



EMPLOYMENT AND WELFARE AMONG SOCIAL GROUPS IN RURAL INDIA

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ABSTRACT

This paper attempts to test the relationship between gainful employment and standards of living for rural population of India. In analysis of access to basic amenities across social group, it turned out that even though overall access has increased during 2001-2011, the vulnerability of ST population has worsened as compared to all other social classes. On employment front, it has remained more or less constant during 1999-2009. The high growth rates in an economy are assumed to create more jobs, which in return is expected to improve standard of living of people. However, this paper established, with the help of employment and basic amenities index, that this correlation between gainful employment and improved standard of living, has proven to be really weak, in case of Rural India. Employment Index of 1999 was compared to amenities index of 2001, whereas employment index of 2009 was compared with amenities index of 2011.

Keywords:

Labour Force Participation Rates (LFPR), Work Force Participation Rates (WPR), Scheduled Caste (SC), Scheduled Tribe (ST), Other Backward Classes (OBC), Amenities Index, Employment Index

1. Introduction

Last decade witnessed high growth rates in Indian economy. During Tenth (2002-07) and Eleventh Plan (2007-12), Indian economy grew at about 8 percent per annum (Planning Commission, 2011)[1]. With increasing growth, inclusiveness of growth became a major issue in our planning process. Inclusive growth is not only about poverty reduction, but should also get reflected in better health outcomes, increased access to education, improved access to basic amenities such as electricity, drinking water, sanitation, transport, banking facilities etc. Indian society which has historically been stratified in various social groups like (SC, ST, OBC) has faced much more economic and social deprivation. Like every other individual, people from these groups face similar kind of economic as well as social exclusion in terms of access to basic resources. Access or command to these resources can be attained only by providing employment (at very elementary level). It is with this spirit that this paper analyses the employment patterns and welfare gains among social groups i.e. SC, ST, OBC and Others in rural India.

1.1 Motivation Of Study

This analysis tries to answers few important questions and raises few concerns regarding contemporary relationship between employment and increase in welfare of workforce. This analysis is restricted to rural area and social groups situated in them. The main aim of this study is to find out if employment among various social groups (SC,ST,OBC) has improved during the high growth decade of 2000-2010 or not, i.e. has growth provided adequate employment to most vulnerable section of society or not. And secondly, is employment enough, to lead to a decent life i.e. in tandem with employment, has access to basic amenities among these social groups increased or not. These questions are relevant, since just like contemporary relationship of growth and employment is considered, where increase in growth is expected to provide employment. Similarly, it is implicit in every analysis of employment that as employment increases; the general welfare of person also increases. But this might not be the case and this is what this study seeks to question.

Period of this analysis is 1999-2000 to 2009-2010. NSS data from 55th and 66th rounds of employment has been used to analyze the employment situation among social groups in rural areas. Second, part of analysis uses census data from 2001 and 2011 on access to basic amenities to measure the welfare gain. The rationale for choosing rural areas for this analysis

is dual: firstly, as per 66th Round of NSS, around 72 percent population of our country resides in rural areas. And within rural area itself, around 73 percent population belong to SC , ST and OBC (10,22 and 41 % respectively). Secondly, the main aim of this analysis is to see if employment generation leads to increase in welfare of rural labour force or not. Knowing that rural population is deprived as compared to urban population, it will be interesting to see if high growth has trickled down for increase in welfare for these group or not.

This study is arranged as follows: Section 2 provides a brief literature review on studies relating to employment analysis for various social groups and their access to basic amenities. Section 3 presents the analysis of employment among social groups in rural area, in greater detail. This section further proceeds with an attempt to explain the changes in labour force and workforce participation rates. In section 4, welfare dimension of social groups and related analysis is presented. Section 5 tries to bring employment and access to basic amenities in one frame, and this section provides index for employment and basic amenities in rural area and see if the correlation between the two is strong enough in rural India or not. Section 6 concludes the study.

2. Literature Review

A huge strand of literature pertaining to the analysis of employment trends for rural and urban areas exists in Indian context. However, very few studies have focused on providing trends of employment for various social groups like SC, ST and OBC across various rounds. Few of the studies that have tried to analyze this dimension are Kumari and Pandey (2012)[2], Abraham (2012)[3], Das (2006)[4,5] among few others. These studies not only analyzed employment trends but Jacob and Abraham examined position of these social groups in labour market and the wage discrimination they face. Two major reports, one by The School of Development Studies (2007)[6] and another Planning Commission report in collaboration with Institute of Applied Manpower research (2011)[1], talks about this similar dimension in detail. Both reports points out the vulnerabilities of ST as compared to all other classes.

