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AGENDA – 4: Education Statistics -- Issues

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18TH CONFERENCE OF CENTRAL AND STATE STATISTICAL ORGANISATIONS

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Agenda - 4

Education Statistics - Issues

Statistics on Literacy & School Education in the New Millennium
Issues, Challenges & Suggestions

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Introduction

Education is one of the most important socio-economic factors influencing human development of a society. Major indicators to measure the status of literacy and educational attainment of any society pose statistical challenges, particularly in developing countries like India, where the sheer size of the problems is a major deterrent for venturing into innovative statistical enterprises. Not only for situation assessment, but also for timeliness and credibility of statistical products from different sources the present state of education statistics needs a thorough overhauling.

The role of reliable, relevant, accurate and up to date educational statistics in effective planning and policy formulation and for optimal use of resources can hardly be overrated. The major sources of statistical information on literacy, participation in education of the population are the administrative records of the Ministry of Human Resource Development and the nation-wide surveys and Population Censuses. From the findings of the latest such large scale statistical exercises, viz. Population Census 2001, NFHS-3 (2005-06) and NSSO survey on 'Participation & Expenditure in Education' (July 2007 - June 2008), the changing scenario of education in India in the new millennium emerges.

Literacy Rate in the Population

In the Population Censuses of India, a person who can both read and write with understanding in any language is to be taken as literate. Census gives estimates of proportion of literates among persons of age 7 & above, adult literacy (persons of age 15 & above) and youth literacy of persons of age 15-24 years.

In National Family Health Surveys, although originally in NFHS-1 & NFHS-2 literacy information was based on self reporting only, in the latest NFHS (2005-06) respondents who have either completed at least standard six or were able to read all parts of the sentence given in the literacy test to others (who have not completed standard six), were taken as literate. NFHS gives distribution of persons of age 6 or more years by number of years of education completed. It also gives number of years of education completed and the proportion of literates among persons of various age-groups between 15 to 49 years.

On the other hand, in the NSS surveys a person is considered literate if he/she can read and write a simple message in at least one language with understanding and educational level is the highest level a person has completed successfully. The latest survey on 'Participation and Expenditure in Education' (2007-08) gives the proportions of literates among different age-groups (all ages, age 5 & above, 7 & above, 15 & above) of the population and its various sub-populations. It also gives percentage distribution of adult population (age 15 & above) by completed level of education and attempts to study its various socio-economic dimensions based on sex, location, social groups, level of living etc.

The table below indicates a steady increase in the level of literacy as a whole as also narrowing of disparities between rural-urban, female-male population sub-groups etc. although the gaps there

still remain a cause of concern.

Table 1: Proportion of Literates in the Population						
Censuses/ Surveys	parameter	All persons	Female	Male	Rural	Urban
Population Census, 2001	% literates among persons of age 7 & above	65	54	75	59	80
NFHS-3 Survey (2005-06)	% population of age 6 & above who attended school		58	78		
NSSO Survey (2007-08)	% literates among persons of age 7 & above	72	62	80	67	84

Literacy rate for population of age 7 & above in major states in 2007-08 varied from 58% in Bihar to 94% in Kerala. The statewise pattern did not undergo major changes in the new millennium.

States with relatively high literacy- Kerala (94%), Assam (84%) & other NE states, Maharashtra (81%), Himachal Pradesh and Tamil Nadu (80% each)

States with relatively low literacy- Bihar (58%), Rajasthan (62%), Andhra Pradesh (64%), Jharkhand (65%), Uttar Pradesh (66%), J&K (68%) and Orissa (68% each).

