

# Education System/ Census Analysis: India



### Total Population: 1.295 billion (2015)

- Men: 51.7%
- Women: 48.3%
- Hindu: 80%
- Muslim: 13%
- Christian: 2.3%
- Sikh: 1.9%

World Bank (2015)

### Population age 5-16: 334 million

- 5-9: 126 million
- 10-12: 107 million
- 13-14: 50 million
- 15-16: 51 million

NSSO (2014)

### Children Classes (I- XII) in school: 234 million

- Classes I-V: 83 million
  - Private: 23.3 million
- Classes VI-VIII: 73 million
  - Private: 17.5 million
- Classes IX-X: 42 million
  - Private: 15.5 million
- Classes XI-XII: 36 million
  - Private: 13.3 million

NSSO (2014)

### Out of School Children (%)

- Classes I-V: 34%
- Classes VI-VIII: 32%
- Classes IX-X: 16%
- Classes XI-XII: 19%

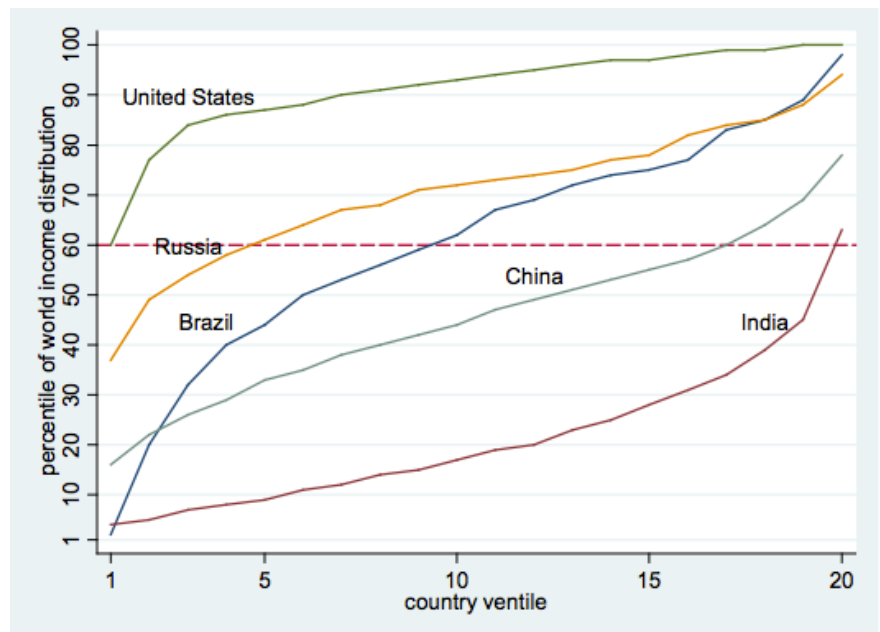
**30%** across age range of 5-16.

## Poverty Measures:

### Global Inequality Approach

The idea that since the late 20<sup>th</sup> century, the explanation of poverty and inequality has shifted from class to location is often referred to as the global approach to observing and measuring income inequality. There are of course other factors that matter for one's income, from gender and parental education which are, from an individual point of view externally given circumstances, to factors like own education, effort and luck that are not. They all influence our income level. But the remarkable thing is that a very large chunk of our income will be determined by only one variable, citizenship, that we, generally, acquire at birth.

The figure to the right illustrates this way of looking at inequality, quite clearly. The x-axis is broken down into 20 ventiles (5% income brackets) on the basis of income within each individual country. The y-axis indicates which percentile, on a global scale, that each point on the x-axis occurs. For example, the bottom 5% of India's population comes in at a little less than 3% of the world income distribution. As you can see, individuals living in the United States and Russia have an overwhelmingly better chance



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at being in the top half of the world's income distribution, while only the top 5-10% of Indians can claim that mark. By these standards, it appears that an overwhelming number of Indian's are in poverty. Many social scientists provide this is the reason for trending migration around the world. World Bank economist, Branko Milanovic, says that "either poor countries will become richer, or poor people will move to rich countries. Development is about people: either poor people have ways to become richer where they are now, or they can become richer by moving somewhere else."

To better explain the magnitude of these conclusions, consider that each of India's ventiles has approximately 60 million people. The data indicates that the bottom twelve ventiles (60%) of the Indian population (720 million) are in the bottom 20% of the world's income distribution. That is extreme inequality.