Second part of the analysis tries to measure welfare of SC and ST Population, by looking at their access to basic amenities like drinking water, sanitation, access to banking services, toilet facility etc. Again, many studies have looked at rural urban division of amenities across various census periods. But only one study by Bhagat (2013)[7] have tried to focus on access

of amenities among social groups. This study has shown how access to basic amenities has improved substantially from 2001 to 2011, by using Census of India data. This analysis points out that even though the access to amenities has improved for SC as well as ST, the gap between these two groups and gap of these groups with all other population has widened in 2011. There was no study found in literature that has tried to link the employment aspect of SC, ST population with their welfare needs of access to basic amenities. Withdrawing from these two strands of literature, this study is a first of an attempt to analyze the inter-relationship between employment and welfare for social groups and especially in rural areas.

3. Employment Trends Among Social Groups in Rural India

Employment growth rate during 1999-2009, has not been commensurate with GDP growth rate in India. In Rural India, annual employment growth rate was 0.66 percent during 1993-94 to 1999-00, and it just increased marginally to 1.26 percent during 1999-00 to 2007-08, during accelerated growth period (Planning Commission, 2011) [1]. Trends of labour force and workforce participation rates are presented in Table 1, along with unemployment rates for various social groups. During 1999-2009, LFPR and WFPR among males have increased marginally for all groups. As for females both of these rates have fallen, leading to an increase in unemployment rates during the same period [8]. It is to be noted that LFPR among both males and females are highest for ST population, it indicates their vulnerability as compared to other social groups. In case of females after ST, SC and OBC work the most and LFPR by Others, which is general category, is lowest in case of female.

Table 1: Labour Force participation Rates, Workforce Participation rates and Unemployment Rates among Social Groups - Rural India (1999 & 2009)

	LFPR				WFP				Unemployment Rate			
	Male		Female		Male		Female		Male		Female	
Social Groups	1999	2009	1999	2009	1999	2009	1999	2009	1999	2009	1999	2009
ST	56.4	56.9	43.9	36.2	55.8	55.9	43.8	35.9	1.1	1.7	0.5	0.9
SC	54.1	55.8	32.7	27.3	53.1	54.8	32.5	26.9	1.8	1.7	0.6	1.5
OBC	54	54.8	30.5	27.1	53.2	54	30.2	26.7	1.5	1.4	1	1.4
Others	53.2	56.3	22.8	20.4	52	55.2	22.3	19.9	2.3	2	2.2	2.5

Data Source: NSS 55th and 66th Round, Report No. 469 and 543, Employment and Unemployment Situation among Social Groups in India.

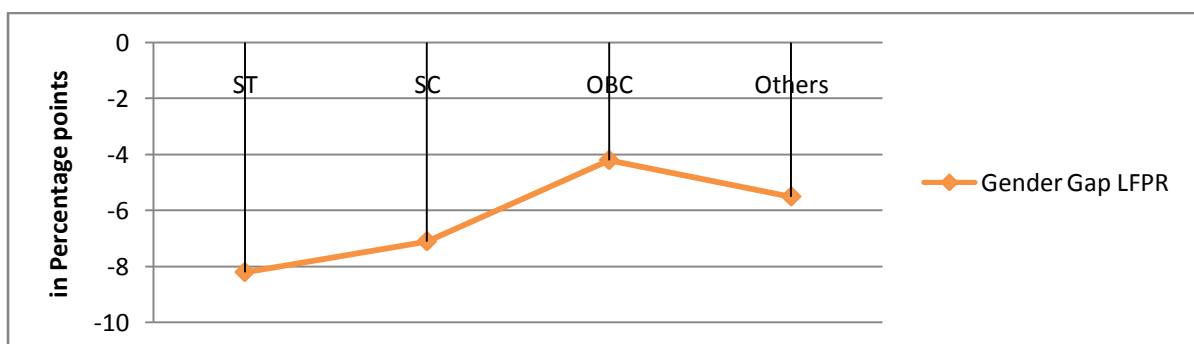
A peculiar feature of female employment in the Indian context has been the responsiveness of their work participation to economic stimuli. Commonly described as the “income effect”, the

past literature has pointed out the fact that females tend to cross the household boundary and enter the labour force if there is a perceived fall in the reservation income of households (Unni 1989; Srivastava and Srivastava 2010) [9, 10]. So a fall in labour force and workforce participation rates of females in “other” category can be partially explained by income effect, since this group is relatively better off as compared other social groups and also since working of women in higher caste is still not considered favorable due to patriarchal norms.