Adult Literacy

The adult literacy rates for population of age 15 & above obtained from these sources can similarly be summarised as below:

Table 2: Proportion of Literates among Adults						
Censuses/ Surveys	parameter	All persons	Female	Male	Rural	Urban
Population Census, 2001	% literates among persons of age 15 years & above	61	48	73	54	78
NFHS-3 Survey (2005-06)	% literates among persons of age 15 to 49 years		55	78		
NSSO Survey (2007-08)	% literates among persons of age 15 years & above	66	55	77	60	82

In 2007-08, about 66% of the country's adult population was found to be literate. Comparison with past surveys/ censuses indicates that both the rural-urban and the male-female disparities have reduced over time but nevertheless they remain significant. Of the population of age 15 & above - 34% were not literate, 24% were literates of level up to primary, 16% of level middle and remaining 26% were of level secondary & above.

Youth Literacy:

The literacy rate of the youth (i.e. among persons of age 15-24 years old) is a major Millennium Development Goal (MDG) indicator. The youth literacy rate had grown by about 20 percentage points during the decade 1990-2001 and by another 7 percentage points by 2007. By the trend of literacy of the 15-24 year old population, India is likely to attain 100% youth literacy by the year 2015. The ratio of literate women to men among the youth improved from 0.7 in Census 2001 to about 0.85 in NSSO(2007-08). The trend of youth literacy as revealed by the abovementioned three nationwide census/ surveys is indicated below:

Table 3: Proportion of Literates among Youth						
Censuses/ Surveys	parameter	All persons	Female	Male	Rural	Urban
Population Census, 2001	% literates among persons of age 15 -24 years	76	68	84	72	87
NFHS-3 Survey (2005-06)	% literates among persons of age 15 -24 years		69	86		
NSSO Survey (2007-08)	% literates among persons of of age 16-24 years	83	79	91	82	93

Completed Level of Education

Table 4: Level of education of the population						
Censuses/ Surveys	parameter	All persons	Female	Male	Rural	Urban
Population Census, 2001	% of persons aged 15 or more who completed primary education or above	46	32	59	40	65
NFHS-3 Survey (2005-06)	% of persons aged 15-49 years who completed 5 or more years of education		51	72		
NSSO Survey (2007-08)	% of persons aged 15 or more who completed primary education or above	57	47	67	50	75

Thus although there has been noticeable improvement in literacy and attainment of atleast primary level of education, majority of the adult females and about half of adult rural population did not complete even primary level of education.

Current enrolment & attendance status

General school education is divided into primary, middle or upper primary, secondary and

higher secondary levels. In most states these terms refer to Classes I-V, VI-VIII, IX-X and XI-XII respectively, but the number of years corresponding to primary, middle, secondary and higher secondary levels is not uniform in all the states. So class-wise grouping is more appropriate for studying current enrolment/ attendance rates. Age-specific current attendance in education are studied with age-groups formed according to the official ages for each class-group. In most of the official educational statistics, enrolment ratios are taken as important indicators which give an idea of the proportion of a population enrolled in educational institutions. Gross enrolment ratio, age-specific enrolment ratio and net enrolment ratio are taken as three principal indicators.

As per administrative statistics of the Ministry of Human Resource Development of the Government of India, the Gross Enrolment Ratio (GER) for Grade I-V in India has already overshot the 100 percent mark for both girls and boys. GER for Grade I-V unlike NER (Net Enrolment Ratio) tends to exceed 100% due to enrolment of children beyond the age group 6-10 years in the primary level education.

The Population Censuses and the major household surveys like National Sample Survey Organisation (NSSO) surveys on 'Participation and Expenditure in Education' or National Family Health Surveys, because of their household approach, collect information on attendance, rather than that on enrolment, in the educational institutions. Therefore, instead of enrolment ratios, the corresponding attendance ratios can be obtained. From the latest such large scale statistical exercises, e.g. Population Census 2001,   NFHS-3 (2005-06) and NSSO survey on 'Participation and Expenditure in Education' (July 2007 - June 2008) depict the changing scenario of attendance in elementary education in the new millennium.

With the launch of Sarva Shiksha Abhiyan (SSA), the Government of India's flagship programme for achievement of Universalization of Elementary Education (UEE) in a time bound manner, mandated by 86th amendment to the Constitution of India making free and compulsory education to the children of 6-14 years age group, a Fundamental Right, the current educational attendance status of children in this age-group assumes great significance. The programme also seeks to open new schools in those habitations which do not have schooling facilities and strengthen existing school infrastructure through provision of additional class rooms, toilets, drinking water, maintenance grant and school improvement grants.

