: 15-65 Years), 2011

| Social Security <br> Benefits ( $\downarrow)$ | NM- <br> Others | NM- <br> SC | NM- <br> ST | NM- <br> OBC | M- <br> Others | M- <br> OBC | All <br> Muslims | All |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Only PF/Pension | 9.62 | 6.00 | 7.06 | 6.52 | 7.93 | 9.00 | 8.59 | 7.42 |
| Only Gratuity | 0.15 | 0.08 | 0.40 | 2.23 | 0.00 | 0.00 | 0.00 | 0.92 |
|  <br> Maternity Benefits | 5.09 | 3.06 | 3.24 | 2.60 | 0.71 | 0.18 | 0.38 | 3.18 |
|  <br> Gratuity | 1.24 | 2.22 | 4.42 | 0.85 | 0.28 | 0.00 | 0.11 | 1.49 |
|  <br>  <br> Maternity Benefits | 1.26 | 2.08 | 2.45 | 3.01 | 0.92 | 0.00 | 0.36 | 2.10 |
|  <br>  <br> Maternity Benefits | 0.55 | 0.92 | 1.71 | 2.66 | 1.01 | 2.06 | 1.65 | 1.61 |
| PF/Pension, <br> Gratuity, Healthcare <br> \& Maternity <br> Benefits | 22.47 | 13.62 | 17.63 | 18.74 | 16.04 | 13.86 | 14.70 | 18.20 |
| Not eligible for any <br> of the above | 56.34 | 69.02 | 60.80 | 60.25 | 68.85 | 74.16 | 72.12 | 62.10 |
| Not Known | 3.27 | 2.99 | 2.29 | 3.14 | 4.24 | 0.75 | 2.09 | 2.97 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

Source: As in table 3.3
The above description is reflective of the fact that there are clear differentials in the working conditions of regular female workers and the disparities for the Muslim community are perceptible particularly in the urban settings. Also, the caste hierarchies in the Muslim community are highlighted whereby the conditions of the M-OBC women was subordinate even in contrast to the upper caste women of their community irrespective of the place of residence.

Table 3.7: Distribution of Regular Women Workers across Socio-Religious Groups by Social Security Benefits in Urban Areas (UPS: 15-65 Years), 2011

| Social Security <br> Benefits $(\downarrow)$ | NM- <br> Others | NM-SC | NM-ST | NM- <br> OBC | M- <br> Others | M-OBC | All <br> Muslims | All |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Only PF/Pension | 7.71 | 4.9 | 6.1 | 6.57 | 5.68 | 6.47 | 6.03 | 6.63 |
| Only Gratuity | 0.81 | 0.68 | 0.59 | 2.04 | 0 | 0.34 | 0.15 | 1.13 |
|  <br> Maternity Benefits | 2.72 | 3.25 | 1.48 | 1.42 | 0.07 | 5.17 | 2.29 | 2.33 |
|  <br> Gratuity | 2.34 | 1.31 | 1.7 | 1.46 | 0 | 1.34 | 0.58 | 1.72 |
|  <br>  <br> Maternity Benefits | 6.31 | 1.26 | 0.48 | 5.31 | 3.12 | 4.29 | 3.63 | 4.63 |
|  <br>  <br> Maternity Benefits | 3.59 | 0.32 | 1.12 | 2.97 | 0.27 | 0.24 | 0.25 | 2.45 |
| PF/Pension, Gratuity, <br>  <br> Maternity Benefits | 30.09 | 21.32 | 31.53 | 17.76 | 21.74 | 11.34 | 17.21 | 23.64 |
| Not eligible for any of <br> the above | 43.57 | 64.4 | 50.36 | 60.72 | 67.48 | 66.82 | 67.19 | 54.9 |
| Not Known | 2.86 | 2.55 | 6.64 | 1.76 | 1.64 | 4 | 2.67 | 2.57 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

Source: As in table 3.3

### 3.6 Variations by Type of Industry and Occupation

### 3.6.1 Industrial Engagements of Women Workers

Socio-cultural and geographic location factors significantly impact the type of industry and occupation in which a women can be employed. In this regard, figure 3.6 depicts the type of industry in which rural women are engaged. A significant proportion of women across socio-religious groups were employed in the agricultural sector, followed by manufacturing, construction and education. Another important observation is that the proportion of NM-Others females finding employment in education was almost double the all-India figure. The analysis also brings to light the fact that Muslim women's concentration in agriculture is lower than the women of other socio-religious categories and among the Muslim women, the absorption in agriculture is lower for M-Other females in comparison to M-OBCs. The lower shares of agricultural affiliations among Muslim women can be explicated on account of differential configurations of land-ownership
among the Muslims (as discussed in section 1.5). A significant proportion of the M-Others females and a lower proportion among the $\mathrm{M}-\mathrm{OBCs}$ were employed in the manufacturing sector. Other sectors of employment for rural Muslim women were trade followed by education, the share for both remaining skewed in favor of M-Others women in comparison to the OBCs among them.

Figure 3.6: Distribution of Women Workers across Socio-Religious Groups by Type of Industry in Rural Areas (UPS: 15-65 Years), 2011


Note: Others include mining, electricity and real estate.
Source: As in table 3.3
Next discussing the industrial affiliations of the urban women, figure 3.7 depicts that at allIndia level about a quarter of women were engaged in the manufacturing sector in 2011 closely followed by community, social and government services. Also, 15\% among them found employment in the education sector and another $10 \%$ remain engaged in the trade sector. The participation of NM-Others females was highest in the education sector, where close to a quarter of them were employed followed by community, social and government services. Trade and health were the other two sectors where the women of this community found employment. On the other hand, the concentration of M-OBCs was close to $60 \%$ in the manufacturing sector while the corresponding figure for the women of upper caste among them was $45 \%$. The participation of women of M-Others is low in community,
social and government services in comparison with the women of other socio-religious categories and this proportion is even lower for the M-OBC women. Similarly, the participation of M-Others females was lower than both the all-India average and the women of NM-Others in education and health sector and the shares for the same remained at lowest levels for the women of M-OBC.

Figure 3.7: Distribution of Women Workers across Socio-Religious Groups by Type of Industry in Urban Areas (UPS: 15-65 Years), 2011


Note: Others include mining, electricity and real estate.
Source: As in table 3.3
Another prominent observation was relating to the participation of M-Others and M-OBC women in the construction work. The engagement of M-OBC was 2 percentage points higher than those of M-Others in rural areas while this gap narrows to about a percentage point in urban areas. It might be a possibility that the caste norms prevalent among the Muslims prevent the participation of upper caste Muslim females from engaging in manual work particularly in rural areas as is the case with NM-Others whose participation in the construction worked remained abysmally low in comparison to NM-SCs, NM-STs and NM-OBCs.

### 3.6.2 Occupational Engagements of Women Workers

The industrial affiliations provide a broad picture of the sectoral divisions of women's work but the stigmas related to caste can be better understood by studying the occupations in which the women of Muslim community find employment. In this regard, table 3.8 and 3.9 depicts the occupational affiliations of women of different socio-religious groups in rural and urban sector respectively.

Table 3.8: Distribution of Women Workers by Type of Occupations across Socio-

$$
\text { Religious Groups in Rural Areas (UPS: 15-65 Years), } 2011
$$

| Type of <br> Occupations <br> ( $\downarrow$ ) | NM- <br> Others | NM- <br> SC | NM-ST | NM- <br> OBC | M- <br> Others | M- <br> OBC | All <br> Muslims | All |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Legislators, <br> Senior <br> Officials and <br> Managers | 3.36 | 1.37 | 1.88 | 2.26 | 2.87 | 5.26 | 4.13 | 2.29 |
| Professionals | 3.03 | 0.76 | 0.55 | 1.3 | 2.09 | 1.65 | 1.86 | 1.34 |
| Technicians <br> and <br> Associate <br> Professionals | 5.52 | 1.94 | 1.54 | 2.24 | 2.41 | 2.89 | 2.67 | 2.55 |
| Clerks | 0.71 | 0.24 | 0.09 | 0.44 | 0.11 | 0.29 | 0.21 | 0.36 |
| Service <br> Workers and | 4.16 | 2.92 | 2 | 3.58 | 6.09 | 5.1 | 5.57 | 3.37 |
|  <br> Market Sales <br> Workers |  |  |  |  |  |  |  |  |
| Skilled <br> Agricultural <br> and Fishery <br> Workers | 55.48 | 26.54 | 50.58 | 45.46 | 25.45 | 30.07 | 27.89 | 42.67 |
|  <br> related <br> Trades <br> Workers | 4.99 | 9.45 | 3.16 | 8.66 | 34.73 | 19.48 | 26.68 | 8.52 |
| Plant and <br> Machine <br>  <br> Assemblers | 0.44 | 0.78 | 0.12 | 1.18 | 1.51 | 0.78 | 1.13 | 0.8 |
| Elementary <br> Occupations | 22.32 | 56 | 40.08 | 34.89 | 24.74 | 34.48 | 29.88 | 38.11 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Ore As | 3.3 |  |  |  |  |  |  |  |

Source: As in table 3.3

The rural women were engaged mostly in skilled agriculture and fishery works followed by elementary occupations. Similar was the scenario with rural NM-Others women. But for the women of NM-SCs, elementary occupations were the major source of livelihood. Illustrating a corresponding situation in the Muslim community, the data reveals that the highest proportion among the M-OBCs were engaged in elementary occupations followed by skilled agricultural and fishery workers and crafts and related trade workers. While for the women of M-Others, craft and related trade work was a dominant area of occupation followed by skilled agricultural and fishery work and elementary occupations. Thus, it can be observed that the stigmas associated with menial level jobs are prevalent among the MOthers as among the NM-Others in rural areas. Another striking feature was a higher percentage of M-OBC females employed as legislators, senior officials and managers in comparison to all-India average and women of other socio-religious groups (table 3.8).

Urban women found themselves mostly in elementary occupations followed by the craft and related trades work. On the other hand, urban NM-Others women were mostly associated with white collar jobs such as those of legislators, senior officials and managers, professionals, technicians and associate professionals and clerks. While a significant proportion among the backward caste of other religions were engaged in elementary occupations, the same was not true for urban OBC Muslim women. Their predominant sector of employment along with M-Others was craft and related trades work. The participation of M-OBC was also high in white collar jobs but lower than the shares of the 'Others' of their community. Thus, the occupational segregation in urban areas gives some credibility to the belief that the M-OBCs are mirroring the patterns of the upper castes of their community (table 3.9).

Having discussed the structural variations of the type of work undertaken, the conditions of work for the self-employed and regular workers, industrial and occupational segregations in the job market for the women of Muslim community, the next section focusses on the participation of Muslim women in the informal sectors of the country.

Table 3.9: Distribution of Women Workers by Type of Occupations across SocioReligious Groups in Urban Areas (UPS: 15-65 Years), 2011

| Type of <br> Occupations <br> ( $\downarrow$ ) | NM- <br> Others | NM- <br> SC | NM- <br> ST | NM- <br> OBC | M- <br> Others | M- <br> OBC | All <br> Muslims | All |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Legislators, <br> Senior <br> Officials and <br> Managers | 14.03 | 6.01 | 8.03 | 10.94 | 10.81 | 10.08 | 10.44 | 10.86 |
| Professionals | 22.93 | 5.84 | 4.4 | 9.01 | 7 | 6.28 | 6.64 | 12.3 |
| Technicians <br> and Associate <br> Professionals | 14.81 | 7.13 | 14.06 | 9.37 | 9.69 | 6.7 | 8.18 | 10.74 |
| Clerks | 11.19 | 3.62 | 4.14 | 3.72 | 2.19 | 1.47 | 1.83 | 5.82 |
| Service <br> Workers and <br> Shop \& Market <br> Sales Workers | 10.56 | 14.07 | 9.79 | 12.67 | 10.06 | 8.82 | 9.43 | 11.78 |
| Skilled <br> Agricultural <br> and Fishery <br> Workers | 1.87 | 4 | 8.95 | 6.47 | 3.33 | 1.02 | 2.17 | 4.27 |
| Craft and <br> related Trades <br> Workers | 10.2 | 13.25 | 15.26 | 20.78 | 35.74 | 48.2 | 42.03 | 18.28 |
| Plant and <br> Machine | 1.98 | 1.49 | 1.37 | 3.5 | 3.4 | 2.89 | 3.15 | 2.55 |
| Operators and <br> Assemblers | 12.43 | 44.59 | 33.99 | 23.54 | 17.78 | 14.54 | 16.14 | 23.4 |
| Elementary <br> Occupations | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Total | 100 |  |  |  |  |  |  |  |
| Sorce As in | 3.2 | 100 |  |  |  |  |  |  |

Source: As in table 3.2

### 3.7 Informalization and Women Workers

A little more than three-fourth of the women were engaged in the informal sector in rural areas (table 3.10) out of which approximately $36 \%$ were employed in the male proprietary enterprises and $33 \%$ in the female operated ones. In the formal sector, a majority of them were employed in the public sector enterprises. A higher share among the NM-Others females were engaged in enterprises managed by women, while the corresponding shares were lower for NM-SCs, NM-STs and NM-OBCs and their participation remained higher in male operated businesses. An analogous comparison can be made for the Muslim community whereby the proportion of M-Others females being engaged in female
proprietary enterprises was 12 percentage points greater than the corresponding figure for the females of M-OBCs. Also, the Muslim women in general and M-Others in particular were engaged in enterprises in partnership with members from the same household and the figures were substantially greater than the all-India rural female figures. A significant proportion of the females from the Muslim community remains engaged in the informal enterprises and the shares were higher for the women of M-OBCs. Thus, the caste hierarchies among the Muslim community places greater restrictions on the women of rural upper caste Muslims.

Table 3.10: Distribution of Women Workers by Type of Enterprise across SocioReligious Groups in Rural Areas (UPS: 15-65 Years), 2011

| Enterprise Type ( $\downarrow$ ) | NMOthers | $\begin{aligned} & \text { NM- } \\ & \text { SC } \end{aligned}$ | $\begin{gathered} \text { NM- } \\ \text { ST } \end{gathered}$ | $\begin{aligned} & \hline \text { NM- } \\ & \text { OBC } \\ & \hline \end{aligned}$ | MOthers | $\begin{gathered} \hline \mathrm{M}- \\ \mathrm{OBC} \\ \hline \end{gathered}$ | All |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| INFORMAL ENTERPRISE |  |  |  |  |  |  |  |
| Male Proprietary | $\begin{gathered} 29.68 \\ (12.68) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 34.77 \\ (21.57) \\ \hline \end{gathered}$ | $\begin{gathered} 37.83 \\ (11.69) \\ \hline \end{gathered}$ | $\begin{gathered} 40.97 \\ (45.87) \\ \hline \end{gathered}$ | $\begin{aligned} & 21.26 \\ & (3.51) \\ & \hline \end{aligned}$ | $\begin{aligned} & 27.84 \\ & (4.68) \end{aligned}$ | $\begin{array}{r} 35.59 \\ (100) \\ \hline \end{array}$ |
| Female Proprietary | $\begin{gathered} 32.57 \\ (15.01) \end{gathered}$ | $\begin{gathered} 32.44 \\ (21.71) \end{gathered}$ | $\begin{aligned} & 24.32 \\ & (8.11) \end{aligned}$ | $\begin{gathered} 31.61 \\ (38.18) \\ \hline \end{gathered}$ | $\begin{aligned} & 53.36 \\ & (9.51) \end{aligned}$ | $\begin{aligned} & 41.21 \\ & (7.48) \end{aligned}$ | $\begin{aligned} & 32.99 \\ & (100) \end{aligned}$ |
| Partnership with members from same household | $\begin{gathered} 0.43 \\ (3.27) \end{gathered}$ | $\begin{gathered} 0.61 \\ (6.77) \end{gathered}$ | $\begin{gathered} 3.06 \\ (16.92) \\ \hline \end{gathered}$ | $\begin{gathered} 2.05 \\ (41.09) \end{gathered}$ | $\begin{gathered} 5.64 \\ (16.66) \\ \hline \end{gathered}$ | $\begin{gathered} 5.09 \\ (15.29) \end{gathered}$ | $\begin{gathered} 1.99 \\ (100) \end{gathered}$ |
| Partnership with members from different household | $\begin{gathered} 0.66 \\ (17.29) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 0.18 \\ (6.65) \\ \hline \end{gathered}$ | $\begin{gathered} 0.89 \\ (16.92) \end{gathered}$ | $\begin{gathered} \hline 0.7 \\ (48) \end{gathered}$ | $\begin{gathered} 0.05 \\ (0.55) \\ \hline \end{gathered}$ | $\begin{gathered} 1.03 \\ (10.59) \\ \hline \end{gathered}$ | $\begin{aligned} & \hline 0.58 \\ & (100) \end{aligned}$ |
| Employer's Households | $\begin{gathered} 3.28 \\ (21.95) \end{gathered}$ | $\begin{gathered} 3.2 \\ (31.11) \end{gathered}$ | $\begin{gathered} 2.28 \\ (11.03) \end{gathered}$ | $\begin{gathered} 1.32 \\ (23.16) \end{gathered}$ | $\begin{array}{r} 2.93 \\ (7.6) \\ \hline \end{array}$ | $\begin{gathered} 1.96 \\ (5.16) \end{gathered}$ | $\begin{aligned} & 2.27 \\ & (100) \\ & \hline \end{aligned}$ |
| Others | $\begin{gathered} \hline 3.37 \\ (11.85) \end{gathered}$ | $\begin{gathered} 5.47 \\ (27.91) \end{gathered}$ | $\begin{gathered} 7.18 \\ (18.24) \end{gathered}$ | $\begin{gathered} 3.18 \\ (29.28) \end{gathered}$ | $\begin{gathered} 5.23 \\ (7.11) \end{gathered}$ | $\begin{array}{r} \hline 4.05 \\ (5.6) \\ \hline \end{array}$ | $\begin{aligned} & \hline 4.33 \\ & (100) \end{aligned}$ |
| Total Informal (x) | $\begin{aligned} & 69.99 \\ & (13.7) \end{aligned}$ | $\begin{gathered} 76.67 \\ (21.77) \end{gathered}$ | $\begin{gathered} 75.56 \\ (10.69) \end{gathered}$ | $\begin{gathered} 79.83 \\ (\mathbf{4 0 . 9 1}) \end{gathered}$ | $\begin{aligned} & 88.47 \\ & (6.69) \\ & \hline \end{aligned}$ | $\begin{aligned} & 81.18 \\ & (6.25) \end{aligned}$ | $\begin{aligned} & 77.75 \\ & (100) \end{aligned}$ |
| FORMAL ENTERPRISE |  |  |  |  |  |  |  |
| Government/ Public Sector | $\begin{gathered} \hline 22.76 \\ (19.01) \end{gathered}$ | $\begin{gathered} 19.9 \\ (24.13) \end{gathered}$ | $\begin{gathered} 21.5 \\ (12.99) \end{gathered}$ | $\begin{gathered} 16.35 \\ (35.78) \\ \hline \end{gathered}$ | $\begin{aligned} & 11.31 \\ & (3.65) \end{aligned}$ | $\begin{aligned} & 13.53 \\ & (4.45) \end{aligned}$ | $\begin{aligned} & 18.21 \\ & (100) \end{aligned}$ |
| Public/Private Ltd Co. | $\begin{gathered} 3.08 \\ (19.88) \end{gathered}$ | $\begin{gathered} 2.71 \\ (25.42) \end{gathered}$ | $\begin{gathered} 2.43 \\ (11.32) \end{gathered}$ | $\begin{gathered} 1.83 \\ (30.92) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 0.0 \\ (0.0) \\ \hline \end{gathered}$ | $\begin{gathered} 4.91 \\ (12.47) \end{gathered}$ | $\begin{array}{r} 2.36 \\ (100) \\ \hline \end{array}$ |
| Cooperative Societies | $\begin{gathered} 4.18 \\ (37.74) \\ \hline \end{gathered}$ | $\begin{gathered} 0.73 \\ (9.56) \\ \hline \end{gathered}$ | $\begin{gathered} 0.52 \\ (3.38) \end{gathered}$ | $\begin{gathered} 1.99 \\ (47.24) \end{gathered}$ | $\begin{gathered} 0.21 \\ (0.74) \\ \hline \end{gathered}$ | $\begin{gathered} 0.38 \\ (1.34) \end{gathered}$ | $\begin{aligned} & 1.68 \\ & (100) \end{aligned}$ |
| Total Formal (y) | $\begin{aligned} & \hline 30.02 \\ & (20.5) \end{aligned}$ | $\begin{aligned} & \hline 23.34 \\ & (23.6) \end{aligned}$ | $\begin{gathered} 24.45 \\ (12.08) \end{gathered}$ | $\begin{gathered} 20.17 \\ (\mathbf{3 6 . 1 3}) \end{gathered}$ | $\begin{aligned} & 11.52 \\ & (\mathbf{3 . 0 5 )} \end{aligned}$ | $\begin{aligned} & 18.82 \\ & (5.06) \end{aligned}$ | $\begin{aligned} & 22.25 \\ & (100) \end{aligned}$ |
| Total ( $\mathrm{x}+\mathrm{y}$ ) | $\begin{gathered} 100 \\ (15.21) \end{gathered}$ | $\begin{gathered} 100 \\ (22.08) \end{gathered}$ | $\begin{aligned} & \hline 100 \\ & (11) \end{aligned}$ | $\begin{gathered} 100 \\ (39.85) \\ \hline \end{gathered}$ | $\begin{gathered} 100 \\ (5.88) \end{gathered}$ | $\begin{gathered} 100 \\ (5.98) \end{gathered}$ | $\begin{gathered} 100 \\ (100) \\ \hline \end{gathered}$ |
| Proportion in the Rural Population | 18.55 | 20.21 | 10.58 | 38.94 | 5.66 | 6.05 | 100 |

Note: Column wise figures denote the proportions for column wise total while numbers in parenthesis depict the proportions in row wise total.
Source: As in table 3.3

As is clearly evident that NM-Others females have a higher representation in the rural formal sector enterprises than their share in the rural population. Also, the shares of NMSC and NM-ST females is higher in the formal sector in comparison with their population shares, but the same is not true for the females of the Muslim community. The higher representation of the NM-Others females may be explained on account of their better linkages in the job market and their high education levels, while for NM-SCs and NM-STs, it may be owing to the reservations for the community in government departments. The representation of M-Others females falls short of their population shares by approximately $3 \%$ points while the corresponding figure for the M-OBC females is 1 percentage point. This can be explained on account of the inclusion of both the Muslim STs and Muslim OBCs in M-OBCs who are entitled to reservations in the public sector.

The patterns for urban areas for all-India females broadly mirrors those of the rural areas except for the fact that close to $10 \%$ of the females found employment in the employer's households who were probably working as domestic help (table 3.11). For the Muslim community, the scenario in urban areas was a little different. Although even in the urban areas, a significant proportion of the Muslim females both from the M-Others and M-OBC were engaged in female operated enterprises but the proportion was significantly higher for the M-OBC. Also, the proportions were higher among the M-OBC women who were working in partnership with the members of the same household. In addition, the M-OBC women had lower participation in employer's households both in comparison with the allIndia urban average and that of M-Others. Thus, it may be inferred that a significant proportion of M-OBC in urban areas were working in the female proprietary enterprises which means they experience greater restrictions in the participation in work requiring interactions with men than the upper castes of their communities.

The socio-religious prerogatives are clearly evident in the urban areas where the representation of NM-Others females in the formal sector enterprises was approximately 10 percentage points higher than their share in the urban population. Similarly, owing to the government reservations, NM-SCs and NM-STs had better representation than their population in the urban formal sector, while the proportions remained miniscule for the MOthers females and even lower for the OBCs of their community.

Table 3.11: Distribution of Women Workers by Type of Enterprise across SocioReligious Groups in Urban Areas (UPS: 15-65 Years), 2011

| Enterprise Type ( $\downarrow$ ) | NMOthers | $\begin{aligned} & \text { NM- } \\ & \text { SC } \end{aligned}$ | $\begin{gathered} \text { NM- } \\ \text { ST } \end{gathered}$ | $\begin{aligned} & \text { NM- } \\ & \text { OBC } \end{aligned}$ | $\begin{gathered} \mathrm{M}- \\ \text { Others } \end{gathered}$ | $\begin{gathered} \mathrm{M}- \\ \mathrm{OBC} \end{gathered}$ | All |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| INFORMAL ENTERPRISE |  |  |  |  |  |  |  |
| Male Proprietary | $\begin{gathered} \hline 25.88 \\ (28.21) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 27.35 \\ (15.99) \\ \hline \end{gathered}$ | $\begin{aligned} & \hline 29.14 \\ & (3.71) \\ & \hline \end{aligned}$ | $\begin{gathered} \hline 33.12 \\ (39.86) \\ \hline \end{gathered}$ | $\begin{aligned} & \hline 32.44 \\ & (5.87) \\ & \hline \end{aligned}$ | $\begin{aligned} & 32.75 \\ & (6.36) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 29.58 \\ & (100) \\ & \hline \end{aligned}$ |
| Female Proprietary | $\begin{aligned} & 22.22 \\ & (27.5) \end{aligned}$ | $\begin{gathered} \hline 21.21 \\ (14.07) \end{gathered}$ | $\begin{aligned} & 18.75 \\ & (2.71) \end{aligned}$ | $\begin{gathered} 27.76 \\ (37.93) \\ \hline \end{gathered}$ | $\begin{aligned} & 37.75 \\ & (7.76) \end{aligned}$ | $\begin{gathered} \hline 45.53 \\ (10.03) \end{gathered}$ | $\begin{aligned} & 26.06 \\ & (100) \end{aligned}$ |
| Partnership with members from same household | $\begin{gathered} 1.89 \\ (35.08) \\ \hline \end{gathered}$ | $\begin{gathered} 2.08 \\ (20.64) \\ \hline \end{gathered}$ | $\begin{gathered} 2.09 \\ (4.53) \end{gathered}$ | $\begin{gathered} 1.51 \\ (31.01) \\ \hline \end{gathered}$ | $\begin{gathered} 0.24 \\ (0.75) \\ \hline \end{gathered}$ | $\begin{gathered} 2.42 \\ (8) \\ \hline \end{gathered}$ | $\begin{aligned} & \hline 1.74 \\ & (100) \\ & \hline \end{aligned}$ |
| Partnership with members from different household | $\begin{gathered} 2.29 \\ (41.32) \end{gathered}$ | $\begin{gathered} 1.39 \\ (13.48) \end{gathered}$ | $\begin{gathered} 3.52 \\ (7.41) \end{gathered}$ | $\begin{gathered} 1.89 \\ (37.72) \\ \hline \end{gathered}$ | $\begin{gathered} 0.02 \\ (0.06) \end{gathered}$ | $\begin{gathered} 0.01 \\ (0.02) \end{gathered}$ | $\begin{array}{r} 1.79 \\ (100) \\ \hline \end{array}$ |
| Employer's Households | $\begin{gathered} 7.77 \\ (26.4) \end{gathered}$ | $\begin{aligned} & 16.64 \\ & (30.3) \\ & \hline \end{aligned}$ | $\begin{aligned} & 4.87 \\ & (1.93) \end{aligned}$ | $\begin{gathered} \hline 8.89 \\ (33.34) \end{gathered}$ | $\begin{gathered} 9.37 \\ (5.28) \end{gathered}$ | $\begin{aligned} & \hline 4.54 \\ & (2.74) \end{aligned}$ | $\begin{gathered} \hline 9.5 \\ (100) \\ \hline \end{gathered}$ |
| Others | $\begin{gathered} 2.59 \\ (23.64) \end{gathered}$ | $\begin{gathered} 4.43 \\ (21.69) \end{gathered}$ | $\begin{gathered} 9.74 \\ (10.37) \end{gathered}$ | $\begin{gathered} 3.76 \\ (37.93) \end{gathered}$ | $\begin{aligned} & \hline 2.71 \\ & (4.1) \end{aligned}$ | $\begin{gathered} 1.39 \\ (2.26) \end{gathered}$ | $\begin{gathered} 3.53 \\ (100) \end{gathered}$ |
| Total Informal (x) | $\begin{gathered} 62.64 \\ (27.99) \end{gathered}$ | $\begin{gathered} 73.1 \\ (17.51) \end{gathered}$ | $\begin{aligned} & 68.11 \\ & (3.55) \end{aligned}$ | $\begin{gathered} 76.93 \\ (37.95) \end{gathered}$ | $\begin{aligned} & 82.53 \\ & (6.12) \end{aligned}$ | $\begin{aligned} & 86.64 \\ & (6.89) \end{aligned}$ | $\begin{array}{r} 72.2 \\ (100) \\ \hline \end{array}$ |
| FORMAL ENTERPRISE |  |  |  |  |  |  |  |
| Government/ Public Sector | $\begin{gathered} \hline 19.52 \\ (39.94) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 19.89 \\ (21.82) \\ \hline \end{gathered}$ | $\begin{aligned} & 26.53 \\ & (6.33) \end{aligned}$ | $\begin{gathered} 11.3 \\ (25.53) \\ \hline \end{gathered}$ | $\begin{aligned} & 12.41 \\ & (4.21) \end{aligned}$ | $\begin{gathered} 5.95 \\ (2.17) \end{gathered}$ | $\begin{aligned} & 15.76 \\ & (100) \end{aligned}$ |
| Public/Private Ltd Co. | $\begin{array}{r} 12.98 \\ (45.9) \\ \hline \end{array}$ | $\begin{gathered} 5.74 \\ (10.89) \\ \hline \end{gathered}$ | $\begin{gathered} 2.85 \\ (1.18) \end{gathered}$ | $\begin{gathered} 9.29 \\ (36.25) \\ \hline \end{gathered}$ | $\begin{gathered} 3.96 \\ (2.32) \\ \hline \end{gathered}$ | $\begin{gathered} 5.51 \\ (3.47) \end{gathered}$ | $\begin{array}{r} 9.12 \\ (100) \\ \hline \end{array}$ |
| Cooperative Societies | $\begin{gathered} 4.85 \\ (53.49) \\ \hline \end{gathered}$ | $\begin{gathered} 1.27 \\ (7.53) \\ \hline \end{gathered}$ | $\begin{gathered} 2.5 \\ (3.22) \end{gathered}$ | $\begin{gathered} \hline 2.46 \\ (29.98) \end{gathered}$ | $\begin{gathered} 1.11 \\ (2.02) \\ \hline \end{gathered}$ | $\begin{gathered} 1.91 \\ (3.75) \end{gathered}$ | $\begin{aligned} & 2.93 \\ & (100) \\ & \hline \end{aligned}$ |
| Total Formal (y) | $\begin{gathered} 37.35 \\ (\mathbf{4 3 . 3 2}) \end{gathered}$ | $\begin{gathered} 26.9 \\ (16.73) \end{gathered}$ | $\begin{aligned} & 31.88 \\ & (4.31) \end{aligned}$ | $\begin{gathered} 23.05 \\ (29.51) \end{gathered}$ | $\begin{aligned} & 17.48 \\ & (\mathbf{3 . 3 6}) \end{aligned}$ | $\begin{aligned} & 13.37 \\ & (2.76) \end{aligned}$ | $\begin{aligned} & 27.81 \\ & (100) \end{aligned}$ |
| Total ( $\mathrm{x}+\mathrm{y}$ ) | $\begin{gathered} 100 \\ (32.25) \\ \hline \end{gathered}$ | $\begin{gathered} 100 \\ (17.29) \\ \hline \end{gathered}$ | $\begin{gathered} 100 \\ (3.76) \end{gathered}$ | $\begin{gathered} 100 \\ (35.6) \\ \hline \end{gathered}$ | $\begin{gathered} 100 \\ (5.35) \end{gathered}$ | $\begin{gathered} 100 \\ (5.74) \end{gathered}$ | $\begin{gathered} 100 \\ (100) \end{gathered}$ |
| Proportion in the Urban Population | 34.02 | 14.26 | 3.10 | 32.51 | 7.68 | 8.43 | 100 |

Note: Column wise figures denote the proportions for column wise total while numbers in parenthesis depict the proportions in row wise total.
Source: As in table 3.3
The above analysis discloses that although a major proportion of the Indian females are engaged in the informal enterprises of the economy irrespective of the sector but the percentages remain higher for the Muslim community. Although there are sectoral intracommunity differences whereby the socio-cultural restrictions appear to be more stringent for the M-Others in rural areas while the M-OBC in urban areas seem to be more reserved. In this regard, the next section analyses the role of family in the labour force participation decisions of women.

