

## Some Challenges in Indian Basic Education: Need for a New Look

Priyanka Bhau<sup>\*</sup>  
Jasbir Singh<sup>\*\*</sup>

### Abstract

*Right to education means education is accessible to all and the conditions are created for all to participate in education to improve their life and livelihood. In India, a walk into a poor village or a poor and crowded urban area will readily reveal the harsh truth of the trade-off between going to school and seeking employment to subsist. The education system in India, even at the basic level, faces challenges that is encapsulated in the country's mean years of schooling, which is 5.12 years -- significantly below the average for all developing countries (7.09 years). India's official literacy rate of 74.04 percent also means that India is the home to world's one-third illiterates. The authors contend that the quality of education services and the provisions that promote the skills and competencies relevant to life and livelihood of learners must be given attention to bring about the necessary changes in the Indian education system. This paper throws light, based on data from the 71st National Sample Survey, on various challenges faced by the Indian education system.*

**Key Words:** National Sample Survey of Education Indicators in India (71st Round), Right to Education, Child Labour, Dropout and Discontinuation of Schooling.

### 1. Introduction

Great classical economists have long been aware of the importance of Human Capital in economic development; and in their own way, have described various factors contributing to it. Adam Smith, for example, stressed the importance of education at various points in his seminal work, *An Inquiry into the Nature and Causes of the Wealth of Nations*. He wrote about the 'acquired' and useful abilities of all the inhabitants or members of society in formulating his concept of 'fixed capital'. Alfred Marshal emphasized the importance of education 'as a national investment.' In his view the most valuable of all capital is that invested in human beings (Mahore, 2001).

The vision of the Ministry of Human Resource Development of India is to realize its human resource potential to the fullest, with equity and excellence. Since the Constitutional Amendment of 1976, which included education in the concurrent list (sharing the responsibility by the central or union and the state governments), the union government accepted a larger responsibility of improving the national and integrative character of education, expanding access to education, accentuating quality and standards at all levels; in addition to its mandate of coordinating the development of scientific, professional, vocational and technical education in the country.

---

<sup>\*</sup> Research Scholar, Department of Economics, University of Jammu, Jammu & Kashmir,  
Email: pia.bhau82@gmail.com

<sup>\*\*</sup> Professor, Department of Economics, University of Jammu, Jammu & Kashmir,  
email: drjbsingh@yahoo.com

The Ministry's endeavor has been directed at achieving Education for All; providing universal access, retention and quality in elementary education, with a special emphasis on education of children belonging to disadvantaged groups and making the adult education programme a mass movement. Simultaneously, it has aimed to provide greater opportunities of access to quality higher education by investing in infrastructure and facility, promoting academic reforms, and improving governance and institutional restructuring.

With the enactment of the Right of Children to Free and Compulsory Education Act 2009, and the fact that Article 21-A of the Constitution of India became operative, it was expected that issues of dropout, out-of-school children, quality of education and availability of trained teachers would be addressed appropriately in the short to medium term (UNESCO, 2015). The Act makes it incumbent on the Government to provide free and compulsory education to all children of 6–14 years of age. The harsh reality is that in 2015, 264 million adults in India lack minimum literacy skills and out of it 67 percent are women. At least 17.7 million children of primary school age are not in school by UNESCO estimate (UIS, e-Atlas of Out-of-School Children, 2016).

India is a nation of young people. Out of a population of over 1.2 billion; around 65 percent are in the age-group of 15-64 years, regarded as the “working age population” (World Development Indicators, 2014). It is predicted that India will see a sharp decline in the dependency ratio over the next 30 years, which will constitute a major demographic dividend for India. This large population can be invaluable human resource if it can be equipped with the necessary skills so as to contribute to the national economy.

It is hardly debatable that a strong nation can be built by ensuring that each citizen is educated. That is why most countries spend substantial amounts on creation and functioning of the educational infrastructure. But to avail themselves of the opportunities, despite the proclamation of the right to education, individuals too have to incur expenditure in the form of course fees, examination fees, cost of books and stationery etc. (NSSO 71<sup>st</sup> Round, 2015). The result, inevitably, is inequality in access to and participation in education.

## **2. Objective**

The objective of this paper is to present and discuss some pressing issues in respect of basic education, particularly primary education, in India, highlighted by the 71<sup>st</sup> Round of National Sample Survey, conducted in 2014.