The Population Censuses collect information on percentage of children in the age-group 6-10 years (official age-group for primary classes) and in the age-group 11-14 years (official age-group for middle level classes) who are attending schools. NHFS-3 gives age-specific attendance rates, as percentage of children attending education in the age-groups 6-10, 11-14, 15-17 years and NSSO gives age-specific attendance rates for the age-groups 6-10, 11-13, 14-17 years etc.

In National Family Health Surveys and in National Sample Surveys the GAR for primary school (Classes I to V) is the total number of primary school students, expressed as a percentage of the official primary-school-age population (6-10 years). If there are significant numbers of overage and underage students at a given level of schooling, the GAR can exceed 100.0. But the NAR for primary school (Classes I to V) is the percentage of the primary-school-age population (6-10 years) who are actually attending primary school. By definition NAR cannot exceed 100.0 percent. Similarly, GAR and NAR can be obtained for the middle, secondary, and higher secondary level schooling. NFHS-3 gives GAR and NAR for the middle, secondary, and higher secondary level school together (i.e. class-group VI-XII and age 11-17 years) while NSSO (2007-08) gives the GAR and NAR separately for class-groups VI-VII, IX-X, XI-XII etc. The Gender Parity Index at any level of schooling is the ratio of the NAR (GAR) for females to

the NAR(GAR) for males for the particular level of education.

Table 5: Percentage of children attending education in different age-groups						
Censuses/ Surveys	% children attending school in age-group	All persons	Female	Male	Rural	Urban
Population Census, 2001	6-10 years	69	66	72	66	79
	11-14 years	75	69	79	71	84
NFHS-3 Survey (2005-06)	6-10 years	83	81	85	81	88
	11-14 years	75	70	80	73	82
	15-17 years	41	34	49	37	51
NSSO Survey (2007-08)	6 – 10 years	88	87	89	87	91
	11 – 13 years	86	83	89	85	89
	14-17 years	64	59	67	61	72

Ministry of Human Resource Development brings out its annual publication 'Selected Educational Statistics' based on administrative data, which gives Gross Enrolment Ratio (GER) for the class-groups I-V, VI-VII, IX-X, XI-XII etc. The corresponding age-groups taken are 6-11 years, 11-14 years, 14-16 years and 16-18 years respectively. Here also due to the presence of overage and underage students at various levels of schooling, the GER may often exceed 100.0. The Gender Parity Index at any level of education is the ratio of the GER for females to the GER for males for the particular level of schooling.

Table 6: Gross and Net Attendance Ratios in School Education						
Censuses/ Surveys	parameter	All persons	Female	Male	Rural	Urban
NFHS-3 Survey (2005-06)	GAR (Primary)	83	81	85	84	82
	NAR (Primary)	72	71	73	71	74
	GAR (Middle, secondary & HS)	61	54	67	56	71
	NAR (Middle, secondary & HS)	51	46	57	47	61
NSSO Survey (2007-08)	GAR (Classes I – V)	104	103	106	105	103
	NAR (Classes I – V)	84	83	86	84	85
	GAR (Classes VI – VIII)	84	81	87	82	90
	NAR (Classes VI – VIII)	59	56	61	57	65
	GAR (Classes IX – X)	70	64	75	66	85
	NAR (Classes IX – X)	41	39	43	38	51
	GAR (Classes XI – XII)	48	42	53	41	65
	NAR (Classes XI – XII)	27	25	29	22	39
Selected Educational Statistics (2006-07)	GER (Classes I – V)	111	108	114		
	GER (Class VI – VIII)	74	70	77		
	GER (Classes IX - X)	53	47	58		
	GER (Classes XI - XII)	28	25	30		

Gender Parity Indices in Educational Attendance or Enrolment:

Table 7: Gender Parity Indices in Educational Attendance/ Enrolment Ratios				
NFHS-3 Survey (2005-06)	GAR (Primary)	NAR (Primary)	GAR(Middle secondary & HS)	NAR(Middle secondary & HS)
	0.95	0.97	0.81	0.81
NSSO Survey (2007-08)	GAR (Class I-V)	NAR (Class I–V)	GAR (Class VI – VIII)	NAR (Class VI – VIII)
	0.97	0.97	0.93	0.92
	GAR (Class IX – X)	NAR (Class IX – X)	GAR (Classes XI – XII)	NAR (Classes XI – XII)
	0.85	0.91	0.79	0.86
Selected Educational Statistics (2006-07)	GER (Class I–V)	GER (Class VI – VIII)	GER (Classes IX - X)	GER (Classes XI - XII)
	0.95	0.91	0.81	0.83
DISE (2007-08)	GER (Class I–V)	GER (Class VI – VII/VIII)		
	0.93	0.89		

Further, as per **DISE 2007-08,** there has been a 13.5% increase in national NER in primary grade between 2005-06 and 2007-08: from 84.53% in 2005-06 to 95.92% in 2007-08.

Annual Status of Education Report (ASER) 2008 for Rural India by and large corroborates the status by DISE data. It shows that 95.7% children of the age group 6-14 years are enrolled in schools and only 4.3% are out of school in rural India. It also observes that the enrolment is highest in the age group 7-10 years for both boys and girls with 2.5% boys and 3.0% girls out of school in this age group. In the age group 11-14 years 5.5% boys and 7.2% girls are reported to be out of school with overall 6.3% out of school in this age group.

NSSO (2007-08) through its age-specific attendance rates indicate that in the age-group 6-10 years 12% children were out of school of whom about 9% were never enrolled while another 2% dropped out. Similarly among children aged 11-14 years 14% children were out of school of whom, 6% were never enrolled and 9% dropped out subsequently.

Drop-out

Population Census 2001 did not release tabulated data on drop-out or non-enrolment. The **National Family Health Survey (2005-06)** collected and tabulated data on main reason for not attending school sought for all children age 6-17 years who were not attending school during the 2005-06 school year. It gives the percent distribution of children aged 6-17 years who have dropped out of school at some time before the 2005-06 school year by the main reason for not attending school.

NSSO survey (2007-08) captured very useful information on the two major critical issues plaguing our education system, viz. non-enrolment and dropping out.

The survey reveals that the most common reasons for school drop-out among persons of age 6-17 years for dropping out of school are the following:

- 'not interested in studies' - reported for 36 % boys and 21 % girls.
- 'costs too much' for 18% each of boys and girls,
- 'required for household work' for 15% girls and 7% boys.
- 'required for outside work for payment in cash or kind' for 9% boys etc.
- 'required for work on family farm/family business' for 7% boys.
- 'repeated failures' for 6% each of boys and girls.
- 'got married' for 5% girls etc.

Table 8: Percentage discontinuing studies among ever-enrolled children in different age-groups (2007-08)				
	Rural	Urban	Female	Male
6 - 10	2	2	2	2
11 - 13	9	6	9	7
14-15	24	17	24	20
16 - 17	44	31	44	37

It also tabulates the major reasons for discontinuing studies among ever-enrolled persons of age 5-29 years as below:

- Financial constraints   21%
- Child not interested in studies   20%
- Unable to cope up or failure in studies   10%
- Completed desired level or class   10%
- Parents not interested in studies   9%

Ministry of Human Resource Development brings out its annual publication 'Selected Educational Statistics'(2006-07) indicate the drop-out rates in different class-groups as below:

Table 9: Percentage drop-outs in different class-groups (2006-07)			
Class-group	All	Female	Male
Classes I - V	25	27	24
Classes I - VIII	46	45	47
Classes I - X	60	61	59

A stable high Net Enrolment Ratio in elementary education will however, largely depend on sustained improvement in survival rate especially in the primary stage (i.e. proportion of pupils starting Grade I who reach the last grade of primary). **DISE 2007-08** finds out the survival rate at primary level up to Grade V. During 2007-08 more than 9% of children enrolled in Grades I to V dropped out from the system before completion of primary grade and there were no major differences in drop-out rate among boys and girls. The corresponding percentage during 2005-06 and 2004-05 were 9% and 10% respectively. However, specific cohort based estimates of primary completion rate, attendance rate, dropout rate, survival to grade V rate are presently not available from statistical surveys, particularly at sub-national levels.