### 3.8 Family: Facilitator or Hindrance in Labour Force Participation of Women?

Family plays a vital role in equipping a women to work by enabling her to gather the requisite skills and education. In addition, the social, cultural, religious and economic factors of a household may significantly impact a woman's decision to participate in the labour market.

### 3.8.1 Age-Activity Profile of Women

A woman's life cycle across the age structure governs her labour market and domestic participation (Abraham 2013). Table 3.12 depicts the age-activity profile of women across socio-religious categories and place of residence. An overwhelming proportion of females in the age-group of 5-15 years were enrolled in educational institutions. A closer examination points to the fact that a lower proportion among the M-Others and even lower among the M-OBC women in both rural and urban areas were students in comparison to both the NM-Others and all-India average. Similarly, in the age-group of 16-25 years, when an exceeding majority of the women both all-India level and NM-Others were busy nurturing their skills, a high proportion among M-OBC were engaged in purely domestic activities and the shares were even greater than those for M-Others women across sectors. The subsequent age-groups endure the brunt of an interplay of low educational equipment and socio-cultural norms resulting in a meagre participation of Muslim women in the labour force confining her to the hearth and home engaged in domestic activities.

Table 3.12: Age-Activity Profile (UPS) of Women by Socio-Religious Groups and Residence, 2011

| Age- <br> Group <br> ( $\downarrow$ ) | Rural |  |  |  |  |  | Urban |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | I | II | III | IV | V | VI | I | II | III | IV | V | VI |
| NM-Others |  |  |  |  |  |  |  |  |  |  |  |  |
| 5-15 | 0.76 | 93.71 | 0.93 | 0.87 | 3.73 | 100 | 0.49 | 97.31 | 0.64 | 0.07 | 1.49 | 100 |
| 16-25 | 13.04 | 32.76 | 27.95 | 25.51 | 0.74 | 100 | 14.56 | 48.62 | 26.11 | 9.61 | 1.1 | 100 |
| 26-35 | 22.45 | 0.38 | 32.75 | 43.87 | 0.56 | 100 | 22.54 | 0.9 | 51.69 | 24.38 | 0.49 | 100 |
| 36-45 | 30.75 | 0.01 | 29.06 | 39.42 | 0.76 | 100 | 21.42 | 0 | 52.98 | 24.4 | 1.19 | 100 |
| 46-55 | 23.92 | 0.00 | 34.61 | 38.91 | 2.55 | 100 | 15.72 | 0.09 | 63.47 | 17.01 | 3.7 | 100 |
| 56-65 | 16.79 | 0.03 | 38.93 | 27.13 | 17.12 | 100 | 7.41 | 0.06 | 63.59 | 8.34 | 20.6 | 100 |
| >65 | 5.24 | 0.06 | 25.06 | 8.87 | 60.77 | 100 | 1.05 | 0.17 | 38.69 | 3.33 | 56.75 | 100 |


| Age- <br> Group <br> $(\downarrow)$ | Rural |  |  |  |  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | I | II | III | IV | V | VI | I | II | III | IV | V | VI |

## M-Others

| 5-15 | 2.16 | 83.76 | 2.05 | 2.04 | 9.99 | 100 | 1.11 | 87.91 | 4.83 | 0.54 | 5.61 | 100 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 16-25 | 15.84 | 21.70 | 27.38 | 33.49 | 1.59 | 100 | 12.35 | 26.41 | 45.35 | 15.30 | 0.59 | 100 |
| 26-35 | 13.88 | 0.19 | 28.67 | 55.86 | 1.39 | 100 | 15.14 | 1.50 | 62.00 | 19.96 | 1.40 | 100 |
| 36-45 | 17.35 | 0.00 | 34.08 | 47.97 | 0.61 | 100 | 17.05 | 0.00 | 64.26 | 17.47 | 1.22 | 100 |
| 46-55 | 13.43 | 0.00 | 41.74 | 41.35 | 3.49 | 100 | 11.31 | 0.00 | 69.29 | 13.96 | 5.44 | 100 |
| 56-65 | 15.78 | 0.37 | 36.04 | 31.42 | 16.39 | 100 | 5.95 | 0.01 | 60.97 | 6.90 | 26.17 | 100 |
| >65 | 5.01 | 0.33 | 13.83 | 12.64 | 68.19 | 100 | 3.00 | 0.40 | 20.26 | 2.60 | 73.74 | 0 |
| M-OBC |  |  |  |  |  |  |  |  |  |  |  |  |
| 5-15 | 2.65 | 76.59 | 2.98 | 2.39 | 15.39 | 100 | 1.05 | 82.38 | 5.52 | 2.08 | 8.98 | 100 |
| 16-25 | 12.83 | 16.79 | 35.42 | 31.68 | 3.28 | 100 | 12.15 | 22.56 | 46.76 | 17.28 | 1.25 | 100 |
| 26-35 | 16.04 | 0.01 | 35.31 | 47.32 | 1.32 | 100 | 11.39 | 0.25 | 61.08 | 26.46 | 0.82 | 100 |
| 36-45 | 19.94 | 0.06 | 39.09 | 39.22 | 1.69 | 100 | 15.83 | 0.00 | 58.11 | 23.94 | 2.12 | 100 |
| 46-55 | 19.23 | 0.00 | 34.87 | 41.02 | 4.88 | 100 | 10.75 | 0.00 | 73.16 | 10.34 | 5.75 | 100 |
| 56-65 | 19.70 | 0.07 | 37.14 | 24.30 | 18.78 | 100 | 8.96 | 0.00 | 60.49 | 10.27 | 20.28 | 100 |
| >65 | 5.65 | 0.00 | 20.07 | 9.30 | 64.97 | 100 | 2.66 | 0.22 | 25.94 | 2.80 | 68.38 | 100 |

All Muslims

| $5-15$ | 2.42 | 79.92 | 2.55 | 2.22 | 12.88 | 100 | 1.07 | 84.96 | 5.20 | 1.36 | 7.40 | 100 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $16-25$ | 14.31 | 19.20 | 31.47 | 32.57 | 2.45 | 100 | 12.25 | 24.43 | 46.08 | 16.31 | 0.92 | 100 |
| $26-35$ | 14.98 | 0.10 | 32.08 | 51.49 | 1.35 | 100 | 13.18 | 0.85 | 61.52 | 23.37 | 1.09 | 100 |
| $36-45$ | 18.63 | 0.03 | 36.56 | 43.64 | 1.15 | 100 | 16.42 | 0.00 | 61.05 | 20.85 | 1.69 | 100 |
| $46-55$ | 16.60 | 0.00 | 37.98 | 41.17 | 4.25 | 100 | 11.01 | 0.00 | 71.37 | 12.01 | 5.60 | 100 |
| $56-65$ | 18.03 | 0.20 | 36.67 | 27.34 | 17.76 | 100 | 7.61 | 0.00 | 60.71 | 8.76 | 22.92 | 100 |
| $>65$ | 5.34 | 0.16 | 17.02 | 10.94 | 66.54 | 100 | 2.82 | 0.30 | 23.19 | 2.70 | 70.98 | 100 |

All

| $5-15$ | 1.52 | 87.58 | 1.81 | 1.93 | 7.16 | 100 | 0.75 | 92.21 | 2.34 | 0.58 | 4.12 | 100 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $16-25$ | 17.47 | 24.29 | 27.31 | 29.86 | 1.07 | 100 | 14.77 | 38.04 | 34.69 | 11.66 | 0.83 | 100 |
| $26-35$ | 28.79 | 0.19 | 27.66 | 42.73 | 0.63 | 100 | 22.39 | 1.03 | 54.11 | 21.82 | 0.65 | 100 |
| $36-45$ | 36.26 | 0.01 | 24.54 | 38.35 | 0.83 | 100 | 23.95 | 0.01 | 54.29 | 20.68 | 1.07 | 100 |
| $46-55$ | 33.94 | 0.06 | 27.09 | 36.06 | 2.85 | 100 | 19.22 | 0.04 | 61.88 | 14.53 | 4.33 | 100 |
| $56-65$ | 23.45 | 0.02 | 30.52 | 28.62 | 17.39 | 100 | 11.07 | 0.03 | 57.91 | 9.37 | 21.62 | 100 |
| $>65$ | 8.42 | 0.13 | 19.94 | 11.12 | 60.39 | 100 | 3.59 | 0.17 | 34.07 | 3.42 | 58.74 | 100 |

Note: I-Labour, II-Student, III-Only Domestic, IV-Domestic \& Allied, V-Others, VI-Total Others include rentiers, pensioners, remittance recipients, disabled, beggars, prostitutes etc. Source: As in table 3.3

### 3.8.2 Marriage and Female LFPR

Table 3.13 discerns that the participation of women in the labour force is significantly altered by her marital status. The involvement of women in rural areas was higher for currently married women in comparison to unmarried ones, while in the urban settings the engagement of married women is less compared to never married women. The witnessed pattern can be explained on account of class homogamy in the Indian economy whereby women of a particular class affiliation are likely to marry in the same class group. Since, the standard of living is higher in the urban areas there might be less requirement on the part of women to work and hence, married women may be more engaged in the household chores and rearing of children. On the other hand, females in rural areas do not relish such a luxury owing to lower incomes of the household.

Table 3.13: Marital Status and Female LFPR (UPS: 15-65 Years) by Socio-Religious Groups and Residence, 2011

| Sector/ <br> Marital <br> Status $(\downarrow)$ | NM- <br> Others | NM-SC | NM-ST | NM- <br> OBC | M- <br> Others | M- <br> OBC | All <br> Muslims | All |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rural |  |  |  |  |  |  |  |  |
| Unmarried | 12.90 | 13.77 | 27.43 | 14.95 | 18.74 | 16.21 | 17.47 | 15.89 |
| Currently <br> Married | 20.97 | 27.66 | 45.56 | 28.49 | 12.56 | 13.59 | 13.09 | 26.86 |
| Widowed | 34.17 | 52.02 | 59.88 | 41.91 | 32.50 | 40.13 | 36.75 | 44.44 |
| Divorced/ <br> Separated | 68.71 | 66.41 | 76.25 | 69.09 | 32.93 | 58.98 | 48.88 | 65.45 |
| Urban |  |  |  |  |  |  |  |  |
| Unmarried | 20.96 | 19.68 | 19.97 | 19.91 | 14.65 | 15.67 | 15.16 | 19.39 |
| Currently <br> Married | 15.06 | 19.47 | 24.44 | 18.68 | 10.58 | 9.16 | 9.85 | 16.33 |
| Widowed | 22.53 | 44.00 | 54.01 | 38.58 | 25.57 | 19.11 | 22.07 | 32.27 |
| Divorced/ <br> Separated | 52.96 | 52.73 | 82.19 | 58.62 | 39.95 | 62.91 | 52.45 | 55.52 |

Source: As in table 3.3
But a similar pattern was not observed for the Muslim community where participation of unmarried women was higher in comparison to currently married ones irrespective of the place of residence. This may be on account of higher cultural restrictions on Muslim women after they get married. The restrictions were apparent to be higher for M-Others in rural areas and for M-OBC in urban settings. The participation rates revealed that married women of upper caste rural Muslim families had lower participation rates than the OBCs
of their religion, while a reverse scenario was observed in urban areas. The intracommunity differences are also striking when we compare the participation of divorced women in the labour market. The participation of divorced M-OBC women in the labour market was $59 \%$ and $63 \%$ in the rural and the urban areas respectively while that of MOthers women was quite low. It may be on account of lack of maintenance from the husband and the poor status of parents of M-OBC women to support their daughters that they have to work to support themselves.

### 3.8.3 Household Size and Female LFPR

It can be observed from table 3.14 that as the household size increases, the participation of women in the labour market starts falling and it is true for the rural and urban sector alike. For household with members less than 9, the participation of Muslim women both MOthers and M-OBC was less than that for NM-Others and all-Indian average across sectors. But for household members greater than 9, the percentage of Muslim women participating in the labour market becomes greater than that of NM-Others women in rural areas but remains significantly low in comparison to all-India average. Urban Muslim families with larger household members have abysmally low levels of women participation.

Table 3.14: Household Size and Female LFPR (UPS: 15-65 Years) by Socio-Religious Groups and Residence, 2011

| Sector/ <br> Household <br> Size ( $\downarrow)$ | NM- <br> Others | NM-SC | NM-ST | NM- <br> OBC | M- <br> Others | M- <br> OBC | All <br> Muslims | All |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rural |  |  |  |  |  |  |  |  |
| $1-4$ | 24.51 | 31.35 | 48.69 | 34.06 | 17.15 | 20.92 | 18.79 | 31.83 |
| $5-8$ | 19.06 | 25.47 | 40.09 | 23.38 | 13.79 | 14.28 | 14.04 | 23.74 |
|  <br> Above | 10.17 | 17.98 | 48.01 | 19.44 | 13.83 | 15.44 | 14.81 | 19.06 |
| Urban |  |  |  |  |  |  |  |  |
| $1-4$ | 19.40 | 26.57 | 27.54 | 23.46 | 14.13 | 15.25 | 14.68 | 21.60 |
| $5-8$ | 14.67 | 19.68 | 24.09 | 18.34 | 14.24 | 11.32 | 12.68 | 16.56 |
|  <br> Above | 12.95 | 12.74 | 35.58 | 14.72 | 7.72 | 9.13 | 8.48 | 12.07 |

Source: As in table 3.3
Such patterns may be on account of the private realities where a woman's responsibilities increases when she has to take care of a larger number of dependents and hence, has to sacrifice her participation in the labour market. The lower participation rates in the urban
areas with larger number of household members in comparison to rural areas may be because of higher number of potential earners in large families and with rising incomes the reduced need for women to participate in the labour market.

The above discussion discerns that although domestic activities including household chores and rearing and caring of children results in "domestication" (Abraham 2013:100) of women in general, Muslim women particularly those of M-OBC forms a peculiar case where attendance in educational institutions in the prime-schooling years and later LFPR during prime-productive years remains abysmally low in comparison to both all-India average and that of NM-Others women. In addition, being married particularly in urban areas brings back the notions of males being the sole bread-winner for the families and results in subordination of both M-Others and M-OBC women.

### 3.9 Quest for Labour Market Participation by Muslim Women

Our preconceived opinions obstructs our capacity to look outside the peripheral. The idea of a veiled Muslim women and hence, their unwillingness to participate in the economy is so deep-rooted in the labour market (Das 2004) that it fails to realize that Muslim women also want to make an active contribution to India's education and employment outcomes (Hameed 2000; Hasan and Menon 2004; Kirmani 2013; Lateef 1990). In this respect, table 3.15 depicts willingness of Muslim women to accept work. It shows that with the increase in the education level, the desire to participate in the labour market increases for M-OBCs which holds irrespective of the sector. While for the women of upper caste Muslims, probably engaged in the status production of the households, the willingness to participate falls after they enter into secondary education.

Table 3.15: Willingness to accept Work by Education Level and Residence
(Age 15 \& Above), 2011

| Education Levels ( $\downarrow$ ) | Rural |  |  | Urban |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | M- <br> Others | M-OBC | All <br> Muslims | M- <br> Others | M-OBC | All <br> Muslims |
| Illiterate or with no <br> formal Education | 32.85 | 28.48 | 30.58 | 29.65 | 32.74 | 31.45 |
| Up to Middle | 44.37 | 36.37 | 40.42 | 32.47 | 29.76 | 31.06 |
| Secondary | 38.81 | 39.69 | 39.3 | 32.08 | 33.98 | 32.97 |
| Graduation and Above | 21.53 | 48.6 | 32.38 | 27.96 | 36.11 | 31.76 |

Source: As in table 3.3

NSSO also collected information with regard to the type of assistance required and type of work acceptable from the women who wanted to pursue work. Table 3.16 shows that the primary assistance required by Muslim women were related to finance, the proportions remaining higher for the $\mathrm{M}-\mathrm{OBC}$ women across sectors. The other area of concern was the lack of requisite training to undertake work.

Table 3.16: Type of Assistance Required and Type of Work Acceptable (Age 15 \& Above), 2011

| Type of Assistance <br> Required/Type of Work <br> Acceptable ( $\downarrow$ ) | Rural |  |  | Urban |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | M- <br> Others | M-OBC | All <br> Muslims | M- <br> Others | M-OBC | All <br> Muslims |  |  |
| Initial Finance on easy <br> terms | 35.2 | 42.39 | 38.65 | 35.64 | 37.16 | 36.47 |  |  |
| Working Finance | 25.53 | 15.45 | 20.7 | 21.42 | 17.07 | 19.05 |  |  |
| Training | 19.09 | 20.76 | 19.89 | 23.31 | 28.03 | 25.88 |  |  |
| Assured Market | 4.94 | 6.73 | 5.8 | 5.07 | 4.7 | 4.87 |  |  |
| Availability of Raw- <br> Materials | 3.69 | 4.16 | 3.92 | 3.76 | 3.62 | 3.68 |  |  |
| Accommodation | 1.48 | 0.73 | 1.12 | 2.06 | 1.38 | 1.69 |  |  |
| No Assistance | 3.58 | 4.12 | 3.83 | 5.76 | 2.8 | 4.15 |  |  |
| Others | 6.49 | 5.66 | 6.09 | 2.97 | 5.25 | 4.21 |  |  |
| Type of Work Acceptable |  |  |  |  |  |  |  |  |
| Regular Full-Time | 15.24 | 22.2 | 18.59 | 27.74 | 22 | 24.61 |  |  |
| Regular Part Time | 79.6 | 74.92 | 77.35 | 7.02 | 71.14 | 70.63 |  |  |
| Occasional Full time | 0.71 | 1.5 | 1.09 | 0.9 | 2.72 | 1.89 |  |  |
| Occasional Part Time | 4.45 | 1.39 | 2.98 | 1.35 | 4.14 | 2.87 |  |  |

Source: As in table 3.3
Also, a significant proportion of Muslim women both M-OBC and M-Others regardless of the place of residence wanted to undertake regular part time work, the proportions of which remaining higher for the upper caste Muslim women in the rural areas while for the MOBCs in the urban settings. Such patterns are reflective of the historical gendered norms whereby women have internalized their position of performing righteous duties for the household, the failure of which restricts a woman's social mobility. Hence, a higher proportion of women wanted to pursue regular part time work with which they have the time to manage their roles of caring and rearing of children, performing household responsibilities, religious duties etc.

### 3.10 Regional Variations

Further, considering Muslims to be a heterogeneous group with different spatial dimensions, table 3.17 discerns that the participation of Muslim females is better in the southern states analogous to the better participation rates across socio-religious groups in the southern part of the country. ${ }^{41}$ At the same time, it is pertinent to mention that even in the southern states, the absolute differentials are huge in terms of labour force participation. For the OBC Muslim women, Northeastern states ${ }^{42}$ provide second highest avenues for labour market participation while western states have better opportunities for the upper caste Muslim women. Western states also provides good avenues of participation for both M-Others and M-OBC women. It can be inferred that the position of Muslims taken together is better in the western and southern states which is broadly in line with the participation rates across communities. Thus, the analyses vindicates the claim that regional patterns may be able to better explain the variations in the labour market outcomes of women (Das 2006).

Table 3.17: Regional Dimensions of Female LFPR across Socio-Religious Groups (UPS: 15-65 Years), 2011

| Regions <br> $(\downarrow)$ | NM- <br> Others | NM-SC | NM-ST | NM- <br> OBC | M- <br> Others | M- <br> OBC | All <br> Muslims | All |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| North | 17.34 | 21.13 | 48.19 | 23.45 | 8.76 | 17.29 | 13.47 | 21.28 |
| Central | 12.63 | 19.64 | 45.44 | 20.49 | 12.70 | 11.35 | 11.80 | 19.93 |
| East | 10.22 | 17.12 | 30.39 | 8.25 | 15.63 | 8.56 | 12.99 | 13.29 |
| Northeast | 14.55 | 13.46 | 31.73 | 20.94 | 7.95 | 20.30 | 8.41 | 19.37 |
| West | 27.78 | 33.36 | 45.75 | 28.88 | 15.84 | 12.49 | 14.79 | 29.68 |
| South | 30.18 | 45.45 | 59.08 | 38.20 | 22.52 | 21.61 | 21.84 | 37.15 |
| Total | 19.11 | 26.33 | 42.28 | 25.76 | 14.32 | 14.74 | 14.54 | 24.23 |

Source: As in table 3.3

### 3.11 Summary of the Findings

Gender based inequality is omnipresent in the Indian labour market with acute participation differentials observed between the two sexes. Thus, while gender remains a pervasive axis of marginalization of women in employment, there are striking disparities witnessed across

[^29]the women belonging to different socio-religious groups. Muslim women both in rural and urban areas have miniscule participation rates even in comparison to the NM-Others women who are themselves reckoned to be experiencing huge restrictions as a way of status production of their households. Further, while Muslim women are under-represented in public sector in both rural and urban areas, the inequalities are striking particularly in the urban areas. Furthermore, intra-community differences in labour market participations are huge particularly in terms of the conditions of work. For the OBC castes among the Muslims, the fall in labour force participation witnessed in the year 2011 in urban areas can be attributed to an interplay of income effect, Ashrafization Hypothesis and fall in artisanal manufacturing. It is difficult to accurately measure which part has a dominant role to play and probably regional analysis can accord a better understanding to the observance of the above phenomenon.

# Chapter 4 <br> Discrimination or Endowment Differences: Analyzing the Wage Differentials for Muslim Women in the Indian Labour Market 

"The worst form of inequality is to try to make unequal things equal."
Aristotle

### 4.1 Introduction

World Economic Forum's Report (2016) establishes that it is going to take another 170 years for women to be paid analogous to men which can be explained both on account of discrimination, that is women with similar endowments receiving lower pay than men and women's concentration in low paid and part-time jobs. Given that women worldwide face disparities particularly in terms of economic participation and wages, India's poor performance in terms of the Estimated Earned Income (measured in US\$, PPP) parameter of the WEF Gender Gap Index (2016) where it stands at a dismal $137^{\text {th }}$ position out of 142 countries is all the more alarming. Besides this, India ranks 135 out of 144 countries in terms of its labour force participation rate (2016:196). ${ }^{43}$

Such pitiable performance in comparison to other countries is broadly reflective of India's patriarchal hegemony which regards of women's labour as insignificant and unimportant. ${ }^{44}$ In this regard, Hasan and Menon argue that there is not just a "statistical veil" (2004:123) over women's labor instead owing to the prevalent gender norms, men and women alike abstain from providing precise description of women's productive activities. To put it differently, women too have internalized the societal definition of their own work (Beaton 1982; Hasan and Menon 2004).

Given the paucity of data on actual contribution of women towards the economic activities, what the previous discussion still reveals is that the labour force participation rates for

[^30]women were significantly lower than those of men. Also, notable variations were observed across socio-religious categories of women workers with Muslim women workers both MOthers and M-OBCs experiencing utmost low rates. Further, since an individual's skills are expected to deteriorate with being unemployed or out of the labour force (Schultz 1961); the fluctuating labour force participation of women coupled with their low education levels is assumed to significantly impact earnings of women workers in general and Muslim women in particular. At the same time, it is possible that labour market discrimination against Muslim women both M-Others and M-OBCs with similar characteristics as that of NM-Other women results in lower wages being paid to them.

With this backdrop, the present chapter broadly examines the following questions:

1. Whether there are disparities in the wage work participation (regular and casual combined) of Muslim women (M-Others and M-OBCs) in comparison to both Muslim men and NM-Other women?
2. Whether there are wage work (regular and casual combined) earnings disparities for Muslim women (M-Others and M-OBCs) in comparison to both Muslim men and NMOther women?
3. Whether the disparities in earnings culminate into discrimination or the endowment effect of education is more prominent in explaining the wage differentials of Muslim women (M-Others and M-OBCs) when compared to NM-Other women?

For the present analysis, data from NSSO $68^{\text {th }}$ Employment-Unemployment has been used. In this regard, it is pertinent to specify the limitations regarding the data availability on the earnings of self-employed individuals in NSS. Since, the proportions of self-employed workers is quite high among Muslim women, the results presented provide a broad outline of the disparities and discrimination and cannot be generalized for the entire population. It is equally relevant to mention that the small sample size of Muslim women workers when bifurcated on the lines of caste makes it difficult to analyze the earnings disparities separately in the regular and the casual labour market. Thus, the regression results are augmented with descriptive statistics delving into the dynamics of the regular labour market.

The chapter delves into the following sections. Section 4.2 and section 4.3 scrutinize the theoretical formulations and empirical literature of the discourse on labour market discrimination respectively. Section 4.4 discusses the methodology of the study and section 4.5 provides a description of the variables. Section 4.6 explicates the econometric exercise evaluating the gender and socio religious disparities and discrimination experienced by the Muslim women compared to NM-Others women. Section 4.7 deals with the summary of the chapter.