## **3. Data and Methods**

This paper utilizes data from the survey on social consumption relating to education, conducted by the National Sample Survey Office (NSSO) as a part of its 71<sup>st</sup> Round. This is the primary source of data on various indicators on education in the country, such as, literacy rates, attendance ratios, incentives received by the students, expenditure incurred for the purpose of education etc. It is an all-India household survey conducted during the period January– June 2014. NSSO collected information from persons aged 5-29 years in relation to education in the country. A total of 4,577 villages were surveyed in rural India and the number of urban blocks surveyed was 3,720. The total number of households surveyed was 36,479 and 29,447 in rural and urban India respectively. NSSO sampling design took into consideration gender, age, and income quintile. It selected 5 quintile classes of the rural and urban households

by the Usual Monthly Per Capita Consumer Expenditure criterion used in national household surveys. The different quintile classes are referred to by numbers 1 to 5, (1 representing the lowest quintile). For the present paper only those elements of the survey have been chosen which relate to various challenges in the Indian education system (NSSO 71st Round, 2015).

To satisfy the objective, data were also collected from Census of India conducted in 2001 and 2011, Annual Status of Education Report, 2014 and Ministry of Labour & Employment Survey, 2015.

### 4. Findings and Discussion

#### Present status of literacy in India

According to the 2011 Census, national adult literacy rate was 74.04 percent as against 18.33 percent in 1951. In isolation this may look quite impressive, but the fact remains that even after more than sixty years of planned development in the country, 26 percent (i.e. more than one quarter) of the population remained illiterate in 2011. In eleven States literacy rates are lower than the national literacy rates. These are Andhra Pradesh, Arunachal Pradesh, Assam, Bihar, Chhattisgarh, Jammu and Kashmir, Jharkhand, Madhya Pradesh, Odisha, Rajasthan and Uttar Pradesh. In Bihar, literacy rate was as low as 63.82 percent in 2011. Kerala had the highest literacy rate of 93.91 percent. In terms of literacy, India’s attainments as compared to several Asian countries are rather disappointing. According to Human Development Report 2011, adult illiteracy rate was 37.2 percent in India in 2005-10 as against 6 percent in China, 9.4 percent in Sri Lanka, 4.5 percent in Philippines and 2.3 percent in Argentina. Undoubtedly, the poor performance of India on the literacy front has affected its overall development performance (Puri and Misra, 2016).

**Table 1: Literacy rates (5 years and above) in percentage by geography, age and gender (NSS 71<sup>st</sup> and 64<sup>th</sup> Rounds)**

Age	Rural				Urban				Total Rural-Urban Gap
	Male	Female	Both	Gender Gap	Male	Female	Both	Gender Gap	
NSS 71 <sup>st</sup> round (2014)									
Age 5 & above	80.3	62.4	71.4	17.9	91.0	80.9	86.1	10.1	14.7
Age 7 & above	79.8	61.3	70.8	18.5	91.1	80.8	85.9	10.3	15.1
Age15 & above	75.0	53.1	64.1	21.9	89.7	77.9	84.0	11.8	19.9
All age (age 0 & above)	72.3	56.8	64.7	15.5	83.7	74.8	79.5	8.9	14.8
NSS 64 <sup>th</sup> round (2007-08)									
Age 5 & above	76.8	57.3	67.3	19.5	89.7	78.1	84.2	11.6	16.9
Age 7 & above	77.0	56.7	67.0	20.3	89.9	78.1	84.3	11.8	17.3
Age15 & above	71.8	47.5	59.7	24.3	88.7	74.6	82.0	14.1	22.3
All age (age 0 & above)	68.4	51.1	60.0	17.3	82.2	71.6	77.1	10.6	17.1

Source: NSS: Key Indicators of Social Consumption in India: Education, 2015

It can be seen that the gap in literacy rates across rural-urban and male-female populations persists. The literacy rate in rural India is lower in comparison to the urban areas for all-age groups. Also, male-female literacy gap is the highest in rural areas, though there is an increase in overall literacy rate from 2007-08 to 2014. In the NSS 71<sup>st</sup> round, male-female gap in literacy rate in rural areas has decreased to 15.5 percentage points from 17.3 in the NSS 64<sup>th</sup> round, whereas the male-female gap in literacy in urban areas has come down to 8.9 percentage points from 10.6.