Sources: Milanovic, Branko. *Global Income Inequality by the Numbers: In History and Now*. World Bank (2012)

## Consumption-Based Approach (Rangarajan)

Some social scientists believe that the best measure of aggregate poverty is to assume that there exists minimum consumption expenditure per person. Under this scenario, those households that are capable of spending less than that minimum measure indicate the impoverished. This has been seen to be more effective, by advocates, because of the difficulties in capturing household incomes through recall-based surveys. These situations can become increasingly complicated when faced with households that have multiple members that do not depend on any sort of wage employment as a source of income.

Traditionally, consumption is broken down into two distinct categories: food and non-food. The minimum food consumption is a figure that is derived from calculating the costs of fulfilling certain nutritional standards. The non-food component of the poverty line basket is comprised of two variables, one of which is fixed. The fixed element estimates the costs of providing some semblance of education, clothing, shelter and transportation. The other component is contingent upon the class that the food consumption capabilities places you in. Based on a complex formula, the Rangarajan approach determines that the poverty line is Rs. 972 in rural areas and Rs. 1407 in urban areas. These figures are per person, monthly, estimates. These measures are roughly 82 and 70% of the median expenditures for rural and urban individuals, respectively. To make these transferable to the data presented from the World Bank; it is equivalent to \$2.14 per day in rural India and \$3.10 per day in urban India (2014 PPP).

The table to the right indicates state-by-state poverty rates and total number of impoverished citizens. Some points of note:

Sources: Report of The Expert Group to Review the Methodology for Measurement of Poverty. Government of India Planning Commission June, 2014

S. No.	States/UTs	RURAL		Urban		Total	
		% age of Persons	No. of Persons (lakhs)	% age of Persons	No. of Persons (lakhs)	% age of Persons	No. of Persons (lakhs)
1	Andhra Pradesh	12.7	71.5	15.6	45.7	13.7	117.3
2	Arunachal Pradesh	39.3	4.3	30.9	1.0	37.4	5.3
3	Assam	42.0	114.1	34.2	15.4	40.9	129.5
4	Bihar	40.1	376.8	50.8	61.4	41.3	438.1
5	Chhattisgarh	49.2	97.9	43.7	26.9	47.9	124.8
6	Delhi	11.9	0.5	15.7	26.3	15.6	26.7
7	Goa	1.4	0.1	9.1	0.8	6.3	0.9
8	Gujarat	31.4	109.8	22.2	58.9	27.4	168.8
9	Haryana	11.0	18.4	15.3	14.0	12.5	32.4
10	Himachal Pradesh	11.1	6.9	8.8	0.6	10.9	7.5
11	Jammu & Kashmir	12.6	11.7	21.6	7.6	15.1	19.3
12	Jharkhand	45.9	117.0	31.3	25.5	42.4	142.5
13	Karnataka	19.8	74.8	25.1	60.9	21.9	135.7
14	Kerala	7.3	12.3	15.3	26.0	11.3	38.3
15	Madhya Pradesh	45.2	241.4	42.1	86.3	44.3	327.8
16	Maharashtra	22.5	139.9	17.0	88.4	20.0	228.3
17	Manipur	34.9	6.7	73.4	6.3	46.7	12.9
18	Meghalaya	26.3	6.4	16.7	1.0	24.4	7.4
19	Mizoram	33.7	1.8	21.5	1.2	27.4	3.1
20	Nagaland	6.1	0.8	32.1	1.9	14.0	2.8
21	Orissa	47.8	169.0	36.3	26.0	45.9	195.0
22	Punjab	7.4	12.9	17.6	18.7	11.3	31.6
23	Rajasthan	21.4	112.0	22.5	39.5	21.7	151.5
24	Sikkim	20.0	0.9	11.7	0.2	17.8	1.1
25	Tamil Nadu	24.3	91.1	20.3	72.8	22.4	163.9
26	Tripura	22.5	6.1	31.3	3.2	24.9	9.3
27	Uttar Pradesh	38.1	600.9	45.7	208.2	39.8	809.1
28	Uttarakhand	12.6	8.9	29.5	9.4	17.8	18.4
29	West Bengal	30.1	188.6	29.0	86.8	29.7	275.4
30	Puducherry	5.9	0.2	8.6	0.7	7.7	1.0
31	Andaman & Nicobar Islands#	6.6	0.2	4.9	0.1	6.0	0.2
32	Chandigarh#	12.0	0.0	21.5	2.3	21.3	2.3
33	Dadra & Nagar Haveli#	55.2	1.0	15.3	0.3	35.6	1.3
34	Daman & Diu#	0.0	0.0	17.6	0.4	13.7	0.4
35	Lakshadweep#	0.6	0.0	7.9	0.0	6.5	0.0
	All India	30.9	2605.2	26.4	1024.7	29.5	3629.9