In females, LFPR and WFPR both are falling, but since with the existing LFPR , WFPR falls more than the fall in LFPR, unemployment increases. This point out the issues and problems that women face in getting gainful employment, i.e. even though women are available for work, they do not get enough jobs since they are not preferred by many employers, for various types of work [11]. Such gender discrimination for jobs is prevalent all across the labour market in India. Secondly, it is to be noted that male LFPR and WFPR have remained stagnant and unemployment rates have fallen for SC, OBC and Others category by 1, 0.1 and 0.3 percentage points. Interestingly, for ST males, the LFPR increased marginally from 56 percent to 57 percent, but their WFPR remained constant at 56 percent during 1999-2009 and hence an increase of 0.6 percentage points in unemployment can be seen in case of ST males.

In order to point out the gender gap dimension of employment, gender gap in LFPR for 1999 and 2009, for all social groups was estimated. As Figure 1 depicts, the gender gap has increased for all groups, but highest increase in this gap is witnessed by ST population (8 percentage points), followed by SC (7 percentage points), Others (6 percentage points) and OBC by 4 percentage points. Increased gap from 1999 to 2009 has mainly been due to fall in female LFPR.

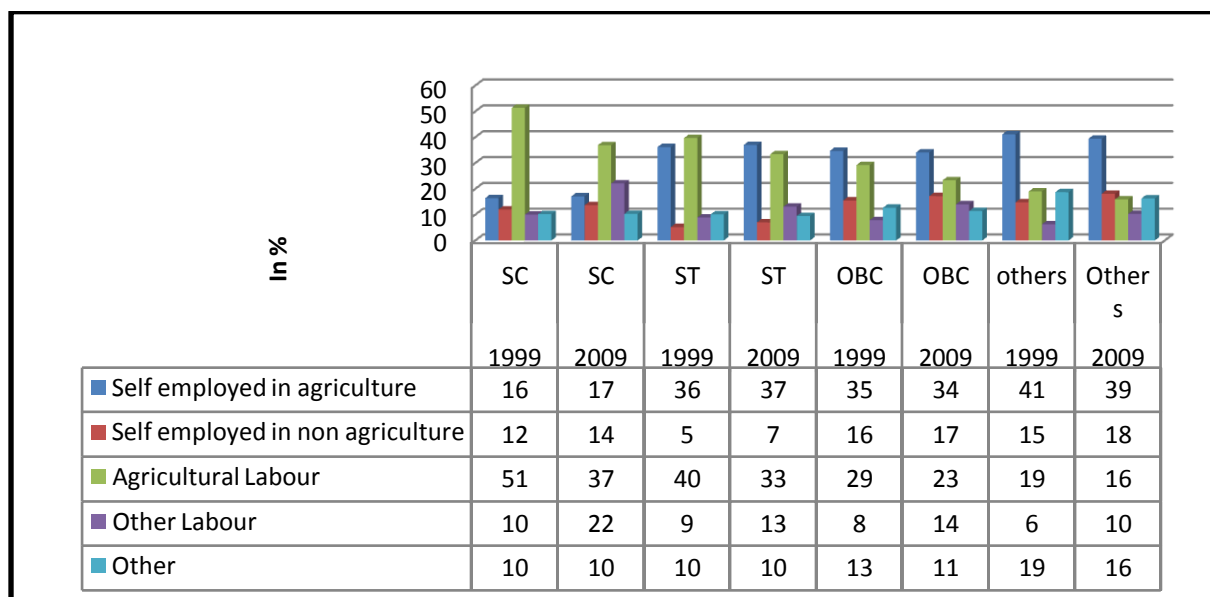
Figure 1: Gender Gap during 1999 – 2009 in LFPR



Source: Author’s Estimation

In terms of occupational diversification of all these social groups, it can be seen from Figure 2 that casualisation (“other labour” category) during 1999-2009 has increased the most for SC’s , OBC’s and ST’s, by 12, 6 and 4 percentage points respectively. Similarly in 2009, self employment in agriculture is highest for OBC’s and Other’s population as compared to SC and ST’s. It points out to the vulnerability of these groups, since ST’s and SC’s population do not have their own land holdings to be self employed in agriculture, they work on other people’s farms, to earn their living. Another feature of the occupational diversification is falling agricultural labour. This points out towards the increase in non agricultural activities in rural areas and especially casual labour, whose evidence has been provided above.