Table 1 shows that the gender gap in literacy rate is somewhat wider than the urban-rural gap in both 71<sup>st</sup> and 64<sup>th</sup> rounds. Two pertinent observations here are: (a) The large urban-rural gap has stubbornly persisted over a period of 7 years between the two rounds of survey and the improvement in bridging the gap has been small. (b) This situation means that rural women are subject to double jeopardy – for being rural residents and for being women.

### ***Problem of Dropouts/Discontinuation in Education***

Human Development Survey (as cited in Desai, 2010) reported that percentages of failures and dropouts are very high in India. Many schools, particularly in the countryside, operate with a single teacher. Overcrowding in classrooms, crumbling infrastructure, lack of teaching aids, dull teaching methods, poor pupil achievements, all of which result in a “discouragement effect” that pushes children to drop out of school. Parents also lose their enthusiasm about sending their children to school (Dreze and Sen, 2006).

**Table 2: Dropout at different ages (Percentages of total dropout, 5-29 years, 2014)**

Age-group of dropout/discontinuation	Rural			Urban			Total Rural-Urban Gap
	Male	Female	Both	Male	Female	Both	
5-15	58.1	62.7	60.3	45.0	41.4	43.3	17.0
16-24	41.5	36.7	39.2	53.6	57.4	55.4	16.2
25-29	0.4	0.6	0.5	1.4	1.2	1.3	0.8

*Source: NSS: Key Indicators of Social Consumption in India: Education, 2015*

The harsh reality of Indian education is that dropout or discontinuation before completing a stage of education is a serious problem. The literacy rate (age 5 years and above) at 76 percent (rural 64.7 and urban 79.5 percent according to NSS 71st Round in 2014, as noted above) does not tell us whether a functional level of skills and competencies have been achieved by those who are reported to be literate and who presumably have been enrolled in school for a duration.

The definition of “being literate” is “a person who can read and write a simple message in any language with understanding.” This definition clearly doesn’t capture basic competencies required to function in life and be employed productively. Those who dropout or discontinue early may not even acquire basic literacy and numeracy skills which are sustainable and useful in their life. Around 60.3 percent of children in rural areas and 43.3 percent of children in urban areas dropped out and discontinued education at different levels between

the age group of 5-15 years. There are various reasons attributed to it but a common cause appears to be the fact that children from poor families find it necessary to seek employment in low-paid informal market jobs to supplement their families' meagre income.

***Is economic activity a common reason for low education participation?***

A walk into poor villages and poor and congested urban areas will reveal the harsh truth of the trade-off between educational attainment and the need to earn an income. Leaving education for the sake of employment is an old phenomenon in both urban and rural areas.

**Table 3: Dropout/discontinuation for various reasons (Per 1000 persons aged 5 – 29 years, 2014)**

Major Reasons	Rural		Urban	
	Male	Female	Male	Female
Not interested in Education	25.1	16.2	20.8	14.3
Financial Constraints	23.6	15.4	23.7	14.9
Engaged in Domestic Activities	5.9	32.9	2.4	23.1
Engaged in Economic Activities	29.9	3.9	33.6	6.9
School is Far off	0.6	4.2	0.2	1.8
Unable to Cope with Studies	5.5	5.1	5.3	3.6
Completed Desired level/class	4.5	4.3	8.3	11.3
Marriage	00	12.4	00	17.1
Other Reasons*	4.8	5.7	5.8	7.0

*Note:* Other reasons include timings of educational institution not suitable, language/medium of instruction, inadequate number of teachers, quality of teachers,, atmosphere at school, preparation for competitive examination and others

*Source:* NSS 71st Round

As Table 3 shows, the largest number of Indian males left education for employment opportunities (29.9 percent) whereas the largest number of Indian females left education to meet the demand of household chores (32.9 percent). The reasons such as 'not interested in education' and 'financial constraints' also push young people out of school to early employment.

In poor families, informal employment opportunities become an inducement to abandon schooling as increasing family income is a higher priority to them. In the lowest income quintile, illiteracy and dropout/discontinuation are a common phenomenon. Employment opportunities are available in the market, especially in the form of hazardous informal activities to which poor parents feel compelled to send their school-going children. Despite the programs of Free Education and the Mid-Day Meal Scheme, working children remain a common phenomenon.