- All India: 29.5% (363 million people)
- Uttar Pradesh: 39.8% (81 million people)
- Bihar: 41% (44 million)
- Madhya Pradesh: 44.3% (38 million)
- West Bengal: 29.7% (28 million)

## Multidimensional Poverty Index (MPI)

The MPI assesses poverty on an individual level. It used ten weighted indicators: years of schooling, school attendance, levels of nutrition, child mortality, access to cooking fuel, sanitation, access to water, ownership of assets, access to electricity and flooring material for home construction. The measure takes into account which of the factors each individual is deprived of and the extent of which they are suffering from these restrictions. MPI's definition of poor is recognized as the absence of three or more of the ten indicators. This places about **650 million people in poverty (55.4%)**, based on the 2014 survey data.

### School Quality Statistics

- Only **56%** of primary education facilities have boundary walls.
- While more girls (50.45%) are enrolled government managed schools, they account for only 44% of private school enrollment.
- Nearly 9% of enrolled primary level students are under-age and more than 6% are over-age.
- More than **40%** of teachers have not graduated from higher education institutions.
- Private schools make up 22.74% of total number of primary institutions (up 2% since 2012).
- Only 87% of schools have access to girl's toilet facility and only 45% have access to hand washing station near the toilet.
- **49.6% of primary schools have access to electrical connections and only 10% have computer technology (only 56% of which are operational).**
- More than 45% of primary schools have a pupil teacher ratio (PTR) of more than 30. This violates the regulations of Right To Education Act 2010.
- Primary-level (Class I-V) retention rates are stagnant at about 82% in 2014.

### Status of School Buildings in India (Primary)

- Private: 12.3%
- Rented: 4.3%
- Government: 78.9%
- Government (rent-free): 1.4%
- No Structure: 1.5%
- Dilapidated Structure: .8%
- Under Construction: 1%

### Number of Classrooms per School (Primary)\*\*

- 1: 6.4%
- 2: 29.7%
- 3: 19.6%
- 4-6: 34.3%
- 7-10: 6.6%
- 11-15: 1.1%

## 10 Facts about Poverty in India

1. India is estimated to have one-third of the world's poor.
2. In 2012, 37% of India's 1.2 billion people fell below the international poverty line, which is \$1.25 (roughly 80 rupees) a day.
3. According to 2010 World Bank Data, India's labor participation rate totaled 55.6%; however, the percentage of wage and salaried workers of those employed only equaled about 18.1%
4. The World Health Organization estimates at nearly 100,000 people die each year from diarrhea.
5. Families can't grow enough crops to feed themselves each year, says the Department of Agriculture. This is due to the lack of new farming techniques, difficult weather
6. A third of the world's malnourished children live in India according to UNICEF, where 46% of all children below the age of three are too small for their age, 47% are underweight and at least 16% are wasted.
7. India has the highest rate of child marriage in the world, where one in three girls become child brides.
8. The poorest states, in India, are Rajasthan, Madhya Pradesh, Uttar Pradesh, Bihar, Jharkhand, Orissa, Chhattisgarh and West Bengal.
9. According to the World Bank, an estimated 2.4 people are living with untreated HIV/AIDS.
10. Men are more than twice as likely as women to hold salaried jobs in large and medium-sized towns that are increasingly important center of economic life. In 2013, women only earned 62% of a man's salary for equal work.

Sources: Anon Online, BBC, UNICEF, Child Line India, Times of India, Deccan Chronicle, Rescuing Lives, International Business Times, PBS, Daily Mail UK.