Non-enrolment

NSSO survey (2007-08) tabulates the percentage of never-enrolled children in different age-gr. to find out that 9% of children between age 6 - 10 years and 6% of children of age 11 – 13 years.

Table 10: Percentage of never enrolled children in different age-groups (2007-08)					
Age-group (years)	Total	Female	Male	Rural	Urban
6 – 10	9	10	8	10	6
11 – 13	6	8	5	7	4
14 – 17	9	11	6	10	5

Considering the most important reason for non-enrolment for each of the never-enrolled persons the three most frequently given reasons for non-enrolment were

      a) parents not interested in education of their children (33%),
      b) financial constraints (21%) and
      c) education not considered necessary (22%).

For females in both rural and urban India, it was the attitude of the parents towards the need for education of their girl children, which had in the majority of cases denied them their education. But for urban males 'financial constraints' was most commonly given as the reason for non-enrolment. The proportion of never enrolled persons across consumption expenditure decile classes clearly depicts the high rates of non-enrolment among persons of lower expenditure classes.
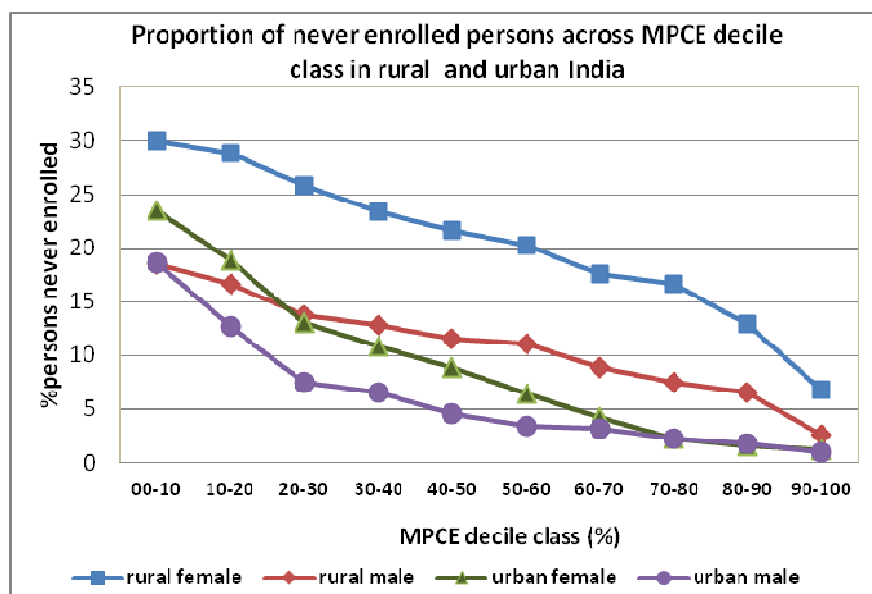
Thus, it can be seen that although education is highly subsidised in India, our education system has been characterised by a high rate of drop-outs. Again, there is a sizeable portion of population who are not entering the education system at all. For both the phenomena, it was economic reasons (e.g.

financial constraints, need to join the labour force early etc.) were found to be of prime significance.

Other Major Aspects of Education

I.   Access to Schools:

Availability of school is one important factor affecting access to education and attendance. The SSA programme seeks to open new schools in those habitations which do not have schooling facilities and strengthen existing school infrastructure through provision of additional class rooms, toilets, drinking water, maintenance grant and school improvement grants.

In the **NSS survey (2007-08)** information was obtained from all the sample households on their distance from the nearest school providing school education at (a) primary (b) middle and (c) secondary level.

