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## **Achieving Universal Literacy in Andhra Pradesh : Status and Prospects**

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# Achieving Universal Literacy in Andhra Pradesh : Status and Prospects

M. Venkatanarayana and C. Ravi<sup>#</sup>

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## Introduction

Informed citizenry, active citizenship and collective actions are critical for the functioning of civil society especially in democratic society (APHDR, 2007). The vehicle through which these are made possible is education. Moreover, literacy and basic education are the crucial factors for the social, economic and human development. Particularly acquiring literacy skills is the foundation for life-long learning and it is a human right (UNESCO, 2005; 2008 & 2012). The crucial role that education development plays in the growth process of an economy is well established (see Barro, 1997; Barro and Sala-i-Martin, 2004; Psacharopoulos, 2006). In the context of globalisation and emerging knowledge based economies, the illiterate labourforce and those having poor educational levels would definitely be disadvantaged in the labour market. Moreover, education enhances the functioning of an individual better (see Sen, 1999). Therefore, given the low levels of education in India it is necessary to enhance educational development further in order to unravel the growth potentials of the Indian economy (Mehrotra *et. al.*, 2005).

Within the country there are wide variations across regions, states and sub-regions within the states. Andhra Pradesh is one of those Indian states which are having historical trend of low levels literacy rate and levels of education. In spite of the state's remarkable performance in terms of the child schooling (i.e. school attendance rate) especially since 1990s, its performance in literacy rate is relatively poor (APHDR, 2007). It is because of the state is having large stocks of illiterate population especially in the adult and older age groups. It is also observed that in spite of state of Andhra Pradesh witnessing better economic growth during the last two decades, its performance in respect of human development index is not impressive because its performance in education particularly with respect to literacy levels is one of the poorest among Indian states (APHDR, 2007). Therefore, in order to improve the

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performance of the state with respect human development index, a remarkable achievement in education particularly adult literacy rate is critical (ibid). Thus, the policy concern in the state is about the prospects of literacy and hence policy interventions required to improve literacy levels in the state.

In this context, the present analysis of progress in literacy rate and changes in disparities across social and geographical groups in literacy rate in Andhra Pradesh. Also an exercise explores the prospects of literacy in Andhra Pradesh with simulation modelling exercise which considers different policy interventions. Having said, the paper is organised as follows. Section I below presents the status of literacy levels in Andhra Pradesh and the Section II presents the prospects of the literacy in India. Section III discusses on policy initiatives and issues with respect adult education programmes. Finally, concluding observations and remarks follows.

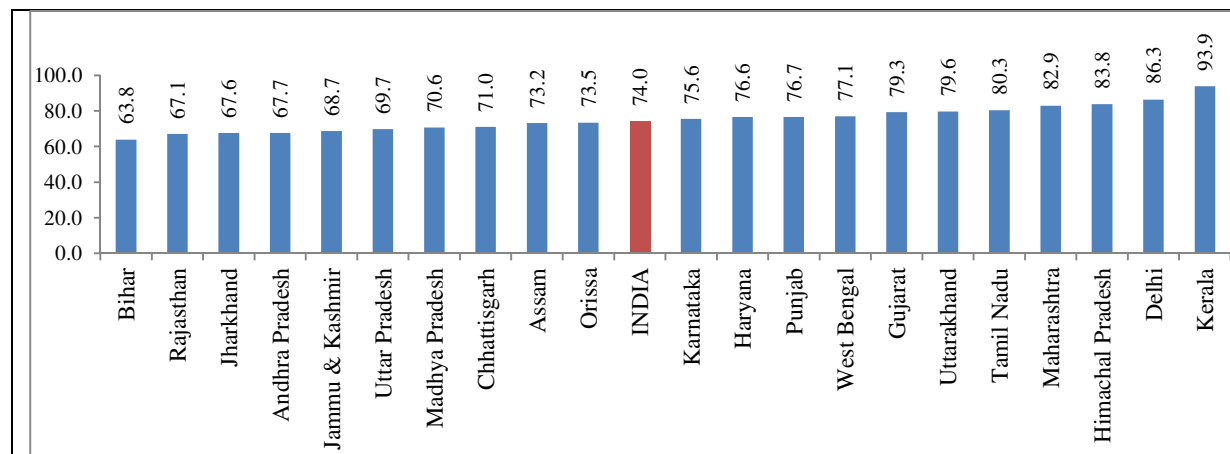
### **I Status of Literacy in Andhra Pradesh**

With respect to the literacy rate, there is a significant improvement over a period in Andhra Pradesh. However, the latest Census 2011 figures have shown that about two-thirds of population in Andhra Pradesh are literates and the rest one-third still remained as illiterates (Table 1.1). Literacy rate in the state is well below the national average and the state is found to be one of the poor performing states in India. The Census 2011 figures show that the state stands at fourth position from the below (lowest literacy rates) next to Bihar, Rajasthan and Jharkand (see Figure 1.1). There are about 24.9 million (or 2.49 crore) illiterates (7 + years age) in the state. While the state's share in total population of the country is nearly 7% in 2011, its contribution to the total illiterates (282.6 million) in the country is around 8.8%. It shows that state over representing for the illiterates of the country.

Over a period especially since 1961, the improvement in overall literacy rate in the state is the largest during the 1980s (14 percentage points increase between 1981 and 1991) and 1990s (17 percentage points increase between 1991 and 2001). During the last decade (i.e. between 2001 and 2011) the improvement in the literacy rate of the state is around 6.6 percentage points which is very low when compared to its performance in the previous decades (Table 1.1). In fact, it is observed that the performance of the state in respect of improvement in literacy rate during 1990s was impressive and one of the highest among Indian states. But the recent decade performance, during 2000s, is other way round – one of

the lowest. If the trend continues, Andhra Pradesh would remain as a laggard state in India with respect to literacy rate.

**Figure 1.1: Literacy Rate across Major Indian States, 2011**



**Note:** 1. Literacy Rate – percentage of literates to the 7 + age population; 2. States are ordered by the rank in terms of literacy rate.

**Source:** Census of India, Census 2011 Provisional Data.

**Table 1.1: Literacy Rate in Andhra Pradesh and in India**

Year	Andhra Pradesh			All-India		
	Person	Male	Female	Person	Male	Female
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>
1961	21.2	30.2	12.0	28.30	40.40	15.35
1971	24.6	33.2	15.8	34.45	45.96	21.97
1981	29.9	39.3	20.4	43.57	56.38	29.76
1991	44.1	55.1	32.7	52.21	64.13	39.29
2001	60.5	70.3	50.4	64.84	75.26	53.67
2011	67.0	74.9	59.1	72.99	80.89	64.64

**Note:** 1. Literacy is for 5 + age population till 1981 and after that, for 7 + age population.

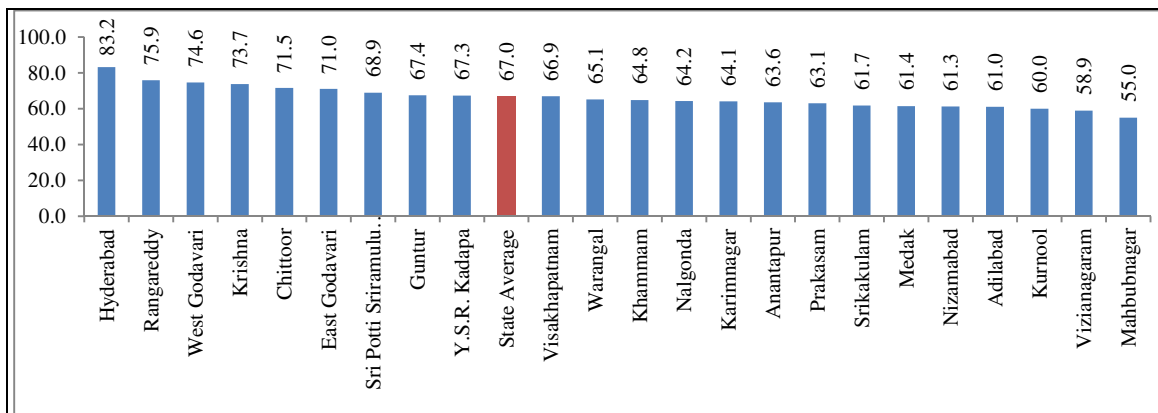
**Source:** 1. APHDR (2008); 2. Census of India.

Although the gender gap in literacy in the state is narrowing down as a result of the improvement in literacy rate over a period is faster among the females when compared to their male counterparts, there is still a significant level of difference (around 16 percentage points in 2011) between male and females in terms of literacy.

### Regional Variation

Within the state there are huge variations across districts in literacy rate. The highest literacy rate (83.2%) is observed in Hyderabad district followed by Rangareddy (75.9%) and West Godavari (74.6%) districts. The lowest rate (55.0%) is observed in the Mahabubnagar district followed by Vizianagaram (58.9%) and Kurnool (60%) districts (Figure 1.2). Between the highest and the lowest literacy rate across districts in the state there is a gap of 28 percentage points. The levels of literacy across districts also indicates a regional pattern wherein except Hyderabad and Rangareddy districts all the other districts are having literacy higher than the state average are Coastal and Rayalaseema districts.

**Figure 1.2: Literacy Rate (%) across Districts in Andhra Pradesh, 2011**



**Note:** 1. Rural-urban combined; 2. Percentage of literates to 7+ years age population.

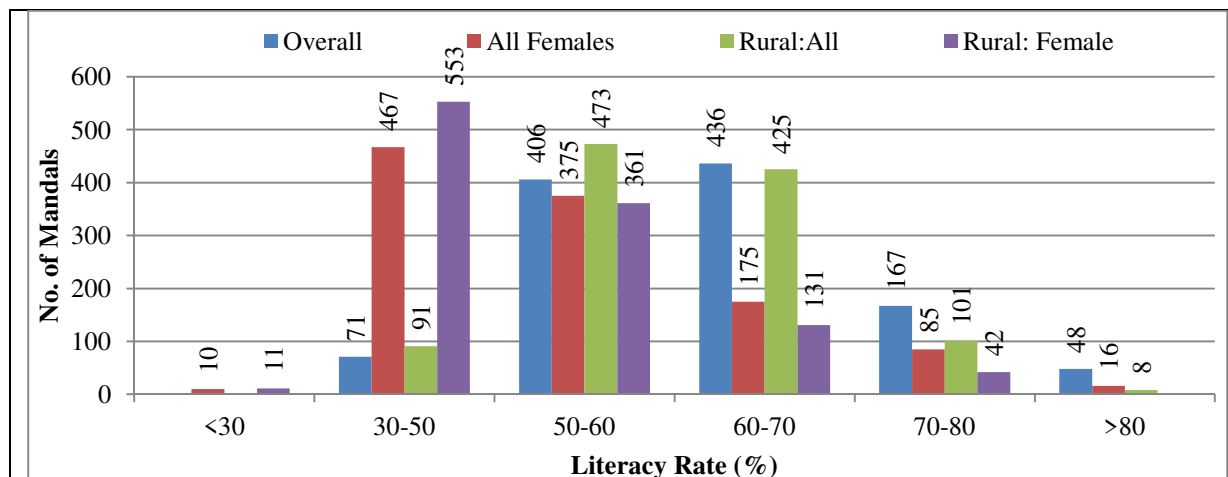
**Source:** Census of India, 2011.