Fig 2: Occupational Diversification Among Social Groups (1999-2009)



Data Source: NSS 55th and 66th Round , Report No. 469 and 543, Employment and Unemployment Situation among Social Groups in India

3.1 Causes of changes in LFPR, WFPR

While explaining fall in LFPR of females among social groups, we try to understand the possible reasons that can lead to changes in these rates. According to Sundaram and Tendulkar [12], LFPR and WFPR can change due to these reasons:

- 1) Even if we consider WFPR and LFPR to be constant, a change in age structure of working population can lead to an increase or decrease in LFP and WFP.
- 2) For females the LFP and WFP changes are associated with the need to augment the income of household.

Also, the third explanation for change in WFP and LFP, as provided by literature, is increase in educational attainment or school enrolments. This sub section tries to provide concrete evidence on this dimension. Focusing specifically on literacy levels¹ of SC,ST ,OBC and others in rural areas, it can be witnessed by Table 2 that ‘no literate male member’ as well as ‘female member’ has fallen substantially during the period of 1999-2009, for all groups. The highest fall has been witnessed in case of ST population, for males this has fallen by 19 percentage points and for females it has fallen by 25 percentage points. It points out towards increasing enrollments and awareness of all social groups towards education, even though male female gap is still very high.

Table 2; Literacy Levels among Social Group – Rural India (1999 & 2009)

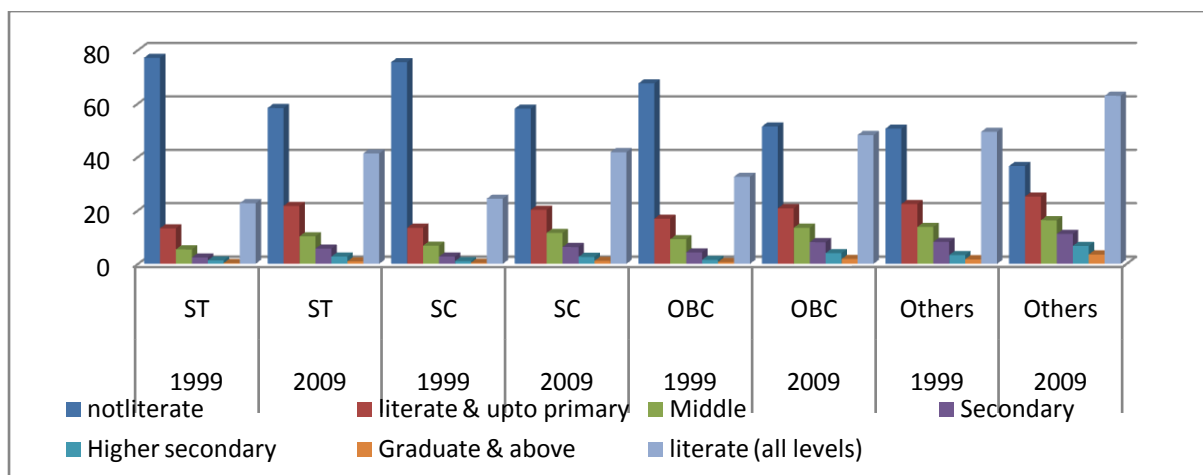
Social Groups	No Literate Adult Male Member (%)		No Literate female Member (%)	
	1999	2009	1999	2009
ST	47.6	28.9	74.5	49.3
SC	41.3	25.1	72.4	49
OBC	32	19.5	63	41.8
Others	19.8	11.2	44.9	25.9

Data Source: NSS 55th and 66th Round , Report No. 469 and 543, Employment and Unemployment Situation among Social Groups in India.

Distribution of rural male and female above 15 + population in terms of education levels are depicted in Figure 3 and 4. Not literates have fallen for all categories of SC, ST OBC and Others during period of our analysis. Literates at all levels of primary, middle, secondary, higher and graduate levels have increased. However, huge difference in education levels between SC, ST and OBC with “others” for both females and males points out towards vulnerabilities of these caste and groups. Especially, for females in 2009, only 41 percent of ST females are literate as compared to 63 % in “others” category.