**Table 4: Situation of children (5-14 years) in India as per Census 2001 & 2011**

State/ UT code	India/State/Union Territory	Census 2001		Census 2011	
		Total Working Children (5-14 years)	Total Children (5-14 years)	Total Working Children (5-14 years)	Total Children (5-14 years)
1	Andhra Pradesh	1,363,339 (7.69)	17,713,764	404,851 (2.61)	15,506,027
2	Arunachal Pradesh	18,482 (6.06)	304,982	5,766 (1.64)	350,482
3	Assam	351,416 (5.06)	6,936,344	99,512 (1.41)	7,036,066
4	Bihar	1,117,500 (4.68)	23,868,079	451,590 (1.55)	28,956,159
5	Chhattisgarh	364,572 (6.95)	5,239,700	63,884 (1.13)	5,642,771
6	Goa	4,138 (1.81)	227,403	6,920 (3.18)	216,957
7	Gujarat	48,553 (0.42)	11,355,498	250,318 (2.08)	11,985,281
8	Haryana	253,491 (4.77)	5,306,241	53,492 (1.03)	5,167,435
9	Himachal Pradesh	107,774 (8.13)	1,324,203	15,001 (1.21)	1,230,401
10	Jammu & Kashmir	175,630 (6.61)	2,653,422	25,528 (0.90)	2,825,826
11	Jharkhand	407,200 (5.47)	7,439,049	90,996 (1.10)	8,242,821
12	Karnataka	822,615 (6.91)	11,903,007	249,432 (2.27)	10,978,155
13	Kerala	26,156 (0.47)	5,531,381	21,757 (0.40)	5,377,882
14	Madhya Pradesh	1,065,259 (6.70)	15,883,680	286,310 (1.70)	16,830,956
15	Maharashtra	764,075 (3.54)	21,567,532	496,916 (2.41)	20,555,189
16	Manipur	28,836 (5.75)	501,425	11,805 (1.95)	605,006
17	Meghalaya	53,940 (8.21)	656,311	18,839 (2.44)	771,788
18	Mizoram	26,265 (12.33)	212,924	2,793 (1.18)	234,769
19	Nagaland	45,874 (8.48)	540,749	11,062 (2.29)	481,770
20	Odisha	377,594 (4.37)	8,634,215	92,087 (1.09)	8,423,393
21	Punjab	177,268 (3.22)	5,489,138	90,353 (1.82)	4,951,421
22	Rajasthan	1,262,570 (8.24)	15,310,011	252,338 (1.53)	16,423,256
23	Sikkim	16,457 (12.04)	136,638	2,704 (2.18)	123,601
24	Tamil Nadu	418,801 (3.60)	11,612,412	151,437 (1.29)	11,728,802
25	Tripura	21,756 (2.78)	781,092	4,998 (0.71)	695,425
26	Uttar Pradesh	1,927,997 (4.08)	47,201,660	896,301 (1.75)	50,931,598
27	Uttarakhand	70183 (3.24)	2164891	28098 (1.27)	2204144
28	West Bengal	857,087 (4.50)	19,029,144	234,275 (1.34)	17,404,332
29	Andaman & Nicobar Islands	1,960 (2.69)	72,803	999 (1.56)	63,921
30	Chandigarh	3,779 (2.07)	181,963	3,135 (1.69)	184,658
31	Dadra & Nagar Haveli	4,274 (8.84)	48,337	1,054 (1.47)	71,252
32	Daman & Diu	729 (2.58)	28,237	774 (2.16)	35,827
33	NCT of Delhi	41,899 (1.34)	3,115,078	26,473 (0.83)	3,184,119
34	Lakshadweep	27 (0.18)	14,266	28 (0.24)	11,405
35	Puducherry	1,904 (1.06)	178,069	1,421 (0.69)	204,443
	India	12,666,377 (5.00)	253,163,648	4,353,247 (1.67)	259,637,338

*Note:* Figures in parentheses indicate percentage

*Source:* Ministry of Labour & Employment, Government of India, 2015

Despite economic prosperity and dramatic fall in poverty levels, unequal access to education leaves millions of children trapped in child labour in developing countries like India (*India Today*, 2015). Child labour is widely prevalent all over India with significant variation among states and territories.

The premise underlying the constitutional amendment proclaiming the right to education and the right to education law is that it is the duty of the state and the parents to guarantee opportunities for education to the child between the age of 6 and 14 years.