- More than 98% of rural as well as urban households reported having a school with primary classes within 2 kms.
- Of the rural households, more than 21% did not have a school with middle level classes within 2 km and 17% did not have a school with secondary level classes within 5 kms.
- In the urban areas, the situation was much bettter with only 3% not having a school with middle level classes within 2 km and 1% not having a school with secondary level classes within 5 kms.
- Among states, in West Bengal, Jharkhand besides one or two tiny states, more than 30% of rural households did not have a school with middle level classes within 2km.

II.   Quality of Education

The issue of quality primary education is appropriate not only because India is reaching the goal of universal primary education but also because the Sarva Shiksha Abhiyan (SSA) seeks to provide quality elementary education and life skills. As of now, learning achievements, when compared with expected notional levels for primary grade students, are quite unsatisfactory as is revealed by **ASER 2009**. It has been seen that almost half of the students studying in Class V cannot read and comprehend a Standard II text and more than 60 % cannot do a simple division. However most of the official statistics available today does not cover much information on this aspect.

lll.   Type of institution attended

More than 70% of students in elementary education attended schools run by government or local bodies.

For Primary level students, type of institution was	govt. or local body in 73%, private aided in 7%, private unaided in 20% cases
For Middle level students, type of institution was	govt. or local body in 70%, private aided in 12%, private unaided in 17% cases
For Secondary/ HS level students, type of inst. was	govt. or local body in 59%, private aided in 21%, private unaided in 18% cases

IV. **Proportion of students getting free education**

 NSSO (2007-08) also collected information on proportion of students getting free education, which matched well with the proportion of students attending schools run by government or local bodies for both primary and middle level of education.

At Primary level: 71% students got free education (Rural- 80%, Urban- 40%)
At Middle level: 68% students got free education (Rural- 75%, Urban- 45%)

V. **Proportion of students getting educational incentives**

 NSSO (2007-08) also collected information on proportion of students availing of educational incentives of various forms.

Mid-day meal from govt.:   At primary level 67% & at middle level 29% students got it

Concession in transport fare: 5% students in both Rural and Urban sector availed it

Free/ subsidised books: 51% students got the incentive (Rural- 58%, Urban- 29%)

Free/ subsidised stationery: 7% students got the incentive (Rural- 8%, Urban- 5%)

Major Issues, Challenges and Suggestions

Major Issues of Concern	Challenges/ Suggestions
Need for legislative support relating to compilation/ publication of educational statistics. Whether the confidentiality clause of 'Collection of Statistics Act' would clash with the stress on total transparency and easy access of educational statistics?	For the purpose of analysis and research by various users including the Central Govt. Ministries and Organisations, it needs to be governed by the Collection of Statistics Act. However, the details required for the purpose of monitoring and public scrutiny may be undertaken by the Monitoring unit of the Ministry independently, which may be governed by separate common central legislation for educational statistics for the purpose of uniformity.
The problems of discordant reference periods, concepts and definitions, variations in periodicities, reference age-groups etc. as adopted by different agencies making it difficult, if not impossible to compare or combine data. Also these cause confusion in interpreting and analysing available datasets on Education.	Attempts need to be made for better uniformity of concepts, definitions, age-grouping, and levels of education, time references etc. across sources. These need to be implemented under the guidance of the National Statistical Commission. Further with every dataset, the associated metadata or qualifying remarks/ statements need to be provided for clear unambiguous interpretation of the same. MHRD has attempted an integrated compilation of uniform concepts and Definitions separately for 'School Education' and 'Higher/ Tertiary Education' which needs to be finalised through consultation with users and stakeholders.
Multiplicity of channels and formats of administrative statistics. (SES system operated by MHRD, DISE by NUEPA, AISES by NCERT quinquennially etc. in school education segment).	Ideally, there should be one unified system of data collection, processing and publication of administrative statistics (annually on a census basis) by integrating parallel systems into a common matrix. Within the matrix each sub-system may be required to submit final compilations to its superior system. To ensure quality of data under the unified system, an in-built system for quality and validation process need to be prepared and vetted by the National Statistical Commission.
Multiplicity of data elements in administrative returns and survey schedules to measure more or less similar parameters.	Rationalisation of data elements and indicators essential keeping in view the objectives and uses of the results in policy formulation/ research and following the standard practices/ measures .
Monitoring of outcomes of various flagship programmes on education	Special survey designs for concurrent monitoring of outcomes of major educational programmes can be taken up to cater to the data needs in this respect and help understand better the changes over time However, MOSPI has decided to undertake a **Survey on Measuring of Outcomes for Children,** which aims at providing regular data on outcome level for key indicators on children and women, which also covers some aspects of education.