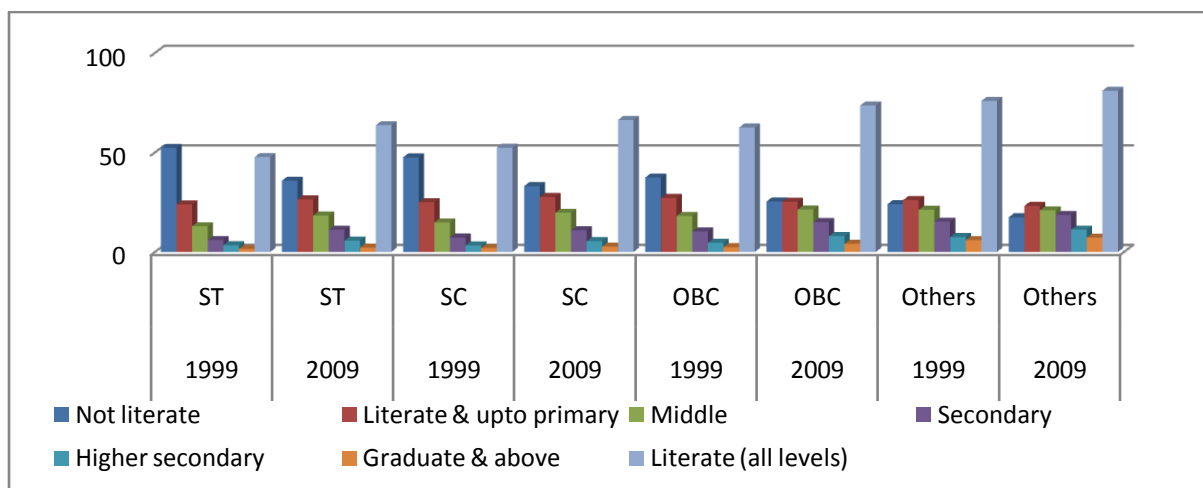
¹ Definition of Literate - In NSS survey, a person was considered as literate if he/she could both read and write a simple message with understanding in at least one language.

Fig 3 : Distribution of Rural Female (15+) by General Level of Education – 1999 & 2009



Data Source: NSS 55th and 66th Round , Report No. 469 and 543, Employment and Unemployment Situation among Social Groups in India.

Fig 4 : Distribution of Rural Male (15+) by General Education Level – 1999 & 2009



Data Source: NSS 55th and 66th Round , Report No. 469 and 543, Employment and Unemployment Situation among Social Groups in India.

3.2 Gender Gap in Literacy

An interesting exercise of calculating gender gap at all levels of education provides us very important insight about increased literacy rates of these social groups. Table 3, points out that overall gender gap in literacy, for all social groups has reduced. Negative sign indicates increase in gender gap. During 1999 to 2009 gender gap in overall literacy has fallen the most by 8 percentage points for “Others”² category, followed by OBC (4.5 percentage points), SC

² Other Category means General Category as per NSS.

(3.5 percentage points) and ST (2.5 percentage points). This can be considered as partial explanation for fall in LFPR and WFPR of females among these groups.

Table 3: Gender Gap in Education (in Percentage Points) During 1999-2009

Education levels	ST	SC	OBC	Others
Literate & upto primary	6	4.1	5.8	5.8
Middle Secondary	(-)0.5	(-)0.1	1.1	2.8
Higher secondary	(-)1.8	0	(-)0.9	(-)0.4
Graduate & above	(-)0.9	(-)0.5	(-)0.9	(-)0.3
literate (all levels)	(-)0.1	0	(-)0.6	0.5
	2.6	3.5	4.5	8.4

Note : Negative Values means gap has increased by # percentage points

Source: Author's Estimation

The largest decline in overall gender gap in “Others” category and lowest in ST category again reinforces the vulnerability of ST population as compared to general category. More surprising is that at every education level of middle, secondary, higher secondary and graduates, (except primary), the gender gap for ST population has increased. This provides a very deep insight about vulnerability position of ST's, it mainly infers that even though females in this category have withdrawn from labour force, and have joined education institutes, they drop out of the schools after primary level and hence leading to increase in gender gap at all other levels of education. This also points out towards unaccounted work of women, i.e women who are neither in formal labour force and nor in education institutes must be a part of unaccounted labour force. Evidence for increase in unaccounted work for women in 2009-10 has been given by Mazumdar and Netha (2011) [11]. Comparing gender gap of ST population at all levels of education with all other categories, the sharp contrast between the gender gap at all levels is easily visible. General category is least vulnerable as expected, gender gap has increased only for secondary and higher secondary level of education.

3.3 Broad Trends

Workforce and labour force participation rates have stagnated for males and are highest for ST, followed by SC, OBC and Others. In case of females from all social groups, many of them are opting out of labour force and are entering education institutes, which is very much visible in increasing literacy rates at all levels of education. Whereas, existing females in labour force across all groups are not getting enough jobs which gets reflected in increasing unemployment rates. Literacy rates are increasing, but 15 year and above literate were lowest

in ST then SC, OBC and Others. Hence Lower categories have a lot to catch up. The next section focuses on access to basic amenities by rural population as a whole and for SC,ST and OBC specifically.