## Potential Interstate Expansion

### Most Widely Spoke Languages in India

1. Hindi: More than 366 million people.
2. Bengali: Nearly 83 million speakers.
3. Telugu: 74 million speakers
4. Marathi: 72 million speakers
5. Tamil: 61 million speakers

#### Hindi Speaking States

- Uttar Pradesh: 151 million Hindi Speakers (91%)
  - Classes I-V: 13.5 million
    - Private: 2.4 million
  - Classes VI-VIII: 12.6 million
    - Private: 1.6 million
  - Classes IX-X: 6.8 million
    - Private: 1 million
  - Classes XI-XII: 6.3 million
    - Private: 880,000
- Bihar: 60 million Hindi Speakers (72%)
  - Classes I-V: 5.9 million
    - Private: 708,000
  - Classes VI-VIII: 5.5 million
    - Private: 440,000
  - Classes IX-X: 2.5 million
    - Private: 250,000
  - Classes XI-XII: 2.1 million
    - Private: 210,000
- Madhya Pradesh: 52 million Hindi Speakers(87%)
  - Classes I-V: 4.8 million
    - Private: 1.1 million
  - Classes VI-VIII: 4.3 million
    - Private: 860,000
  - Classes IX-X: 2.4 million
    - Private: 576,000
  - Classes XI-XII: 1.9 million
    - Private: 456,000

#### Non-Hindi Speaking States

- West Bengal: 68 million (75%) Bengali speakers.
  - Classes I-V: 10 million
    - Private: 800,000
  - Classes VI-VIII: 2.7 million
    - Private: 108,000
  - Classes IX-X: 1.7 million
    - Private: 51,000
  - Classes XI-XII: 1.3 million
    - Private: 39,000
- Maharashtra: 67 million (59%) (Marathi Speakers)
  - Classes I-V: 4.1 million
    - Private: 820,000
  - Classes VI-VIII: 3.6 million
    - Private: 1.3 million
  - Classes IX-X: 2.2 million
    - Private: 1.4 million
  - Classes XI-XII: 2 million
    - Private: 1.2 million
- Andhra Pradesh: 64 million (75%) Telugu speakers
  - Classes I-V: 4.1 million
    - Private: 1.2 million
  - Classes VI-VIII: 3.4 million
    - Private: 510,000
  - Classes IX-X: 2.1 million
    - 903,000
  - Classes XI-XII: 1.8 million
    - Private: 774,000

All Private School percentages were taken from NSS (2014) statewide survey.

The above data comes from the previously mentioned 2014 NSSO Survey data. The students speaking the particular languages have been estimated using the average percentages of the region

With more than 1.2 billion people, India presents quite a challenge when it comes to universal, quality education. India is home to some of the world's most and least educated individuals. Computer Shiksha wishes to bridge this gap by exposing children to computer literacy programs in the many poorly funded government and NGO operated institutions throughout the country. To expound upon its current reach, Computer Shiksha needs to analyze which markets will be best suited for the expansion of its phase II Hindi video program and which regions of the country would be well-suited expanding the language offering. The data above should indicate where a great amount of demand exists.

No matter which poverty estimate is more accurate, there are hundreds of millions of people below the poverty line. Even many that are not considered within the impoverished segment are expected to allot Rs. 350 a month for school purposes. This is often not plausible.

Eradication of poverty in India requires every person having access to safe drinking water, sanitation, housing, nutrition, health services and education. For many of these underprivileged children, education is seen as a luxury rather than a right. The opportunity costs, plus the actual costs of education are often too much for families that are struggling. An estimate done in the 2011 census suggests that 33 million school-aged children are employed in various sectors. The

percentages of employment are even higher (14-16%) for the bottom two economic quintiles.

As of 2014, only 10.32% of primary schools had access to computer technology. It is impossible to measure whether this small proportion has the ability to maintain this technology, so the demand for Computer Shiksha's services could not be higher! India's population growth will rely on a well-educated and skilled workforce to provide inclusive economic growth in the years to come. Inclusive growth focuses on creating opportunities and making these opportunities accessible to all! Without proper education, inclusivity is impossible.

In order for Computer Shiksha to achieve its mission of reaching 1 million children in the next four years, precision focus must be taken on the future. With the phase II (Hindi) modules nearing their completion,

Computer

Shiksha should

focus its resources in expanding the reach of its programs. Partnerships need to be cultivated and maintained in the many predominantly Hindi speaking regions. As the above data suggests, there are tens of millions of primary school aged individuals that are deprived of the opportunity to maximize their potential. Although, by many standards, poverty and inequity are decreasing, it is still imperative that the education system continues to seek innovative ways to improve. At Computer Shiksha, we believe that part of the solution is the training that we provide. We can develop a better future for those that cannot even imagine it and create an atmosphere where success is highly correlated with ambition and hard work.

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