Data requirement for monitoring 'Right to education' as a Fundamental Right. Need to track a basic minimum set of outcome indicators at sub-national level.	Since education for children in the age-group 6-14 years is now a Fundamental Right, it is important to track each Child's educational status on a continuing basis. The mechanism and institutional set up required for this needs to be widely discussed and debated for the sake of uniformity and integration on a common platform. Education related MDG-indicators provide a basic minimum set of outcome indicators, which needs to be tracked sub-nationally upto the community level, for intervention planning.
Problem of acceptability and mainstreaming of DISE data	DISE system developed for Elementary education should be overhauled to become the National Statistics for the sector. DISE should be upgraded in all states to include Secondary and Higher Secondary stages of education. Specific provision for rigorous quality control through random sample checking is necessary.
Need for a proper spacing of statistical exercises covering Educational Statistics.	Education statistics has been part of the large scale national surveys like NSS, NFHS, AISES as also in the Population Censuses. Harmonisation of concepts, definitions of key educational parameters would enable availability of time series data as also their external validation.
Absence of a regular channel of transparent educational data and public access to basic (unit record) data	A National Educational Statistics Portal may be lunched through which authenticate official statistics may be made readily available for public consumption. This portal should serve as a single window data shop for education statistics from all official sources, administrative statistics and surveys/ censuses such as etc. such as AISES, DISE, Population Census, NFHS, NSS etc. Also efforts need to be made to compile comparable datasets from various sources.
Information on quality of learning, skills at national and disaggregated sub-national levels is statistically invisible.	Sarva Shiksha Abhiyan (SSA) seeks to provide quality elementary education and life skills. This is also an objective of 'World Fit For Children', that India has also endorsed. However most of the official statistics available today does not cover information on the quality aspect of education even at national level. The types of information produced by ASER need to be mainstreamed for planning and determination of intervention strategies.

Specific cohort based estimates of primary completion rate, attendance rate, dropout rate, survival to grade V rate are not available from administrative statistics particularly at sub-national levels.	Existing education MIS is highly deficient in capturing required age-specific dynamic data from schools and other educational institutions. No serious effort is made to obtain information on quality of education. Data available through DISE system do not have acceptance for administrative purposes due to problem of coverage and validation. The institutional mechanism similar to Central Bureau of Education Statistics (CBES), proposed by the Review Committee constituted by MoHRD, aided by appropriate legal instruments and real time reporting system, can facilitate production of frequent estimates on the basic education indicators for education MIS. However, The statistical objectives of CBES should not clash with the monitoring objectives of the Ministry.
Facilitate international comparisons and to fulfil the requirements of international agencies on educational statistics	International Standard Classification for Education (ISCED) has been developed by UNESCO for reporting educational statistics. Developing a scientific system of classification of education statistics in India and a comprehensive concordance between ISCED and classification in Indian system may be drawn up to facilitate conversion of data generated by indigenous standards and for harmonization on a common platform.
Dissemination of educational statistics	There should be two distinct dissemination systems for educational information. The first one should be of general nature which may be provided free of cost, for example, to students aspiring to take admission in a particular institution in a particular discipline, should know the following information free of cost: a) whether the institution is recognized by UGC or not? b) whether the course is recognized by UGC or not?, c) the list of teacher, d) fees component, f) hostel facility etc. The second category of data includes published data on educational statistics (literacy, enrolment/ attendance etc.) decomposed by various geographical and socio-economic categories.
Adopting available technology for efficient management of a mammoth volume of educational statistics with assured credibility and timeliness.	Technological innovations may be harnessed so as to modernize every individual sub-systems and integrate with the National Focal Point in such a way that data throughputs across a country wide network on real time basis can make all crucial results available for situation assessment without any delay due to time lag in data cleaning and reorganisation of data structures etc. Also the institutional mechanism for establishing linkage with data warehouse of MoSPI has to be established as a part of this integrated system.