4. Welfare Patterns among social groups In Rural India

Even though employment trends has not shown very rosy picture for various social groups, as presented in the last section. But access to basic amenities has improved marginally if we look at overall rural, urban and total picture of India. Table 4 and 5 presents some of the most basic amenities like electricity availability, bathroom facility, LPG availability, Latrine within premise, tap water, no drainage and houses with concrete roof.

Table 4: Household Access to Basic Amenities in India -2001 & 2011

Household Living Condition in Rural and Urban Area						
	Rural 2001	Rural 2011	Urban 2001	Urban 2011	Total 2001	Total 2011
Electricity	44	55	88	93	56	67
Bathroom Within House	23	25	70	78	36	42
LPG Availability	6	11	48	65	18	29
Latrine Within Premise	21	31	73	81	36	46
No Drainage	66	63	22	18	54	49
Tap Water	24	31	69	71	37	44
House with Concrete roof	12	19	44	53	21	30

Source: House listing and Housing Census Data 2001 & 2011.

This data set was available from house listing and housing census data of 2001 and 2011. Electricity availability among rural households has increased by 10 percentage points during 2001 to 2011, bathroom and LPG facility increased by 2 and 5 percentage points. However if one looks at the difference between rural and urban access to amenities, the picture is very disappointing. In 2011, 93 percent households are electrified in urban areas as compared to only 55 percent in rural areas. Gap in bathroom facility within premise, LPG, availability of tap water and house with concrete roof are even worse. Similar scenario is present in case of access to basic assets like banking services and having access to assets like radio, scooter, bicycle, television mobile phones etc. Banking facilities in rural areas increased from 30 percent to 55 percent from 2001 to 2011, but in urban areas it stands at 67 percent in 2011 as depicted in Table 5. Largest increase has been witnessed in case of mobile phones for rural population, which has increased by 50 percentage points during 2001-2011, as per Bhagat (2013)[7], it is “runaway consumerism”.

Table 5 : Household Access to Assets in India – 2001 & 2011

Households Asset holdings In Rural and Urban India						
	Rural	Rural	Urban	Urban	Total	Total
Households Asset holdings	2001	2011	2001	2011	2001	2011
Banking Facilities	30	55	50	67	36	59
Radio	31	17	44	25	35	20
Television	19	33	64	77	32	47
Telephone	4	54	23	82	9	63
Bicycyle	43	46	46	42	44	45
Scooter	7	14	25	35	12	21
Car	1	2	6	10	3	5
None of the assests	40	23	19	7	34	18

Source: House listing and Housing Census Data 2001 & 2011.

Access to assets, by SC and ST households has increased overall in India. However, the gap between ST with total population³ in terms of access to basic amenities and assets has increased from 2001 to 2011. Gap in tap water availability of ST household with total population was 17 percentage points in 2001, it increased to 19 percentage points in 2011. Similar increase has been witnessed in case of latrine facility, drainage, bathroom, LPG and household with concrete houses (except electricity) as depicted in table 6. The same gap in amenities and asset for SC population with total population has fallen or remained same during 2001 to 2011⁴.

Table: 6 Gaps in Amenities of SC with Total Population and ST with Total Population (2001&2011)

Basic Amenities	SC Gap with all		ST gap with all	
	2001	2011	2001	2011
House with concrete roof	8	8	15	20
Tap water	5	2	17	19
Electricity as a source of lighting	12	8	19	16
Latrine facility within the premises	13	13	19	24
Connected to drainage	4	5	25	28
With bathroom	14	14	21	25
LPG/PNG	10	12	12	19

Source: Authors Estimation

Similar picture of high gap in basic assets of SC population vis a vis total population and ST population vis a vis total population is represented in Table 7. Hence, even though the absolute number for access to basic amenities have increased for SC's and ST's, their gap

³ Gap of ST amenities holdings with Total population was calculated by subtracting assets holding of a particular year for total population and ST population holding of assets for same year.

⁴ This analysis uses total (rural + Urban) figures of amenities for social groups like SC and ST and not rural area specific data. Since comparable data on same amenities, caste wise for two census period was not available.

with overall population and gap with in themselves has increased substantially from 2001 to 2011 census.