Mandal<sup>1</sup> (sub-district) level analysis of literacy rate shows that out of the total 1128 mandals in the state of Andhra Pradesh a majority number of them (815 mandals comprising of three-fourths of the total) are having literacy rate below the state average (67%), according to 2011 Census information. About two-fifths of mandals are having literacy rate in the range of 50 to 60% and another two-fifths of them are having 60 to 70% (Figure 1.3). Very few mandals are having literacy rate above 80% (see Figure 1.3 and Table 1.2). However, with respect to literacy rate of rural people especially among the rural females, there are about 10 mandals in Andhra Pradesh having rural female literacy rate below 30% in 2011. Moreover, strikingly, about half of the rural mandals are having female literacy in the range of 30 to 50% only (Figure 1.3). This half of the mandals located in rural topography and having female literacy rate below 50%, are found to contribute more than one-thirds of the total population in the

<sup>1</sup> Mandal is administrative division below the District in Andhra Pradesh.

state (see Table 1.2). Such is the dire condition of female literacy in many of mandals the state.

**Figure 1.3: No of Mandals in Andhra Pradesh by the level of Literacy Rate in 2011**



**Note:** Mandal is administrative division below the District in Andhra Pradesh.

**Source:** Primary Census Abstract, Census 2011, Census of India, Andhra Pradesh.

**Table 1.2: Number of Mandals with their share of population and average literacy rate by Literacy Level in 2011 - Andhra Pradesh**

Literacy Levels (%)	Overall Literacy: Persons			Rural Literacy: Persons			Rural Females' Literacy		
	No. of mandals	% of Population	Average literacy(%)	No. of mandal	% of Population	Average literacy(%)	No. of mandal	% of Population	Average literacy(%)
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>	<i>9</i>	<i>10</i>
Less than 30%	-	-	-	-	-	-	11	4.8	27.5
30-50%	71	4.5	45.61	91	8.5	45.81	553	31.1	36.6
50-60%	406	24.4	56.05	473	40.8	56.07	361	17.9	52.1
60-70%	436	31.8	64.66	425	39.3	64.07	131	31.3	63.7
70-80%	167	23.5	74.86	101	10.4	73.53	42	14.9	72.7
Greater than 80%	48	15.8	82.74	8	1	81.07	-	-	-

**Note:** '-' None.

**Source:** Primary Census of Abstract.

### *Social Group disparities*

Across social groups, there has been a progress in literacy among both SC and ST communities in the state. For SCs it increased from 8.5 per cent to 31.6 per cent between 1961 and 1991 and to 53.5 during 1991-2001. For STs the literacy rate was 4.4 per cent in 1961; it increased to 17.2 per cent in 1991 and 37.1 per cent in 2001. Till 1991 the literacy

rate of STs was less than one-third of the all-community average literacy rate in the state. The gap between the literacy levels of SC/ST and the state average increased till 1991 and subsequently it narrowed down to some extent. The rate of achievement in terms of literacy levels was higher for the STs and SCs when compared to the state average during 1991-01. However about half the SCs and two-thirds of the STs in the state still continued to be illiterates.

**Table 1.3: Literacy Levels by Caste and Gender in Andhra Pradesh**

Year	SC			ST			All		
	Person	Male	Female	Person	Male	Female	Person	Male	Female
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>	<i>9</i>	<i>10</i>
1961	8.5	13.4	3.4	4.4	7.3	1.5	21.2	30.2	12.0
1971	10.7	15.9	5.3	5.3	8.5	2.1	24.6	33.2	15.8
1981	17.7	24.8	10.3	7.8	12.0	3.5	29.9	39.3	20.4
1991	31.6	34.4	20.9	17.2	20.1	8.7	44.1	55.1	32.7
2001	53.5	63.5	43.4	37.1	47.7	26.1	60.5	70.3	50.4

**Notes:** 1. Figures are in percentage; 2. Literacy is for 5 + population for the years 1961 and 1971 thereafter it has been for 7+ age population; 3. Up to 2001 it is Census data, for 2009-10 it is based on NSS estimations.

**Source:** 1. GoAP (2007); Census of India, Andhra Pradesh.

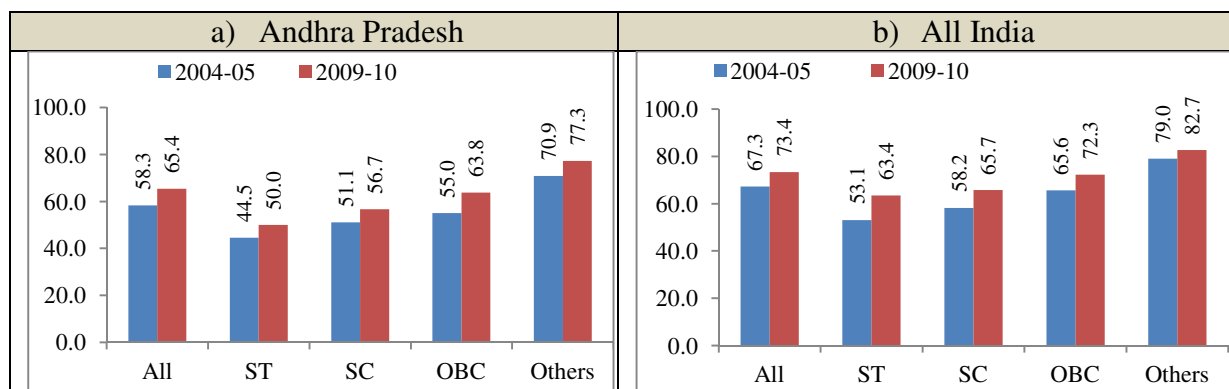
The growth of literate persons in each social group during 1991-2001 was very much higher than the growth of population of the respective social group. Moreover, the growth of literate persons was the highest of among the STs (10.41 per cent per annum) followed by the SC (7.55 per cent per annum) when compared to the all community (5.01 per cent per annum) average in the state (GoAP, 2007).

Further disaggregated by gender and caste, ST women were the most backward and their literacy rate was one-fourth of the state average. This suggests that ST female adults could not avail of the desired benefit from literacy campaigns and/or from formal schooling facilities as compared to SC female adults in rural Andhra Pradesh. SC male adults, however, could benefit from these initiatives to improve their literacy position between 1991 and 2001 (Reddy *et. al.*, 2008).

To get the recent experiences of these social groups in terms of their performance in improving their literacy level during the last one decade period, Census based information is not yet available. However, one can use the information recorded in NSSO's quinquennial

survey on employment and unemployment, in this respect. The analysis based on the NSSO data indicates that the gaps in literacy rates across social groups continue to persist (Figure 1.4a). Still around half of the ST and SC population in the state survives with illiteracy. If one compares the performance of these ST/SC social groups in the state with that of their counterparts at the all India level, performance of ST/SC groups in Andhra Pradesh is lagging behind that of national averages (Figure 1.4a&b).

**Figure 1.4: Literacy Rate (%) by Social Groups in Andhra Pradesh and India**



**Note:** Literacy rate for 7 + age population.

**Source:** Estimated using NSSO 61<sup>st</sup> (2004-05) and 66<sup>th</sup> (2009-10) Round Employment and Unemployment Survey unit record data.

Within the state there are huge variations across districts in terms of the performance of these social groups. A study analysed such variations across districts based on 2001 Census data observed that the pattern of inter-district variations in literacy rate among SCs was very similar to the regional pattern seen in the all community average literacy rate (Reddy et al, 2009). Across districts, the literacy rate was relatively the lowest among the STs by community and ST female by community and gender. West Godavari district next to Hyderabad was the district with highest literacy rate and Mahabubnagar was the district with the lowest literacy rate in all six literacy rate parameters (ibid).

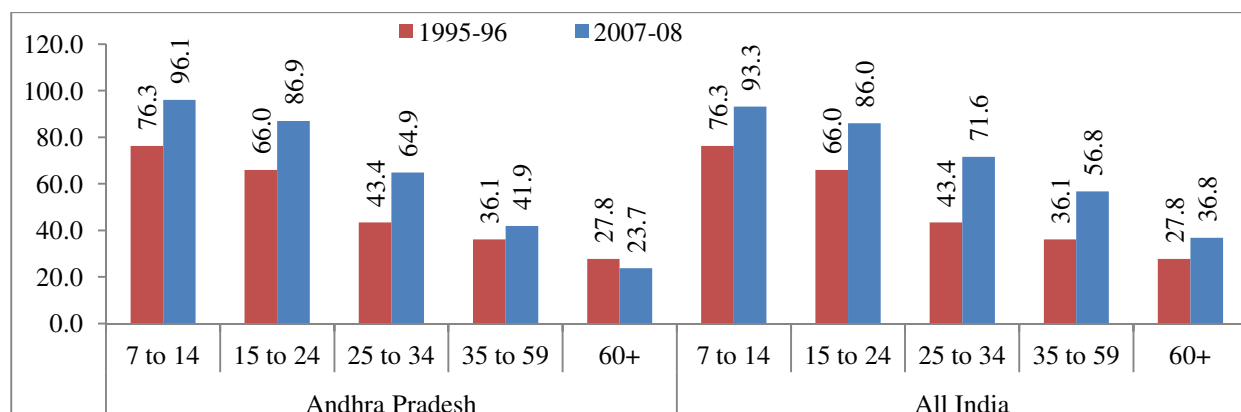
### ***Change in Age-group specific literacy rate***

Literacy rate across age groups too varied. When examined age group specific literacy rate it can be observed that the literacy rate in Andhra Pradesh declined with ascension of higher age groups (Figure 1.5). The high literacy rate among younger age groups is because of recent remarkable expansion primary education owing initiative such as DPEP and its successor SSA. The literacy among the older age groups indicates the haunting historical neglect of primary education and the adult education/literacy programmes. The increase in



age group-specific literacy rate between 1995-96 and 2007-08 literacy shows the expansion of primary education over a period of time (Figure 1.5). Because of remarkable expansion and improvements in primary education in the state especially during the last two decades, the improvement in the literacy rate during the period is relatively higher among the younger age groups than that of the adult and older age group.