### 4.2 Theoretical Underpinnings

Individuals invest in their education, training, health and other forms of knowledge enhancing activities with a perception that in addition to accentuating their earnings (Becker 1962; Schultz 1961), accumulated human capital would facilitate improvement in their occupations along with other non-monetary covert benefits (Becker 1992). Contrary to the perceived benefits of human capital if an individual owing to some group specific characteristics but with similar productive factors receives differential treatment in the labour market, then such a situation must be regarded as discrimination (Thorat 2008).

The discourse on labour market discrimination has numerous theoretical underpinnings. According to Becker (1957), employers may develop an aversion for individuals of a particular group owing to their demographic characteristics such as gender, race or class. Such a prejudiced understanding in certain situations may result in differential treatment during either the hiring process or may be reflected in lower wages being paid to the group which is independent of one's productive capabilities. Another neo-classical argument has been propounded by Phelps (1972) and Arrow (1973) who argue that in the absence of complete information regarding an individuals' characteristics, employers would resort to 'statistical discrimination' against workers of a particular group if group characteristics are assumed to be associated with performance. Incomplete information may result in stringent rules being applied to the members of a particular group owing to the cynicism regarding their group characteristics which may eventually lead to opinionated process in hiring and wages. Thus, judgements become subjective and employers may fail to see certain skills in an individual simply because they are not expected to be present in the members of a particular group.

Mincer and Polachek (1974) extends the above argument encapsulating the notion of gender. They argued that women acquire less human capital than men owing to their time allocation in the household production especially during child bearing and rearing. ${ }^{45}$ Thus, women's labour force participation follows a discontinuous pattern across her life-cycle which hampers her growth in productivity. Interrupted labour force participation is expected to be present in women as a group which justifies the employer's aversion in hiring them with the outcome of lower investment in women's education and eventually lower earnings. Thus, specialization theories with an assumption of women's discretionary choices to concentrate in the home sector tend to accept the sexual division of labour and consequent lower earnings of women as natural (Cain 1986).

But theories focusing on differential preferences of women in comparison to men fails to recognize that the inclinations women have are themselves a social construct and have direct linkages to the history of women as a social group and its evolution. In this regard, Schulman (1996) argues that firms tend to adapt a division of labour which is reflective of their external environment. In other words, if women are considered to be lower in status to the males, then the same structure would be followed within the organization as firms are receptive to the sentiments of their customers, suppliers, neighbors or the government. Thus, the labour market becomes a social construct and the social identities so fabricated are used to perpetuate the lower status of individuals (Piore 1983). It is implicative of the fact that discrimination has a multiplier effect. The result is that women may internalize their position to be relegated and hence they acquire less human capital and eventually discrimination becomes a "self-fulfilling prophecy" (Schulman 1996:58). In other words, there would be a vicious cycle of lower educational investment and hence, lower wages than men.

Although organizational hierarchies change with the evolution of gender and religious norms but as long as customs remain fixed, such standards will perpetuate within organizations. Jobs are given titles of low or high status, men or women, white or black and it is difficult to change them (Schulman 1996). For instance, the growth of capitalism

[^31]led to vertical organizational hierarchies with managerial jobs being reserved for males while clerical jobs of "serving mentality" (Reich et al 1973:360) being offered to females. The evolution was neither biological nor technical instead reinforced the prevalent gender hierarchies. Thus, women's labour market participation has either been fiddled with the needs and comforts of the ruling elites to extract maximum surplus by maintaining a reserve army of labour or has been distress driven. Be it the women during the Second World War who were drawn into the labour market to fill in for the men who would go for war (Beaton 1982) or the Indian women whose participation in the labour market during 2004 was agrarian distress-driven (Abraham 2009, 2013; Himanshu 2011; Thomas 2012); in both the circumstances, the idea of the modern woman was relinquished with the revival of men's income.

The same arguments for lower capital acquisition can be extended for the disadvantaged groups in the Indian labour market. On one hand, preconceived notions about a particular group be it women or minority reinforce the authority of majority group and that of males. On the other hand, social identities created in the process lead one to believe these social structures. For instance, if a minority group believes that they would be discriminated against in the labour market then they would not acquire the human capital necessary for the job. This problem accentuates for a minority women as she has to fight two realms one at the household level which devalues of women labour as being restricted to household work only and the other at the institutional level where she is thought of being discriminated against as she is a member of a minority group.

### 4.3 Empirical Literature

Despite women receiving higher returns than men in the labour market ${ }^{46}$ (Aslam 2007; Duraisamy 2002; Kingdon and Unni 2001; Singhari and Madheswaran 2016) there remains pervasive gender disparities (Chakraborty 2016; Chakraborty and Chakraborty 2010; Rani 2014; Kingdon and Unni 2001; Sengupta and Das 2014). For instance, Rani (2014) using IHDS-I (2004-05) established that women earn less than men both in the rural and urban segments of the market. Making use of the 1987-1988 employment round of NSSO for

[^32]urban Tamil Nadu and Madhya Pradesh, Kingdon and Unni (2001) found that despite approximately $16 \%$ higher returns of education for females than males, both female wage work participation and earnings were lower than that of males. Decomposing the earnings differential, they asserted that educational endowments could explain only $1-5 \%$ of the total gap in daily earnings between men and women and $35-45 \%$ of the gap was due to discrimination by employers. Similar results were established by Aslam (2007) using 2002 Pakistan Integrated Household Survey. All the methods used in the study - OLS, Heckman correction, 2SLS and household fixed effects exhibited lower earnings for females despite significantly higher returns for women's education. In a recent study, Chakraborty (2016) using 1993-94 and 2011-12 rounds decomposed the wage differentials between males and females and found that between the two rounds, the discrimination against females in the wage market increased from $57.1 \%$ to $62.9 \%$. Chakraborty and Chakraborty (2010) also found discrimination to account for a significant proportion of the total gender wage gap for the two districts of West Bengal - Murshidabad and South 24 Parganas. Thus, the gender discrimination in the labour market incentivize the households to allocate more funds for male education and less for females (Aslam 2007).

Studies have also established disparities in the earnings of Muslim workers in comparison to their non-Muslim counterparts. Considering ethnicity as an axis of exclusion, Dutta (2006) using 1983 to 1999 quinquennial NSSO employment rounds and current weekly status of individuals established that Muslim regular male workers in the age group of 15 to 65 years earned substantially lower wages and that the inequality increased in the one and half decade considered for the analysis. Using a micro-level study of recognized Bombay slums conducted in 1989, Khandker (1992) established that both Muslim men and women had lower earnings in self-employment than the individuals of other religions.

At the same time, few studies have also found little or no evidence of earnings disparities for Muslim workers. Working with IHDS- I (2004-05), Rani (2014) established that while being a Muslim worker in the age group of 10 to 60 years noticeably reduces earnings in urban India; opposite effect was prevalent in rural settings. Kingdom and Unni (2001) using NSS $43{ }^{\text {rd }}$ round data for the states of Tamil Nadu and Madhya Pradesh did not find any significant difference in the earnings of Muslim wage earners and others. In this regard,
studies attribute the lower earnings of Muslim workers to their poor education attainments. For instance, Bhaumik and Chakrabarty (2009) found little evidence of religious based discrimination against the Muslim community in comparison with their Hindu counterparts. Using the NSS rounds for the 1987-2005 period, the study established that major differences in the earnings gap could be attributed to education deficit among the Indian Muslims. Using four employment and unemployment surveys of the NSS spanning from the period of 1983 to 2012 for regular workers, Duraisamy and Duraisamy (2017) found that growth in real wages of Muslim workers has been less in comparison to nonMuslim upper caste, ST, SC and OBC. Decomposing the observed inequality using Blinder-Oaxaca Decomposition, the study found that while the component of labour market discrimination for Muslims increased between 1983 and 2012, a major part of it was on account of poor educational attainments. On the basis of the results, the study concluded that while there is no denying the fact that economic reforms have disproportionately benefitted upper caste non-Muslims in comparison to Muslims but at the same time lack of education particularly dearth of higher education in explaining the earnings differentials among Muslims cannot be ruled out. In this regard, both the studies argued for development policy prescriptions to facilitate higher education among the Muslim community.

There are a few studies undertaking an analysis for wage differentials of Muslim women in the Indian labour market. In a study using employment-unemployment NSSO rounds from 1983 to 2007-08, Bhalla and Kaur (2011) established that while being a Muslim female worker reduced earnings in the urban labour market by $19 \%$ in 1983, the gap narrowed to 3 percentage points in 2007-08. With a purpose to understand the multidimensionality of gender in the Indian labour market, Sengupta and Das (2014) constructed a pooled cross-section of 1993-94 and 2009-10 employment rounds of NSSO and analyzed the changes in the wage gap across gender, caste and religious categories over time. According to the usual principal activity status of an individual, Muslim women's wage work participation rate was lower but exhibited an improvement over the years. In addition, the gender gap in weekly earnings among regular Muslim workers (30\%) was more pronounced than among Hindus (27\%), though a slight reduction in the wage gap was witnessed for Muslims women compared to their male counterparts over the period under
study. The analysis concluded that owing to the religious customs and partly because of religious discrimination, Muslim women are located lower in hierarchy than their Hindu counterparts in the labour market. Similar findings have been made by Rani (2014). Her analysis discerns that while Muslim men earned $56 \%$ higher wages than Muslim women, the earnings disparity in other minorities was found to be approximately $24 \%$ in favor of males. Also, Bhaumik and Chakrabarty (2009) by decomposing the wage gap asserted that gender discrimination was more prevalent among the Muslims in comparison to Hindus.

Thus, while there is a consensus on the prevalence and perpetuation of gender wage disparities in the Indian labour market; the literature analyzing the wage differentials of Muslim workers remain segmented. But when the gender dimensions are analyzed simultaneous to religion (in the present case Islam), there is unanimity in the scholarly writings on the most marginalized earnings of Muslim women in comparison to their men. At the same time, it is pertinent to believe that the Muslim females lying at the intersection of their gender, religion and caste earn lower wages not just in comparison to the males of their communities but also NM-Other females. The wage discrimination of Muslim females undertaking their caste dimensions has not been analyzed in comparison to the females of other socio-religious groups, a lacuna in the literature which is attempted to be addressed in the chapter.

### 4.4 Methodology of the Study

### 4.4.1 Wage Equation and Some Methodological Impediments

Studies widely make use of the Mincerian semi-logarithmic earnings function propounded by Mincer (1974) to discern the returns to education and wage differentials (Agrawal 2011; Bhaumik and Chakrabarty 2009; Duraisamy 2002; Duraisamy and Duraisamy 2017; Kingdon and Theopold 2008; Kingdon and Unni 2001; Klasen and Pieters 2012; Madheswaran and Attewell 2007; Rani 2014; Sengupta and Das 2014; Singhari and Madheswaran 2016; Vatta et al 2016).

There are various pitfalls in using the linear version of the human capital earnings equation. One of the caveats which finds evidence in the literature is the omitted variable bias. Wages may be influenced both by observed and unobserved factors. While the human capital
variables i.e. completed level of schooling and potential job market experience of an individual are observed factors, variables especially innate ability, quality of schooling, family background, socio-economic characteristics and place of residence may also influence wages. Not accounting for such variables may result in returns being overestimated (Card 1999; Dougherty and Jimenez 1991; Psacharopoulos 1994). ${ }^{47}$ Thus, even after controlling for human capital variables, ability may exert an independent effect on earnings. Higher able agents can advance more from schooling than the less able ones, thereby generating higher returns for themselves. But at the same time such individuals are likely to drop out earlier from school in the quest for job if their ability of school progression is positively related to their ability to earn, thereby reducing their returns (Harmon et al 2003). Thus, ability may have a positive or negative impact on an individuals' labour market returns. In this regard, testing for ability using National Longitudinal Survey of Young Men in US for 1966 to 1970, Griliches (1977) found that the positive effect of ability on the estimated schooling coefficient was small and if schooling was treated analogous to ability, the direction of bias reverses. Card (1999) via a thorough review of literature upholds the finding that ability and other unobservable factors do not account for more than $10 \%$ of the difference in the estimated schooling coefficient. In the Indian context, Rani (2014) using IHDS-I (2004-05) data established that only the higher educated individuals were able to reap the benefits of English ability skills while the returns were either similar or there was no significant difference between the individuals with no, little or fluent English skills at lower levels of education. Thus, taking into consideration the observation of Heckman and Vytlacil (2000) that schooling and ability are so firmly related that it is difficult to measure their individual impact on earnings and with the data limitations in NSSO on an appropriate measure of ability, the present study does not take into account ability as a determining factor of wages.

Another estimation issue concerns the omission of quality of schooling and family background which may significantly influence the returns reaped by an individual. Dutta (2006) argues that although years of schooling takes into consideration the quality of

[^33]schooling such as poor quality of teaching will determine an individual's progression to the next level but the impact of family background variables in affecting the school quality decisions cannot be completely ruled out. Illustratively, Kingdon (1998) in a study of 993 households of urban Lucknow (Uttar Pradesh) for the year 1995 finds that after controlling for parents education, the returns to higher education gets reduced substantially. This is indicative of the fact that students with privileged backgrounds pursue higher education so that a significant part of their return can be attributed to their backgrounds. Agrawal (2011) using IHDS-I (2004-05) data and taking education level of the household head as an indicator of family background establishes that having a household head with a graduate degree is associated with at least $40 \%$ wage premium in comparison to having household head with illiterate or below primary level of education. ${ }^{48}$ In this regard, Psacharopoulos and Patrinos (2004) with their substantive study of empirical literature find that inclusion of instrumental variables (IV) such as family background produce results that are greater than those of OLS but whether it is on account of error of measurement or inadequate instruments remains unclear. In addition, Dutta (2006) argues that if we include social and religious background of an individual as a factor affecting an individual's wage, then the impact of bias of not controlling for family background remains less serious. Thus, the present study makes use of an individual's socio-religious affiliation as having a significant impact on wages. In addition, the analysis also controls for an individual's place and state of residence.

Another complicated estimation issue is that of the selectivity bias which can be considered to be a specific form of omitted variable bias. Wage earners are a non-randomly selected sub-group of the population as data also contains unemployed and out of labour force individuals for whom the wage is not observed. Problem is further compounded in India owing to the presence of a significant proportion of self-employed individuals for whom NSSO does not collect information on wages. In such circumstances, sample becomes incidentally truncated (Wooldridge 2002) as we observe the wage offer only for those who participate in wage work. Estimating the wage determinants from a non-randomized

[^34]sample is bound to jeopardize the accuracy of the model by creating biasness in the results. To correct for the sample selection bias, two-step procedure proposed by Heckman (1976, 1979) is used.

### 4.4.2 Heckman Procedure

To correct for the selectivity bias, the present analysis uses the Heckman two-step procedure. The first step uses the probit maximum likelihood method for estimating the participation equation using all the observations in the sample. In the second stage, the wage equation is estimated only for those individuals for whom the wages are realized i.e. for the uncensored observations. In addition, for Heckman technique to give precise results, there should be at least one variable which affects an individual's decision to participate in wage work but has no impact on wages (Wooldridge 2002). Such variables are referred to as the identifying variables. The method is discussed as follows:

## Stage I: Participation Equation (Relationship between Education and Wage Work Participation)

In the labour market, an individual ' $i$ ' will only work if that person receives an amount at least equal to his/her reservation wage. In other words,

$$
\mathrm{zi}_{\mathrm{i}}{ }^{*}=\mathrm{x}_{\mathrm{i}} \gamma+\varepsilon_{\mathrm{i}}
$$

where $\mathrm{z}_{\mathrm{i}}{ }^{*}$ is the difference between an individual's offer wage and reservation wage, $\mathrm{x}_{\mathrm{i}}$ is a set of explanatory variables and $\varepsilon_{\mathrm{i}}$ is the error term, $\varepsilon_{\mathrm{i}}, \sim \mathrm{N}\left(0, \sigma_{\varepsilon}^{2}\right)$. But we actually do not observe $\mathrm{z}^{*}$, instead we observe a dichotomous variable lfp which takes the value 1 if an individual participates in wage work and 0 if not i.e.

$$
\begin{aligned}
\text { lfp }= & 1 \text { if } \mathrm{z}_{\mathrm{i}}{ }^{*}>0 \\
& 0 \text { if } \mathrm{z}_{\mathrm{i}}{ }^{*}<=0
\end{aligned}
$$

Thus, the wage function is realized only if $\mathrm{z}_{\mathrm{i}}{ }^{*}$ is positive. Thus, the first step in estimating the earnings is the estimation of the probit equation of participation in wage work. Following form of probit model specification is used:

$$
\begin{equation*}
\mathrm{lfp}_{\mathrm{i}}=\mathrm{Z}_{\mathrm{i}} \Phi+\varepsilon_{\mathrm{i}} \tag{1}
\end{equation*}
$$

where lfp takes the value of 1 if an individual participates in wage work and 0 if not, Z is a set of explanatory and identifying variables summarized in table 4.1 and $\varepsilon_{\mathrm{i}} \sim \mathrm{N}\left(0, \sigma_{\varepsilon}^{2}\right)$.

From the estimation of the probit equation, selection variable called the inverse mills ratio $(\lambda)$ is generated.

## Stage II: Wage Equation (Relationship between Education and Earnings)

The earnings equation ${ }^{49}$ uses the inverse mills ratio obtained from equation (1) as an additional regressor to eliminate the impact of the correlation between wages and the error term. The following form of Mincerian earnings function (Mincer, 1974) was used to fit the wage equation:

$$
\begin{equation*}
\log _{-} \text {wage }_{i}=\beta_{0}+\beta_{1} \text { age }+\beta_{2} \text { age_sq }+\sum_{k} \gamma_{\mathrm{k}} S_{\mathrm{ik}}+\sum_{\mathrm{j}} \delta_{\mathrm{j}} \mathrm{x}_{\mathrm{ij}}+\alpha\left(\lambda_{\mathrm{i}}\right)+\mu_{\mathrm{i}} \tag{2}
\end{equation*}
$$

where natural logarithm of daily wages of worker ' $i$ ' is the dependent variable, $S_{i k}$ depicts a categorical variable for ' $k$ ' levels of education, $\mathrm{x}_{\mathrm{j}}$ is a set of explanatory variables, $\lambda$ is the inverse mills ratio estimated from the first stage probit results and $u_{i} \sim N\left(0, \sigma^{2}{ }_{u}\right)$. The variable used in equation 2 are summarized in table 4.1.

### 4.5 Selection of Variables

The inter-socio-religious and gender wage gap for individuals in the age group of 15-65 years has been computed using the daily wages and usual principal activity status (UPS) of an individual. ${ }^{50}$ The individuals for whom there were missing observation on wages were dropped from the analysis. ${ }^{51}$ Age has been used as a proxy for experience ${ }^{52}$ and square of age has been used to capture the curvilinear impact of age on earnings i.e. the possible decreasing returns to human capital after reaching the peak of one's career (Bhaumik and

[^35]Chakrabarty 2009; Chakraborty 2016; Kingdon and Theopold 2008; Klasen and Pieters 2012; Madheswaran and Attewell 2007; Sengupta and Das 2014; Singhari and Madheswaran 2016). ${ }^{53}$ The variables considered for the analysis are summarized in table 4.1.

Table 4.1: Variables Description

| VARIABLE | ABBREVIATION | DEFINITION |
| :--- | :---: | :--- |
| OUTCOME VARIABLE | log_wage | $\begin{array}{l}\text { Natural Logarithm of daily wages in } \\ \text { rupees. The weekly wages (both in cash } \\ \text { and kind) are divided by total number of } \\ \text { days worked in a week to arrive at the } \\ \text { daily wages }\end{array}$ |
| Wage Equation) |  |  |\(\left.\quad \begin{array}{l}Participation in wage work in Usual <br>

Principal Activity Status (Codes 31, 41 <br>
and 51) <br>
Participation in wage work 1, self- <br>
employed, unemployed and out of labor <br>
force 0\end{array}\right]\)

[^36]| VARIABLE | ABBREVIATION | DEFINITION |
| :---: | :---: | :---: |
| NM-Others | M-Others | Muslim Others |
|  | M-OBC | Muslim OBC/ST/SC |
| Geographic Location Factors: |  |  |
| Sector <br> Reference Category: <br> Rural | Sector | urban |
| Region ${ }^{54}$ <br> Reference Category: <br> North | Central |  |
|  | East |  |
|  | northeast |  |
|  | west |  |
|  | south |  |
| Exclusion Restrictions (Used only in Work Participation Equation) |  |  |
| Household Size | hh_size | Number of persons in the household |
| Number of children in the household Omitted Category: No child | child1 | One child |
|  | child2 | Two children |
|  | child3 | Three or more children |
| Old | Old | Number of individuals with age above 65 in the household |

The participation equation also includes variables which are excluded from the wage equation. The identifying variables used in the literature are non-labour income possessed by an individual, ownership of land, household size, number of children and elderly in the household. It has been observed that the presence of a large number of dependents in the household makes working adults particularly women to substitute wage work for flexible work forms such as self-employment or informal employment (Kingdon and Theopold 2008). In addition, individuals with non-labour income and land ownership are less likely to participate in wage work. In this regard, Dutta (2006) observes that land ownership may turn out to be endogenous to both employment and wages. In addition, it is not a good identifier in the urban context. Since, NSSO data does not provide information on nonlabour income of an individual, the present analysis uses household size, elderly above 65 and dummy variable on the number of children in the household as variables having an impact on the labour force participation but no impact on wages. The dummy variable takes the value of $0,1,2,3$ if the household has no child, one child, two child or more than three children respectively. Similar dummies have been used by Dutta (2006) and Singhari and Madheswaran (2016) in the Indian context.

[^37]
### 4.6 Econometric Exercise

### 4.6.1 Augmented Mincer and Heckman Procedure

### 4.6.1.1 Model I: Setting the Context

Model I depicts the estimates of the Heckman corrected augmented wage work participation and wage equation separately for males and females. It does not include the socio-religious controls but proves to be the starting point for analyzing the gendered dimensions of wage work participation and human capital. ${ }^{55}$

Erstwhile discussion reveals that to correct for sample selection bias, a probit regression is to be estimated over the entire sample to account for the unobserved wages of nonparticipants in wage work. The estimation results depicts that the Inverse Mills Ratio ( $\lambda$ ) (part I (a, b, c), appendix table A4.4) is statistically significant implying the presence of selectivity bias. At the same time, a statistically significant Wald chi-square test ${ }^{56}$ depicts that the selection process is not randomized. In other words, the unobservable variables (captured in the error term) in stage I probit equation are correlated with the error term of the OLS wage equation thereby manifesting the use of Inverse Mills Ratio ( $\lambda$ ) to be added to the wage equation as an additional regressor. Thus, the selectivity corrected wage equation has been depicted for all the three variants of model I whose results are discussed in the following subsection.

WWP Equation: Estimated Model I (Part I - a, b and c) portrays that in comparison to illiterates, the participation in wage work is lower for those with primary level of education. In fact, wage work participation remains less than that of illiterates for all education levels until higher secondary and the coefficient turns positive only for the graduate and above education levels. The findings are in line with other Indian studies (Agrawal 2011; Kingdon and Unni 2001; Sengupta and Das 2014). Thus, for both males and females, wage-work participation follows a U-shaped pattern with education levels. Further, individuals with

[^38]technical education are more likely to participate in wage work in comparison to people with no technical degrees.

Being currently married significantly reduces the wage work participation of women while the opposite effects are realized for men. The observed pattern can be explained on account of the perceived antithetical duties of men and women i.e. men handling the greater financial responsibilities post marriage (Agrawal 2011; Dutta 2006) while women being in the domestic spheres managing the household chores (Kingdon and Unni 2001). Also, a married woman's wage work participation may be severely affected by the prevailing customs (Kingdon 1998).

Further discussing the geographic location factors, the individuals residing in urban areas had higher chances of being in wage work than their rural compeers which can probably be explained on account of better opportunities of finding wage work in urban areas. But for females, the coefficient was not statistically significant which may be because of the need based casual work to which women resort to for livelihood in rural settings. In addition, the likelihood of wage work participation increases if a male resides in southern and western states in comparison to the north although the coefficient for western states is insignificant. While the similar effects for females are quite different. Females in the northeast, west and south are more likely than their northern counterparts to seek wage work. Such a pattern reinforces the belief that northern states are more patriarchal and conservative which significantly constrains a woman's public participation particularly her employment outcomes, a finding analogous to the one observed by Das (2004; 2006).

The exclusion restrictions used for identifying the wage equation are statistically significant and have expected signs in Model I (Part I - a). Members of large households with presence of elderly are less likely to have wage work affiliations. At the same time, the coefficients of one, two and three children dummies are positive and significant implicative of the survival effect owing to which individuals with more children have to work more to fulfill their basic necessities. But once such effects are segregated by gender, the study recognizes that the presence of children has opposite influence on men and women. For males, the increase in the number of children, significantly improved their likelihood of participation in wage work. Juxtaposed women were less likely to seek wage
work if they had children although the coefficient turns positive and insignificant if the household had three or more children. The insignificance of more number of children on WWP of women may be indicative of the child care responsibilities extended by the Indian joint family structures or the survival effect which drives poor women with more children into the workforce or a cumulative effect of both (Das 2006; Kingdon 1998).

Wage Equation: The coefficients of the selectivity corrected wage equation depicts a positive relationship between age and earnings and an adverse effect of square of age on wages. The pattern is in conformity with the human capital theories which predict that initially with the increase in age, individuals derive knowledge and on the job skills which results in improvement in wages but at a later stage, such productivity gains are offset by age-driven efficiency losses.

The marginal effect of education on wages is a monotonically increasing function of education levels. In other words, in contrast to illiterates, there is an enhancement in wages with each subsequent level of education with the maximum being earned by those with graduate and above level of education. In addition, individuals with technical degrees command superior wages than those with no technical education.

Further, married individuals earn higher wages than their non-married counterparts. Individuals both male and female residing in urban areas have better wages than those in rural areas. This may be on account of poor implementation of Minimum Wages Act in rural areas (Karan and Selvaraj 2008). Except for the north-east, the wages are low across other state-regions in comparison to the northern states.

Model I offers a preliminary evidence of the differential patterns of wage work participation and earnings for men and women when the socio-religious categories are not controlled for. The next model gauges at the labour market participation and earnings differential of Muslim-Others and M-OBCs in general and with the women of their respective communities in particular.

### 4.6.1.2 Model II: Gender Disparities in Earnings

Similar to Model I, a statistically significant Inverse Mills Ratio ( $\lambda$ ) (part I, table 4.2) and Wald chi-square test ${ }^{57}$ validate the use of selectivity corrected Mincer wage equation for estimation purposes. ${ }^{58}$

WWP Equation: A statistically significant negative coefficient for each of the interaction of socio-religious variable with the females of their respective categories even after controlling for education, household and geographic location factors suggests that in comparison to males, the wage work participation of females is lower. Further, wage work participation was higher for all socio-religious categories in contrast to NM-Others individuals. In this regard, Kingdon (1998) established that males wage work participation is orthogonal to their caste affiliations. In fact for both the M-Others and M-OBCs, wage work participation was more than for those of the NM-Others. The results presented here are in contrast to the generally held notion that the Indian Muslims with artisanal bequests are more likely to be in self-employment than other communities. Consequently, they are less likely to be in wage work (Basant 2012; Das 2004; Hasan 2016; Hasan and Menon 2004; Robinson 2007; GoI, SCR 2006). In this regard, appendix table A4.5 offers useful insights. Although the participation in self-employment is higher across socio-religious communities, the casualization is approximately 13 percent higher for the Muslim 'Others' in comparison to NM-Others while the analogous figure for the OBCs of the Muslim community was 18 percentage points. Since, the data used in Model II includes both the regular and casual wage earners, hence, higher affiliations to wage work for Muslims may be on account of such an inclusion. Casualization among Muslims has been studied extensively in the literature. For instance, Borooah et al (2007) based their analysis on NSS $55^{\text {th }}$ round and found that in comparison to forward caste Hindus, the probability of being in self-employment and casual employment was higher for both the Muslim OBCs and other Muslim men in the age group of 25 to 45 years. Similarly, Das (2008) in her study on Minority Enclaves using NSS $61{ }^{\text {st }}$ round data found that Muslim men with a perception

[^39]of discrimination in the regular labour market had a higher chance of engaging in non-farm self-employment. At the same time, if they acquire secondary and above education, they were more likely to be in casual wage work. In a primary survey conducted in the state of Uttar Pradesh during October 2014 to April 2015, Trivedi et al (2016) established that across the three generations - grandfather, father and respondent's generation; the inclination of Muslims has shifted towards being unskilled non-agricultural labourers with the percentages remaining higher for the backward caste Muslims in comparison to the upper castes of their communities.