Table 7: Gaps in Assets of SC with Total Population and ST with Total Population (2001&2011)

Assets	Sc gap with all		ST gap with all	
	2001	2011	2001	2011
Availing banking services	10	8	16	14
Television	10	38	20	55
Telephone	6	1	7	2
Scooter/motorcycle/moped	6	9	8	12
Car/van/jeep	2	3	2	3

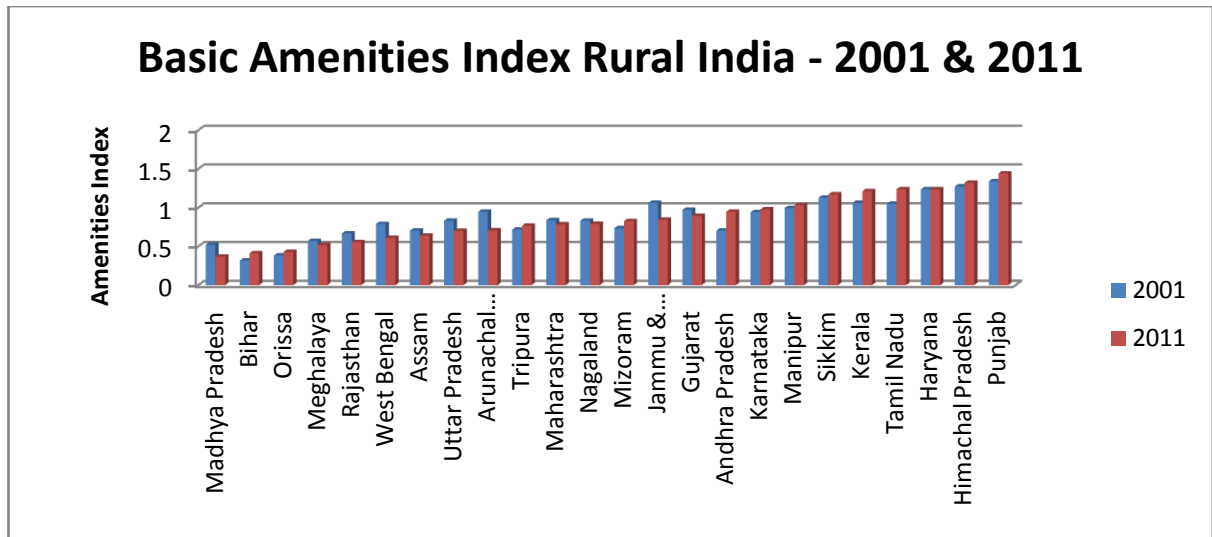
Source: Authors Estimation

5. Employment and welfare – are they related?

Last two subsections provided individual analysis of employment and access to basic amenities for social groups among rural areas. This section tries to bring them together by way of calculating amenities index and employment index. Amenities composite index has been calculated using Lindahl's composite rank index method. Data for amenities like tap water availability, latrine facility, electricity facility, communication and transport facilities was collected for all Indian state, from census 2001 and 2011, for rural India. Further for each census year this index was calculated by providing rankings to each state, summing ranks across all indicators gave a composite index⁵. State wise basic amenities index is presented in figure 5. This index has been calculated for rural area for every state. High income states of Punjab, Haryana, Himachal Pradesh, Tamil Nadu, Kerala, Karnataka, Andhra Pradesh and Gujarat have performed better in amenities index for rural areas. Low income states of Bihar, Orissa, Madhya Pradesh performed poorly, in this index.

⁵ Even though, Lindahl's composite rank index has a drawback of not been able to show gaps among variables. This method provides composite indices which are as good as obtained from Principal Component Analysis (PCA). States ranking according to this composite index, in this study matches the index made by Das and Mistri (2013). These authors applied PCA to calculate basic amenities index and used almost same set of variable in construction of index.