**Figure 1.5: Improvement in Literacy Rate (%) by age groups in Andhra Pradesh and India**



**Note:** Age group specific literacy rates (%).

**Source:** Based on the unit record data of NSS 52<sup>nd</sup> (1995-96) and 64<sup>th</sup> Round (2007-08) Surveys on Literacy and Participation in Education (Sch. 25).

The contribution of younger age group literates to the total literates in the state is higher than their proportion in the state population (Table 1.4). Correspondingly the contribution of adults and older age group literates to the total literates in the state is lower than their proportion in the state population.

**Table 1.4: Percentage Distribution of Population and Literates by Broad Age Groups in Andhra Pradesh and India**

Age Group	Distribution of Population				Distribution of Literates			
	Andhra Pradesh		India		Andhra Pradesh		India	
	1995-96	2007-08	1995-96	2007-08	1995-96	2007-08	1995-96	2007-08
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>	<i>9</i>
7-14	18.9	15.4	19.1	17.9	33.1	26.3	29.8	27.2
15-24	16.0	18.2	16.4	18.0	24.1	28.3	24.3	25.3
25-34	19.3	17.3	17.0	16.1	19.2	20.0	19.4	18.8
35-59	24.3	29.5	23.4	26.2	20.1	22.0	22.4	24.3
60+	5.4	8.0	6.4	7.3	3.5	3.4	4.1	4.4

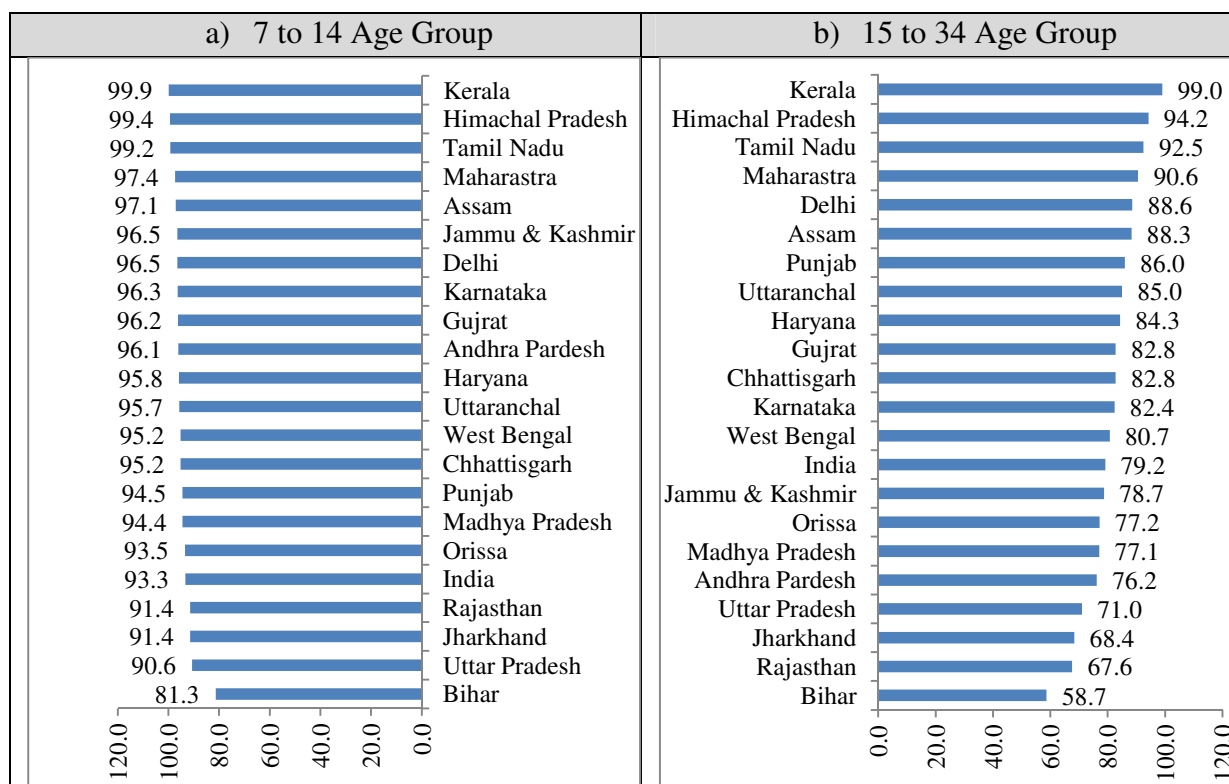
**Note:** Figures presented are percentages.

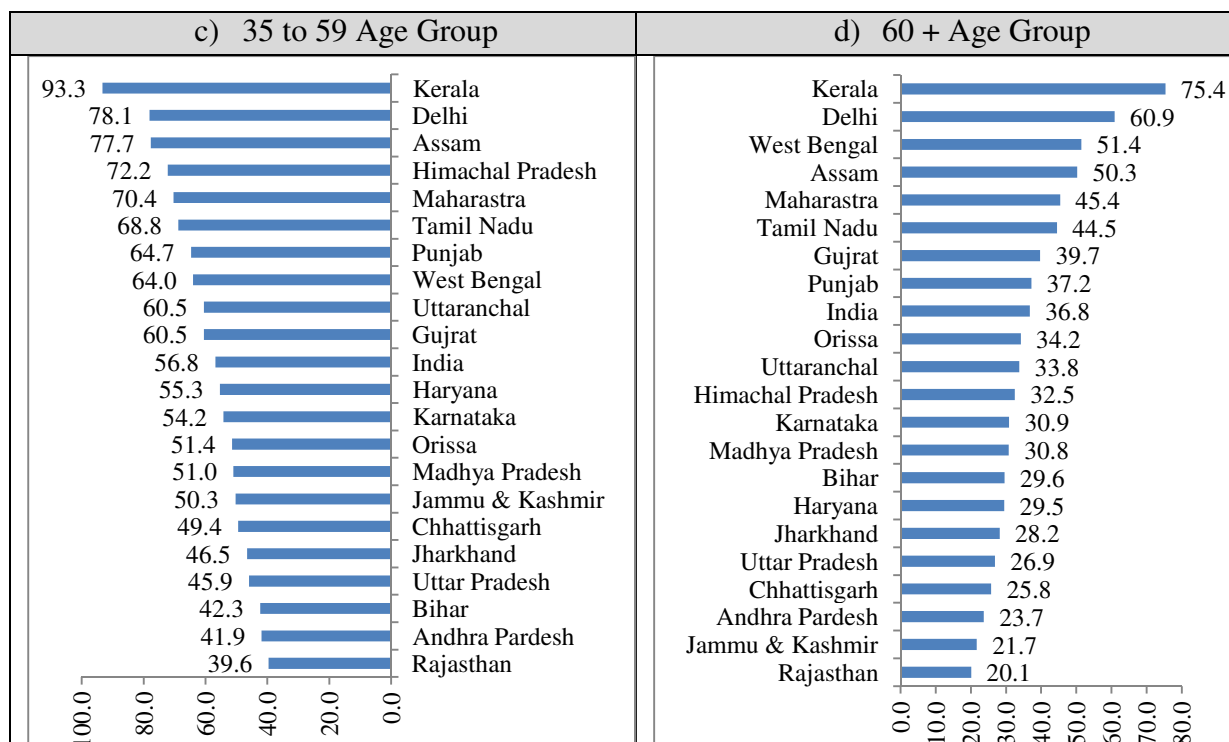
**Source:** Based on the unit record data of NSS 52<sup>nd</sup> (1995-96) and 64<sup>th</sup> Round (2007-08) Surveys on Literacy and Participation in Education (Sch. 25).

Having analysed the situation of literacy levels for the state, the comparison of the state with the other states in terms of age specific literacy rate shows the relative position of the state of Andhra Pradesh in the all India context. The Figure 1.6 indicates that in the younger (7 to 14) age groups the literacy rate across states varies between 90 to 99 percent except Bihar; and the state of Andhra Pradesh stands in the middle.

The variation across states in the literacy rate increases from the younger (7 to 14) age group to that of the older age group (60 + years). The relative position of the Andhra Pradesh worsens with ascension of higher age groups wherein the state position moves from the middle for the 7 to 14 years age group to fifth lowest for the 15 to 34 years age group and to the second lowest for the 35 to 59 years age group and the third lowest for the older (60 + years) age group (see Figure 1.6a, b, c and d).

**Figure 1.6: Age Specific Literacy Rate across Major States in India, 2007-08**





**Note:** Age specific literacy rates.

**Source:** Based on the unit record data of NSS 64<sup>th</sup> Round (2007-08) Surveys on Literacy and Participation in Education (Sch. 25).