Table 4.2: Estimates of Wage Work Participation and Selectivity Corrected Wage Equation depicting Gender Disparities (UPS: 15-65 Years), 2011

| VARIABLES | PART I WWP Equation | PART II OLS Wage Equation | PART III <br> Selectivity Corrected Wage Equation |
| :---: | :---: | :---: | :---: |
| age |  | $\begin{aligned} & \hline 0.0383^{* * *} \\ & (0.00153) \end{aligned}$ | $\begin{gathered} \hline 0.0381^{* * *} \\ (0.00153) \end{gathered}$ |
| age_sq |  | $\begin{gathered} -0.000295 * * * \\ (.000019) \end{gathered}$ | $\begin{gathered} -0.000292 * * * \\ (.000019) \end{gathered}$ |
| Pri | $\begin{gathered} -0.0586 * * * \\ (0.00969) \end{gathered}$ | $\begin{aligned} & 0.141 * * * \\ & (0.00855) \end{aligned}$ | $\begin{aligned} & 0.148 * * * \\ & (0.00865) \end{aligned}$ |
| Mid | $\begin{aligned} & -0.223 * * * \\ & (0.00861) \end{aligned}$ | $\begin{aligned} & 0.264 * * * \\ & (0.00783) \end{aligned}$ | $\begin{aligned} & 0.289 * * * \\ & (0.00871) \end{aligned}$ |
| Sec | $\begin{aligned} & -0.341 * * * \\ & (0.00917) \end{aligned}$ | $\begin{aligned} & 0.452 * * * \\ & (0.00843) \end{aligned}$ | $\begin{gathered} 0.490^{* * *} \\ (0.0102) \end{gathered}$ |
| higher_sec | $\begin{gathered} -0.280^{* * *} \\ (0.0102) \end{gathered}$ | $\begin{aligned} & 0.712 * * * \\ & (0.00942) \end{aligned}$ | $\begin{gathered} 0.745^{*} * * \\ (0.0106) \end{gathered}$ |
| Grad | $\begin{aligned} & 0.283 * * * \\ & (0.0100) \end{aligned}$ | $\begin{aligned} & 1.157 * * * \\ & (0.00817) \end{aligned}$ | $\begin{aligned} & 1.129 * * * \\ & (0.00926) \end{aligned}$ |
| tech_edu | $\begin{gathered} 0.247 * * * \\ (0.0198) \end{gathered}$ | $\begin{gathered} 0.275^{* * *} \\ (0.0138) \end{gathered}$ | $\begin{gathered} 0.251 * * * \\ (0.0144) \end{gathered}$ |
| NM-SC | $\begin{gathered} 0.512 * * * \\ (0.0113) \end{gathered}$ | $\begin{gathered} -0.0899 * * * \\ (0.00866) \end{gathered}$ | $\begin{gathered} -0.139 * * * \\ (0.0114) \end{gathered}$ |
| NM-ST | $\begin{gathered} 0.261^{* * *} \\ (0.0128) \end{gathered}$ | $\begin{gathered} -0.0271 * * * \\ (0.0103) \end{gathered}$ | $\begin{gathered} -0.0527 * * * \\ (0.0111) \end{gathered}$ |
| NM-OBC | $\begin{gathered} 0.0691 * * * \\ (0.00946) \end{gathered}$ | $\begin{aligned} & -0.102 * * * \\ & (0.00785) \end{aligned}$ | $\begin{aligned} & -0.107 * * * \\ & (0.00795) \end{aligned}$ |
| M-Others | $\begin{gathered} 0.0947 * * * \\ (0.0145) \end{gathered}$ | $\begin{gathered} -0.0405^{* * *} \\ (0.0122) \end{gathered}$ | $\begin{gathered} -0.0431 * * * \\ (0.0123) \end{gathered}$ |
| M-OBC | $\begin{aligned} & 0.172 * * * \\ & (0.0152) \end{aligned}$ | $\begin{aligned} & 0.00481 \\ & (0.0124) \end{aligned}$ | $\begin{aligned} & -0.00365 \\ & (0.0125) \end{aligned}$ |
| NM-Others_female | $\begin{gathered} -1.026^{* * *} \\ (0.0121) \end{gathered}$ | $\begin{gathered} -0.392 * * * \\ (0.0130) \end{gathered}$ | $\begin{gathered} -0.274 * * * \\ (0.0218) \end{gathered}$ |
| NM-SC_female | $\begin{gathered} -1.203 * * * \\ (0.0141) \end{gathered}$ | $\begin{gathered} -0.466^{* * *} \\ (0.0135) \end{gathered}$ | $\begin{gathered} -0.337 * * * \\ (0.0235) \end{gathered}$ |


| VARIABLES | PART I WWP Equation | PART II OLS Wage Equation | PART III <br> Selectivity Corrected Wage Equation |
| :---: | :---: | :---: | :---: |
| NM-ST_female | -0.914*** | -0.304*** | -0.201*** |
|  | (0.0159) | (0.0163) | (0.0223) |
| NM-OBC_female | -0.998*** | $-0.469^{* * *}$ | -0.356*** |
|  | (0.0103) | (0.0108) | (0.0198) |
| M-Others_female | -1.277*** | $-0.538 * * *$ | -0.388*** |
|  | (0.0249) | (0.0300) | (0.0374) |
| M-OBC_female | -1.408*** | $-0.589^{* * *}$ | -0.429*** |
|  | (0.0253) | (0.0300) | (0.0382) |
| marital_status | 0.264*** | 0.103*** | 0.0754*** |
|  | (0.00638) | (0.00696) | (0.00811) |
| Urban | 0.183*** | 0.127*** | 0.106*** |
|  | (0.00590) | (0.00513) | (0.00602) |
| Region |  |  |  |
| Central | -0.142*** | -0.319*** | -0.303*** |
|  | (0.00976) | (0.00882) | (0.00921) |
| East | -0.0775*** | -0.224*** | -0.218*** |
|  | (0.00956) | (0.00850) | (0.00859) |
| Northeast | -0.156*** | 0.0400*** | 0.0556*** |
|  | (0.0113) | (0.0102) | (0.0105) |
| West | $0.160 * * *$ | $-0.180 * * *$ | -0.198*** |
|  | (0.0103) | (0.00894) | (0.00939) |
| South | 0.260*** | -0.0510*** | -0.0835*** |
|  | (0.00935) | (0.00803) | (0.00941) |
| Exclusion Restrictions |  |  |  |
| No. of Children |  |  |  |
| child1 | 0.0902*** |  |  |
|  | (0.00750) |  |  |
| child2 | $0.120 * * *$ |  |  |
|  | (0.0116) |  |  |
| child3 | 0.212*** |  |  |
|  | (0.0238) |  |  |
| old | 0.0140** |  |  |
|  | (0.00705) |  |  |
| hh_size | $-0.0722 * * *$ |  |  |
|  | (0.00142) |  |  |
| lambda | -0.151*** |  |  |
|  | (0.0223) |  |  |
| rhosigma | -0.23581 |  |  |
|  | . 64161034 |  |  |
| Constant | $-0.346 * * *$ | 4.114*** | 4.309*** |
|  | (0.0138) | (0.0279) | (0.0401) |

Robust standard errors in parentheses
*** $\mathrm{p}<0.01$, ** $\mathrm{p}<0.05$, * $\mathrm{p}<0.1$

Wage Equation: For estimated Model II, selectivity corrected wage equation has been reported in part III of table 4.2. ${ }^{59}$ Both the augmented Mincer (OLS, part II table 4.2) and selectivity corrected wage equation portrays that age and age square variables are significant and have expected signs as per the human capital theory. ${ }^{60}$ The marginal wage gap for education levels portrays a pattern similar to the one observed in the previous models. In other words, with each education level completed, there is an improvement in the wages earned. But a careful scrutiny of Model I (a) and Model II brings to light an interesting observation. Model II which includes variables on socio-religious affiliations exhibits lower marginal effects to education levels than the specification which had no such controls. As Rani (2014) observed that since such groups are marginalized in the Indian context, their inclusion into the earnings models reduces the average returns to education.

Further, all socio-religious communities experience significantly lower earnings in the labour market than those of NM-Others individuals with the coefficient being insignificant only for those of Muslim OBCs. The finding that Muslim community as a whole faces no severe disparities in earnings is not unique to this study. Rani (2014) using IHDS-I (200405) data established that being a Muslim in the rural settings conferred better wages to the community and that the urban settings withheld higher disparities. Kingdon and Unni (2001) using NSS $43^{\text {rd }}$ round (1987-88) established that Muslims in both the states of Tamil Nadu and Madhya Pradesh considered for the analysis had no significant wage differentials. Dutta's study (2006) analyzing NSSO rounds of 1983, 1993 and 1999 found that the Muslim casual wage workers earned higher wages across the three time periods while those in regular wage work faced severe disparities. The result that M-Others experience disparities in wage work earnings while the OBCs of their community do not is striking. This probably can be explained with the help of table A4.6 which distinguishes the wage earnings of socio-religious communities by regular and casual work. The table depicts that the individuals of $\mathrm{M}-\mathrm{OBC}$ castes earn higher relative wages, better even in comparison to the individuals of NM-Others in the casual labour market while the same is not true for M-Others. It might be a possibility that M-OBCs do not have entrepreneurial linkages as much as their M-Others counterparts and hence, remain engaged either as petty

[^40]traders, skilled or unskilled casual labourers. Given the data limitations, it is not possible to discern the lucrativeness of the self-employment opportunities with which M-OBCs associate themselves with as NSS does not provide data on earnings of the self-employed. Hence, generalizing the aforementioned results for the entire population can prove to be misleading.

Further, the interaction of the sex variable with the socio-religious variable indicates the presence of gender disparities in earnings across all the categories considered for the analysis. Further, controlling for the education, geographic location, marital status and experience (proxied by age) factors, while NM-Others females earn approximately $27 \%$ less than the males of their communities, the corresponding figures for the M-Others and M-OBC were 39 and 43 percent respectively. In other words, the gender disparities are most stark among the Muslim OBCs.

The above analysis reveals that females across all categories experience disparities in earnings in comparison to the males of their respective communities. The next model compares the labour market participation and earnings differential of M-Others and MOBC women with those of NM-Others. This will accord a better understanding of the relative position of the Muslim women in the Indian labour market.

### 4.6.1.3 Model III: Socio-Religious Disparities in Earnings

Analogous to the previous models, a statistically significant Inverse Mills Ratio ( $\lambda$ ) (part I, table 4.3) and Wald chi-square test ${ }^{61}$ validate the use of selectivity corrected Mincer wage equation for estimation purposes. ${ }^{62}$

WWP Equation: In line with a priori expectations, male participants across socio-religious categories had higher wage work affiliations that those of the NM-Others females. Further, the participation coefficients were positive for the women of all backward caste females in

[^41]comparison to those of the NM-Others. ${ }^{63}$ In addition, stage I probit results indicate that the participation of Muslim females both 'Others' and 'OBCs' was lower with respect to their NM-Others female equivalents. The results are commensurate with that of other studies (Das 2004; Hasan and Menon 2004; Rastogi 2007; Khan 2015).

Table 4.3: Estimates of Wage Work Participation and Selectivity Corrected Wage Equation depicting Socio-Religious Disparities (UPS: 15-65 Years), 2011

| VARIABLES | PART I <br> WWP Equation | PART II OLS Wage Equation | PART III <br> Selectivity Corrected Wage Equation |
| :---: | :---: | :---: | :---: |
| Age |  | 0.0383*** | $0.0381^{* * *}$ |
|  |  | (0.00154) | (0.00153) |
| age_sq |  | -0.000295*** | -0.000292*** |
|  |  | (.0000196) | (.000019) |
| Pri | -0.0586*** | $0.141^{* * *}$ | 0.148*** |
|  | (0.00969) | (0.00757) | (0.00865) |
| Mid | -0.223*** | 0.264*** | 0.289*** |
|  | (0.00861) | (0.00721) | (0.00871) |
| Sec | -0.341*** | 0.452*** | 0.490*** |
|  | (0.00917) | (0.00858) | (0.0102) |
| higher_sec | -0.280*** | 0.712*** | 0.745*** |
|  | (0.0102) | (0.0103) | (0.0106) |
| Grad | 0.283*** | $1.157 * * *$ | $1.129 * * *$ |
|  | (0.0100) | (0.00878) | (0.00926) |
| tech_edu | 0.247*** | 0.275*** | 0.251*** |
|  | (0.0198) | (.0165) | (0.0144) |
| NM-SC Female | 0.335*** | -0.164*** | -0.202*** |
|  | (0.0151) | (0.0196) | (0.0179) |
| NM-ST Female | 0.373*** | 0.0614*** | 0.0210 |
|  | (0.0167) | (0.0213) | (0.0197) |
| NM-OBC Female | 0.0972 *** | -0.179*** | -0.189*** |
|  | (0.0131) | (0.0181) | (0.0154) |
| M-Others Female | -0.156*** | -0.186*** | -0.157*** |
|  | (0.0237) | (0.0371) | (0.0307) |
| M-OBC Female | -0.209*** | -0.192*** | -0.159*** |
|  | (0.0240) | (0.0374) | (0.0309) |
| NM-Others Male | $1.026^{* * *}$ | 0.392*** | 0.274*** |
|  | (0.0121) | (0.0162) | (0.0218) |
| NM-SC Male | $1.539 * * *$ | 0.302*** | 0.135*** |
|  | (0.0133) | (0.0162) | (0.0281) |
| NM-ST Male | 1.288*** | 0.365*** | 0.222*** |
|  | (0.0147) | (0.0170) | (0.0258) |

[^42]| VARIABLES | PART I WWP Equation | PART II OLS Wage Equation | PART III Selectivity Corrected Wage Equation |
| :---: | :---: | :---: | :---: |
| NM-OBC Male | 1.096*** | 0.290*** | 0.167*** |
|  | (0.0118) | (0.0159) | (0.0223) |
| M-Others Male | 1.121*** | 0.352*** | $0.231 * * *$ |
|  | (0.0162) | (0.0182) | (0.0239) |
| M-OBC Male | 1.198*** | 0.397*** | 0.271*** |
|  | (0.0167) | (0.0182) | (0.0247) |
| marital_status | 0.264*** | 0.103*** | 0.0754*** |
|  | (0.00638) | (.00720) | (0.00811) |
| Urban | 0.183*** | 0.127*** | 0.106*** |
|  | (0.00590) | (0.00522) | (0.00602) |
| Regions |  |  |  |
| Central | -0.142*** | -0.319*** | -0.303*** |
|  | (0.00976) | (0.00889) | (0.00921) |
| East | -0.0775*** | -0.224*** | -0.218*** |
|  | (0.00956) | (0.00876) | (0.00859) |
| Northeast | -0.156*** | 0.0400*** | 0.0556*** |
|  | (0.0113) | (0.0103) | (0.0105) |
| West | 0.160*** | -0.180*** | -0.198*** |
|  | (0.0103) | (0.00896) | (0.00939) |
| South | 0.260*** | -0.0510*** | -0.0835*** |
|  | (0.00935) | (0.00795) | (0.00941) |
| Exclusion Restrictions |  |  |  |
| No. of Children |  |  |  |
|  | (0.00750) |  |  |
| child2 | 0.120 *** |  |  |
|  | (0.0116) |  |  |
| child3 | 0.212*** |  |  |
|  | (0.0238) |  |  |
| old | 0.0140** |  |  |
|  | (0.00705) |  |  |
| hh_size | -0.0722*** |  |  |
|  | (0.00142) |  |  |
| lambda | -0.151*** |  |  |
|  | (0.0223) |  |  |
| Constant | -1.372*** | $3.722 * * *$ | 4.035*** |
|  | (0.0153) |  | (0.0551) |

Robust standard errors in parentheses *** $\mathrm{p}<0.01$, ** $\mathrm{p}<0.05$, * $\mathrm{p}<0.1$

Wage Equation: While the males across socio-religious categories earn higher wages than the NM-Others females, only the women of the ST community command a wage greater than their NM-Others counterparts. Further, the earnings inequalities to the detriment of
the Muslim women both M-Others and M-OBC in comparison to the NM-Others females was approximately $16 \%$.

The above analysis details that Muslim women both M-Others and M-OBCs remains relegated in wage work both in terms of earnings and participation and compared to both the males of their community and NM-Others females. A final step in this regard would be to analyze how much of the wage differentials between the women of the NM-Others and those of M-Others and M-OBCs can be explained.

### 4.6.2 How much of the socio-religious wage gap can be explained?

The linear Blinder-Oaxaca decomposition (Oaxaca 1973; Blinder 1973) has been used for analyzing the differences in the wage earnings of NM-Others females and those of the MOthers and M-OBCs. Here, the outcome variable is the natural logarithm of nominal daily wages of female ' $i$ ' (ln y). The Predictor Variable is socio-religious affiliation. The following equation provides the gap in the daily mean earnings between NM-Others and Muslim 'Others' (OBC) females:

$$
\begin{aligned}
\ln y^{\text {NM-Others Fem }}-\ln y^{\text {M-Others/M-OBC Fem }}= & \beta^{\text {NM-Others Fem }} x^{\text {NM-Others Fem }}- \\
& \beta^{\text {M-Others/M-OBC Fem }} x^{\text {M-Others/M-OBC Fem }}
\end{aligned}
$$

where $\mathrm{x}^{\mathrm{NM} \text {-Others Fem }}$ and $\mathrm{x}^{\text {M-Others/M-OBC Fem }}$ are the vectors of the human capital variables i.e. age, square of age, five education levels, marital status, technical education, sector and states for NM-Others females and Muslim 'Others' (OBC) caste females estimated at their respected means and $\beta$ s are the parameters estimated from augmented Mincer wage equation.

Further using the Blinder-Oaxaca decomposition, we can discern the part of the wage gap that can be explained i.e. is owing to the explanatory variables (X's) and the part that remains unexplained and is due to $\beta$ 's (discrimination). Mathematically, this can be written as:
$\ln \mathrm{y}^{\mathrm{NM}-\text { Others Fem }}-\ln \mathrm{y}^{\text {M-Others/M-OBC Fem }}=\Delta \mathrm{x} \beta^{\mathrm{NM}-\text { Others Fem }}+\Delta \beta \mathrm{x}^{\text {M-Others/M-OBC Fem }}$
where $\Delta x=X^{\text {NM-Others Fem }}-X^{M-o t h e r s / M-O B C ~ F e m ~(e x p l a i n e d ~ c o m p o n e n t) ~ a n d ~} \Delta \beta=\beta^{N M-O t h e r s ~ F e m ~}$ $-\beta^{\text {M-Others/M-OBC Fem }}$ (unexplained component). Such a decomposition assumes that the discrimination in the labour market is against M-Others (OBC) females and there is no positive discrimination for NM-Others females. In such circumstances, NM-Others wage structure would prevail in the labour market. At the same time, if there is over payment to certain groups greater than their productivity then the decomposition would be of the following form:

$$
\ln \mathrm{y}^{\text {NM-Others Fem }}-\ln \mathrm{y}^{\text {M-Others/M-OBC Fem }}=\Delta \mathrm{x} \beta^{\text {M-Others/M-OBC Fem }}+\Delta \beta \mathrm{x}^{\text {NM-Others Fem }}
$$

In this regard, the literature seems divided over the type of the wage structure that should be used (Kingon and Unni 2001; Duraisamy and Duraisamy 2017). Models based on the weighted sum as the one proposed by Oaxaca and Ransom (1994) have also been used in the literature. The model takes the following form:

$$
\begin{array}{r}
\ln \mathrm{y}^{\text {NM-Others Fem }}-\ln \mathrm{y}^{\text {M-Others/M-OBC Fem }}=\left\{\mathrm{E}\left(\mathrm{X}_{\text {NM-Others Fem }}\right)-\mathrm{E}\left(\mathrm{X}_{\mathrm{M}-\mathrm{Others} / \mathrm{M}-\mathrm{OBC}} \text { Fem }\right)\right\}^{\prime} \\
\left\{\mathrm{W} \beta_{\mathrm{NM} \text {-Others Fem }}+(\mathrm{I}-\mathrm{W}) \beta_{\mathrm{M}-\mathrm{Others} / \mathrm{M}-\mathrm{OBC} \text { Fem }}\right\}+ \\
\left\{(\mathrm{I}-\mathrm{W})^{\prime} \mathrm{E}\left(\mathrm{X}_{\text {NM-Others Fem }}\right)+\mathrm{W}^{\prime} \mathrm{E}\left(\mathrm{X}_{\mathrm{M}-\mathrm{Others} / \mathrm{M}-\mathrm{OBC} \text { Fem }}\right)\right\}^{\prime} \\
\left(\beta_{\text {NM-Others Fem }}-\beta_{\mathrm{M}-\mathrm{Others} / \mathrm{M}-\mathrm{OBC} \text { Fem }}\right)
\end{array}
$$

where W is the relative weights given to the wage coefficients of NM-Others females and I depicts the Identity matrix. For instance, if $\mathrm{W}=1$, then it means the wage structure of NMOthers females would prevail (equation 3) while $\mathrm{W}=0$ would have the opposite effect (equation 4).

But the above model removes some of the unexplained part and transfers it to the endowment effect. Hence, following the advice of Jann (2008), the present study adds a group indicator in the pooled model as an additional explanatory variable to offset the aforementioned deficit. ${ }^{64}$

[^43]As depicted in appendix table A4.7, if the NM-Others females wage structure prevailed in the labour market, the discrimination effect for the M-Others females would have been $17.5 \%$. On the other hand, the overpayment to NM-Others females confers $27 \%$ to positive wage discrimination to the detriment of the M-Others females. The results of pooled Oaxaca decomposition (table 4.4) portrays the unexplained coefficient to be approximately $19 \%$. Scrutiny of the explained endowment effects depicts that graduation and above education level alone could explicate $61.3 \%$ of the total gap in the average earnings of the M-Others women in comparison to their NM-Others counterparts. Higher experience (proxied by age) of the NM-Others females contributes another $10.8 \%$ of the total wage gap. Further, secondary education, technical degrees, urban residence and being currently married all significantly favor the NM-Others females.

Table 4.4: Blinder-Oaxaca Decomposition (NM-Others and M-Others Females), 2011

| log_wage | Coefficient | Std. Err. | $\mathrm{p}>\mathrm{z}$ |
| :--- | :---: | :---: | :---: |
| Overall |  |  |  |
| NM-Others_females | 5.428 | 0.0199 | 0.000 |
| M-Others_females | 4.916 | 0.0436 | 0.000 |
| difference | 0.513 | 0.0480 | 0.000 |
| explained | 0.416 | 0.0358 | 0.000 |
| unexplained | 0.097 | 0.0385 | 0.012 |
| Percentage Explained | 81.12 |  |  |
| Percentage Unexplained | 18.88 |  |  |
| explained |  |  |  |
| age | 0.055 | 0.0221 | 0.012 |
| age_sq | -0.014 | 0.0153 | 0.350 |
| pri | -0.003 | 0.0021 | 0.126 |
| mid | 0.005 | 0.0033 | 0.121 |
| sec | 0.013 | 0.0073 | 0.084 |
| higher_sec | 0.004 | 0.0135 | 0.779 |
| grad | 0.314 | 0.0319 | 0.000 |
| tech_edu | 0.019 | 0.0046 | 0.000 |
| marital_status | 0.008 | 0.0038 | 0.028 |
| Urban | 0.015 | 0.0066 | 0.024 |
| Region | 0.000 |  |  |
| Central | 0.007 | 0.0036 | 0.927 |
| East | -0.002 | 0.0020 | 0.093 |
| North-East | -0.003 | 0.0024 | 0.248 |
| West | -0.002 | 0.0019 | 0.252 |
| South | 0.037 | 0.3658 | 0.919 |
| Constant |  |  |  |

A similar exercise for the Muslim OBC women estimates discrimination to be about 8.5\%, the coefficient for the unexplained part being statistically insignificant using the NMOthers female wage structure. On the other hand, the discrimination coefficient increases to $31 \%$ using the M-OBC wage configuration and turns out to be significant (appendix table A4.8). The pooled decomposition results estimates the unexplained component to be $11 \%$. Out of the total earnings gap, higher experience (using age and its square as proxies) explains approximately $7 \%$ of the wage gap [(0.0776-0.0319/0.5656)*100]. Further, if the M-OBC women had the same level of graduation and above education as among the NMOthers women, they could have reduced the wage gap by approximately $68 \%$. Residence in urban areas, marriage and technical education all benefit NM-Others women (table 4.5).

Table 4.5: Blinder-Oaxaca Decomposition (NM-Others and M-OBC Females), 2011

| log_wage | Coefficient | Std. Err. | p>z |
| :--- | :---: | :---: | :---: |
| Overall |  |  |  |
| NM-Other__females | 5.4283 | 0.0199 | 0.000 |
| M-OBC_females | 4.8626 | 0.0413 | 0.000 |
| Difference | 0.5656 | 0.0458 | 0.000 |
| Explained | 0.5032 | 0.0346 | 0.000 |
| unexplained | 0.0625 | 0.0415 | 0.133 |
| Percentage Explained | 88.95 |  |  |
| Percentage Unexplained | 11.05 |  |  |
| explained |  |  |  |
| age | 0.0776 | 0.0279 | 0.005 |
| age_sq | -0.0319 | 0.0172 | 0.064 |
| pri | -0.0058 | 0.0029 | 0.049 |
| mid | -0.0124 | 0.0055 | 0.023 |
| sec | 0.0134 | 0.0070 | 0.056 |
| higher_sec | 0.0181 | 0.0132 | 0.171 |
| grad | 0.3832 | 0.0309 | 0.000 |
| tech_edu | 0.0163 | 0.0043 | 0.000 |
| marital_status | 0.0064 | 0.0033 | 0.051 |
| Urban | 0.0281 | 0.0067 | 0.000 |
| Region |  |  |  |
| Central | 0.0129 | 0.0057 | 0.023 |
| East | -0.0199 | 0.0054 | 0.000 |
| North-East | 0.0024 | 0.0031 | 0.453 |
| West | -0.0109 | 0.0054 | 0.042 |
| South | 0.0257 | 0.0151 | 0.090 |
| Constant | 0.7262 | 0.3614 | 0.045 |

The above description highlights the paucity of education among the women of the Muslim community compared to the women of NM-Others. In other words, if M-Others had the
similar educational endowments as that of the NM-Others women, they could have reduced their earnings gap by approximately $65 \%$ while the analogous figure for the M-OBC women was $70 \%$. Corresponding to the findings of the present analysis, studies by Bhaumik and Chakrabarty (2009) and Duraisamy and Duraisamy (2017) have also testified major differences in the earnings gap of Muslims being present on account of their poor educational attainments.

At this juncture, it is pertinent to mention that since, Blinder-Oaxaca Decomposition does not take into consideration the quality of schools and other unobservable attributes of the individuals, the results presented must be interpreted with caution. Added to the above limitation is the fact that historical discrimination against the Muslim women might be responsible for their lower education attainments and consequent poor earnings. On such accounts, as argued by Borooah (2010); the discrimination coefficient may be underestimated. Also, the lack of earnings data on self-employed individuals, it is not possible to measure the actual extent of the discrimination.

It is equally important to recognize the fact that regular and casual labour market are different segments of the Indian labour market with different characteristics of agents (Duraisamy and Duraisamy 2017). The purpose of the chapter has been to establish the wage inequality that exists in the Indian labour market against the women of the Muslim community. Although no meaningful statistical analysis is feasible owing to the miniscule sample of Muslim women in regular wage employment, an attempt has been made to highlight the quandaries of M-Others and M-OBC women with the help of descriptive statistics.

In both the regular and casual labour markets, the gender disparities were stark across the socio-religious communities (appendix table A4.6). Comparing the inequalities in mean earnings, one realizes that while NM-Others men earned 1.19 times more than their female counterparts in the regular labour market, the corresponding figures for the M-Others and M-OBC were 1.21 and 1.34 respectively. Considering the socio-religious disparities for females, the descriptive statistics for regular workers unravels that the earnings of the NMOthers women was 1.8 times greater than those of the 'Others' of the Muslim community while the corresponding figure was 2.24 for the M-OBC of their community. Thus, Muslim
women earned considerably less than both the males of their communities and NM-Other females but the disparities were even higher for M-OBC women compared to M-Others even in the regular labour market.