The government has been taking various pro-active measures to tackle the problem. However, considering the magnitude and extent of the problem and that it is essentially a socio-economic problem inextricably linked to poverty and illiteracy, it requires concerted efforts from all sections of society to make a dent in the problem (Ministry of Labour & Employment, Government of India, 2015). In 2001, there were 1.26 crore working children in the age group of 5-14 which has been reduced to 43.53 lakh in 2011. These children deprived of education are pushed into the darkness of poverty, thus setting off an inter-generational cycle of deprivation and poverty.

Eighty percent of working children in India live in rural areas and three out of four of them work in agriculture or in household industries, most of which are home-based employment and may not be recorded in working children data. Five states -- Bihar, Uttar Pradesh, Rajasthan, Madhya Pradesh and Maharashtra – have over half of India's total child labour population. India's biggest hub of child labour is Uttar Pradesh which accounts for almost 20% of India's child labourers (Save the Children, 2016)

UNICEF, in a review of child labour definition and estimates, found that employment questions used in child labour surveys generally miss unpaid farm work, animal husbandry, and help in family. It is highly likely that the prevalence of child labour in India that prevents or impedes children's participation of education is much higher than the census statistics suggest (UNICEF, 2012).

#### ***Decline in Gross Attendance Ratio (GAR) in Higher Grades***

GAR at primary level was nearly 100 percent for both males and females in rural and urban areas. But as one moves to higher classes, the trend is of declining GAR. At upper primary level, GAR was 92 percent for males (91 percent in rural and 93 percent in urban areas) and 88 percent for females (in both rural and urban).

**Table 5: Gross Attendance Ratio (percent) for different levels of education**

Level of Education	Rural		Urban	
	Male	Female	Male	Female
Primary	102	100	102	102
Upper Primary	91	88	93	88
Secondary	86	84	90	94
Higher Secondary	63	58	73	75
Above Higher Secondary	12	9	18	18

Source: NSS 71<sup>st</sup> Round, Education in India

Table 5 presents GAR for various broad population categories i.e. rural-urban and male-female by stages of education. It can be seen that from primary to higher secondary level, GAR declined significantly; and quite sharply beyond school education.

***Lowest Quintile: The Worst Sufferer***

Poverty is both a cause and a consequence of discrimination, since a lack of financial resources compels those in the lower socio-economic strata to compromise with their children's education at an early age. The level of participation at various stages of school education varies significantly across different quintile classes defined by the Usual Monthly Per Capita Consumer Expenditure (UMPCE), especially after the primary level. In both rural and urban India, while only 67 percent people in the lowest UMPCE quintile class participated in secondary education, it has increased to 105 percent and 111 percent in rural and urban India respectively for the highest UMPCE quintile class.

**Table 6: Gross Attendance Ratio (in percent) for different levels of education for each quintile class of UMPCE**

Quintile class of UMPCE	Level of Education					
	Primary	Upper Primary	Secondary	Higher Secondary	Primary to Higher secondary	Above Higher Secondary
RURAL						
1	99	81	67	38	82	4
2	99	91	81	48	87	5
3	101	94	86	57	90	9
4	103	94	91	70	93	12
5	107	91	105	89	99	21
<b>All</b>	<b>101</b>	<b>90</b>	<b>85</b>	<b>61</b>	<b>90</b>	<b>11</b>
URBAN						
1	100	82	67	41	82	6
2	101	89	92	65	91	10
3	105	97	100	78	98	16
4	105	96	103	92	100	24
5	101	94	111	99	101	33
<b>All</b>	<b>102</b>	<b>91</b>	<b>92</b>	<b>74</b>	<b>93</b>	<b>18</b>

*Source: NSS 71<sup>st</sup> Round, Education in India*

This disparity has increased further at higher secondary level in both the areas. At above higher secondary levels, GARs is only 4 percent and 6 percent in the bottom quintile class for rural and urban areas respectively, whereas these are 21 percent and 33 percent in rural and urban India respectively for the top quintile class of UMPCE.

The discussion above depicts India as a developing country struggling with poverty and other poverty-induced problems in establishing the right to education. Poverty restricts a



person to meeting basic necessities of life. Education is also one of the necessities of life, but poor families find themselves on the horns of a dilemma in choosing between sending their children to work and to school. Better education may open better employment opportunities in the future, but poverty-ridden families often are not able to make that choice. Here, the system fails to provide an environment conducive for education for the disadvantaged segments in society. Educational disparity found across quintile classes, rural-urban divide and male-female gap is a hindrance for a society that is struggling to fulfil equal right to education for all.