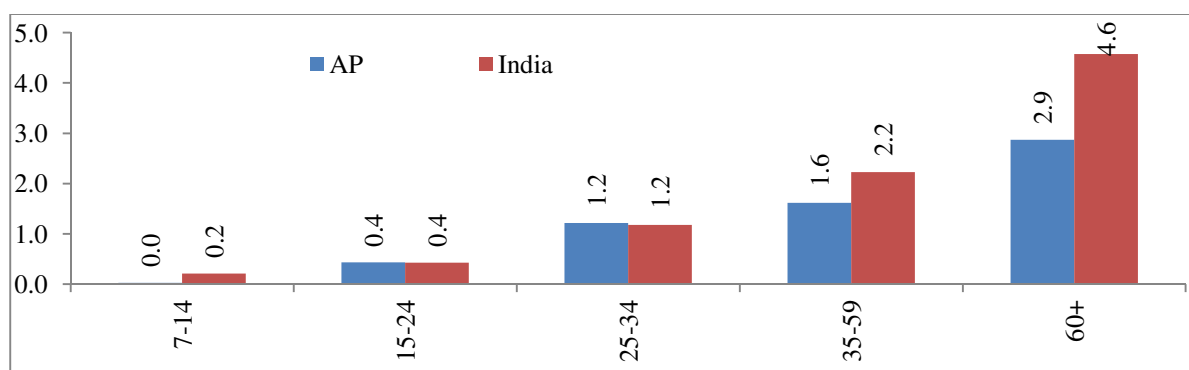
### *Literacy through informal means*

There are different means i.e. formal and informal ways and non-formal educational programmes, that impart basic skills (reading, writing and numeracy) required for literacy. Formal schooling is the most common mode to become a literate, so that at young age the chances of formal schooling are more than that of as age increases. When formal schooling is the only means of acquiring literacy skills, the literacy rate observed for an younger age cohort remains constant (if one assumes mortality rate among the literates and illiterates in that age cohort is same) throughout the passage of that age cohort through different age group brackets over a period of time. In this case, therefore, the age-specific literacy rate at a point of indicates change in literacy rate over a period of time. In the older age group there are chances for acquiring literacy skills through these means. Therefore, there are chances of improving the literacy rate across age groups through these methods (also see Venkatanarayana, 2013).

When observed the percentage of those literates who have become literates (or who acquired literacy skills) through all the informal ways and through non-formal educational

programmes or adult literacy programmes to the total literates in the state are very marginal (below one percent among 7 + years age literates). When we refer it as the percentage of literates without formal schooling, by age groups the share is increasing marginally. The percentage is higher (around 3%) among the older age groups (60 + years age). However, when compared to all India average, the percentage of literates without formal schooling is lower in the state across age groups (Figure 1.7).

**Figure 1.7: Percentage of those who became Literates without Formal Schooling (through Informal/Non-formal Education) to the Total Literates by age groups in Andhra Pradesh and India, 2007-08**



**Note:** 1. Age group specific percentages; 2. Informal/Non-Formal Education includes Total Literacy Campaign (TLC), NFEC, AIEP, AEC, and others.

**Source:** Based on the unit record data of NSS 64<sup>th</sup> Round (2007-08) Surveys on Literacy and Participation in Education (Sch. 25).

One must also note the demographic factor i.e. age specific mortality rate as important factor that affects the age specific literacy rate. In other words in a particular age cohort in its passage, if the mortality rate is higher among literates when compared to illiterates in that cohort, the literacy rate in the age cohort declines and vice versa (i.e. if the mortality rate is higher among illiterates when compared literates, the literacy rate in that age cohort increases). The increase or decline in the age specific literacy rate in a particular age cohort in this particular case is purely a demographic effect. However, we don't have sufficient information on age specific mortality rates among literates and illiterates.

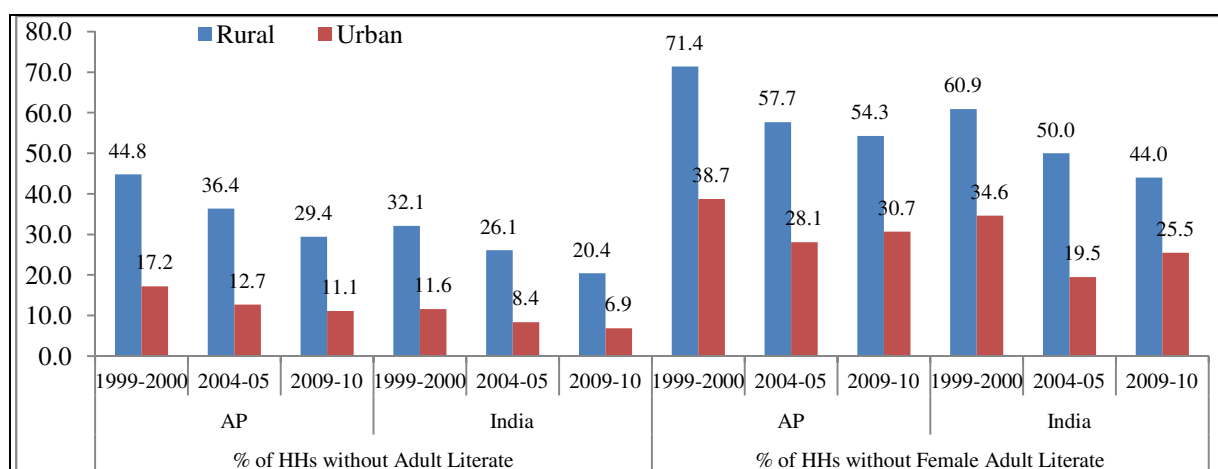
Similarly, the case of migration especially external migration factor i.e. the literacy levels among the net migrants affects the overall literacy rate of a country/state/region. If the net migration (positive) in favour of in-migrants and the literacy level are higher (lower) than non-migrant population then the overall literacy rate improves (declines). If the net migration (negative) in favour of out-migrants and the literacy level are lower (higher) than non-

migrant population then the overall literacy rate improves (declines). But it all depends on size of the migrants. In case of Andhra Pradesh, the share of external migrants in the total population of the state is small (below 1%) so that the literacy status of net migrants may not significantly affect overall literacy rate in the state.

### ***Isolated and Proximate Illiteracy***

It is also appropriate to consider literacy at the household level. It is observed that a household with an adult literate member has an advantage over that of a household which had no literate adult. The externality effect of one adult literate member on the other illiterate members within a household is referred as proximate literacy and the illiterate members are proximate illiterates in the literature (See Basu and Foster, 1998; Gibson, 1999; Basu et. al., 2000; and Subramanian, 2004). Due to the externality effect of the literate member of the family the benefits of literacy will spread to other members. Household in which no adult member is literate, it is referred as isolated illiteracy (ibid), it is the most disadvantaged /deprived one. In this respect, the literacy programmes has to identify the households in which all the members are illiterate, prioritise and target such households.

**Figure 1.8: Percentage of Households without an Adult Literate in A P and India**



**Note:** 1. Adults in the 15+ age group; 2. Percentage of Households.

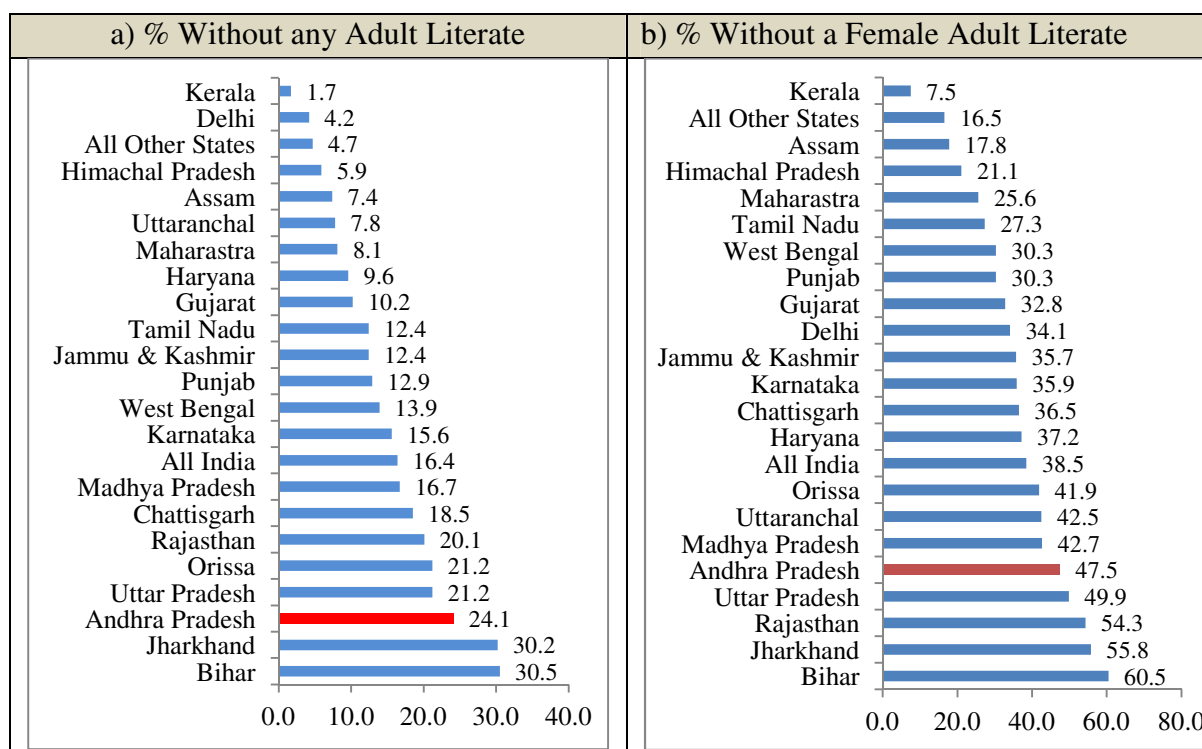
**Source:** Estimations using three Rounds (55<sup>th</sup>, 61<sup>st</sup> and 66<sup>th</sup>) of NSS Employment and Unemployment Survey Unit Record data.

In Andhra Pradesh there are still one-third of the rural households and one-tenth of the urban households are without an adult literate (see Figure 1.8). The incidence of household adult illiteracy (where the entire adult members are illiterates) is relatively much higher in Andhra Pradesh than all-India. Moreover, it is well established fact that the externality of female literacy, presence of female literate in a household is even more especially in terms of women

and child health, child mortality and child schooling etc. It is more important if an adult female. In this respect Andhra Pradesh is highly disadvantaged wherein more than half of the rural and around one-third of the urban households still do not have a female adult literate member (see Figure 1.8). Over time there is declining trend of household illiteracy in terms of both the aspects – all adult illiterates and female adult illiterates (see Figure 1.8). During last one decade period, the rate of decline at the national level is faster than that of Andhra Pradesh.

In the all India context, Andhra Pradesh is the third largest state in terms of the incidence of households without any adult literates (See Figure 1.9). In terms of the incidence of households without a female adult literate, Andhra Pradesh is the fifth largest state in India. But the magnitude of the problem is very high around half of the total households (rural urban combined) in the state.