The mean wage gap depicted above provides an evidence of the gender and socio-religious disparities for the Muslim women in general and M-OBC in particular. But the disparities in the regular labour market would differ among the high and low wage earners. In this regard, appendix table A4.9 illustrates the wage inequality at five points on the wage distribution $\left(10^{\text {th }}, 25^{\text {th }}, 50^{\text {th }}, 75^{\text {th }}\right.$ and $\left.90^{\text {th }}\right)$. Even for the low-wage earners of the Muslim community, the relative wage gap remains stark with respect to NM-Others for both males and females. The relative disparities in wages are highest for the community particularly after the median that is among the high-wage earners irrespective of gender. The intracommunity wage-differences are evident at each point on the wage-distribution except at the median for females. On the other hand, the intra-community differences for males become evident only after the median. Even the gender disparities are apparent across the points on the wage distribution but they reduce at the high end of the wage distribution except for M-OBC females. Thus, even in the regular wage market which is perceived to offer security and is considered to be a source of income mobility (Borooah et al 2007), Muslim community in general and M-OBC women in particular earn considerably lower wages both in comparison to the males and NM-Other females.

### 4.7 Summary of the Findings

The regression analysis brings out certain insightful observations regarding women's decision to participate in wage work. Being married, bigger household size and increase in the number of children significantly lowers women's wage work participation while being from southern and western states in reference to the north improves it. Also, women's wage work participation follows a U-shaped pattern with increase in the participation rates witnessed for women only after higher secondary level of education. Furthermore, in comparison to the males of their respective communities, females had lower wage work affiliations. Besides this, Muslim females both M-Others and M-OBC had lower participation in wage work even when compared to the NM-Others females.

Turning the focus on earnings, the selectivity corrected wage equations exhibit that with each education level completed, there is an enhancement in the earnings of the individuals. As inherent in any labour market discourse, the gender disparities are prevalent in terms of wages earned with even NM-Others females earning about three-fourth times the males of their community. When analyzed in terms of the Muslim women, the gender disparities were higher with M-Others women earning approximately $39 \%$ lower wages while the analogous figure for M-OBC women was $43 \%$. Furthermore, Muslim women both MOthers and M-OBC earned approximately $16 \%$ lower wages than the NM-Others females. Thus, the analysis unravels that Muslim women both M-Others and M-OBC earn differential wages in the labour market not just in comparison to the males of their communities but also NM-Other females.

Decomposing the wage gap into explained and unexplained components entailed that a major part of the earnings gap between NM-Others females and M-Others (M-OBC) females was owing to the endowment differences between them. To put it differently, a significant proportion of it could be attributed to the poor higher education attainment among the Muslim women.

## Chapter 5

## Summary and Conclusions

The discourses on Muslim women - the lynchpin of the present analysis remains confined to the issue of purdah, polygamy, Muslim Personal Laws and cultural injunctions of Islam being the sole markers of their lives and identities (Agnes 2012; Hasan and Menon 2004; Kirmani 2013). Such construction of identities conjectures Muslim women as a monolithic category, a method coterminous to the one homogenizing 'Muslims' or generalizing 'women' thereby ignoring the impact of presence of sub-groups within a group which can be both privileged and marginalized at the same time in different dimensions. For instance, as the present analysis entails, M-Others women while being reprimanded on the basis of both their gender and religion were privileged on the basis of their caste particularly in terms of their educational access compared to the M-OBC women. Put another way, homogenizing the category 'Muslim women' obscures the variations across their caste, class and region and universally portrays them as victims of cultural and religious fundamentalism. In this regard, the theoretical construct of intersectionality which deploys the post-structuralist methods of deconstructing the identities can advance the cause of unveiling universalism regarding the category 'Muslim women' to bring out the quandaries of most disadvantaged among them. While disadvantage is itself a multi-faceted phenomenon and can be studied in different dimensions, the present study has delved on to the questions of education and labour market outcomes of Muslim women. Such dimensions are analyzed because an attempt to eliminate the gender gradient arising from discrimination must be woven around women's intellect i.e. education and their economic freedom i.e. question of employment which becomes further complex when multiple intersecting identities are analogously studied.

Thus, the present analysis by drawing out data from three Employment-Unemployment rounds $-55^{\text {th }}, 61^{\text {st }}$ and $68^{\text {th }}$ rounds and two Social Consumption: Education rounds $-64^{\text {th }}$ and $71^{\text {st }}$ rounds has made an attempt to discern the education, employment and earnings disparities of the category 'Muslim women' with regard to the gender gradient, socioreligious question and intra-socio-religious gaps.

### 5.1 Summary of the Analysis

Human capital influences the participation and earnings of individuals in the labour market (Becker 1962; Schultz 1961). At the same time, if workers have perceptions of discrimination in the labour market, then they limit their desires for upward mobility and hence, acquire low human capital (Piore 1983; Reich et al 1973; Schulman 1996). Thus, education and employment are the two realms inter-connected by their very virtue with happenings in one significant impacting the outcomes in the other. In this context, the present study began with analyzing the educational deficits of Muslim women - both MOthers and M-OBCs to examining their labour market affiliations and earnings gaps.

There has been a substantial education expansion in the country evident from the improvements in literacy rates, educational attainment levels of the population and their improved access to education over the last decade (1999-2011). While the gender disparities in terms of educational access measured in terms of GAR using Kundu and Rao Index (1985) were quite low in 2014 for both NM-Others and M-Others women across sectors, they were quite high for the women of M-OBCs particularly in the rural settings. Furthermore, the socio-religious and intra-socio-religious disparities both in terms of higher educational attainments and access were higher for the M-OBC students in the urban settings compared to the rural ones remaining still higher for the females of their communities compared to males. Thus, while gender disparities were more prevalent in the rural settings, the socio-religious and intra-socio-religious gaps to the detriment of M-OBC women were pervasive in the urban areas.

The class dimensions of higher educational attainments conferred that M-OBC women in the highest income quintile in rural settings had a slightly higher proportion than those of M-Others women with graduate and above education levels while the opposite scenario with a greater magnitude was evident in the urban settings. The variability across regions established that while M-Others women had better educational prospects in the western regions, the $\mathrm{M}-\mathrm{OBC}$ women remained better off in the southern states. Thus, education dynamics brought out that Muslim women were not a monolithic category with varied participation and access across their castes, class, regions and sector.

Moving on to the employment dynamics of the women in general, the study found that women in India were mostly distress workers. Thus, progressing through the times of distress at a high pace (2004), the female labour force participation reached its erstwhile levels in the better times (2011). In this regard, gender gradient appeared to be highly prevalent in the labour market across socio-religious groups of women workers but the most subdued to the men of their communities in terms of labour force participation rates were M-Others women in rural areas with their subordinate position taken by M-OBC women in the urban settings in 2011. Lowest participation rates of M-OBC women in urban areas in the most recent year coupled with equalizing of participation rates in the highest quintile with those of M-Others, a lower percentage of M-OBCs in elementary occupations, a significantly higher percentage of M-OBC women in female enterprises, a lower percentage of married M-OBCs as women workers compared to those of M-Others raise an interesting possibility of 'Ashrafization' taking place among the urban OBC women of the Muslim community. At the same time, the possibilities of income effect and lack of adequate employment opportunities generated cannot be ruled out as a reason for poor representation of Muslim women workers. The regional dimensions were clearly evident in the participation decisions of women with both M-OBC and M-Others women had higher participation rates in the southern states but still relatively they had lower rates than the women of other socio-religious groups even in the southern states.

Furthermore, analyzing the relationship between earnings and education levels, the study found that the gender disparities were highest for the M-OBC women followed by those of M-Others. Besides this, using the mechanism of decomposing of the wage differential between NM-Others females and their M-Others (M-OBC) counterparts' the analysis unraveled higher education deficit as the primary reason for the lower earnings of both the M-Others and M-OBC women in comparison to their NM-Others counterparts.

These findings when analyzed analogous to the fact that Muslim women with graduate and above level of education had higher labour force participation rates than at all other levels which become close to those of NM-Others females and all-India average in both rural and urban areas renders one to consider higher education as a panacea for Muslim women. To
put it differently, Muslim women with higher education being active entrants into the labour market builds for a strong case for facilitating their access to higher education.

### 5.2 Findings and Conclusion

There is a "cynical chain of inequalities" (Tilak 2015:187) - educational disparities result in labour market inequalities contributing to poor earnings and the consequent sociopolitical structural inequalities generated reinforces lower educational participation by disadvantaged groups. Since, nothing happens in contextual isolation, thus, unless both the state and the Muslim community alike undertake important measures to improve the representation of Muslim women in higher education, the "systematic" and "systemic" inequalities to quote Deshpande (2006:2439) will continue to intensify. Also, Muslim women with already miniscule rates of higher education participation will continue facing the brunt of political religion (Lateef 1990) on one hand and the patriarchal construct of the Indian society superimposed on the politics of fear of maintaining group identity on the other. The situation in this context would become complex for Muslim women with multifarious identities each reinforcing the other to cumulatively contribute to their perpetual backwardness.

In this regard, it has been argued that involving private sector can prove to be efficient. This can take the form of rewards such as extending grants to educational institutions for maintaining composite student ratios, tax concessions for private firms or preferential public work contracts for fostering composite population of employees, future concessional land rates to builders for making housing societies with population from diverse groups etc. (Basant 2012; Duraisamy and Duraisamy 2017; Saxena 1983). Also, means-cum-merit based scholarships provisioned under article 15(4) of the constitution can prove to be an effective tool in catering to the educational needs of the Muslim community. Several such schemes by the Ministry of Minority Affairs (MoMA) are already in place. Need is to improve the access of such scholarships particularly to the Muslim women and in the rural areas where the higher education attainments and attendance are abysmally low in comparison to the urban sector. Also, there is a need to improve the concentration of schools in Muslim dominated areas. Such actions via signaling effects can
go a long way in improving the educational deficits of the Muslims in general and the women of their communities in particular.

### 5.3 Limitations of the Study

The analysis presented broadly falters on four accounts. Firstly, since the sample size of different socio-religious groups is small for comparable state level analysis, the present study has not been able to address state level variations; although an attempt has been made to reduce the deficit by controlling for the regional effects in the regressions.

Secondly, while accepting the differential characteristics of the regular and casual labour markets; the small sample size for Muslim other and OBC women who remain employed in wage work restricts their separate analysis in the Heckman procedure. To correct for the aforementioned limitation, descriptive statistics delving into the dynamics of the regular labour market was used to augment the regression results.

Thirdly, since NSSO does not provide the data on wages of self-employed individuals; they remain outside the purview of the present analysis. Thus, it would be erroneous to generalize the results of wage differentials for the entire population.

Fourthly, it is plausible that the discrimination experienced by the Muslim women in the labour market is not just a result of their present attributes instead may be consequent upon the past discrimination. To put it differently, Muslim women's lower access to wage employment in the past may have adversely impacted the human capital that they acquired. Since, it is not possible to measure the impact of historical discrimination, the results for discrimination may be underestimated.

The present study holds significance as it discerns the quandaries of the marginalized within the marginalized in terms of their education and labour market outcomes. This can guide policies by ascertaining whom to focus on and why and at the same time evaluating the impact of the policies. Further, it also open up avenues for future research in the domain of intersectional analysis at the regional level.

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99eeb49f4276\&enrichSource=Y292ZXJQYWdIOzIzNTYwMjI2OTtBUzoxMDIxNDE4 NTUyNzI5NjVAMTQwMTM2MzkyNDczNg\%3D\%3D\&el=1_x_3 accessed 29 March 2016.

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## APPENDIX

## Appendix to Chapter 1

Table A1.1: Spatial Distribution of Population, 2011-12

|  | NMOthers | $\begin{gathered} \hline \text { NM- } \\ \text { SC } \end{gathered}$ | $\begin{gathered} \text { NM- } \\ \text { ST } \end{gathered}$ | $\begin{aligned} & \text { NM- } \\ & \text { OBC } \end{aligned}$ | $\begin{gathered} \text { M- } \\ \text { Others } \end{gathered}$ | $\begin{gathered} \mathrm{M}- \\ \mathrm{OBC} \end{gathered}$ | $\begin{gathered} \text { All } \\ \text { Muslims } \end{gathered}$ | All |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| North | 19.22 | 15.85 | 10.23 | 8.99 | 9.29 | 11.16 | 10.27 | 12.80 |
| Haryana | 4.79 | 2.63 | 0.21 | 1.44 | 0.52 | 1.34 | 0.95 | 2.22 |
| Himachal Pradesh | 1.33 | 0.78 | 0.41 | 0.27 | 0.11 | 0.03 | 0.07 | 0.58 |
| Jammu \& Kashmir | 0.95 | 0.56 | 0.13 | 0.05 | 5.99 | 2.14 | 3.98 | 0.89 |
| Punjab | 4.79 | 4.74 | 0.04 | 0.93 | 0.47 | 0.46 | 0.46 | 2.35 |
| Rajasthan | 4.33 | 5.73 | 9.16 | 5.73 | 1.30 | 6.53 | 4.03 | 5.48 |
| Chandigarh | 0.23 | 0.09 | 0.02 | 0.05 | 0.02 | 0.02 | 0.02 | 0.09 |
| Delhi | 2.81 | 1.31 | 0.27 | 0.52 | 0.89 | 0.63 | 0.76 | 1.18 |
| Central | 18.94 | 27.75 | 26.22 | 27.28 | 17.85 | 35.43 | 27.02 | 25.42 |
| Madhya Pradesh | 5.28 | 6.48 | 24.37 | 8.50 | 2.09 | 3.80 | 2.98 | 8.01 |
| Uttar Pradesh | 13.66 | 21.28 | 1.85 | 18.78 | 15.76 | 31.63 | 24.04 | 17.41 |
| East | 22.59 | 25.19 | 21.29 | 18.35 | 35.31 | 19.65 | 27.14 | 22.03 |
| Bihar | 6.84 | 9.93 | 7.51 | 13.79 | 5.70 | 16.99 | 11.59 | 10.71 |
| Orissa | 3.58 | 3.85 | 9.26 | 3.12 | 0.59 | 0.15 | 0.36 | 3.50 |
| Sikkim | 0.01 | 0.01 | 0.20 | 0.07 | 0.01 | 0.00 | 0.01 | 0.05 |
| West Bengal | 12.07 | 11.39 | 4.28 | 1.36 | 28.99 | 2.48 | 15.16 | 7.74 |
| Andaman \& Nicobar | 0.09 | 0.00 | 0.03 | 0.01 | 0.02 | 0.02 | 0.02 | 0.03 |
| Northeast | 2.50 | 1.89 | 11.42 | 2.04 | 11.97 | 0.44 | 5.95 | 3.45 |
| Arunachal Pradesh | 0.10 | 0.00 | 0.79 | 0.01 | 0.02 | 0.00 | 0.01 | 0.09 |
| Assam | 1.99 | 1.50 | 3.98 | 1.65 | 11.38 | 0.13 | 5.51 | 2.43 |
| Manipur | 0.09 | 0.04 | 0.82 | 0.24 | 0.01 | 0.29 | 0.15 | 0.21 |
| Meghalaya | 0.05 | 0.00 | 2.43 | 0.01 | 0.09 | 0.01 | 0.05 | 0.23 |
| Mizoram | 0.01 | 0.00 | 0.91 | 0.00 | 0.00 | 0.01 | 0 | 0.08 |
| Nagaland | 0.00 | 0.01 | 1.16 | 0.00 | 0.01 | 0.00 | 0.01 | 0.10 |
| Tripura | 0.25 | 0.32 | 1.33 | 0.14 | 0.47 | 0.00 | 0.22 | 0.31 |
| West | 22.23 | 9.61 | 21.16 | 13.00 | 15.41 | 6.92 | 10.98 | 14.79 |
| Goa | 0.37 | 0.02 | 0.13 | 0.05 | 0.07 | 0.04 | 0.05 | 0.12 |
| Gujarat | 7.09 | 1.95 | 11.10 | 4.80 | 2.98 | 3.89 | 3.45 | 5.11 |
| Maharashtra | 14.69 | 7.63 | 9.73 | 8.13 | 12.34 | 2.98 | 7.46 | 9.51 |
| Dadra \& Nagar Haveli | 0.04 | 0.01 | 0.18 | 0.00 | 0.01 | 0.00 | 0.01 | 0.03 |
| Daman and Diu | 0.03 | 0.01 | 0.02 | 0.02 | 0.00 | 0.01 | 0.01 | 0.02 |
| South | 14.53 | 19.71 | 9.67 | 30.34 | 10.17 | 26.41 | 18.64 | 21.51 |
| Andhra Pradesh | 6.17 | 7.36 | 4.95 | 9.38 | 7.42 | 3.19 | 5.21 | 7.34 |
| Karnataka | 4.30 | 4.44 | 3.59 | 6.25 | 2.54 | 6.97 | 4.85 | 5.06 |
| Kerala | 3.28 | 1.28 | 0.36 | 2.87 | 0.14 | 11.26 | 5.94 | 2.87 |
| Tamil Nadu | 0.72 | 6.57 | 0.78 | 11.63 | 0.06 | 4.84 | 2.56 | 6.12 |
| Lakshadweep | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.06 | 0.03 | 0.00 |
| Pondicherry | 0.06 | 0.06 | 0.00 | 0.21 | 0.01 | 0.09 | 0.05 | 0.11 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

Source: Computed using unit record data of Employment-Unemployment $68^{\text {th }}$ Round of NSSO

Table A1.2: Proportion of Socio-Religious Communities in Each State, 2011-12

|  | NMOthers | $\begin{gathered} \text { NM- } \\ \text { SC } \end{gathered}$ | $\begin{gathered} \text { NM- } \\ \text { ST } \end{gathered}$ | $\begin{aligned} & \text { NM- } \\ & \text { OBC } \end{aligned}$ | MOthers (x) | $\begin{gathered} \mathrm{M}- \\ \mathrm{OBC} \end{gathered}$ $(\mathrm{y})$ | All Muslims $(x+y)$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| North | 32.78 | 23.31 | 6.82 | 26 | 4.8 | 6.29 | 11.09 | 100 |
| Haryana | 47.03 | 22.26 | 0.82 | 23.99 | 1.55 | 4.36 | 5.91 | 100 |
| Himachal Pradesh | 50.10 | 25.27 | 6.00 | 17.07 | 1.23 | 0.32 | 1.55 | 100 |
| Jammu \& Kashmir | 23.20 | 11.86 | 1.23 | 2.17 | 44.25 | 17.30 | 61.55 | 100 |
| Punjab | 44.46 | 37.98 | 0.13 | 14.70 | 1.32 | 1.41 | 2.73 | 100 |
| Rajasthan | 17.23 | 19.68 | 14.26 | 38.67 | 1.57 | 8.60 | 10.17 | 100 |
| Chandigarh | 55.17 | 19.32 | 1.63 | 20.24 | 1.66 | 1.98 | 3.64 | 100 |
| Delhi | 51.95 | 20.94 | 1.96 | 16.30 | 4.99 | 3.88 | 8.87 | 100 |
| Central | 16.26 | 20.54 | 8.8 | 39.7 | 4.65 | 10.06 | 14.71 | 100 |
| Madhya Pradesh | 14.39 | 15.22 | 25.96 | 39.28 | 1.73 | 3.42 | 5.15 | 100 |
| Uttar Pradesh | 17.12 | 22.99 | 0.90 | 39.90 | 5.99 | 13.11 | 19.1 | 100 |
| East | 22.38 | 21.51 | 8.24 | 30.82 | 10.6 | 6.44 | 17.04 | 100 |
| Bihar | 13.94 | 17.45 | 5.98 | 47.65 | 3.52 | 11.45 | 14.97 | 100 |
| Orissa | 22.31 | 20.71 | 22.56 | 33.01 | 1.11 | 0.30 | 1.41 | 100 |
| Sikkim | 6.09 | 5.55 | 36.09 | 50.30 | 1.68 | 0.29 | 1.97 | 100 |
| West Bengal | 34.03 | 27.68 | 4.72 | 6.48 | 24.77 | 2.31 | 27.08 | 100 |
| Andaman \& Nicobar | 67.86 | 0.00 | 9.08 | 13.04 | 4.84 | 5.18 | 10.02 | 100 |
| Northeast | 15.79 | 10.28 | 28.21 | 21.87 | 22.93 | 0.92 | 23.85 | 100 |
| Arunachal Pradesh | 23.82 | 0.92 | 71.07 | 2.72 | 1.30 | 0.16 | 1.46 | 100 |
| Assam | 17.87 | 11.66 | 13.99 | 25.08 | 30.99 | 0.40 | 31.39 | 100 |
| Manipur | 9.06 | 4.05 | 33.88 | 42.83 | 0.26 | 9.93 | 10.19 | 100 |
| Meghalaya | 5.06 | 0.36 | 90.63 | 1.06 | 2.63 | 0.25 | 2.88 | 100 |
| Mizoram | 2.85 | 0.16 | 94.90 | 1.56 | 0.04 | 0.48 | 0.52 | 100 |
| Nagaland | 0.70 | 1.76 | 96.74 | 0.07 | 0.39 | 0.34 | 0.73 | 100 |
| Tripura | 17.76 | 19.33 | 36.52 | 16.41 | 9.98 | 0.01 | 9.99 | 100 |
| West | 32.79 | 12.22 | 12.2 | 32.52 | 6.89 | 3.38 | 10.27 | 100 |
| Goa | 66.07 | 2.92 | 9.15 | 15.69 | 3.81 | 2.35 | 6.16 | 100 |
| Gujarat | 30.27 | 7.16 | 18.51 | 34.72 | 3.86 | 5.48 | 9.34 | 100 |
| Maharashtra | 33.70 | 15.09 | 8.72 | 31.64 | 8.58 | 2.26 | 10.84 | 100 |
| Dadra and Nagar Haveli | 32.87 | 4.24 | 56.48 | 3.87 | 2.15 | 0.38 | 2.53 | 100 |
| Daman and Diu | 40.60 | 10.10 | 9.88 | 33.37 | 1.53 | 4.52 | 6.05 | 100 |
| South | 14.74 | 17.24 | 3.84 | 52.2 | 3.13 | 8.86 | 11.99 | 100 |
| Andhra Pradesh | 18.32 | 18.86 | 5.74 | 47.26 | 6.68 | 3.13 | 9.81 | 100 |
| Karnataka | 18.54 | 16.49 | 6.04 | 45.67 | 3.32 | 9.93 | 13.25 | 100 |
| Kerala | 24.93 | 8.39 | 1.06 | 36.99 | 0.31 | 28.33 | 28.64 | 100 |
| Tamil Nadu | 2.55 | 20.22 | 1.09 | 70.36 | 0.07 | 5.71 | 5.78 | 100 |
| Lakshadweep | 0.44 | 0.31 | 0.00 | 0.50 | 0.00 | 98.75 | 98.75 | 100 |
| Pondicherry | 12.70 | 9.38 | 0.11 | 71.41 | 0.69 | 5.71 | 6.4 | 100 |
| Total | 21.82 | 18.81 | 8.53 | 37 | 6.61 | 7.22 | 13.83 | 100 |

Source: As in table A1.1

## Appendix to Chapter 2

Table A2.1: Literacy Rates across Socio-Religious Groups by Sex in Rural Areas (1999-2011 \& 2007-2014)

|  | 1999 |  | 2004 |  | 2011 |  | 2007* |  | 2014* |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Groups <br> ( $\downarrow)$ | M | F | M | F | M | F | M | F | M | F |
| NMOthers | 83.75 | 61.39 | 85.6 | 67.15 | 88.89 | 74.05 | 87.97 | 71.9 | 89.9 | 75.76 |
| NM-SC | 59.07 | 34.5 | 66.01 | 42.62 | 74.46 | 54.25 | 70.6 | 49.86 | 74.77 | 56.13 |
| NM-ST | 54.06 | 32.02 | 61.51 | 39.32 | 72.04 | 53.52 | 69.44 | 47.83 | 73.31 | 54.64 |
| $\begin{aligned} & \hline \text { NM- } \\ & \text { OBC } \\ & \hline \end{aligned}$ | 67.92 | 40.9 | 74.29 | 49.25 | 79.97 | 59.76 | 78.83 | 56.06 | 81.82 | 61.38 |
| MOthers | 63.08 | 42.35 | 69.35 | 52.59 | 76.32 | 62.42 | 74.47 | 59.38 | 78.06 | 64.48 |
| M-OBC | 65.19 | 43.23 | 67.65 | 48.09 | 74.44 | 57.76 | 68.51 | 49.74 | 75.78 | 58.12 |
| All Muslim | 63.73 | 42.63 | 68.68 | 50.74 | 75.37 | 60 | 71.75 | 55 | 76.84 | 61.02 |
| All | 67.94 | 43.76 | 72.83 | 50.52 | 79.06 | 60.58 | 77 | 56.67 | 80.13 | 61.98 |

Note: M-Males, F-Females
Source: Computed using unit record data of Employment-Unemployment ( $55^{\text {th }}, 61^{\text {st }}$ and $68^{\text {th }}$ ) and Social Expenditure: Education ( $64^{\text {th }}$ and $\left.71^{\text {st }}\right)$ Rounds of NSSO

Table A2.2: Literacy Rates across Socio-Religious Groups by Sex in Urban Areas (1999-2011 \& 2007-2014)

|  | 1999 |  | 2004 |  | 2011 |  | 2007* |  | 2014* |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Groups <br> ( $\downarrow$ ) | M | F | M | F | M | F | M | F | M | F |
| NMOthers | 95.02 | 85.62 | 95.96 | 88.49 | 96.21 | 90.04 | 96.47 | 89.14 | 96.26 | 89.87 |
| NM-SC | 77.28 | 56.17 | 82.68 | 61.36 | 87.13 | 70.57 | 83.47 | 66.31 | 86.37 | 71.93 |
| NM-ST | 79.35 | 60.91 | 83.8 | 64.34 | 88.73 | 72.86 | 86.37 | 69.57 | 89.86 | 76.33 |
| $\begin{aligned} & \hline \text { NM- } \\ & \mathrm{OBC} \end{aligned}$ | 85.92 | 67.93 | 88.52 | 72.96 | 91.95 | 79.7 | 90.55 | 76.56 | 91.56 | 79.67 |
| MOthers | 78.84 | 63.11 | 81.36 | 69.29 | 85.63 | 74.36 | 83.32 | 71.24 | 86.88 | 75.86 |
| M-OBC | 71.77 | 60.13 | 76.33 | 63.56 | 81.25 | 69.79 | 77.65 | 65.72 | 82.28 | 73.2 |
| All <br> Muslim | 76.57 | 62.12 | 79.37 | 66.98 | 83.39 | 71.95 | 80.87 | 68.81 | 84.23 | 74.27 |
| All | 86.62 | 72.27 | 88.82 | 75.84 | 91.14 | 80.34 | 89.93 | 78.07 | 91.08 | 80.91 |

Note: M-Males, F-Females
Source: As in table A2.1

Table A2.3: Percentage Distribution of Population by Completed Education Levels for Socio-Religious Groups in Rural Areas (All Ages) by Sex (1999-2011 \& 2007-2014)

| Socio- <br> Religious <br> Groups/ <br> Education <br> Levels ( $\downarrow$ ) | 1999 |  | 2004 |  | 2011 |  | $2007^{*}$ |  | $2014^{*}$ |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | M | F | M | F | M | F | M | F | M | F