### ***The Question of Quality Education***

It is necessary to understand the quality of education situation from the perspective of rural India. It is true that the enrollment ratio in rural areas has risen but the question is: Are children, who are going to school in India, learning? According to Annual Status of Education Report (2014), the quality of education, measured by students' literacy competency, pose serious issues which must be addressed.

**Table 7: Quality of Education**

Percentage of children at different reading levels All India (Rural), 2014						
Grade	Beginner	Letter	Word	Para: Std I level	Story: Std II level	Total (%)
Std III	14.9	25.0	20.0	16.6	23.6	100
Std IV	8.4	17.5	17.9	18.9	37.4	100
Std V	5.7	12.8	14.3	19.1	48.1	100

*Note:* Reading skill was taken as a proxy for quality of education, and assessed by making students read the text in Hindi and English language of any previous classes. The assessment visit to Government schools was made on any random day in September, October and November. Reading skill was measured on four criteria, i.e. reading out a paragraph from a Std I level textbook, a Std II level story, and letters of the alphabet and words.

Source: Annual Status of Education Report, 2014.

As a matter of fact, reading is a foundational skill; without being able to read well, a child cannot progress in the education system. Table 7 revealed that students struggled in reading at different grade levels. For example, standard V students struggled in reading a Std II level story as only 48.1 percent were able to read it while the rest were at lower levels. Close to 20 percent of the children could only identify letters of the alphabet, whereas 14 percent could read words but not a sentence and 19 percent could read sentences but not a longer text.

## **5. Conclusion**

NSS 71st round conducted in 2014 highlights that mean years of schooling of the people of India remains low compared to the average for developing countries; and that the literacy rate of the population does not represent a functional level of skills and competencies necessary for improving people's life and livelihood.

There are disparities in the education system that affect adversely rural people and women. Poverty and the quality of services provided in schools together impede participation in education for a large proportion of young people, who drop out or discontinue schooling early and engage in child labour. Despite government commitment and efforts, progress has been slow in this respect. Children in the lower socio-economic strata have remained particularly disadvantaged and deprived.

With the low reading levels achieved by most students, which is more common in rural areas and the lower income quintiles, the reasons for dropout and discontinuation and the general quality deficits of the system become evident. Clearly, the education system is not making the expected contribution to preparing young people adequately for the world of work and for life. Merely a quantitative approach to educational expansion have to be replaced by a quality-with-equity strategy that is more effective than what has been attempted so far in planning and managing the education system.

### References

- ASER (2016). Annual Status of Education Report, 2014.
- Census of India (2001 & 2011). Census of India 2011 and 2011, Government of India.
- Desai, S. B. (2010). *Human Development in India*. New Delhi : Oxford University Press.
- Dreze, J. and Sen, A. (2006). *India: Development and Participation*. New Delhi : Oxford University Press.
- India Today (2015). "Unequal Access to Education Leads to Child Labour in India." *India Today*, 29th September 2015, <http://indiatoday.intoday.in/calendar/29-9-2015/online.html>
- Mahore, R. Y. (2001). "Human resources and economic development," In Ruddar Datt (Ed.), *Human Development and Economic Development*, New Delhi : Deep and Deep Publications Pvt. Ltd.
- Ministry of Labour & Employment, (2015). "Working Children in India," Ministry of Labour and Employment, Government of India.
- NSSO (2015). "71st Round," National Sample Survey Office, Ministry of Statistics and Programme Implementation, Government of India.
- Puri, V. K. and Misra, S. K. (2016). *Indian Economy*. New Delhi : Himalaya Publishing House Pvt. Ltd.
- Save the Children (2016) Statistics of Child Labour, India, State-wise. Delhi: Save the Children. <https://www.savethechildren.in/articles/statistics-of-child-labour-in-india-state-wise-2016>
- UIS (2016). e-Atlas for out-of-School Children. Montreal: UNESCO Institute of Statistics.
- UNESCO (2015). Education For All, Global Monitoring Report, 2015. UNESCO.
- UNICEF (2012). "How sensitive are estimates of working children and child labour to definitions? A comparative analysis." MICS Methodological Paper No. 1. New York: UNICEF.
- World Bank (2014). *World Development Indicators*, 2014). Washington, D.C.: The World Bank.