**Figure 1.9: % of Households without an Adult Literate member Across Major States in India, 2009-10**



Note: Rural-Urban Combined.

Source: Estimations using NSS 66<sup>th</sup> (2009-10) Round Employment and Unemployment Survey Unit Record data.

It is to be noted that Andhra Pradesh is sixth largest in terms of percentage of female headed households in the state. All its southern sisters are ahead of Andhra Pradesh in having female

headed households. But the uniqueness of the state is that although state is lower incidence of female headed households but the incidence of household without a female adult literate is higher even among the female headed households. In other southern states it is not case.

On the whole, despite its remarkable performance in school education in the recent past especially during the last two decades, the state is lagging behind in literacy particularly among the adults. The performance of the state over a period is impressive with respect to improvement in literacy rate, such performance of the state however, has not been sufficient to break its status as a laggard state in India in respect literacy. It indicates need for an appropriate state-specific policy measures to improve literacy levels in the state.

## **II Prospects of Literacy in Andhra Pradesh**

The analysis indicates that the relatively poor performance of Andhra Pradesh with respect to literacy rate in the all India context especially when compared to the other states and also the poor performance of the state during the last decade when compared to that of the previous decades. It is, therefore, the cause of concern for the state policy. In this respect an attempt is made to explore the prospects of literacy rate in the state through simulation exercise. Herein we present the variants of literacy rate projection models involving a policy variable and demographic factors. Both the population and literates projections are made using following simulation model by taking year 2008 as the base.

### ***Demographic Factors affecting literacy rate***

One must also note the demographic factor i.e. age specific mortality rate as important factor that affects the literacy rate in general age specific literacy rate in particular (see also Venkatanarayana, 2013). In other words, if the mortality rate is higher among the illiterates than that of literates, rate of growth in literates would be higher than that of illiterates. The literacy rate as result of such demographic factor increases. The case is other way round when the mortality rate is higher among the literates than that of illiterates, literacy rate declines. Similarly, for a particular age cohort in its transit across different age structures, if the mortality rate is higher among literates when compared to illiterates in that cohort, the literacy rate of the cohort declines and vice versa - i.e. if the mortality rate is higher among the illiterates when compared that of literates, the literacy rate in that age cohort increases. In this respect, the increase or decline in the age specific literacy rate in a particular age cohort

purely is a demographic effect. However, we don't have sufficient information on age specific mortality rates among literates and illiterates<sup>2</sup>.

Besides, the factor of migration especially external migration wherein the literacy levels of the net migrants do affects the overall literacy rate of a country/state/region. If the net migration is positive indicating surplus of in-migrants over out-migrants and the literacy level are higher (lower) among these net in-migrants than that non-migrant population then the overall literacy rate improves (declines). If the net migration is negative indicating the out-migrants and the literacy level are lower (higher) than non-migrant population then the overall literacy rate improves (declines). But it all depends on size of the migrants and its share in the population. In India, however, the share of external migrants in the total population is small (below 1%) so that the literacy status of net migrants may not significantly affect overall literacy rate in the country.

Along with these factors the demographic transition itself has its impact on the improvement in literacy levels. The faster demographic transition with a fast deceleration in birth rate means decline in the size of the younger age group and the bulging adult/older age group. Andhra Pradesh is one of the Indian states that have shown a faster demographic transition especially during last two decades (see Venkatanarayana, 2012). In this case, if there are very low levels of adult literacy, even a remarkable improvement in school education, which is the most resorted way of acquiring literacy skills, thereby the literacy levels among the younger age groups. The growth in flow of young literates with formal schooling into the adult cohort decelerates. In the absence of any adult literacy programme, the decline in stock of adult illiterate is equal to their mortality rate only. In a situation of same mortality rate for literate and illiterate among adult population, the rate of growth in adult literates is limited by the rate growth in flow of younger age into adult cohort. As a result the improvement in overall (among 7+ years age group) or adult (among 15+ years age group) literacy rate would be very slow. Herein one say that it could be one of the reasons why Andhra Pradesh states' performance with respect to literacy rate when compared with other Indian states is not so impressive during the 2000s (between 2001 and 2011).

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<sup>2</sup> One must, however, be aware of the demographic affect in terms of age specific mortality rates. As mentioned above for a particular age cohort in its passage, if the mortality rate is higher among literates when compared to illiterates in that cohort, the literacy rate in the age cohort declines and vice versa (i.e. if the mortality rate is higher among illiterates when compared literates, the literacy rate in that age cohort increases). Owing to this demographic factor the age specific literacy rates may change but its impact is not yet empirically measured so far.



### ***Policy Initiatives and Literacy***

As mentioned elsewhere above, there are different means i.e. formal schooling, informal or non-formal educational programmes that impart basic literacy skills. Formal schooling is the most common mode. The other means are informal/non-formal modes of adult education programmes which are complementary and provide second chance of acquiring literacy skills for those who have missed the first chance through formal schooling when they were young. All these means are associated with the policy initiatives. Most of adult literacy and education programmes have to adapt informal or non-formal modes only. Under the National Literacy Mission (NLM) in India and for its initiatives such as Total Literacy Campaign (TLC) these informal or non-formal modes were used to impart literacy skills among the adults. Herein we consider such a policy intervention to improve adult literacy.

### ***Assumptions***

For population projections birth rate continues to decline beyond our base years but the age-specific mortality rate of base year continues to prevail during our projection period. With respect to literacy projection, the basic assumption of the literacy model is age-specific mortality rate is same among both the literates and illiterates of that age group. With respect to external migration (in or out), the literacy rate among the net migrants is equal to that of the non-migrant population. Besides, these basic assumptions, the other assumptions along with policy variable prescriptions considered for the simulation exercise are specified in the Table 2.1.

### ***Source of Data for the Base Year***

We have used RGI projections based on 2001 Census data for the age group-wise population. With respect to age-specific mortality rate we have used SRS estimates for the year 2008. As regards the age-specific literacy rate, we have used our estimates using unit record data of NSSO 64<sup>th</sup> round (2007-08) survey on Literacy and Participation in Education (Sch. 25).

### ***Projection Models***

Both the population and literates projections are made using following simulation model by taking year 2008 as the base year for the required parameters. The model specifications are as follows.

Age Group Specific Population projection model specification:

$$P_{i,j} = \{[(P_{i,j-1})/Z_i] \cdot (Z_{i-1} - (Z_{i-1} - 1))\} + \{(P_{i,j-1} - (ASDR_i \cdot P_{i,j-1})) \cdot (Z_i - 1)\} \dots\dots\dots (1)$$

Age Group Specific Literate population projections model specification – Without any policy intervention:

$$L_{i,j} = \{[(L_{i-1,j-1})/Z_i] \cdot (Z_{i-1} - (Z_{i-1} - 1))\} + \{(L_{i,j-1} - (ASDR_i \cdot L_{i,j-1})) \cdot (Z_i - 1)\} \dots\dots\dots (2)$$

Age Group Specific Literate population projections model specification – With policy intervention in school education and in terms of adult literacy programmes:

$$L_{i,j} = \{[(L_{i-1,j-1})/Z_i] \cdot (Z_{i-1} - (Z_{i-1} - 1))\} + \{(L_{i,j-1} - (ASDR_i \cdot L_{i,j-1})) \cdot (Z_i - 1)\} + \{PI_{i,j}\} \dots (3)$$

$$PI_{i,j} = (x_{i,j} \cdot ILP_{i,j})$$

P – Population; L – Literates

PI – Number of Illiterates made as Literates through Policy Intervention

ILP – Illiterate population; x – Percent of Illiterates targeted

i - i<sup>th</sup> age group (0-6, 7-9, 10-14, 15-19, ....., and 75 +)

j – j<sup>th</sup> Year (2008, 2009, ....., 2050)

Z – age group interval (mostly 5 years age interval except 0-6, 7-9 and 75+ age groups)

ASDR – Age specific death/mortality rate of population (based on SRS)

i-1 and j-1 refer to immediate precedent age group and year

Given the projections of population and literates by age groups, the age specific literacy rates can be simply computed as:

$$ALR_{i,j} = L_{i,j} / P_{i,j} \cdot 100 \dots\dots\dots (4)$$

Finally the overall literacy is the summation of age-specific literacy rates:

$$LR_{(7+ pop),j} = \sum_i^n ALR_{i,j} \cdot SP_{i,j} \dots\dots\dots (5)$$

ALR – Age-specific Literacy Rate

LR – Overall Literacy Rate

SP – Share of the ‘i’th age group in the total population

Having specified the simulation model, there are five variants of simulation models and the specifications of five variants are as follows. Assumptions that apply to different Variants simulation models are presented in the Table 2.1.

**Variants I** – It is status quo situation wherein there is no new policy intervention programmes to improve literacy levels in the state, whatever are there they will continue.

**Variante II** – In this simulation model policy intervention programmes in the school education of 5-14 years age group is assumed to improve literacy levels in the state.

**Variante III** – In this simulation model policy intervention through adult literacy programmes especially for the 15-35 years age group along with policy intervention programmes in the school education of 5-14 years age group is assumed to improve literacy levels in the state.