NM- Others

| Illiterate | 25.64 | 44.29 | 23.46 | 38.9 | 18.44 | 30.8 | 20.05 | 34.03 | 17.23 | 29.23 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Below <br> Primary | 20.14 | 18.36 | 18.16 | 17.54 | 16.07 | 16.64 | 17.12 | 16.18 | 16.76 | 16.22 |
| Primary | 15.14 | 13.9 | 15.84 | 15.56 | 14.17 | 15.22 | 17.6 | 18.49 | 13.41 | 15.45 |
| Middle | 17.47 | 12.71 | 17.98 | 14.01 | 17.52 | 15.1 | 17.36 | 14.06 | 16.97 | 15.3 |
| Secondary | 11.34 | 6.63 | 12.3 | 7.85 | 15.83 | 10.78 | 14.15 | 9.63 | 16.54 | 12.1 |
| Higher <br> Secondary | 5.75 | 2.69 | 6.77 | 3.84 | 10.23 | 7.12 | 7.86 | 4.6 | 10.3 | 7.1 |
|  <br> Above | 4.52 | 1.43 | 5.49 | 2.29 | 7.74 | 4.35 | 5.85 | 3.01 | 8.79 | 4.6 |


| M- Others |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Illiterate | 47.31 | 64.52 | 40.09 | 54.19 | 32.03 | 43.25 | 35.95 | 47.43 | 30.49 | 42.06 |
| Below <br> Primary | 24.14 | 18.95 | 24.45 | 21.14 | 24.9 | 22.3 | 25.64 | 21.83 | 21.92 | 21.64 |
| Primary | 11.93 | 9 | 17.03 | 14.62 | 17.85 | 15.95 | 19.37 | 18.43 | 20.92 | 17.75 |
| Middle | 8.78 | 5.02 | 10.46 | 6.79 | 11.17 | 10.44 | 10.11 | 7.54 | 13.28 | 9.85 |
| Secondary | 4.7 | 1.74 | 4.61 | 2.2 | 7.83 | 5.31 | 5.16 | 3.49 | 7.82 | 5.47 |
| Higher Secondary | 1.74 | 0.59 | 2.01 | 0.78 | 3.9 | 1.81 | 2.27 | 0.78 | 3.61 | 2.14 |
| Graduate \& Above | 1.4 | 0.19 | 1.36 | 0.29 | 2.32 | 0.94 | 1.5 | 0.49 | 1.95 | 1.09 |
| M-OBC |  |  |  |  |  |  |  |  |  |  |
| Illiterate | 46.4 | 63.29 | 44.32 | 58.65 | 36.65 | 49.61 | 41.52 | 56.81 | 34.17 | 48.46 |
| Below <br> Primary | 22.9 | 16.84 | 24.21 | 17.98 | 20.73 | 20.21 | 23.52 | 19.94 | 24.13 | 20.36 |
| Primary | 12.78 | 8.5 | 13.1 | 10.66 | 15.64 | 12.53 | 16.04 | 10.63 | 16.1 | 12.83 |
| Middle | 11.38 | 8.43 | 11.7 | 8.38 | 15.29 | 9.84 | 10.74 | 7.1 | 12.95 | 9.88 |
| Secondary | 4.32 | 2.08 | 3.84 | 2.8 | 7.2 | 4.64 | 4.79 | 3.33 | 6.7 | 5.13 |
| Higher Secondary | 1.52 | 0.58 | 1.72 | 1.21 | 3.13 | 2.4 | 2.27 | 1.55 | 4.03 | 2.2 |
| Graduate \& Above | 0.7 | 0.29 | 1.11 | 0.32 | 1.36 | 0.78 | 1.12 | 0.65 | 1.93 | 1.14 |
| All Muslims |  |  |  |  |  |  |  |  |  |  |
| Illiterate | 47.03 | 64.13 | 41.78 | 56.04 | 34.4 | 46.6 | 38.51 | 51.78 | 32.48 | 45.57 |
| Below <br> Primary | 23.76 | 18.29 | 24.35 | 19.82 | 22.76 | 21.2 | 24.66 | 20.95 | 23.12 | 20.94 |
| Primary | 12.2 | 8.84 | 15.48 | 12.98 | 16.72 | 14.15 | 17.84 | 14.81 | 18.3 | 15.05 |
| Middle | 9.59 | 6.09 | 10.95 | 7.46 | 13.29 | 10.12 | 10.4 | 7.34 | 13.11 | 9.87 |
| Secondary | 4.58 | 1.85 | 4.29 | 2.44 | 7.51 | 4.95 | 4.99 | 3.42 | 7.21 | 5.28 |
| Higher Secondary | 1.67 | 0.59 | 1.89 | 0.96 | 3.5 | 2.12 | 2.27 | 1.14 | 3.84 | 2.17 |


| Socio- | 1999 |  | 2004 |  | 2011 |  | 2007* |  | 2014* |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Groups/ <br> Education <br> Levels ( $\downarrow$ ) | M | F | M | F | M | F | M | F | M | F |
| Graduate \& Above | 1.18 | 0.22 | 1.26 | 0.3 | 1.83 | 0.86 | 1.33 | 0.57 | 1.94 | 1.12 |
| All |  |  |  |  |  |  |  |  |  |  |
| Illiterate | 41.07 | 61.2 | 36.68 | 55.22 | 28.62 | 44.64 | 31.72 | 49.03 | 27.91 | 43.44 |
| Below <br> Primary | 20.91 | 16.33 | 20.87 | 17.49 | 20.41 | 18.32 | 21.32 | 18.43 | 19.74 | 17.56 |
| Primary | 13.36 | 9.84 | 15.5 | 11.88 | 15.47 | 13.52 | 17.92 | 15.24 | 15.81 | 14.07 |
| Middle | 12.7 | 7.58 | 14.08 | 8.97 | 15.63 | 11.62 | 14.18 | 9.34 | 15.5 | 11.63 |
| Secondary | 6.73 | 3.23 | 6.92 | 3.81 | 10.57 | 6.6 | 8.24 | 4.81 | 10.52 | 7.19 |
| Higher <br> Secondary | 3.16 | 1.24 | 3.53 | 1.8 | 5.83 | 3.6 | 4.14 | 2.06 | 6.39 | 3.99 |
| Graduate \& Above | 2.07 | 0.58 | 2.43 | 0.84 | 3.47 | 1.69 | 2.48 | 1.08 | 4.13 | 2.11 |

## Note: M-Male, F-Female

Source: As in table A2.1

Table A2.4: Percentage Distribution of Population by Completed Education Levels for Socio-Religious Groups in Urban Areas (All Ages) by Sex (1999-2011 \& 2007-2014)

| Socio- <br> Religious <br> Groups/ <br> Education <br> Levels ( $\downarrow$ ) | 1999 |  | 2004 |  | 2011 |  | 2007* |  | 2014* |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | M | F | M | F | M | F | M | F | M | F |
| NM- Others |  |  |  |  |  |  |  |  |  |  |
| Illiterate | 12.25 | 20 | 11.65 | 17.79 | 9.84 | 15.06 | 10.7 | 16.86 | 10.46 | 15.44 |
| Below <br> Primary | 14.52 | 15.29 | 12.37 | 13.51 | 11.91 | 11.9 | 12.87 | 12.68 | 11 | 11.24 |
| Primary | 10.43 | 12.51 | 11.52 | 12.85 | 9.65 | 10.66 | 11.88 | 13.49 | 9.63 | 10.89 |
| Middle | 15.13 | 14.96 | 14.9 | 15.64 | 12.65 | 13.35 | 13.79 | 13.4 | 12.19 | 12.3 |
| Secondary | 17 | 14.18 | 15.86 | 13.59 | 15.93 | 15 | 15.58 | 14.87 | 15.07 | 14.89 |
| Higher Secondary | 11.38 | 9.43 | 12.36 | 10.3 | 13.48 | 13.28 | 12.43 | 10.95 | 13.88 | 12.18 |
| Graduate \& Above | 19.28 | 13.63 | 21.34 | 16.32 | 26.54 | 20.77 | 22.74 | 17.74 | 27.76 | 23.07 |
| M- Others |  |  |  |  |  |  |  |  |  |  |
| Illiterate | 30.72 | 44.88 | 27.51 | 38.26 | 22.41 | 30.76 | 25.61 | 36.27 | 21.87 | 31.31 |
| Below <br> Primary | 22.18 | 19.84 | 19.5 | 18.46 | 20.13 | 17.55 | 20.07 | 18.1 | 20.38 | 17 |
| Primary | 14.99 | 13.15 | 16.63 | 15.05 | 16.56 | 15.37 | 18.86 | 17.49 | 16.43 | 15.23 |
| Middle | 13.93 | 10.63 | 16.1 | 13.65 | 15.61 | 15.17 | 13.46 | 10.88 | 13.74 | 13.43 |
| Secondary | 8.97 | 6.07 | 9.46 | 7.16 | 11.29 | 10.36 | 10.86 | 9.47 | 11.87 | 10.38 |
| Higher Secondary | 4.89 | 3.01 | 4.88 | 3.88 | 6.66 | 5.93 | 5.54 | 4.32 | 7.48 | 6.44 |


| Socio- | 1999 |  | 2004 |  | 2011 |  | 2007* |  | 2014* |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Groups/ <br> Education <br> Levels ( $\downarrow$ ) | M | F | M | F | M | F | M | F | M | F |
| Graduate \& Above | 4.32 | 2.41 | 5.92 | 3.54 | 7.33 | 4.87 | 5.6 | 3.48 | 8.23 | 6.21 |
| M-OBC |  |  |  |  |  |  |  |  |  |  |
| Illiterate | 37.25 | 47.19 | 33.76 | 43.31 | 28.1 | 36.83 | 30.85 | 41.62 | 26.92 | 33.8 |
| Below Primary | 19.95 | 19.96 | 20.69 | 20.38 | 20.29 | 19.51 | 20.6 | 18.57 | 19.42 | 21.48 |
| Primary | 14.43 | 13.32 | 18.32 | 14.46 | 15.81 | 14.19 | 18.02 | 15.52 | 17.46 | 15.63 |
| Middle | 14.44 | 11.13 | 13.81 | 11.62 | 14.79 | 12.19 | 13.53 | 12.02 | 14.67 | 11.48 |
| Secondary | 7.83 | 4.89 | 6.92 | 5.57 | 10.94 | 8.57 | 9.56 | 7.07 | 10.17 | 9.66 |
| Higher Secondary | 3.68 | 2.16 | 3.54 | 3.02 | 5.66 | 5.4 | 4.26 | 3.29 | 5.99 | 4.83 |
| Graduate \& Above | 2.41 | 1.35 | 2.95 | 1.66 | 4.41 | 3.31 | 3.18 | 1.91 | 5.36 | 3.13 |
| All Muslims |  |  |  |  |  |  |  |  |  |  |
| Illiterate | 32.82 | 45.64 | 30.01 | 40.31 | 25.35 | 33.99 | 27.88 | 38.64 | 24.77 | 32.8 |
| Below Primary | 21.46 | 19.88 | 19.97 | 19.24 | 20.21 | 18.59 | 20.3 | 18.31 | 19.83 | 19.68 |
| Primary | 14.81 | 13.21 | 17.31 | 14.81 | 16.18 | 14.74 | 18.5 | 16.62 | 17.02 | 15.47 |
| Middle | 14.1 | 10.8 | 15.19 | 12.82 | 15.19 | 13.58 | 13.49 | 11.39 | 14.28 | 12.26 |
| Secondary | 8.6 | 5.68 | 8.45 | 6.52 | 11.11 | 9.41 | 10.29 | 8.4 | 10.9 | 9.95 |
| Higher Secondary | 4.5 | 2.73 | 4.34 | 3.53 | 6.15 | 5.65 | 4.99 | 3.87 | 6.62 | 5.48 |
| Graduate \& Above | 3.71 | 2.06 | 4.74 | 2.77 | 5.82 | 4.04 | 4.55 | 2.78 | 6.59 | 4.37 |
| All |  |  |  |  |  |  |  |  |  |  |
| Illiterate | 21.86 | 34.22 | 19.97 | 31.03 | 16.23 | 25.61 | 18.14 | 28.61 | 16.67 | 25.34 |
| Below Primary | 17.74 | 17 | 15.95 | 15.53 | 15.54 | 14.85 | 15.98 | 15.11 | 14.86 | 14.56 |
| Primary | 13.08 | 12.79 | 14.83 | 14.22 | 13.02 | 12.53 | 15.51 | 15.18 | 13.08 | 12.86 |
| Middle | 15.57 | 13.31 | 16.43 | 14.55 | 14.97 | 13.66 | 15.21 | 13.19 | 14.6 | 13.18 |
| Secondary | 13.15 | 9.81 | 12.45 | 9.85 | 14.17 | 12.19 | 13.55 | 11.47 | 13.93 | 12.25 |
| Higher Secondary | 7.83 | 5.94 | 8.48 | 6.51 | 10.43 | 9.66 | 8.91 | 7.34 | 10.6 | 9.39 |
| Graduate \& Above | 10.76 | 6.95 | 11.89 | 8.31 | 15.64 | 11.5 | 12.69 | 9.1 | 16.27 | 12.43 |

Note: M-Male, F-Female
Source: As in table A2.1

Table A2.5: GAR in Primary Level of Education across Socio-Religious Groups by Sex and Residence (1999-2011 \& 2014)

|  |  |  | RURAL |  |  |  |  | URBAN |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | NMOthers | MOthers | $\begin{gathered} \mathrm{M}- \\ \mathrm{OBC} \end{gathered}$ | All Muslims | All | NM- <br> Others | M- <br> Others | $\begin{gathered} \mathrm{M}- \\ \mathrm{OBC} \end{gathered}$ | All Muslims | All |
| 1999 |  |  |  |  |  |  |  |  |  |  |
| M | 89.75 | 66.48 | 67.92 | 66.90 | 78.11 | 83.32 | 85.11 | 72.84 | 81.27 | 81.75 |
| F | 85.82 | 66.28 | 55.95 | 63.15 | 69.18 | 80.51 | 76.78 | 69.24 | 74.20 | 76.49 |
| P | 88.04 | 66.39 | 62.28 | 65.26 | 73.93 | 81.98 | 81.20 | 71.03 | 77.88 | 79.39 |
| 2004 |  |  |  |  |  |  |  |  |  |  |
| M | 109.24 | 101.85 | 99.04 | 100.51 | 105.11 | 106.25 | 97.62 | 94.31 | 96.17 | 104.03 |
| F | 105.62 | 100.01 | 84.78 | 93.83 | 97.49 | 98.66 | 90.74 | 106.10 | 97.00 | 98.29 |
| P | 107.25 | 100.98 | 92.79 | 97.62 | 101.51 | 102.50 | 94.20 | 99.78 | 96.57 | 101.24 |
| 2011 |  |  |  |  |  |  |  |  |  |  |
| M | 103.20 | 101.80 | 98.78 | 100.29 | 105.71 | 102.75 | 101.53 | 99.55 | 100.40 | 103.90 |
| F | 102.24 | 95.35 | 90.63 | 92.69 | 101.91 | 97.20 | 99.98 | 102.92 | 101.58 | 103.05 |
| P | 102.50 | 98.88 | 94.58 | 96.97 | 104.04 | 100.28 | 100.77 | 101.12 | 100.96 | 103.51 |
| 2014* |  |  |  |  |  |  |  |  |  |  |
| M | 102.56 | 102.12 | 94.17 | 97.49 | 102.17 | 102.75 | 107.91 | 101.73 | 104.29 | 102.03 |
| F | 103.49 | 90.05 | 94.59 | 92.50 | 100.00 | 101.19 | 100.57 | 100.18 | 100.32 | 102.31 |
| P | 102.50 | 96.15 | 94.36 | 94.81 | 101.17 | 102.04 | 104.79 | 100.97 | 102.43 | 102.16 |
| Compound Annual Growth Rate (1999 to 2011) |  |  |  |  |  |  |  |  |  |  |
| M | 1.17 | 3.61 | 3.17 | 3.43 | 2.55 | 1.76 | 1.48 | 2.64 | 1.78 | 2.02 |
| F | 1.47 | 3.08 | 4.10 | 3.25 | 3.28 | 1.58 | 2.22 | 3.36 | 2.65 | 2.51 |
| P | 1.27 | 3.38 | 3.54 | 3.35 | 2.89 | 1.69 | 1.82 | 2.99 | 2.19 | 2.24 |

Note: M-Male, F-Female, P-Person
Source: Computed using unit record data of Employment-Unemployment ( $55^{\text {th }}, 61^{\text {st }}$ and $68^{\text {th }}$ ) and Social Expenditure: Education ( $71^{\text {st }}$ ) Round of NSSO

Table A2.6: GAR in Middle Level of Education across Socio-Religious Groups by Sex and Residence (1999-2011 \& 2014)


Note: M-Male, F-Female, P-Person
Source: As in table A2.5

Table A2.7: GAR in Secondary Level of Education across Socio-Religious Groups by Sex and Residence (1999-2011 \& 2014)

|  |  |  | RURAL |  |  |  |  | URBAN |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | NMOthers | MOthers | $\begin{gathered} \mathrm{M}- \\ \mathrm{OBC} \end{gathered}$ | All Muslim | All | NMOthers | MOthers | $\begin{gathered} \mathrm{M}- \\ \mathrm{OBC} \end{gathered}$ | All Muslim | All |
| 1999 |  |  |  |  |  |  |  |  |  |  |
| M | 71.44 | 33.71 | 38.68 | 35.42 | 50.87 | 88.81 | 51.19 | 43.44 | 48.55 | 71.36 |
| F | 51.23 | 19.82 | 24.12 | 21.19 | 32.58 | 82.58 | 39.02 | 35.66 | 37.93 | 61.53 |
| P | 62.27 | 26.83 | 31.88 | 28.50 | 42.59 | 85.89 | 45.26 | 39.79 | 43.44 | 67.01 |
| 2004 |  |  |  |  |  |  |  |  |  |  |
| M | 81.90 | 45.09 | 48.86 | 46.56 | 60.13 | 97.38 | 58.51 | 47.97 | 54.13 | 78.06 |
| F | 67.33 | 28.78 | 28.25 | 28.55 | 42.59 | 93.35 | 57.92 | 47.74 | 53.56 | 73.58 |
| P | 75.04 | 36.90 | 38.12 | 37.38 | 51.98 | 95.46 | 58.22 | 47.86 | 53.85 | 76.21 |
| 2011 |  |  |  |  |  |  |  |  |  |  |
| M | 101.55 | 66.70 | 69.54 | 68.23 | 85.20 | 101.74 | 68.58 | 70.41 | 69.53 | 91.18 |
| F | 88.14 | 69.00 | 54.95 | 61.89 | 72.70 | 98.82 | 77.82 | 60.18 | 68.85 | 87.10 |
| P | 96.26 | 67.83 | 62.84 | 65.22 | 79.46 | 100.46 | 73.02 | 65.60 | 69.21 | 88.71 |
| 2014* |  |  |  |  |  |  |  |  |  |  |
| M | 98.79 | 61.74 | 60.91 | 61.23 | 75.44 | 98.43 | 70.55 | 51.83 | 58.67 | 81.89 |
| F | 89.85 | 57.26 | 53.34 | 55.04 | 71.97 | 95.05 | 62.40 | 57.93 | 59.59 | 84.49 |
| P | 94.66 | 59.63 | 57.23 | 58.27 | 73.85 | 96.82 | 66.74 | 54.64 | 59.09 | 82.98 |
| Compound Annual Growth Rate (1999 to 2011) |  |  |  |  |  |  |  |  |  |  |
| M | 2.97 | 5.85 | 5.01 | 5.61 | 4.39 | 1.14 | 2.47 | 4.11 | 3.04 | 2.06 |
| F | 4.63 | 10.95 | 7.10 | 9.34 | 6.92 | 1.51 | 5.92 | 4.46 | 5.09 | 2.94 |
| P | 3.70 | 8.04 | 5.82 | 7.14 | 5.33 | 1.31 | 4.07 | 4.25 | 3.96 | 2.37 |

Source: As in table A2.5

Table A2.8: GAR in Graduate and Above Level of Education across Socio-Religious Groups by Sex and Residence (1999-2011 \& 2014)

|  | RURAL |  |  |  |  | URBAN |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | NMOthers | MOthers | $\begin{gathered} \mathrm{M}- \\ \mathrm{OBC} \\ \hline \end{gathered}$ | All <br> Muslims | All | NM- <br> Others | MOthers | $\begin{gathered} \mathrm{M}- \\ \mathrm{OBC} \\ \hline \end{gathered}$ | All Muslims | All |
| 1999 |  |  |  |  |  |  |  |  |  |  |
| M | 15.39 | 5.40 | 3.87 | 4.89 | 8.62 | 40.28 | 13.50 | 9.29 | 12.06 | 26.41 |
| F | 8.64 | 2.05 | 1.85 | 1.99 | 4.18 | 34.64 | 10.83 | 6.39 | 9.28 | 21.46 |
| P | 12.08 | 3.64 | 2.86 | 3.39 | 6.41 | 37.80 | 12.32 | 7.99 | 10.82 | 24.09 |
| 2004 |  |  |  |  |  |  |  |  |  |  |
| M | 14.97 | 7.61 | 7.58 | 7.60 | 9.28 | 38.31 | 11.95 | 9.71 | 11.08 | 24.66 |
| F | 10.88 | 3.05 | 5.19 | 3.90 | 5.67 | 37.71 | 11.03 | 7.89 | 9.76 | 22.42 |
| P | 13.04 | 5.41 | 6.34 | 5.76 | 7.50 | 38.14 | 11.53 | 8.86 | 10.47 | 23.72 |
| 2011 |  |  |  |  |  |  |  |  |  |  |
| M | 36.71 | 17.68 | 14.22 | 15.95 | 22.36 | 51.16 | 18.83 | 15.01 | 16.88 | 37.33 |
| F | 27.77 | 7.95 | 7.78 | 7.87 | 14.41 | 51.11 | 15.79 | 16.56 | 16.18 | 36.07 |
| P | 32.52 | 12.96 | 11.04 | 11.95 | 18.51 | 51.34 | 17.43 | 15.73 | 16.56 | 36.80 |
| 2014* |  |  |  |  |  |  |  |  |  |  |
| M | 33.63 | 9.62 | 15.66 | 12.76 | 21.20 | 49.02 | 20.29 | 16.32 | 17.97 | 35.08 |
| F | 31.00 | 9.94 | 9.27 | 9.57 | 16.79 | 50.90 | 18.96 | 13.54 | 15.83 | 35.01 |
| P | 32.40 | 9.77 | 12.60 | 11.31 | 19.07 | 49.70 | 19.68 | 15.05 | 16.99 | 35.01 |
| Compound Annual Growth Rate (1999 to 2011) |  |  |  |  |  |  |  |  |  |  |
| M | 7.52 | 10.39 | 11.45 | 10.34 | 8.27 | 2.01 | 2.81 | 4.08 | 2.84 | 2.93 |
| F | 10.22 | 11.94 | 12.70 | 12.13 | 10.87 | 3.29 | 3.19 | 8.25 | 4.74 | 4.42 |
| P | 8.60 | 11.15 | 11.92 | 11.06 | 9.24 | 2.58 | 2.94 | 5.81 | 3.61 | 3.59 |

Source: As in table A2.5

Table A2.9: Binary Logistic Estimates for Education Transitions (1999-2011)

| Variables | School Enrollment | Primary | Middle | Secondary |
| :---: | :---: | :---: | :---: | :---: |
| Year (Ref: 1999) |  |  |  |  |
| 2004 | 2.057*** | 1.710*** | 1.098*** | 0.957** |
|  | (0.0322) | (0.0408) | (0.0213) | (0.0187) |
| 2011 | 4.349*** | 3.940*** | 2.687*** | 1.926*** |
|  | (0.105) | (0.132) | (0.0664) | (0.0414) |
| Sex (Ref: Males) |  |  |  |  |
| females | 0.695*** | 0.771*** | 0.721*** | 0.679*** |
|  | (0.00994) | (0.0169) | (0.0126) | (0.0113) |
| Socio-Religious Exclusion <br> (Ref: NM-Others) |  |  |  |  |
| NM-SC | 0.450*** | 0.483*** | 0.499*** | 0.590*** |
|  | (0.0122) | (0.0186) | (0.0144) | (0.0164) |
| NM-ST | 0.373*** | 0.441*** | 0.572*** | 0.738*** |
|  | (0.0111) | (0.0191) | (0.0195) | (0.0239) |
| NM-OBC | 0.537*** | 0.637*** | 0.655*** | 0.705*** |
|  | (0.0138) | (0.0228) | (0.0170) | (0.0155) |
| M-Others | 0.373*** | 0.334*** | 0.412*** | $0.621 * * *$ |
|  | (0.0112) | (0.0139) | (0.0135) | (0.0199) |
| M-OBC | 0.263*** | 0.308*** | 0.382*** | 0.388*** |
|  | (0.00871) | (0.0151) | (0.0152) | (0.0151) |
| Geographic Location Factors |  |  |  |  |
| Sector (Ref: Rural) |  |  |  |  |
| Urban |  |  |  |  |
|  | (0.0174) | $(0.0253)$ | (0.0208) | $(0.0245)$ |
| Region (Ref: North) |  |  |  |  |
| Central | 0.992 | 0.990 | $1.294 * * *$ | $1.089 * * *$ |
|  | (0.0241) | (0.0381) | $(0.0369)$ | $(0.0312)$ |
| East | $0.842 * * *$ | $0.779 * * *$ | $1.400^{* * *}$ | $1.005$ |
|  | (0.0204) | $(0.0292)$ | $(0.0412)$ | (0.0294) |
| Northeast | $1.514^{* * *}$ | $1.397 * * *$ | $1.833 * * *$ | $1.500 * * *$ |
|  | $(0.0472)$ | $(0.0646)$ | (0.0633) | (0.0500) |
| West | $2.078 * * *$ | $1.433 * * *$ | $1.302^{* * *}$ | $0.495 * * *$ |
|  | $(0.0724)$ | (0.0703) | $(0.0444)$ | $(0.0152)$ |
| South | 2.669*** | 1.566*** | 1.563*** | 0.682*** |
|  | (0.0839) | (0.0694) | (0.0481) | (0.0194) |
| hh_size | 1.020*** | 1.056*** | 1.068*** | 1.048*** |
|  | (0.00253) | (0.00459) | (0.00390) | (0.00328) |
| log_mpce | 3.942*** | 4.142*** | 4.795*** | 4.850*** |
|  | (0.0763) | (0.119) | (0.109) | (0.0991) |
| age | 1.171*** | 0.785*** | $0.708 * * *$ | 0.691*** |
|  | (0.00540) | (0.00533) | (0.00394) | (0.00354) |
| Constant | $0.000477 * * *$ | 0.0541*** | $0.0529 * * *$ | 0.0664*** |
|  | (6.43e-05) | (0.0111) | (0.00880) | (0.0110) |
| Observations | 218,205 | 169,372 | 134,821 | 80,924 |
| Wald chi2 (17) | 17881.26 | 7402.27 | 11051.11 | 14122.92 |
| [Prob > chi2] | [0.00] | [0.00] | [0.00] | [0.00] |
| Log likelihood ratio | -66294.243 | -32392.48 | -44647.576 | -44163.994 |
| Pseudo R Square | 0.1642 | 0.1265 | 0.1434 | 0.1932 |

Robust Standard Errors in parentheses
*** $\mathrm{p}<0.01, * * \mathrm{p}<0.05, * \mathrm{p}<0.1$