Fig 5: Basic Amenities Index for Rural India – 2001 & 2011

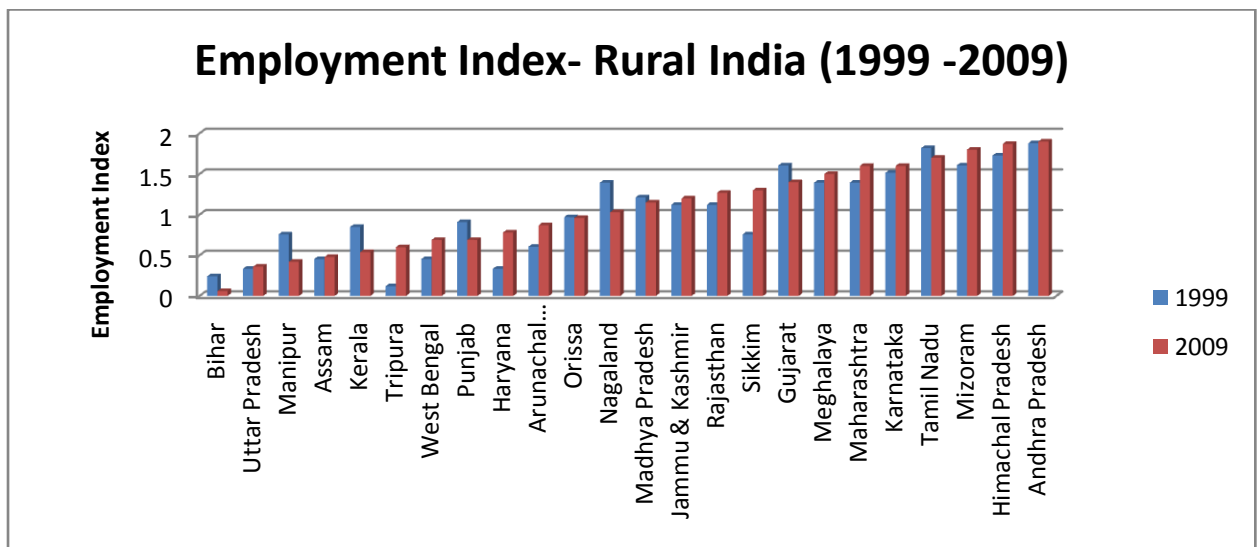


Note: States have been arranged in ascending order based on amenities index of 2011.

Source: Author's Calculation

In similar way employment index was calculated as depicted in figure 6. Just like amenities, even in employment index, high income states are performing better in providing employment to its rural population as compared to low income states of Bihar, Uttar Pradesh and Madhya Pradesh.

Fig 6: Employment Index for Rural India – 1999 & 2009



Note: Figures are arranged in ascending order based on employment index, 2011.

Source: Author's Calculation

It is to be noted that employment index of 1999 (calculated by using NSS data) was then compared to access to amenities in 2001. Similarly, 2009 employment index was compared

with 2011's amenities index. Simple Karl Pearson's coefficient of correlation among amenities and employment index between two periods was calculated. It came out to be very low. Correlation between employment in 1999, with access to amenities in 2001 came out to be 0.12. On the other hand correlation of employment in 2009 with 2011 amenities index, increased to 0.22.

6. Conclusion

The correlation results in last section mainly points out towards the disconnect between getting gainful employment and improvement in quality of life. Even though many policies for welfare of these social groups and their employment has been initiated in rural areas , very little seems to be seen as in term of its result. One might celebrate the overall increase in access to basic amenities, but looking at increased gap between SC and ST population, raises many questions regarding policy interventions and their impact on people. Hence, this analysis provides some basic framework to not just see employment individually, but correlate it with access to basic amenities as well. Therefore, it can be said that the implicit relationship that is assumed between employment availability and increase in living conditions and welfare of people, has turned out to be weak in rural India.

References

1. IAMR and Planning Commission (2011): *Human Development Report 2011: Towards Social Inclusion* (New Delhi: Oxford University Press).
2. Kumari, R. & Pandey,A, (2012), Women's Work Participation in Labour Market In Contemporary India, *Journal of Community Positive Practices*.
3. Abraham, V. (2012), Wages and Earnings of Marginalized Social and Religious Groups in India: Data Sources, Scope, Limitations and Suggestions, Centre of Development Studies, Kerala, *MPRA Paper No. 37799*
4. Das, B. & Mistri A. (2013), Household Quality of Living in Indian States: Analysis of 2011 Census, *4: 151, Environment and Urbanization Asia*.
5. Das, M.B (2006), Does Traditional Axes of Exclusion Affect Labor Market Outcomes in India ?, *Social Development Papers, South Asian Series, Paper No. 97/ June 2006*
6. Report to Department of International Development (2007), Gender Caste and Growth Assessment – India, The School of Development Studies, The Overseas Development Group.
7. Bhagat, R.B (2013), Conditions of SC/ST Households : A Story of Unequal Improvement, *Economics & Political Weekly, vol xlviii 62 no 41*
8. Himanshu (2011), Employment Trends in India: A Re-Examination, *Economics & Political Weekly, vol xlvi no 37*
9. Unni, Jeemol (1989): Changes in Women's Employment in Rural Areas, *Economic & Political Weekly, Review of Women's Studies, Vol 24, No 17*.
10. Srivastava, Nisha and Ravi Srivastava (2010): Women, Work and Employment Outcomes in Rural India, *Economic & Political Weekly, 10 July*.
11. Mazumdar, I. & N Neetha, (2011), Gender Dimensions: Employment Trends in India, 1993-94 to 2009-10, *Economics & Political Weekly, vol xlvi no 43*
12. Sundaram, K and S Tendulkar (2006): Changing Structure of India Workforce, Quality of Employment and Real Earnings, 1983-2000 in *India: Meeting the Employment Challenge*, Conference on Labour and Employment Issues, organised by Institute for Human Development,27-29 July, New Delhi.