**Table 2.1: Assumption of the Simulation Models**

Sno	Assumption	Variants of Simulation Models				
		I	II	III	IV	V
1	2	3	4	5	6	7
1	0-6 years age population continue to decline over a period of time as the current (negative) rate of growth (i.e. between 2001-2011) indicates.	YES	YES	YES	YES	YES
2	Age specific death rates of the population are applied to both the literates and illiterates without difference.	YES	YES	YES	YES	YES
3	Equal distribution of population within the age group cohort	YES	YES	YES	YES	YES
5	Within the age group cohort same literacy rate for each single year age cohorts.	YES	YES	YES	YES	YES
7	Literacy level of the net migrants is same as that of the non-migrants.	YES	YES	YES	YES	YES
4	Literacy rate within the age group cohort is freed.	YES	YES	NO	NO	NO
6	There is near impossibility of a person acquiring literacy skills once he/she moves out of 7-9 age group brackets.	YES	NO	NO	NO	NO
8	Literacy rate within the younger age groups (especially for the 7-9 and 10-14 age groups) will improve from the current levels of around 96%.	NO	YES	YES	YES	YES
9	The literacy rate of 96% among the 7-9 and 10-14 age group will grow at 5% per annum till it reaches 100%.	NO	YES	YES	YES	YES
12	There is no chance of a person acquiring literacy skills once he/she 14 years age group bracket.	YES	YES	NO	NO	NO
13	10% of the illiterates in the age group 15-35 years will be targeted under adult literacy programme and thus they will be made as literates.	NO	NO	YES	NO	NO
14	The chance of acquiring literacy skills for those illiterates in the age group 15-35 opened with a policy intervention through adult literacy programmes.	NO	NO	YES	YES	YES
15	There is no chance for an illiterate person acquiring literacy skills once he/she cross 15-35 years age group bracket.	NO	NO	YES	YES	NO
16	20% of the illiterates in the age group 15-35 years will be targeted under adult literacy programme and thus they will be made as literates.	NO	NO	YES	YES	YES
17	5% of illiterates in the 35-60 age group per year till no illiterate in the age group left out, will be made literate in 2012.	NO	NO	NO	NO	YES
18	After 2012 the percentage of illiterates in the 35-60 age group who will be targeted for the adult literacy programmes will increase from the base 5% in 2012 at a rate 5% per annum till no illiterate in the age group left out.	NO	NO	NO	NO	YES

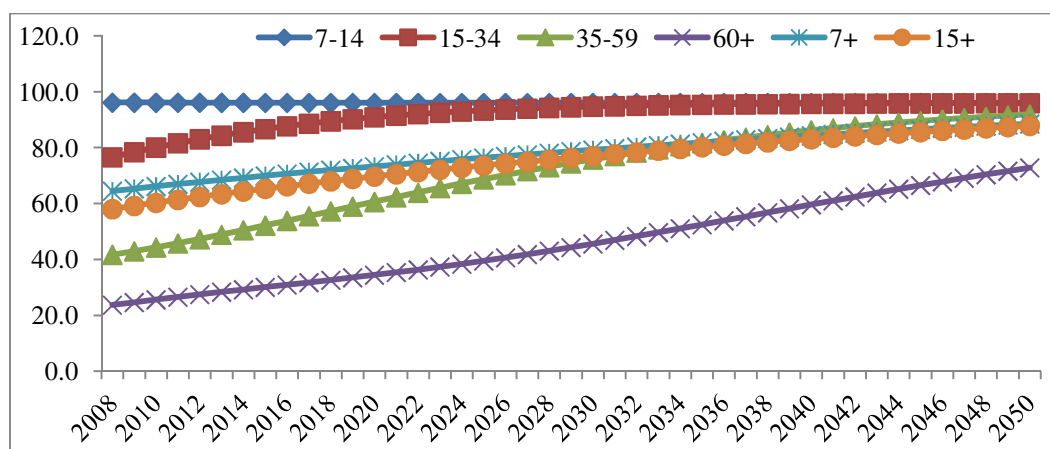
Source: Authors’.

**Variant IV** – It is similar to the Variant III. In this simulation model also policy intervention through adult literacy programmes especially for the 15-35 years age group along with policy intervention programmes in the school education of 5-14 years age group is assumed to improve literacy levels in the state. But the rate at which the percentage of illiterates in the 15-35 age group who will become literates through adult literacy programmes will be higher. All the assumptions of the Variant III remain constant in this simulation model but the rate at which the percentage of illiterates in the 15-35 age group who will be made literates through adult literacy programme would vary.

**Variant V** – In this variant of simulation model the policy intervention through adult literacy programmes is applied to 35 to 60 years age group along with 15-35 age group and the policy intervention programmes in the school education of 5-14 years age group, is assumed to improve literacy levels in the state. In this variant of simulation all the assumptions of the Variant IV remain constant. Besides the other assumptions are related to rate at which the number illiterates in 35-60 year age group will be made literates.

Based on the above models and the model specific assumptions, projection results can be summarised as below. The trend in the projected literacy rate for Andhra Pradesh till 2050 based on the simulation model Variant I is presented in the Figure 2.1. Projections based on this model indicate that Andhra Pradesh will not achieve 100% literacy rate even by 2050. The maximum possible literacy rate in the 7 + years age population will be around 88%.

**Figure 2.1: Projected Literacy Rate in Andhra Pradesh - Variant I**

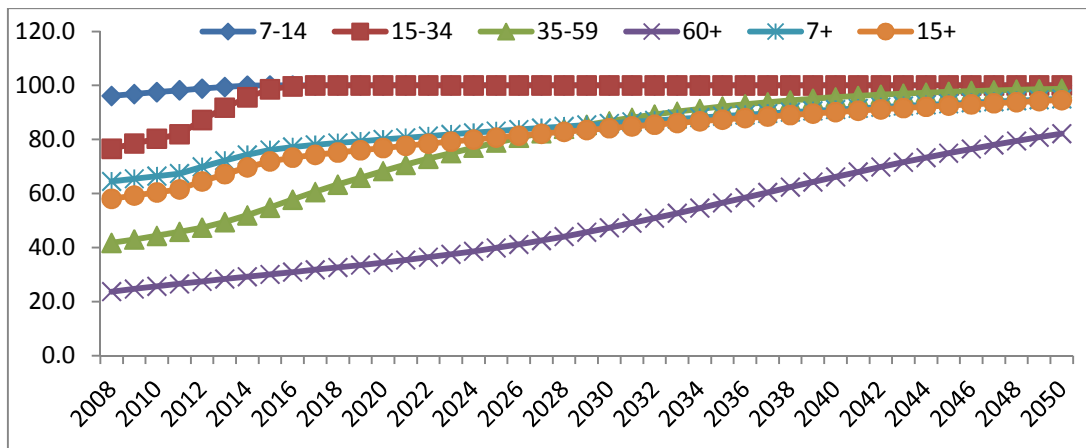


**Note:** Age group specific Literacy Rates.

**Source:** Authors Projections.

The trend in the projected literacy rates for Andhra Pradesh till 2050 based on the simulation model Variant IV is presented in the Figure 2.2. Projections on this model indicate that although achieving 100% literacy rate even by 2050 is not possible, it can be improved through school education and adult literacy programmes for the 5-14 and 15-35 age group. The maximum possible literacy rate in the 7 + age population will be around 95%.

**Figure 2.2: Projected Literacy Rate in Andhra Pradesh - Variant IV**



**Note:** Age group specific Literacy Rates.

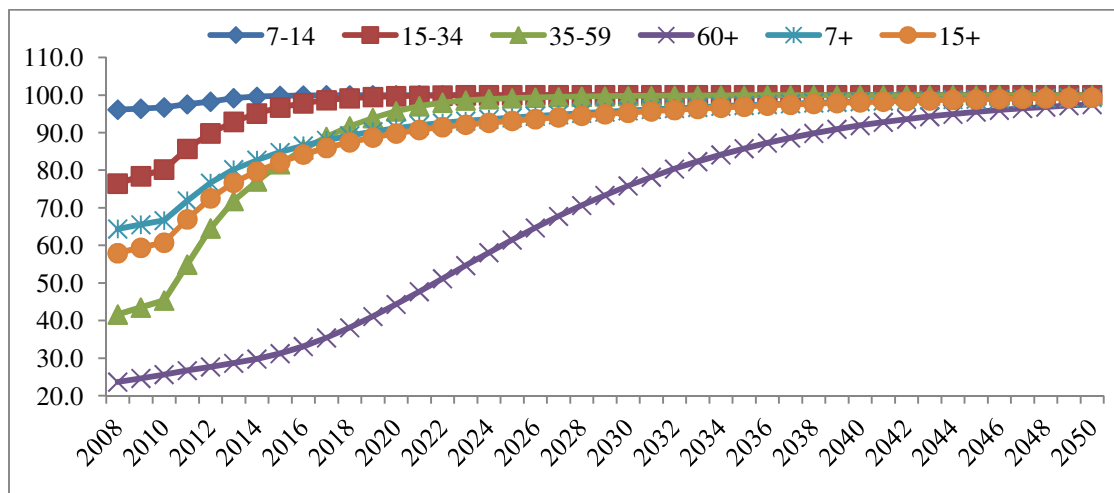
**Source:** Authors Projections.

The trend in the projected literacy rates for Andhra Pradesh till 2050 based on the simulation model Variant V is presented in the Figure 2.3. Projections on this model indicate that 100% literacy rate possible by 2050. In this respect literacy levels have to be improved through school education for the 5 to 14 year age group and adult literacy programmes for 15 to 35 years and 35 to 60 years age groups.

The trend in projected literacy rates for the 15 to 35 years age group Andhra Pradesh till 2050 based on the simulation model Variant I and IV is presented in the Figure 2.4. The illiterate population in the 15 to 35 years age will be the target age group for the adult literacy programmes in the state. The projections with Variant IV simulation model indicate that when around 20% per year of the illiterates in the age group 15 to 35 years will be targeted under adult literacy programme and thus they will be made as literates, the literacy rate in this age group would be distinctively higher than the literacy rate projected with Variant I (under the condition that there will not be any new policy intervention for improving literacy rate in this age group). If the target of imparting literacy skills to the 20% of the illiterates in the 15

to 35 years age group per years will be made possible, by 2020 there is a chance of achieving 100% literacy rate in this age group in the state.