Table A2.10: Binary Logistic Estimates for Higher Education Enrollment (1999-2011 \& 2007-2014)

| Variables | 1999 | 2004 | 2011 | 2007 | 2014 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Sex (Ref: Male) females | $\begin{gathered} 0.741 * * * \\ (0.0197) \end{gathered}$ | $\begin{gathered} 0.795 * * * \\ (0.0213) \end{gathered}$ | $\begin{gathered} 0.798 * * * \\ (0.0180) \end{gathered}$ | $\begin{gathered} 0.883 * * * \\ (0.0302) \end{gathered}$ | $\begin{gathered} 0.914 * * * \\ (0.0210) \end{gathered}$ |
| Socio-Religious Exclusion (Ref: NM-Others) |  |  |  |  |  |
| NM-SC | $\begin{gathered} 0.505 * * * \\ (0.0236) \end{gathered}$ | $\begin{gathered} 0.617 * * * \\ (0.0285) \end{gathered}$ | $\begin{gathered} 0.574 * * * \\ (0.0220) \end{gathered}$ | $\begin{gathered} 0.589 * * * \\ (0.0327) \end{gathered}$ | $\begin{gathered} 0.593 * * * \\ (0.0223) \end{gathered}$ |
| NM-ST | $\begin{gathered} 0.422 * * * \\ (0.0271) \end{gathered}$ | $\begin{aligned} & 0.526 * * * \\ & (0.0321) \end{aligned}$ | $\begin{aligned} & 0.644 * * * \\ & (0.0286) \end{aligned}$ | $\begin{aligned} & 0.423 * * * \\ & (0.0328) \end{aligned}$ | $\begin{gathered} 0.550 * * * \\ (0.0246) \end{gathered}$ |
| NM-OBC | $\begin{gathered} 0.592 * * * \\ (0.0203) \end{gathered}$ | $\begin{aligned} & 0.759 * * * \\ & (0.0258) \end{aligned}$ | $\begin{aligned} & 0.792 * * * \\ & (0.0240) \end{aligned}$ | $\begin{aligned} & 0.648 * * * \\ & (0.0283) \end{aligned}$ | $\begin{aligned} & 0.786^{* * *} \\ & (0.0237) \end{aligned}$ |
| M-Others | $\begin{aligned} & 0.434 * * * \\ & (0.0229) \end{aligned}$ | $\begin{aligned} & 0.596 * * * \\ & (0.0328) \end{aligned}$ | $\begin{gathered} 0.677 * * * \\ (0.0305) \end{gathered}$ | $\begin{aligned} & 0.357 * * * \\ & (0.0288) \end{aligned}$ | $\begin{gathered} 0.574 * * * \\ (0.0291) \end{gathered}$ |
| M-OBC | $\begin{gathered} 0.209 * * * \\ (0.0184) \end{gathered}$ | $\begin{aligned} & 0.430 * * * \\ & (0.0315) \end{aligned}$ | $\begin{aligned} & 0.438 * * * \\ & (0.0228) \end{aligned}$ | $\begin{aligned} & 0.287 * * * \\ & (0.0269) \end{aligned}$ | $\begin{gathered} 0.425^{*} * * \\ (0.0211) \end{gathered}$ |
| Geographic Location Factors Sector (Ref: Rural) |  |  |  |  |  |
| Urban | $\begin{aligned} & 1.843 * * * \\ & (0.0548) \end{aligned}$ | $\begin{aligned} & 1.563 * * * \\ & (0.0443) \end{aligned}$ | $\begin{aligned} & 1.260 * * * \\ & (0.0302) \end{aligned}$ | $\begin{aligned} & 1.552 * * * \\ & (0.0619) \end{aligned}$ | $\begin{aligned} & 1.063 * * \\ & (0.0261) \end{aligned}$ |
| Region (Ref: <br> North) |  |  |  |  |  |
| Central | $\begin{aligned} & 1.528 * * * \\ & (0.0655) \end{aligned}$ | $\begin{aligned} & 1.416 * * * \\ & (0.0619) \end{aligned}$ | $\begin{aligned} & 1.246 * * * \\ & (0.0460) \end{aligned}$ | $\begin{gathered} 2.008^{*} * * \\ (0.120) \end{gathered}$ | $\begin{aligned} & 1.499 * * * \\ & (0.0576) \end{aligned}$ |
| East | $\begin{aligned} & 1.182 * * * \\ & (0.0563) \end{aligned}$ | $\begin{aligned} & 1.246 * * * \\ & (0.0575) \end{aligned}$ | $\begin{gathered} 0.986 \\ (0.0388) \end{gathered}$ | $\begin{aligned} & 1.519 * * * \\ & (0.0947) \end{aligned}$ | $\begin{gathered} 1.375 * * * \\ (0.0556) \end{gathered}$ |
| Northeast | $\begin{aligned} & 1.444 * * * \\ & (0.0900) \end{aligned}$ | $\begin{gathered} 1.038 \\ (0.0626) \end{gathered}$ | $\begin{gathered} 0.999 \\ (0.0454) \end{gathered}$ | $\begin{gathered} 0.997 \\ (0.0818) \end{gathered}$ | $\begin{aligned} & 1.209 * * * \\ & (0.0593) \end{aligned}$ |
| West | $\begin{gathered} 1.067 \\ (0.0492) \end{gathered}$ | $\begin{gathered} 1.009 \\ (0.0484) \end{gathered}$ | $\begin{aligned} & 0.804 * * * \\ & (0.0330) \end{aligned}$ | $\begin{aligned} & 1.370^{* * *} \\ & (0.0831) \end{aligned}$ | $\begin{gathered} 0.895 * * * \\ (0.0385) \end{gathered}$ |
| South | $\begin{aligned} & 1.658 * * * \\ & (0.0690) \end{aligned}$ | $\begin{aligned} & 1.419 * * * \\ & (0.0612) \end{aligned}$ | $\begin{aligned} & 1.186 * * * \\ & (0.0436) \end{aligned}$ | $\begin{gathered} 2.165 * * * \\ (0.123) \end{gathered}$ | $\begin{aligned} & 1.755^{*} * * \\ & (0.0692) \end{aligned}$ |
| hh_size | $\begin{aligned} & 1.036 * * * \\ & (0.00449) \end{aligned}$ | $\begin{aligned} & 1.047 * * * \\ & (0.00461) \end{aligned}$ | $\begin{aligned} & 1.035 * * * \\ & (0.00453) \end{aligned}$ | $\begin{aligned} & 1.043 * * * \\ & (0.00773) \end{aligned}$ | $\begin{aligned} & 1.022^{* * *} \\ & (0.00505) \end{aligned}$ |
| log_mpce | $\begin{gathered} 4.969 * * * \\ (0.140) \end{gathered}$ | $\begin{gathered} 4.956 * * * \\ (0.141) \end{gathered}$ | $\begin{gathered} 3.190 * * * \\ (0.0726) \end{gathered}$ | $\begin{gathered} 4.698 * * * \\ (0.180) \end{gathered}$ | $\begin{gathered} 3.960 * * * \\ (0.0977) \end{gathered}$ |
| age | $\begin{aligned} & 0.912 * * * \\ & (0.00678) \end{aligned}$ | $\begin{aligned} & 0.884 * * * \\ & (0.00661) \end{aligned}$ | $\begin{aligned} & 0.857 * * * \\ & (0.00552) \end{aligned}$ | $\begin{aligned} & 0.841 * * * \\ & (0.00798) \end{aligned}$ | $\begin{aligned} & 0.951 * * * \\ & (0.00632) \end{aligned}$ |
| Constant | $\begin{gathered} 1.56 \mathrm{e}-05^{*} * * \\ (3.85 \mathrm{e}-06) \end{gathered}$ | $\begin{gathered} 2.65 \mathrm{e}-05 * * * \\ (6.67 \mathrm{e}-06) \end{gathered}$ | $\begin{gathered} 0.00286^{* * *} \\ (0.000592) \end{gathered}$ | $\begin{gathered} 8.27 \mathrm{e}-05^{* *} * \\ (2.74 \mathrm{e}-05) \end{gathered}$ | $\begin{gathered} 0.000126 * * * \\ (2.84 \mathrm{e}-05) \end{gathered}$ |
| Wald chi2 (15) | 7392.75 | 5823.99 | 4907.52 | 4348.32 | 5476.80 |
| [Prob > chi2] | [0.00] | [0.00] | [0.00] | [0.00] | [0.00] |
| Log likelihood |  |  |  |  | -22965.676 |
| Ratio | -20042.967 | -20062.725 | -24591.792 | -12397.589 |  |
| Pseudo R Square | 0.1872 | 0.1542 | 0.1061 | 0.1741 | 0.1380 |
| Observations | 68,118 | 68,839 | 50,385 | 49,025 | 41,480 |

Robust Standard Errors in parentheses
*** $\mathrm{p}<0.01$, ** $\mathrm{p}<0.05$, * $\mathrm{p}<0.1$

## Appendix to Chapter-3

Table A3.1: LFPR (in \%) by Socio-Religious Groups,
Sex and Residence (UP\&SS: 15-65 years), 1999-2011

| Sector/Socio- <br> Religious <br> Groups ( $\downarrow$ ) | 1999 |  |  | 2004 |  | 2011 |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male | Female | Male | Female | Male | Female |  |
| Rural |  |  |  |  |  |  |  |
| NM-Others | 84.10 | 37.93 | 85.84 | 44.02 | 80.42 | 30.17 |  |
| NM-SC | 88.53 | 52.14 | 89.22 | 54.19 | 84.01 | 40.00 |  |
| NM-ST | 90.23 | 69.48 | 90.71 | 71.88 | 86.84 | 55.09 |  |
| NM-OBC | 88.23 | 49.42 | 88.16 | 54.23 | 83.03 | 38.03 |  |
| M-Others | 88.97 | 26.73 | 88.89 | 28.03 | 85.21 | 25.77 |  |
| M-OBC | 87.70 | 30.19 | 86.04 | 32.15 | 81.38 | 23.60 |  |
| All Muslims | 87.88 | 27.86 | 87.50 | 29.71 | 83.62 | 24.65 |  |
| All | 87.32 | 47.23 | 88.29 | 51.13 | 83.07 | 37.20 |  |
| Urban | 78 |  |  |  |  |  |  |
| NM-Others | 78.66 | 17.18 | 78.85 | 21.27 | 77.08 | 19.24 |  |
| NM-SC | 82.70 | 29.41 | 83.08 | 31.03 | 80.12 | 25.55 |  |
| NM-ST | 78.59 | 33.04 | 78.35 | 38.29 | 78.09 | 29.49 |  |
| NM-OBC | 82.78 | 26.00 | 83.27 | 30.16 | 79.46 | 23.97 |  |
| M-Others | 82.87 | 15.52 | 84.97 | 17.60 | 81.82 | 16.14 |  |
| M-OBC | 84.52 | 18.95 | 84.08 | 20.83 | 82.43 | 15.73 |  |
| All Muslims | 83.33 | 16.61 | 84.62 | 18.82 | 82.16 | 15.93 |  |
| All | 80.98 | 21.69 | 81.57 | 25.47 | 78.86 | 21.40 |  |

Source: Computed using unit record data of Employment-Unemployment Rounds (55 ${ }^{\text {th }}$, $61^{\text {st }}$ and $68^{\text {th }}$ ) of NSSO

Table A3.2: WPR (in \%) by Socio-Religious Groups, Sex and Residence (UP\&SS: 15-65 years), 1999-2011

| Sector/Socio- <br> Religious <br> Groups ( $\downarrow)$ | 1999 |  | 2004 |  | 2011 |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male | Female | Male | Female | Male | Female |
| Rural |  |  |  |  |  |  |
| NM-Others | 82.09 | 36.92 | 83.82 | 42.66 | 79.16 | 29.53 |
| NM-SC | 86.70 | 51.90 | 87.72 | 53.30 | 82.27 | 39.60 |
| NM-ST | 89.30 | 69.48 | 89.82 | 71.43 | 86.09 | 54.34 |
| NM-OBC | 87.09 | 48.99 | 86.87 | 53.29 | 81.72 | 37.51 |
| M-Others | 86.76 | 26.47 | 87.50 | 27.40 | 83.80 | 25.08 |
| M-OBC | 85.03 | 29.29 | 83.92 | 30.36 | 80.00 | 22.29 |
| All Muslims | 85.86 | 27.39 | 85.78 | 28.61 | 81.53 | 23.64 |
| All | 85.85 | 46.68 | 86.49 | 50.23 | 81.50 | 36.60 |
| Urban | 74.70 | 15.77 | 75.83 | 19.31 | 74.74 | 17.97 |
| NM-Others | 78.43 | 28.55 | 78.46 | 29.55 | 77.64 | 24.37 |
| NM-SC | 75.19 | 32.00 | 75.99 | 37.08 | 75.44 | 28.06 |
| NM-ST | 78.95 | 24.68 | 80.61 | 28.07 | 77.30 | 22.80 |
| NM-OBC | 78.71 | 14.54 | 82.11 | 16.66 | 77.71 | 15.33 |
| M-Others | 81.47 | 17.51 | 80.90 | 19.26 | 80.26 | 15.10 |
| M-OBC | 79.88 | 15.48 | 81.54 | 17.64 | 78.92 | 15.22 |
| All Muslims | 77.20 | 20.44 | 78.50 | 23.72 | 76.49 | 20.28 |
| All |  |  |  |  |  |  |

Source: As in table A3.1

Table A3.3: Average MPCE (in 2004-05 Prices) by Socio-Religious Groups and
Residence, 1999-2011

| SRGs <br> $(\downarrow)$ | Average MPCE |  |  |  |  |  |  | Growth in Average MPCE |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Rural |  |  | 99 | 04 | 11 | 99 | 2004 | 2011 | $99-$ <br> 04 | $04-$ <br> 11 | $99-$ <br> 11 | $99-$ <br> 04 |
|  | $04-$ <br> 11 | $99-$ <br> 11 |  |  |  |  |  |  |  |  |  |  |  |
| NM- <br> Others | 618 | 729 | 850 | 1190 | 1411 | 1744 | 18.10 | 16.52 | 37.62 | 18.57 | 23.58 | 46.52 |  |
| NM- <br> SC | 435 | 471 | 582 | 699 | 733 | 969 | 8.40 | 23.58 | 33.96 | 4.75 | 32.30 | 38.59 |  |
| NM- <br> ST | 398 | 439 | 508 | 806 | 858 | 1062 | 10.14 | 15.73 | 27.47 | 6.51 | 23.80 | 31.86 |  |
| NM- <br> OBC | 482 | 544 | 667 | 805 | 1013 | 1225 | 12.81 | 22.65 | 38.37 | 25.85 | 20.93 | 52.19 |  |
| M- <br> Others | 451 | 502 | 627 | 704 | 807 | 1016 | 11.53 | 24.87 | 39.27 | 14.59 | 25.98 | 44.35 |  |
| M- <br> OBC | 500 | 550 | 651 | 655 | 673 | 874 | 9.91 | 18.31 | 30.04 | 2.65 | 29.95 | 33.39 |  |

Source: As in table A3.1

## Appendix to Chapter 4

Table A4.1: Selectivity Corrected Rates of Return to Education (RTE) for Regular Workers by Gender (2011-12)

| Education Levels $(\downarrow)$ | Person | Male | Female |
| :--- | :---: | :---: | :---: |
| Primary | 9.3 | 2.5 | 9.2 |
| Middle | 5.2 | 3.7 | 8 |
| Secondary | 10.2 | 8.9 | 17.5 |
| Higher Secondary | 8.7 | 8.6 | 12.5 |
| Diploma | 15.9 | 16.6 | 23.6 |
| Graduate and above | 11.5 | 11.7 | 13.6 |

Source: Singhari and Madheswaran (2016:13)
Note: The study is based on a sample of individuals aged 15 to 65 years with real daily wages ( 2001 prices) being computed on current daily status of an individual. Returns for primary education have been calculated as $(\mathrm{RTE})_{\text {pri }}=\beta_{\text {pri }} / 2$ while for other education levels as $(\operatorname{RTE})_{\text {edu_level }}=\left(\beta_{\text {edu_level }}-\beta_{\text {edu_level-1 }}\right) /\left(S_{\text {edu_level }}-S_{\text {edu_level-1 }}\right)$ where $\beta$ s represent the coefficients from the selectivity corrected wage equation and $S$ is the additional years of schooling computed as 3,2,2, 2 and 3 for middle, secondary, higher secondary, diploma and graduate and above levels.

Table A4.2: Means and Standard Deviations of Key Variables used in the Models, 2011

| Variable | Mean | Std. Dev. | Min | Max |
| :--- | :---: | :---: | :---: | :---: |
| log_wage (All) | 5.3919 | 0.8596 | 1.455 | 8.915 |
| log_wage (Male) | 5.4873 | 0.8144 | 1.455 | 8.915 |
| log_wage (Female) | 5.0100 | 0.9270 | 1.925 | 8.700 |
| Male | 0.4996 | 0.5000 | 0 | 1 |
| Female | 0.5004 | 0.5000 | 0 | 1 |
| Education Level |  |  |  |  |
| Illiterate \& Below <br> Primary | 0.2935 | 0.4553 | 0 | 1 |
| Primary | 0.1147 | 0.3186 | 0 | 1 |
| Middle | 0.1894 | 0.3918 | 0 | 1 |
| Secondary | 0.1698 | 0.3755 | 0 | 1 |
| Higher Secondary | 0.1188 | 0.3235 | 0 | 1 |
| Graduation \& Above | 0.1138 | 0.3176 | 0 | 1 |
| No technical Education | 0.9826 | 0.1309 | 0 | 1 |
| Technical Education | 0.0174 | 0.1309 | 0 | 1 |
| NM-Others | 0.2533 | 0.4349 | 0 | 1 |
| NM-SC | 0.1487 | 0.3558 | 0 | 1 |
| NM-ST | 0.1271 | 0.3331 | 0 | 1 |
| NM-OBC | 0.3274 | 0.4693 | 0 | 1 |
| M-Others | 0.0747 | 0.2629 | 0 | 1 |
| M-OBC | 0.0689 | 0.2533 | 0 | 1 |


| Variable | Mean | Std. Dev. | Min | Max |
| :--- | :---: | :---: | :---: | :---: |
| Age | 35 | 14 | 15 | 65 |
| age_sq | 1425 | 1062 | 225 | 4225 |
| Married | 0.6854 | 0.4643 | 0 | 1 |
| Single | 0.3146 | 0.4643 | 0 | 1 |
| Rural | 0.6028 | 0.4893 | 0 | 1 |
| Urban | 0.3972 | 0.4893 | 0 | 1 |
| North | 0.1744 | 0.3794 | 0 | 1 |
| Central | 0.1851 | 0.3884 | 0 | 1 |
| East | 0.1832 | 0.3868 | 0 | 1 |
| North-East | 0.1363 | 0.3431 | 0 | 1 |
| West | 0.1225 | 0.3278 | 0 | 1 |
| South | 0.1986 | 0.3990 | 0 | 1 |
| No. of Children |  |  |  |  |
| child1 | 0.1964 | 0.3973 | 0 | 1 |
| child2 | 0.0762 | 0.2654 | 0 | 1 |
| child3 | 0.0199 | 0.1398 | 0 | 1 |
| Old | 0.1672 | 0.4358 | 0 | 4 |
| hh_size | 5.4082 | 2.6381 | 1 | 39 |
| Sorce: Coma |  |  |  |  |

Source: Computed using unit record data of Employment-Unemployment ( $68^{\text {th }}$ ) Round of NSSO

Table A4.3: Means and Standard Deviations of Socio-Religious Groups-Education Level by Sex, 2011

| Variable | Males |  | Females |  |
| :--- | :---: | :---: | :---: | :---: |
|  | Mean | Std. Dev. | Mean | Std. Dev. |
| NM-Others | 0.2537 | 0.4351 | 0.2528 | 0.4346 |
| NM-SC | 0.1489 | 0.3560 | 0.1484 | 0.3555 |
| NM-ST | 0.1268 | 0.3327 | 0.1274 | 0.3335 |
| NM-OBC | 0.3271 | 0.4692 | 0.3277 | 0.4694 |
| M-Others | 0.0762 | 0.2654 | 0.0731 | 0.2603 |
| M-OBC | 0.0672 | 0.2504 | 0.0706 | 0.2561 |
| Education Level |  |  |  |  |
| Illiterate \& Below Primary | 0.2113 | 0.4082 | 0.3755 | 0.4842 |
| Primary | 0.1144 | 0.3183 | 0.1150 | 0.3190 |
| Middle | 0.2053 | 0.4039 | 0.1735 | 0.3787 |
| Secondary | 0.1919 | 0.3938 | 0.1478 | 0.3549 |
| Higher Secondary | 0.1357 | 0.3425 | 0.1019 | 0.3025 |
| Graduation \& Above | 0.1414 | 0.3485 | 0.0863 | 0.2808 |
| No technical Education | 0.9756 | 0.1542 | 0.9895 | 0.1020 |
| Technical Education | 0.0244 | 0.1542 | 0.0105 | 0.1020 |
| NM-Others |  |  |  |  |
| Illiterate \& Below Primary | 0.1053 | 0.3069 | 0.2293 | 0.4204 |
| Primary | 0.0793 | 0.2702 | 0.1020 | 0.3026 |
| Middle | 0.1753 | 0.3802 | 0.1687 | 0.3745 |
| Secondary | 0.2200 | 0.4142 | 0.1850 | 0.3883 |


| Variable | Males |  | Females |  |
| :--- | :---: | :---: | :---: | :---: |
|  | Mean | Std. Dev. | Mean | Std. Dev. |
| Higher Secondary | 0.1776 | 0.3822 | 0.1464 | 0.3535 |
| Graduation \& Above | 0.2425 | 0.4286 | 0.1686 | 0.3744 |
| No technical Education | 0.9536 | 0.2104 | 0.9795 | 0.1416 |
| Technical Education | 0.0464 | 0.2104 | 0.0205 | 0.1416 |
| M-Others |  |  |  |  |
| Illiterate \& Below Primary | 0.2705 | 0.4442 | 0.4529 | 0.4978 |
| Primary | 0.1388 | 0.3458 | 0.1233 | 0.3288 |
| Middle | 0.2043 | 0.4032 | 0.1654 | 0.3715 |
| Secondary | 0.1691 | 0.3749 | 0.1269 | 0.3329 |
| Higher Secondary | 0.1147 | 0.3187 | 0.0733 | 0.2606 |
| Graduation \& Above | 0.1026 | 0.3035 | 0.0582 | 0.2341 |
| No technical Education | 0.9824 | 0.1314 | 0.9954 | 0.0673 |
| Technical Education | 0.0176 | 0.1314 | 0.0046 | 0.0673 |
| M-OBC |  |  |  |  |
| Illiterate \& Below Primary | 0.2955 | 0.4563 | 0.4544 | 0.4979 |
| Primary | 0.1366 | 0.3434 | 0.1236 | 0.3292 |
| Middle | 0.2281 | 0.4196 | 0.1823 | 0.3861 |
| Secondary | 0.1745 | 0.3795 | 0.1218 | 0.3271 |
| Higher Secondary | 0.0936 | 0.2913 | 0.0747 | 0.2630 |
| Graduation \& Above | 0.0717 | 0.2580 | 0.0430 | 0.2029 |
| No technical Education | 0.9869 | 0.1137 | 0.9945 | 0.0738 |
| Technical Education | 0.0131 | 0.1137 | 0.0055 | 0.0738 |

Source: As in table A4.2

Table A4.4: Model I-Estimates of Wage Work Participation and Selectivity Corrected Wage Equation (UPS: 15-65 Years), 2011

|  | ALL (a) |  | MALES (b) |  | FEMALES (c) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | PART I <br> WWP Equation | PART II <br> Wage Equation | PART I <br> WWP <br> Equation | PART II <br> Wage Equation | PART I <br> WWP Equation | PART II <br> Wage Equation |
| age |  | $\begin{gathered} \hline 0.0292 * * * \\ (0.00158) \end{gathered}$ |  | $\begin{gathered} \hline 0.0373 * * * \\ (0.00173) \end{gathered}$ |  | $\begin{aligned} & \hline 0.0448 * * * \\ & (0.00347) \end{aligned}$ |
| age_sq |  | $\begin{gathered} -0.000186^{* * *} \\ (.0000197) \end{gathered}$ |  | $\begin{gathered} -0.000271 * * * \\ (0.0000214) \end{gathered}$ |  | $\begin{gathered} -0.000405 * * * \\ (.0000441) \end{gathered}$ |
| pri | $\begin{gathered} 0.0813 * * * \\ (0.00895) \end{gathered}$ | $\begin{aligned} & 0.199 * * * \\ & (0.00894) \end{aligned}$ | $\begin{aligned} & -0.00732 \\ & (0.0122) \end{aligned}$ | $\begin{aligned} & 0.136 * * * \\ & (0.00928) \end{aligned}$ | $\begin{gathered} -0.186 * * * \\ (0.0166) \end{gathered}$ | $\begin{aligned} & 0.152 * * * \\ & (0.0232) \end{aligned}$ |
| mid | $\begin{gathered} -0.0353 * * * \\ (0.00789) \end{gathered}$ | $\begin{aligned} & 0.353 * * * \\ & (0.00805) \end{aligned}$ | $\begin{gathered} -0.180 * * * \\ (0.0107) \end{gathered}$ | $\begin{aligned} & 0.275 * * * \\ & (0.00898) \end{aligned}$ | $\begin{gathered} -0.400^{* * *} \\ (0.0155) \end{gathered}$ | $\begin{aligned} & 0.287 * * * \\ & (0.0267) \end{aligned}$ |
| sec | $\begin{aligned} & -0.138 * * * \\ & (0.00837) \end{aligned}$ | $\begin{aligned} & 0.551 * * * \\ & (0.00901) \end{aligned}$ | $\begin{gathered} -0.346 * * * \\ (0.0111) \end{gathered}$ | $\begin{gathered} 0.460 * * * \\ (0.0108) \end{gathered}$ | $\begin{gathered} -0.453 * * * \\ (0.0167) \end{gathered}$ | $\begin{aligned} & 0.600^{* * *} \\ & (0.0294) \end{aligned}$ |
| higher_ <br> sec | $\begin{gathered} -0.0947 * * * \\ (0.00942) \end{gathered}$ | $\begin{aligned} & 0.795 * * * \\ & (0.00986) \end{aligned}$ | $\begin{gathered} -0.329 * * * \\ (0.0124) \end{gathered}$ | $\begin{gathered} 0.708 * * * \\ (0.0116) \end{gathered}$ | $\begin{gathered} -0.295 * * * \\ (0.0179) \end{gathered}$ | $\begin{gathered} 0.914 * * * \\ (0.0274) \end{gathered}$ |
| grad | $\begin{aligned} & 0.427 * * * \\ & (0.00924) \end{aligned}$ | $\begin{aligned} & 1.190 * * * \\ & (0.0110) \end{aligned}$ | $\begin{gathered} 0.117 * * * \\ (0.0123) \end{gathered}$ | $\begin{aligned} & 1.112 * * * \\ & (0.00910) \end{aligned}$ | $\begin{aligned} & 0.406 * * * \\ & (0.0162) \end{aligned}$ | $\begin{aligned} & 1.300 * * * \\ & (0.0245) \end{aligned}$ |
| tech_ | $0.309 * * *$ | $0.265 * * *$ | $0.168 * * *$ | $0.286^{* * *}$ | $0.421 * * *$ | $0.152 * * *$ |
| marital_ | $0.216 * * *$ | $0.162 * * *$ | $0.483 * * *$ | $0.0757 * * *$ | $-0.213 * * *$ | $0.0983 * * *$ |
| urban | $0.114 * * *$ | $0.131 * * *$ | $0.226 * * *$ | $\begin{aligned} & (0.0123) \\ & 0.112^{*} * * \end{aligned}$ | $0.00489$ | $0.127 * * *$ |
| Region | (0.00547) | (0.00575) | (0.00717) | (0.00683) | (0.0102) | (0.0130) |
| Central | $\begin{aligned} & -0.117 * * * \\ & (0.00896) \end{aligned}$ | $\begin{aligned} & -0.326 * * * \\ & (0.00933) \end{aligned}$ | $\begin{gathered} -0.182 * * * \\ (0.0115) \end{gathered}$ | $\begin{aligned} & -0.318^{* * *} \\ & (0.00979) \end{aligned}$ | $\begin{aligned} & -0.00232 \\ & (0.0181) \end{aligned}$ | $\begin{gathered} -0.300 * * * \\ (0.0251) \end{gathered}$ |
| East | $\begin{gathered} -0.0548 * * * \\ (0.00884) \end{gathered}$ | $\begin{aligned} & -0.222 * * * \\ & (0.00881) \end{aligned}$ | $\begin{gathered} -0.0962 * * * \\ (0.0114) \end{gathered}$ | $\begin{aligned} & -0.236^{* * *} \\ & (0.00900) \end{aligned}$ | $\begin{aligned} & 0.00927 \\ & (0.0180) \end{aligned}$ | $\begin{gathered} -0.149 * * * \\ (0.0249) \end{gathered}$ |
| NE | $\begin{aligned} & -0.112 * * * \\ & (0.00974) \end{aligned}$ | $\begin{aligned} & 0.0407 * * * \\ & (0.00998) \end{aligned}$ | $\begin{gathered} -0.179 * * * \\ (0.0126) \end{gathered}$ | $\begin{gathered} 0.0415 * * * \\ (0.0105) \end{gathered}$ | $\begin{gathered} 0.121^{*} * * \\ (0.0192) \end{gathered}$ | $\begin{gathered} 0.177 * * * \\ (0.0266) \end{gathered}$ |
| West | $\begin{aligned} & 0.109 * * * \\ & (0.00957) \end{aligned}$ | $\begin{gathered} -0.233 * * * \\ (0.00946) \end{gathered}$ | $\begin{gathered} 0.0181 \\ (0.0126) \end{gathered}$ | $\begin{gathered} -0.176 * * * \\ (0.00964) \end{gathered}$ | $\begin{gathered} 0.422 * * * \\ (0.0180) \end{gathered}$ | $\begin{gathered} -0.218 * * * \\ (0.0292) \end{gathered}$ |
| South | $\begin{aligned} & 0.180 * * * \\ & (0.00842) \end{aligned}$ | $\begin{gathered} -0.156 * * * \\ (0.00893) \end{gathered}$ | $\begin{gathered} 0.103 * * * \\ (0.0112) \end{gathered}$ | $\begin{gathered} -0.0799 * * * \\ (0.00874) \end{gathered}$ | $\begin{gathered} 0.526 * * * \\ (0.0158) \end{gathered}$ | $\begin{gathered} -0.160 * * * \\ (0.0310) \end{gathered}$ |
| Exclusio <br> No. of C | Restrictions ildren |  |  |  |  |  |
| child1 | $\begin{aligned} & 0.0642 * * * \\ & (0.00697) \end{aligned}$ |  | $\begin{aligned} & 0.148 * * * \\ & (0.00929) \end{aligned}$ |  | $\begin{gathered} -0.0342 * * * \\ (0.0132) \end{gathered}$ |  |
| child2 | $\begin{gathered} 0.109 * * * \\ (0.0107) \end{gathered}$ |  | $\begin{gathered} 0.191 * * * \\ (0.0142) \end{gathered}$ |  | $\begin{aligned} & -0.0179 \\ & (0.0211) \end{aligned}$ |  |
| child3 | $\begin{gathered} 0.191 * * * \\ (0.0219) \end{gathered}$ |  | $\begin{gathered} 0.285 * * * \\ (0.0282) \end{gathered}$ |  | $\begin{gathered} 0.0203 \\ (0.0475) \end{gathered}$ |  |
| old | $\begin{gathered} -0.0551 * * * \\ (0.00661) \end{gathered}$ |  | $\begin{aligned} & 0.000968 \\ & (0.00870) \end{aligned}$ |  | $\begin{gathered} 0.0152 \\ (0.0120) \end{gathered}$ |  |
| hh_size | $\begin{gathered} -0.0627 * * * \\ (0.00131) \end{gathered}$ |  | $\begin{gathered} -0.0732 * * * \\ (0.00169) \end{gathered}$ |  | $\begin{gathered} -0.0719 * * * \\ (0.00259) \end{gathered}$ |  |
| Inverse | -0.0807*** |  | -0.0977*** |  | -0.187*** |  |
| Mills | (0.0237) |  | (0.0244) |  | (0.0479) |  |
| Ratio ( $\lambda$ ) rho | -0.12284 |  | -0.15824 |  | -0.26235 |  |


|  | ALL (a) |  | MALES (b) |  | FEMALES (c) |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | PART I | PART II | PART I | PART II | PART I | PART II |
|  | WWP | Wage | WWP | Wage | WWP | Wage |
|  | Equation | Equation | Equation | Equation | Equation | Equation |
| sigma | .65678763 |  | .61740368 |  | .71449545 |  |
| Constant | $-0.700^{* * *}$ | $4.188^{* * *}$ | $-0.288^{* * *}$ | $4.199^{* * *}$ | $-0.948^{* * *}$ | $3.825^{* * *}$ |
|  | $(0.0111)$ | $(0.0464)$ | $(0.0149)$ | $(0.0430)$ | $(0.0207)$ | $(0.112)$ |