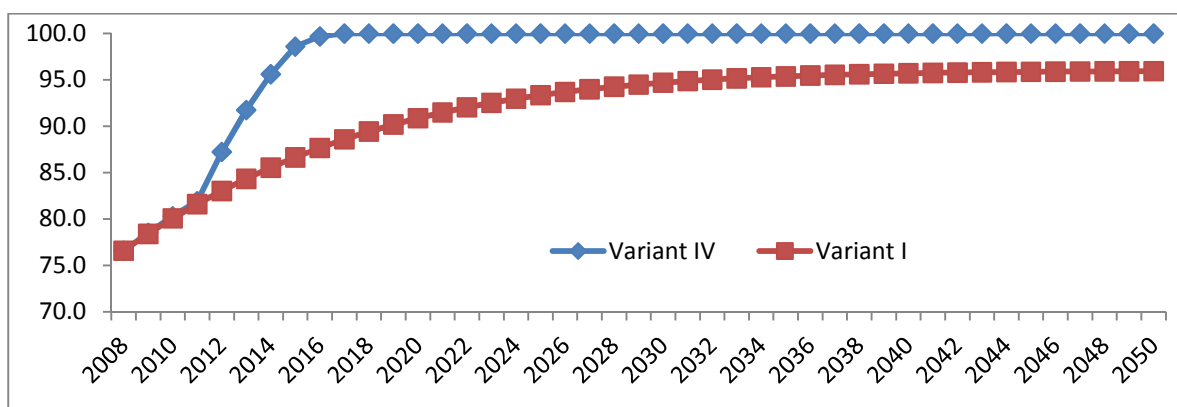
**Figure 2.3: Projected Literacy Rate in Andhra Pradesh - Variant IV**



**Note:** Age group specific Literacy Rates.

**Source:** Authors Projections.

**Figure 2.4: Projected Literacy Rate for 15-34 age group in A P - Variant I and IV**



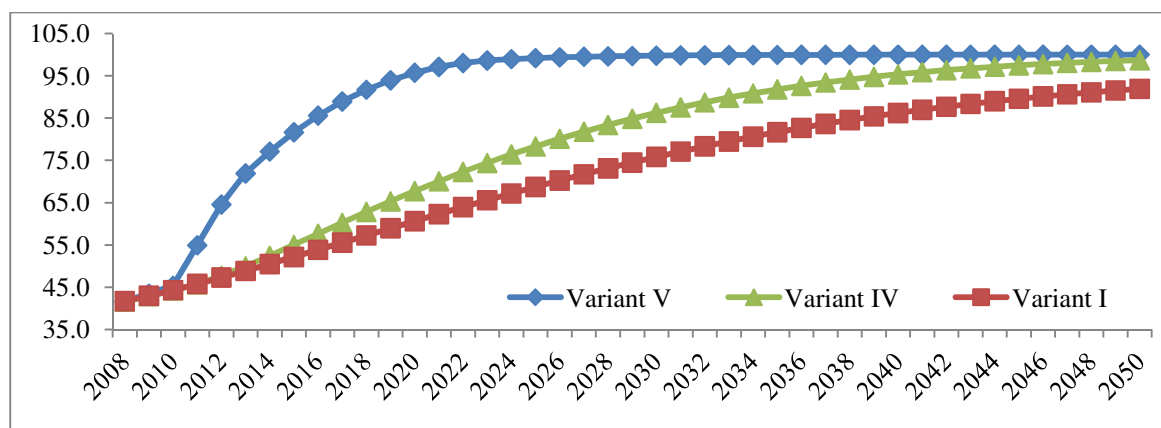
**Note:** Age group specific Literacy Rates.

**Source:** Authors Projections.

Similarly the trend in projected literacy rates for the 35 to 60 age group based on the Variant I, IV and V of our simulation models is presented in the Figure 2.5. The illiterate population in the 15 to 35 years age will be the target age group for the adult literacy programmes in the state. The projections with Variant V simulation model indicate that when around 5% per year of the illiterates in the age group 15-35 years will be targeted under adult literacy programme and thus they will be made as literates, the literacy rate in this age group would be distinctively higher than the literacy rate projected with Variant I and IV (under the

condition that there will not be any new policy intervention for improving literacy rate in this age group). If the target of imparting literacy skills to the 5% of the illiterates in the 35 to 60 age group per year will be made possible, by 2020 there is a chance of achieving 100% literacy rate in this age group in the state.

**Figure 2.5: Projected Literacy Rate for 35-60 age group in A P - Variant I, IV and V**



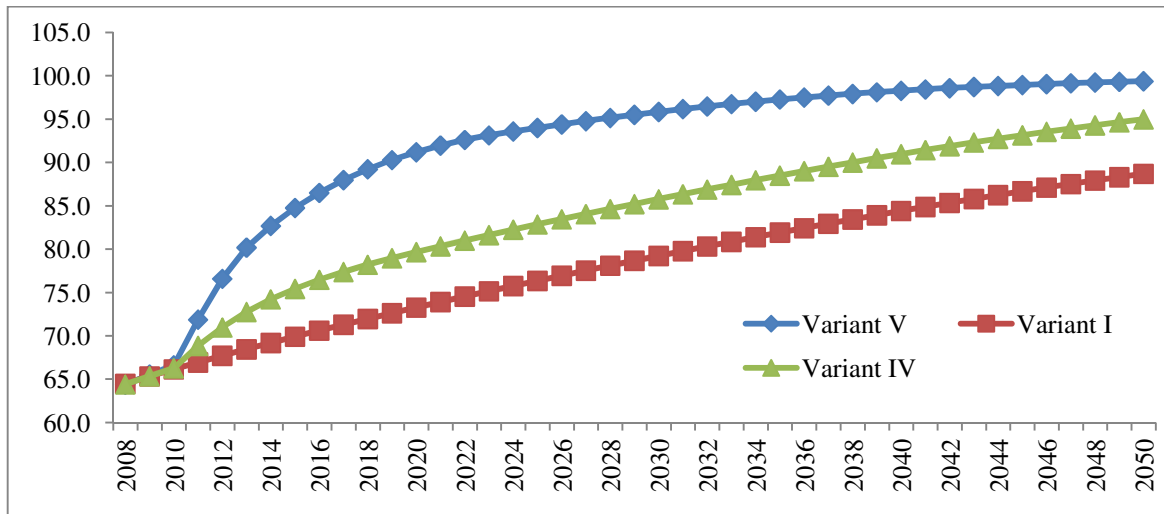
**Note:** Age group specific Literacy Rates.

**Source:** Authors Projections.

All the above said and done given the policy intervention through school education and adult literacy programmes for the 5 to 14 and 15 to 35 and 35 to 60 age groups and thereby improvement in the literacy rate in these two age groups, the concern is what would be the overall improvement. The trend in projected literacy rates for the 7 + age group Andhra Pradesh till 2050 based on the simulation models Variant I, IV and V is presented in the Figure 2.6. It indicates the state will achieve 100% overall literacy rate (for 7 + years age population) at least by 2050.

When the 20% illiterate population in the 15 to 35 years age and 5% illiterate population in the 35 to 60 years age will be the target age group for the adult literacy programmes and the school education programmes ensures 100% enrolment of 5 to 14 years age group and thus the 100% literacy rate among the 7 to 14 years age group in a few years ahead the overall literacy (of 7 + year age population) will also be distinctively higher than the literacy rate projected with Variant I (under the condition that there will not be any new policy intervention for improving literacy rate in this age group).

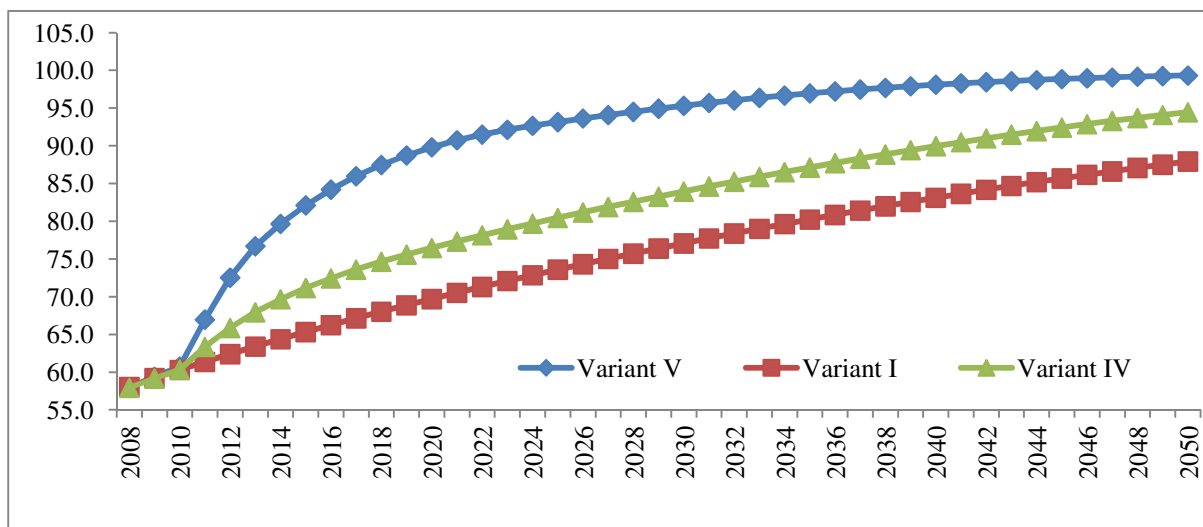
**Figure 2.6: Projected Literacy Rate (for 7+ age Population) in A P - Variants I, IV and V**



Source: Authors Projections.

Similarly the concern is about the adult literacy rate in the state. The trend in projected literacy rates among adults (i.e. for the 15 + years age group) in Andhra Pradesh till 2050 based on the simulation model Variant I and IV is presented in the Figure 2.7. The adult literacy (of 15 + years age population) will be improved over that of the Variant I, with the policy intervention through adult literacy programmes.

**Figure 2.7: Projected Adult Literacy Rate (for 15 + age Population) in Andhra Pradesh - Variants I, IV and V**



Note: Age group specific Literacy Rates.

Source: Authors Projections.

The projected literacy rate for Andhra Pradesh based on four variants of simulation models across age groups are summarised in the Table 2.2. It indicates that without any new policy



intervention, the improvement in literacy rate will be very slow in the state. By 2050 it can achieve only 88% literacy rate. The improvement in literacy would be due to demographic change only. When the policy intervention through school education programmes ensures the 100% school attendance rate especially for 5-14 age group and thus the 100% literacy rate in the 7 to 14 years age, the overall literacy can be improved marginally when compared to that of the situation without any policy intervention with respect to adult literacy. It is because when the chance of becoming a literate is only possible through formal schooling and for the 7 to 14 age groups and thus those crossing 14 years loses the chance of acquiring literacy skills. The chances of acquiring literacy skills through informal methods without any target adult literacy programmes meant for 15 + years age group illiterates are very meagre. It takes time to the passage of the current 7-14 age cohort through different age groups.

**Table 2.2: Prospects of Literacy Rate in Andhra Pradesh**

Age Group / Simulation Variant	Base Year	Projections for the Year				
	2008	2015	2020	2030	2040	2050
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>
<b>Variant I</b>						
7-14	96.14	96.05	96.02	96.00	96.00	96.00
15-34	76.59	86.66	90.88	94.70	95.71	95.94
35-59	41.73	52.17	60.65	75.82	86.21	91.91
60 +	23.71	30.08	34.44	45.60	59.62	72.82
7 +	64.48	69.92	73.28	79.19	84.30	88.53
15 +	58.06	65.31	69.70	77.06	83.05	87.83
<b>Variant II</b>						
7-14	96.14	100	100	100	100	100
15-34	76.59	87.18	92.35	97.68	99.41	99.86
35-59	41.73	52.17	60.66	76.22	87.60	94.38
60 +	23.71	30.08	34.44	45.60	59.71	73.31
7 +	64.48	70.72	74.37	80.78	86.34	91.02
15 +	58.06	65.56	70.34	78.34	84.89	90.18
<b>Variant III</b>						
7-14	96.14	100	100	100	100	100
15-34	76.59	96.86	100	100	100	100
35-59	41.73	55.91	68.81	86.98	95.69	98.81
60 +	23.71	30.08	34.51	47.83	66.64	82.42
7 +	64.48	75.83	80.19	86.12	91.21	95.10
15 +	58.06	71.57	77.08	84.37	90.27	94.64
<b>Variant IV</b>						
7-14	96.14	100	100	100	100	100
15-34	76.59	98.59	100	100	100	100
35-59	41.73	54.76	68.32	86.79	95.66	98.81
60 +	23.71	30.08	34.45	47.33	66.16	82.17
7 +	64.48	76.11	80.00	85.96	91.09	95.04
15 +	58.06	71.91	76.86	84.19	90.14	94.57
<b>Variant V</b>						
7-14	96.1	100	100	100	100	100
15-34	76.5	96.7	100	100	100	100
35-59	41.7	81.6	95.7	99.8	100	100
60 +	23.7	31.2	44.3	75.9	91.9	97.5
7 +	64.4	84.8	91.2	95.9	98.3	99.4
15 +	58.0	82.1	89.8	95.3	98.1	99.3

**Note:** 1. Age group specific Literacy rate (percentage of literates to the population within the age group); 2. 2008 is the base year.

**Source:** Authors Estimates based on Simulation Exercise.

The policy intervention through adult literacy programmes can change situation and can improve the literacy levels among the adults where a large stock of illiterates lie. However, for the adult literacy programmes especially under the National Literacy Mission (NLM) illiterate population of 15-35 years age is the target age group. A large stock of illiterates who were not in this age group and crossed 35 years of age and entered into 35 + age population will remain as illiterates till their mortality.

### **III Need for Adult Education/Literacy Programmes**

Projections presented above indicate that there is need for policy intervention through school education programmes and adult literacy programmes for the improvement literacy levels in the state. As the literacy rates among the 7-14 age groups is reaching saturation point, all the younger age cohorts (below 15 years age) becomes literates very soon. However, the due to decelerating growth and declining size of younger age population, it can contribute marginally to the overall literacy rate as there is a huge stock of adult illiterates. The improvement in school education targeting 100% enrolment and universal primary completion ensures 100% literacy among the young (below 15 years age). If this is the only medium of improving literacy levels without any initiative for adult illiterates, it takes long time (at least a century) achieve 100% literacy rate in total population. It will possible when the 100% literacy of school age population sustained forever and this 100% literacy rate age cohort grows older and older. On the other hand, it is possible when all the adult illiterates becomes older and ultimately die.

In this context, a policy intervention through adult literacy programmes is a necessary condition to address the phenomenon of illiteracy. In this respect there have been initiatives the Indian context. At the national levels eradication of illiteracy has been concern since independence. However, policy attempts Non-Formal Education for the Youth in 1975, National Adult Education Programme in 1978. Thereafter, establishment of National Literacy Mission (NLM) in 1988 was an important policy intervention for liquidating the illiteracy.

The NLM has three components in the Total Literacy Campaign (TLC), Post Literacy (PLP), and Continuing Education Programme (CEP). They are continuously interlinked programmes for improving adult literacy. The Total Literacy Campaign is to turn as many illiterate adults as to literates by motivating and facilitating the acquisition of basic literacy skills (reading, writing and numeracy). The Post Literacy Programm (PLP) is meant for retaining the literacy

skills of the neo-literates. The Continuing Education Programme (CEP) is meant for those who have acquired literacy skills and retained with PLP and interested in further education and vocational education, occupational skills. Initially the implementation of NLM was selective and the success of the selective implementation ensured the scaling up of the Mission and turned into a mass programme. However, the execution of NLM and implementation of its three-tier programmes resulted in a very poor outcome (see Rao, 1993; Banerjee, 1993 & 1994; GoI, 1994; Ghosh, 1997; Mishra, 1998; Saldanha, 1999; Karlekar, 2004). Although one cannot ignore the success stories of the NLM in different parts of the country, its shortcomings have resulted in poor outcomes in general<sup>3</sup>. A promising and intrinsically good programme inflicted with serious weakness (GoI, 1994; Banerjee, 1994).

Many times it could not ensure adequate acquisition of literacy skills for the neo-literates (ibid). Further, there was a problem of relapse into illiteracy - the loss of newly acquired fragile literacy skills due to long delays between the initial literacy programs and the start-up activities of the PLP (Karlekar, 2004). Besides, there was a problem of loss of interest in continued learning because of a paucity of relevant materials in native languages and the lack of a perceived value for further education as a means of social and economic development (ibid). Such a problem of relapse into illiteracy led to fragility in literacy achievement through TLC (GoI, 1994; Banerjee, 1994). On the learners' point of view too, there was a failure of many adults to acquire initial literacy skills due to lack of perceived need, work schedules, or family needs (Karlekar, 2004).

Despite of all the weakness and problems, a numerous adults acquired initial literacy and a useful percentage did sustain and advance their literacy and education in post- literacy and continuing education (Karlekar, 2004). Besides, there were 'externality' and 'multiplier' effects of the literacy campaign (ibid). One of such externality of TLC is the social mobilization especially the women<sup>4</sup> (Ghosh, 1997). One of such success stories is the women's mobilization as an unintended outcome of the TLC's literacy primer in Andhra Pradesh. It began with a fight against distribution of arrack in a Village of Nellore district and

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<sup>3</sup> The NLM's initial strategy of implementing TLC at the district level with a wider public participation, on pilot basis in southern states observed to be successful (Ghosh, 1997). The success of the TLC faded away when it was scaled up to many other districts across states especially to educational backward states and region (Ghosh, 1997, Saldanha, 1999). The initial wider public participation was replaced with over bureaucratisation (Ghosh, 1997). The target obsessed bureaucratic implementation resulted in fudging the number of neo-literates (GoI, 1994; Banerjee, 1994).

<sup>4</sup> In addition, the multiplier effect can be seen through increase in children's education and better health care behavior (Ghosh, 1997; Karlekar, 2004).

had spread all over the state eventually resulted in the invocation of prohibition law in the state (Pattanaik and Reddy, 1993; Ghosh, 1997).

However, the success story of Kerala and Tamil Nadu to some extent is not replicated any other state in India, so is in Andhra Pradesh. It interesting to note that at height of extremism prevailing in parts of the state during early 1990s, the TLC was one of the State's initiatives that were approved by extremists in the state (Rao, 1993). Also, Andhra Pradesh has presented a success story of impact of literacy primer in the form women's mobilization and fight against arrack that mentioned above. But when we examined the impact of TLC on improving literacy rate, as we have observed from the above analysis it was very meager in the state.

It is also true for the country as a whole too. The overall intended impact of the programme on improving the literacy rate in India was very meager. It might be due to problems of the programme in promoting and assessing the acquisition of initial literacy and the need for post- literacy and continuing education programmes to sustain literacy and promote continued learning and knowledge development (Karlekar, 2004).

Instead of the revitalising and strengthening the total literacy programme, it is almost scrapped all over the country, in Andhra Pradesh too. One can observe that the number of TLC and PLP centres at the national levels reduced to a few and they almost disappeared in the context of Andhra Pradesh. In contrast there are number of CEP centres in the state as well as in the country. In fact CEP is transition phase evolves through TLC and PLP. Thus what does the presence of CEP centres in the state without TLC and PLP centre indicate, is it that necessity of TLC centre is over, had the TLC achieved its targets in the state as well as in the country? One may not get an answer but one can say there is a need for continuance of these adult literacy programmes in the state as well as in the country as a whole.

The simulation exercise that explored the prospects of literacy levels in the state indicates that unless the state policy concentrates on improving adult literacy and hence designs appropriate programmes especially for illiterates of both the 15-35 and 35 to 60 age groups and implements them rigorously, achieving 100% literacy rate in the state is simply not possible in the near future (even by 2050). Hence, there is a strong need for rejuvenating the State Literacy Mission (SLM) and designing state specific adult literacy programmes if the policy making body in the state is intend to achieve 100% literacy rate in the near future.

The Total Literacy Campaign (TLC) under the National Literacy Mission (NLM) of India targets only 15-35 age group illiterate population. But there is a sheer need to target the 35 to 60 age group illiterates and even the older age illiterate population under the adult literacy programmes in order to achieve 100% literacy rate in the state in the near future.

Unless the state improves its literacy levels remarkably, it will remain one of those poor performing states in India in terms of human development index (HDI) and ranking of states based it. Because education is one of the three components with one-third weight each involved in the computation of HDI. Adult literacy is one of the two sub-components and accounts two-thirds of weight in the education component.

#### **IV Concluding Remarks**

The performance of the state with respect to literacy rate in the all India context especially when compared to the other states is relatively poor. The recent data has also shown the poor performance of the state during the last decade when compared to that of the previous decades. Therefore there is a cause of concern for the state policy. In this regard an attempt is made to explore the prospects of literacy rate in the state through simulation exercise. These simulation exercises indicate the impossibility of achieving 100% literacy rate in the near future for the state Andhra Pradesh. But it can achieve 95% of literacy rate by 2050 if the state can rigorously implement the adult literacy programmes for at least 5 years period from 2012 for the age group 15 to 35 years age group covering all those illiterates in this age group. Moreover, if the state can extend the adult literacy programmes for the 35 to 60 years group and implement the programme for at least 5 years period from 2012, the state can achieve 100% literacy rate by 2050. Therefore, achieving the goal of 100% literacy rate in the state depends on its policy intervention through adult literacy programmes, rigour in their implementation and their coverage. It is important because unless the state improves its literacy levels remarkably, it will remain one of those poor performing states in India in terms of human development index (HDI) and ranking of states based it.

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