Robust standard errors in parentheses
*** $\mathrm{p}<0.01,{ }^{* *} \mathrm{p}<0.05, * \mathrm{p}<0.1$
Table A4.5: Activity Status by Socio-Religious Groups (UPS: 15-65 Years), 2011

|  | Self-Employed | Regular | Casual | Unemployed | Total |
| :--- | :---: | :---: | :---: | :---: | :---: |
| NM-Others | 53.02 | 30.77 | 12.86 | 3.35 | 100 |
| NM-SC | 32.54 | 16.47 | 48.28 | 2.7 | 100 |
| NM-ST | 51.29 | 9.28 | 37.7 | 1.74 | 100 |
| NM-OBC | 51.9 | 17.07 | 28.6 | 2.43 | 100 |
| M-Others | 53.02 | 17.15 | 26.02 | 3.81 | 100 |
| M-OBC | 48.91 | 16.79 | 30.98 | 3.32 | 100 |
| All Muslims | 50.95 | 16.97 | 28.53 | 3.56 | 100 |
| Total | 48.29 | 19.12 | 29.84 | 2.75 | 100 |

Source: As in table A4.2
Table A4.6: Nominal Daily Wages (in Rs.) by Socio-Religious Groups and Sex (UPS: 15-65 Years), 2011

| Socio-Religious <br> Groups ( $\downarrow)$ | Regular |  |  |  | Casual |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male | Female | Person | M/F | Male | Female | Person | M/F |
| NM-Others | 567 | 478 | 550 | 1.19 | 164 | 102 | 151 | 1.61 |
| NM-SC | 348 | 221 | 320 | 1.57 | 158 | 109 | 147 | 1.45 |
| NM-ST | 402 | 266 | 371 | 1.51 | 127 | 98 | 118 | 1.30 |
| NM-OBC | 385 | 267 | 362 | 1.44 | 165 | 109 | 151 | 1.51 |
| M-Others | 307 | 254 | 300 | 1.21 | 149 | 91 | 142 | 1.64 |
| M-OBC | 285 | 213 | 274 | 1.34 | 168 | 101 | 160 | 1.66 |
| All Muslims | 296 | 232 | 287 | 1.28 | 159 | 96 | 152 | 1.66 |
| All | 434 | 327 | 413 | 1.33 | 158 | 106 | 146 | 1.49 |
| NM-Others/ <br> M-Others | 1.85 | 1.88 | 1.83 |  | 1.10 | 1.12 | 1.06 |  |
| NM-Others/ <br> M-OBC | 1.99 | 2.24 | 2.01 |  | 0.98 | 1.01 | 0.94 |  |
| M-Others/ <br> M-OBC | 1.08 | 1.19 | 1.09 |  | 0.89 | 0.90 | 0.89 |  |
| NM-Others/ <br> All Muslim | 1.92 | 2.06 | 1.92 |  | 1.03 | 1.06 | 0.99 |  |

Source: As in table A4.2

Table A4.7: Oaxaca Decomposition by Alternative Wage Structures
(NM-Others and M-Others Females), 2011

|  | NM-Others Females Wage Structure |  |  | M-Others Females Wage Structure |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| log_wage2 | Coefficient | Std. Err. | $\mathrm{P}>\mathrm{z}$ | Coefficient | Std. Err. | $\mathrm{P}>\mathrm{z}$ |
| NM-Others | 5.428 | 0.0200 | 0.000 | 5.428 | 0.0200 | 0.000 |
| M-Others | 4.916 | 0.0440 | 0.000 | 4.916 | 0.0440 | 0.000 |
| difference | 0.513 | 0.0484 | 0.000 | 0.513 | 0.0484 | 0.000 |
| explained | 0.423 | 0.0371 | 0.000 | 0.375 | 0.0413 | 0.000 |
| unexplained | 0.090 | 0.0393 | 0.022 | 0.138 | 0.0461 | 0.003 |
| Percentage <br> Explained | 82.47 |  |  | 73.17 |  |  |
| Percentage <br> Unexplained | 17.53 |  |  | 26.88 |  |  |

Table A4.8: Oaxaca Decomposition by Alternative Wage Structures (NM-Others and M-OBC Females), 2011

|  | NM-Others Females Wage Structure |  |  | M-OBC Females Wage Structure |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| log_wage2 | Coefficient | Std. Err. | $\mathrm{P}>\mathrm{z}$ | Coefficient | Std. Err. | $\mathrm{P}>\mathrm{z}$ |
| NM-Others | 5.428 | 0.0200 | 0.000 | 5.428 | 0.0200 | 0.000 |
| M-OBC | 4.863 | 0.0417 | 0.000 | 4.863 | 0.0417 | 0.000 |
| difference | 0.566 | 0.0462 | 0.000 | 0.566 | 0.0462 | 0.000 |
| explained | 0.517 | 0.0363 | 0.000 | 0.390 | 0.0500 | 0.000 |
| unexplained | 0.048 | 0.0431 | 0.263 | 0.175 | 0.0561 | 0.002 |
| Percentage <br> Explained | 91.46 |  |  | 68.99 |  |  |
| Percentage <br> Unexplained | 8.54 |  |  | 31.01 |  |  |

Table A4.9: Nominal Daily Wages (in Rs.) by Socio-Religious Categories and Wage Quintiles (Regular Workers, UPS: 15-65 Years), 2011

|  | Males |  |  |  |  | Females |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $10 \%$ | $25 \%$ | $50 \%$ | $75 \%$ | $90 \%$ | $10 \%$ | $25 \%$ | $50 \%$ | $75 \%$ | $90 \%$ |
| NM- <br> Others | 120 | 200 | 357 | 733 | 1186 | 67 | 111 | 267 | 696 | 114 <br> 3 |
| M-Others | 86 | 124 | 207 | 357 | 661 | 50 | 86 | 133 | 342 | 657 |
| M-OBC | 94 | 125 | 200 | 321 | 600 | 40 | 71 | 140 | 250 | 500 |
| All <br> Muslims | 89 | 125 | 200 | 350 | 607 | 50 | 75 | 133 | 271 | 553 |
| All | 103 | 157 | 267 | 571 | 934 | 54 | 89 | 160 | 429 | 833 |
| NM- <br> Others/ <br> M-Others | 1.40 | 1.61 | 1.73 | 2.05 | 1.79 | 1.33 | 1.30 | 2.00 | 2.04 | 1.74 |
| NM- <br> Others/ <br> M-OBC | 1.27 | 1.60 | 1.79 | 2.28 | 1.98 | 1.67 | 1.56 | 1.91 | 2.79 | 2.29 |
| M-Others/ <br> M-OBC | 0.91 | 0.99 | 1.03 | 1.11 | 1.10 | 1.25 | 1.20 | 0.95 | 1.37 | 1.31 |
| NM- <br> Others/ <br> All <br> Muslims | 1.34 | 1.60 | 1.79 | 2.10 | 1.95 | 1.33 | 1.49 | 2.00 | 2.57 | 2.07 |

Source: As in table A4.2


[^0]:    ${ }^{1}$ Computed using unit level data from $68^{\text {th }}$ NSSO Employment-Unemployment Round. The earnings ratio is calculated as the ratio of female to male earnings for individuals in the age group of 15 to 65 years at allIndia level using Usual Principal and Subsidiary Status (UP\&SS) in combined labour market (regular and casual).

[^1]:    ${ }^{2}$ For instance, as per NFHS-3 (2005-06:476), $54.4 \%$ of the women respondents accepted that husbands beating their wives was justified on account of at least one of the following reasons such as going out without informing her husband, neglecting the house or children, arguing with her husband, showing disrespect to her in-laws, refusing sexual intercourse with her partner, not being able to cook properly or suspicion of her being an unfaithful wife. Further, there were miniscule differences in the attitudes of Hindu and Muslim female respondents towards wife beating.
    ${ }^{3}$ For instance, Lateef (1990) argues that neither The Shariat Act (1937) aimed to enhance the legal prospects of Muslim women in terms of her rights to dower and share in property nor the Hindu Code Bill directed to improve the legal status of Hindu women reached its intended conclusions. Such outcomes are reflective of the patriarchal construct of the Indian society where women are subsumed to be subordinate in every realm compared to men.

[^2]:    ${ }^{4}$ Various authors prior to Crenshaw had recognition that black women formed a special case in the broader discourse on feminism on one hand, and anti-racism on the other. For instance, Ain't I a Woman?: Black Women and Feminism by bell hooks (1981) based on the catchphrase of Sojourner Truth's famous speech at a women's rights convention way back in 1851 described how owing to the conjunction of sexism and racism, black women were placed at the bottommost hierarchy in terms of their status and condition with respect to any other American group. Similar concerns relating to the multiplicative, simultaneous and context specific issues for black women were raised by Anthias and Yuval-Davis (1983) and King (1988).

[^3]:    ${ }^{5}$ It has been argued that security concerns, difficulty in acquisition of houses - rented or otherwise and the feelings of 'otherness' has resulted in ghettoization of Muslims which results in their further marginalization (Khan 2007).

[^4]:    ${ }^{6}$ The traditional caste system among Hindus is divided into four distinct Varna's - Brahmins (teachers or priests), Kshatriyas (warriors), Vaishya (moneylenders, merchants or traders) and Shudras (performing menial jobs). There is another category - Ati Sudras or dalits (engaged in lowest menial jobs such as animal butchery and skinning off their carcasses, removing human waste etc.) who were considered to be so low that weren't even allotted a caste (Desai and Kulkarni 2008). In addition, the caste system strictly follows the hierarchical order and at the time of birth itself, ones caste defines a persons' occupation and economic rights as caste is hereditary in nature (Dumont 1970; Gupta 2005).
    ${ }^{7}$ It is pertinent to mention that not only the Muslims adopted the norms prevalent among the Hindus but Islam also altered the Hindu ethos and convictions which led to the syncretism of Hindu and Islamic cultures (Chand 1946).
    ${ }^{8}$ Ahmad (1967) asserted that there are significant regional variations in terms of presence of numerous subgroups among Muslims, a phenomenon also prevalent among the Hindus (Desai and Kulkarni 2008).
    ${ }^{9}$ While Ajlaf's can be equated with the OBCs among the Hindus, Arzal's are equivalent to the Hindu SCs (GoI, SCR 2006).

[^5]:    ${ }^{10}$ While high caste Muslim males could marry a woman from low caste Muslims but a women of a higher caste Muslim group could not marry a lower caste Muslim male (Bhattacharya 1978; Dube 1978), analogous traditions are practiced among the Hindus (Chakravarti 1993).
    ${ }^{11}$ For instance, unlike Hindus; Muslims from all caste groups whether low or high were allowed entry in the mosque as found by Bhattacharya (1978) in his study of rural West Bengal.

[^6]:    ${ }^{12}$ In this context, Momin (1977) in his study on Bhiwandi district of Maharashtra on Kokni Muslims (traditionally Ashraf by occupation) and Momins who initially belonged to the Ajlaf category argues that even a process of "de-Ashrafization" was prevalent among Muslims. His study found that Kokni Muslims adopted the occupations of the Momins on account of their becoming educationally advanced and economically dominant due to industrialization, a process which coincided with Kokni Muslims losing a major chunk of their economic resources.

[^7]:    ${ }^{13}$ Firstly, the population shares of women of Muslim STs and SCs are miniscule for any meaningful statistical analysis. Secondly, although all STs are entitled to reservations irrespective of their religious affiliations; several cases of claims of ST status by Muslim individuals remained unattended as reported by GoI (SCR 2006). Since, even ST Muslims have borne the brunt of disparities; their inclusion in OBC Muslims for the present analysis seems to be justified. Further, self-reporting of NSS data makes it conditional on an individuals' knowledge of his/her social status particularly for OBCs - whether Muslim or otherwise. Since, inclusion of sub-categories in the OBC list is an ongoing process and there are state level variations (GoI, SCR 2006), thus results must be interpreted with caution.
    ${ }^{14}$ The individuals with missing observations on either their religion or caste have not been considered for the analysis.

[^8]:    ${ }^{15}$ Approximately $90 \%$ of the NM-Others were Hindu-Others in all the rounds considered for the analysis.
    ${ }^{16}$ Northern states includes Chandigarh, Delhi, Haryana, Himachal Pradesh, Jammu \& Kashmir, Punjab and Rajasthan. Central states comprise of Madhya Pradesh and Uttar Pradesh. Eastern states consist of Andaman \& Nicobar Islands, Bihar, Orissa, Sikkim and West Bengal. North-Eastern states includes Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland and Tripura. Western states contain Goa, Gujarat, Maharashtra, Dadra and Nagar Havelli and Daman and Diu. Southern states takes into account the states of Andhra Pradesh, Karnataka, Kerala, Tamil Nadu, Lakshadweep and Pondicherry. Since, the states of Jharkhand, Chhattisgarh, Uttarakhand and Telangana were carved out later, hence to maintain consistency over the years, these states were merged with their parent states.

[^9]:    ${ }^{17}$ Consumption expenditure in NSSO records the spending by households on items of education, clothing and bedding, footwear, institutional medical care and other durable goods for a reference period of 'last 365 days' while expenditure on other items is documented for 'last 30 days.' The aggregate monthly consumption

[^10]:    expenditure divided by household size equals Monthly Per Capita Consumption Expenditure (MPCE) which

[^11]:    ${ }^{18}$ Including homestead land in the land owned which has completely different productive uses is an incorrect way to access agricultural land possessed by the households. Thus, cultivated land which is a better approximation of the agricultural land has been reported (Rawal 2013).

[^12]:    ${ }^{19}$ For the rest of the document, these rounds would be referred to as $1999\left(55^{\text {th }}\right), 2004\left(61^{\text {st }}\right), 2011\left(68^{\text {th }}\right)$ for Employment-Unemployment rounds and 2007 ( $\left.64^{\text {th }}\right)$ and 2014 ( $\left.71^{\text {st }}\right)$ for Social Consumption: Education rounds.

[^13]:    ${ }^{20}$ The present analysis has adopted the Census definition of literacy rate where a literate is a person with age 7 years and above who can read and write in any language with understanding (Census 2011).

[^14]:    ${ }^{21}$ To discern the inequalities in the Education parameters, Kundu and Rao Index $\left(\mathrm{I}_{\mathrm{KR}}\right)(1985)$ has been used: $\mathrm{I}_{\mathrm{KR}}=\ln \left[\mathrm{E}_{\mathrm{X} 1} / \mathrm{E}_{\mathrm{X} 2}\right]+\ln \left[\left(200-\mathrm{E}_{\mathrm{X} 2}\right) /\left(200-\mathrm{E}_{\mathrm{X} 1}\right)\right]$ where ' $E$ ' denotes the educational attainment/Gross Attendance Rates/Age-Specific Attendance Rates; X1>=X2 with X1 (reference group) and X2 being the groups for whom the disparities are calculated. If the Index is equal to zero, then it represents a state of perfect equality and a higher value of the index represents greater inequality. For the gender disparities, the reference category is males, for the socio-religious disparities, NM-Others is the reference category while in case of intra-socio-religious disparity, M-Others is the reference group. A negative value for the index denotes higher disparity for the reference group.

[^15]:    ${ }^{22}$ GAR has been used instead of enrolment rates as a number of women might be enrolled in higher education institutes but may not be attending the courses on account of getting engaged in domestic activities, taking care of younger siblings or other such reasons. In such circumstances, attendance rates would be a better criteria to ascertain their education affiliations. GAR is defined as:
    GAR $($ Primary $)=\underline{\text { Number of persons attending Primary Level of Education } \times 100}$
    Estimated population in the age-group 6-10 years
    Similarly, for middle, secondary, graduation and above level of education; GAR has been defined as the number of persons attending that particular level of education divided by the estimated population in the relevant age group which is 11 to 13 for middle, 14 to 17 for secondary and 18 to 23 for graduation and above (NSSO 2014). Since, for the year 1999, attendance in secondary and higher secondary were recorded under the sub-head of secondary education, hence, to maintain consistency over the years, a similar approach has been adopted for other years. Also, for computing the GAR for higher education both the current attendance in graduate and above courses and diploma or certificate courses of graduate and above level have been considered.

[^16]:    ${ }^{23}$ Gross attendance rates of 2014 are not comparable to that of the previous years because of the change in the structure of education. For the earlier years, NSSO followed the structure of education prevalent in the states. But for the Education round (2014), same structure across states was adhered to, that is, classes I-V, VI-VIII, IX-X and XI-XII reflecting primary, middle, secondary and higher secondary levels respectively (NSSO 2014).
    ${ }^{24}$ Since the numerator consists of individuals currently attending educational institutions which may be outside the official age-group, hence, GAR can turn out to be greater than 100 (NSSO 2014).

[^17]:    ${ }^{25}$ Never Enrolled individuals are a proportion of those persons who in the age group of 6 to 23 years have never attended educational institutions to the total population in the age-group of 6 to 23 years.

[^18]:    ${ }^{26}$ By pooling independent cross-sectional data collected at different points of time from the same population, the precision of the estimators and test statistics increases (Wooldridge 2002). In addition, the results become robust owing to the reduction in sample attrition related with the mortality and recollection bias of old respondents (Desai and Kulkarni 2008).

[^19]:    ${ }^{27}$ Six regions have been included to account for the state level variations as defined in section 1.5
    ${ }^{28}$ The monthly per capita consumption expenditure (MPCE) in current prices is converted into real MPCE at 2004-05 prices using Consumer Price Index for Rural Labourers (CPI-RL) for rural areas and Consumer Price Index for Industrial workers (CPI-IW) for urban areas to adjust for the price-variations not only across rural-urban sectors but also across the states and union territories. For both the sectors, monthly CPI was converted to annual CPI on the basis of agricultural year (July-June) as the fieldwork of all the NSS surveys used for the analysis except for $71^{\text {st }}$ Round was conducted as per the agricultural calendar. To maintain consistency, agricultural year was considered even for the $71^{\text {st }}$ Round. Further, the price center's as explicated in Dubey and Gangopadhyay (1998) were used for the states/UT for which information on CPI was not collected.

[^20]:    ${ }^{29}$ The reported standard errors have been adjusted for correlation bias using the STATAs cluster command. In addition, on the basis of the logistic equation and using STATAs margins command, the predicted probabilities have been computed for each transition, year, socio-religious group and sex. The results for which are reported in table 2.9.

[^21]:    ${ }^{30}$ The two education rounds are not strictly comparable. Firstly, MPCE in the $71^{\text {st }}$ Round does not record the unusual expenditures such as those on ceremonies, tours, hospitalization etc. (NSSO 2014:11) while the same was not true for the $64^{\text {th }}$ round. Secondly, the definition of basic course was slightly changed in the $71^{\text {st }}$ round. If an individual was simultaneously pursuing two or more courses in the same level, then $64^{\text {th }}$ round recorded information for both the courses but considered the course in the general education as the basic course, while $71^{\text {st }}$ round recorded such information taking technical education as the basic course (NSSO 2014). To make the two rounds comparable, students pursuing more than one course in the $64^{\text {th }}$ round were scrutinized and their course considered for the present analysis was taken to be the course of technical education.

[^22]:    ${ }^{31}$ For instance, in 1999 the probability of a male being in higher education was $17.3 \%$. The male probability has been computed by assuming all the individuals in the sample were males when the values of other variables was set equal to their observed values.

[^23]:    ${ }^{32}$ There are majorly three types of educational institutions in India- government, private-aided and private un-aided. The process of recruitment and disbursal of salaries of teachers in private-aided institutions is undertaken by the government. Hence, they are expected to have a similar quality of teaching as that of government institutions (Azam and Kingdon 2011). Thus, government and private-aided institutions have been combined under the head 'public' institutions.

[^24]:    ${ }^{33}$ The classification of regions has been outlined in section 1.5 of chapter 1.

[^25]:    ${ }^{34}$ India has a Total Fertility Rate (TFR) of 2.48 children per women at present down from 4.4 in 1978-80 which is expected to further reduce to 2.14 by 2025 (United Nations 2015) which is also the replacement level fertility rate.
    ${ }^{35}$ Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) was enacted in 2005 to provide at least 100 days of wage-employment per rural household in a financial year. The act ensured that at least $33 \%$ participants must be women with equal remuneration for men and women. It also had special provisions of child care for women with five or more children at the site of work. To encourage further participation it ensures that work takes place within 5 kilometers of the individual's residence.

[^26]:    ${ }^{36}$ According to NSSO, an activity in which an individual assigns major time during the reference period of last 365 days is referred to as the usual principal activity status of an individual.
    ${ }^{37}$ LFPR and WPR based on UP\&SS have been reported in Appendix table A3.1 and table A3.2 respectively. The trends are broadly the same for both UPS and UP\&SS. To maintain consistency over the analysis, further discussion is based on UPS and LFPR.

[^27]:    ${ }^{38}$ As depicted in Appendix table A3.3, the growth in average real MPCE (proxy for income) in urban settings between 2004 and 2011 has been higher for M-OBCs compared to M-Others. Thus, income effect may have induced M-OBC women to withdraw out of the labour force.
    ${ }^{39}$ MPCE separately for rural and urban areas used as a proxy for income has been distributed into five quintiles and female LFPR has been plotted against them.

[^28]:    ${ }^{40}$ The workers who managed their enterprises either on their own or with one or more partners but without any regular engagement of hired labour were referred to as own account workers. Although such enterprises may have had the help of unpaid helpers. Employers were those self-employed persons who operated their enterprises either on their own or with one or more partners but with active engagement of hired labour. Helpers on the other hand were a category among self-employed who received no remuneration for their assistance in operating the household enterprise.

[^29]:    ${ }^{41}$ The classification of regions has been outlined in section 1.5 of chapter 1.
    ${ }^{42}$ Although the northeastern states seem to have a higher participation of the womenfolk of M-OBC but as discussed in chapter 1, the proportion of M-OBCs in northeastern states is a miniscule $0.44 \%$ of the region's total population.

[^30]:    ${ }^{43}$ The countries are ranked on the basis of the gender disparities measured as the female to male ratio in various sub-indices of the WEF Gender Gap Index (WEF Report 2016).
    ${ }^{44}$ On an average Indian women spends 351.9 minutes per day in un-paid work and 184.7 minutes in paid work amounting to a total of 536.6 minutes in productive activities while the analogous figure for men is 442.3 minutes per day (OECD 2015). Despite a greater allocation of time by women for work - domestic or economic; her work remains undervalued (Raju 2013).

[^31]:    ${ }^{45}$ The model is motivated by Becker's (1965) theory of time allocation which asserted household as itself being a production unit. The theory opined that a household member would supply labour only if the utility from working in the market is greater than the utility in home production.

[^32]:    ${ }^{46}$ Table A4.1 of appendix depicts that the returns to education are higher for females in comparison to males at all education levels with the highest being for the diploma holders.

[^33]:    ${ }^{47}$ In such situations, the human capital variables which are added as explanatory variables in the Mincer equation and the unobservable parameters of schooling which would are accounted for by the error term are correlated. Parameters so estimated would be biased. In addition, if the education variable is incorrectly measured, the returns may be biased downwards (Card 1999; Griliches 1977).

[^34]:    ${ }^{48}$ Parents with higher education positively affect the schooling decisions of their children both via conducive learning environment which may be facilitated for instance by private coaching and better family connections which may help an individual in getting a job (Agrawal 2011; Kingdon 1998).

[^35]:    ${ }^{49}$ In the Standard semi-logarithmic Mincerian earnings function (Mincer, 1974), wages depend upon the years of schooling and job market experience of an individual. It also includes square of experience to capture the possible curvilinear impact of experience on earnings.
    ${ }^{50}$ According to NSSO, an activity in which an individual assigns major time during the reference period of last 365 days is referred to as the usual principal activity status of an individual.
    ${ }^{51}$ Also, on the basis of kernel density function, individuals whose nominal daily wages were greater than Rs 8000 were dropped from the analysis on account of they being outliers. In addition, owing to missing observations on various variables, another 868 observations were not considered for the analysis.
    ${ }^{52}$ Mincerian earnings function uses potential job market experience of an individual as a determining factor of wages which is calculated as age less the number of years of schooling less five. Since, NSSO does not directly provide the data on number of years of schooling, any computation using educational levels of individuals is prone to measurement error (Bhaumik and Chakrabarty 2009). For instance, experience would be incorrectly computed if a student repeats a class as there is no information on repetition in NSSO. In addition, the experience variable makes an assumption that an individual starts earning immediately after leaving school but such an assumption is incorrect especially for women as their continuity in public sphere varies considerably (Mincer and Polachek 1974).

[^36]:    ${ }^{53}$ Since, age has been used as a proxy of experience which is unlikely to affect participation of individuals in the job market (Sengupta and Das 2014). Hence, age and its square have not been used in the participation equation.

[^37]:    ${ }^{54}$ The classification of regions has been outlined in section 1.5 of chapter 1.

[^38]:    ${ }^{55}$ For Model I (a), the total number of observations were 300130 out of which 233930 were censored and the remaining uncensored. For Model I (b), the corresponding figures were 149944 and 96981 while for Model I (c), out of a total 150186 observations, 13237 were uncensored and the rest censored.
    ${ }^{56}$ (a) Wald chi-sq (15) $=31807.21$, (b) Wald chi-sq (15) $=32923.52$ and (c) Wald chi-sq $(15)=8946.38$, Prob. > chi2 $=0.00$

[^39]:    ${ }^{57}$ Wald chi2 26 ) $=43996.52$, Prob. $>$ chi-sq $=0.00$
    ${ }^{58}$ The interaction variables of socio-religious groups with females in Model II are reflective of the gender disparities in each socio-religious group. For instance, NM-Others_female indicate the situation of NMOthers females compared to NM-Others males and similar interpretations follow for other interactions.

[^40]:    ${ }^{59}$ For comparison purposes, augmented Mincer wage equation is also reported in part II, table 4.2.
    ${ }^{60}$ The discussion in this section is based on the interpretation of the selectivity corrected Mincer equation.

[^41]:    ${ }^{61}$ Wald chi2 26 ) $=43996.52$, Prob. $>$ chi-sq=0.00
    ${ }^{62}$ The interaction variables of socio-religious groups and sex in Model III indicates the socio-religious disparities in comparison to NM-Others females. For instance, NM-SC_female indicate the situation of NMSC females compared to NM-Others females, that of NM-ST_female compared to NM-Others females and so on.

[^42]:    ${ }^{63}$ This may be on account of the Sanskritization theory which advocates that women of backward castes can work but not of the upper caste (Kingdon 1998).

[^43]:    ${ }^{64}$ Although the decomposition based on both the wage structures has been reported in the appendix tables A4.7 and A4.8. The decompositions are based on the OLS regressions estimated separately for NM-Others, M-Others and M-OBC females but have not been reported to avoid duplication as the coefficients in Model II (Part II) are self-explanatory. Selectivity corrected wage equations have not been used for the purpose of decomposition as the selectivity corrected wage decomposition attaches greater weight to non-participation and hence, underestimates the actual discrimination (Kingdon and Unni 2001).