Paper Highlighting Issues Relating to Education Statistics

Ministry of Human Resource Development

Education in India has been witnessing major changes both academic and administrative. Even on the financial side, expenditure on education has grown rapidly. New courses have multiplied. Besides formal education, other systems like home study, open distance learning, correspondence course, etc., have received wider acceptance. New curricular approaches, especially at the school level, have gained currency. The Sarva Shiksha Abhiyan has introduced new dimensions to enrolment, retention, evaluation and progression. Educational administration at all levels has undergone substantive changes. These and other changes have had substantial implications for educational planning and policy; educational administration; research and studies; and, speedy dissemination of correct information.

Reliable and accurate statistics, being the basis for planning and coordination in addition to being useful for providing guidance are vital for effective discharge of central responsibility in this field. The need of a sound and reliable statistical database and information base has come to be increasingly stressed. Various efforts made in the past in this regard have been either fragmented or ineffective. The felt-need has been for giving a holistic attention to all the segments in the Human Resource Development sector.

The principal agency responsible for compilation and dissemination of educational statistics at all India level is the Ministry of Human Resource Development. It collects procures, consolidate, analyse and provide information on quantitative and qualitative aspects of education to meet the needs of educational planning, policymaking and evaluation. Ministry of Human Resource Development depends on the States to supply all statistics needed by it. The main sources of this information are the Education Departments of the State Governments/ U.T. Administrations.

School Education

There are broadly four stages of school education in India, namely, primary, upper primary, secondary and higher/senior secondary. In pursuance of the National Policy on Education, there have been attempts to evolve a uniform pattern of 12 years of school education, commonly known as 10+2 pattern. The 'plus two' stage refers to classes XI and XII, which constitute higher/senior secondary stage. Secondary stage consists of classes IX and X. The initial schooling stage up to class V is called primary stage. Upper primary stage which is also known as middle stage, consist of classes VI to VIII. The schooling stage up to classes VIII is generally called 'elementary stage'.

Higher Education

For the purpose of collection of education statistics, Higher education consist, education after schooling i.e. after completion of at least twelve years of school education e.g. diploma after completion

of 12 years of schooling, graduate, post graduate diploma and degree, M.Phil/ Ph.D. etc. in any stream like Arts, Commerce, Science, Engineering, Architecture, Medicine, Agriculture, Fisheries, Laws, Teaching etc.

ISSUES TO BE DISCUSSED IN THE MEETING

MHRD is facing various difficulties in collecting the reliable Statistics from States particularly for Higher Education. The main difficulty in educational data not being put to proper use for planning purposes is that there is not enough collaboration between the planners and those responsible for data collection. There are various other problems such as huge time lag, less coverage, quality of data, lack of coordination among various departments of States etc.

1.   Nodal Agency for collection of Education data Particularly Higher Education in the States

At present there are several Departments in the State which are responsible for providing higher education such as Technical Education Department, Higher Education, Medical Education, Agriculture etc. Ministry has given the nodal responsibility of collection of data in respect of all type of Higher Education to the Directorate of Higher Education in the State. But there do not seem any co-ordination among various departments in most of the States. At the level of MHRD, it is not possible to co-ordinate among various departments for providing the data to the Ministry. Now School Education Department has also been bifurcated into two-three departments in the States and therefore, there is no single agency which can provide data to the Ministry. In some of the States, XI-XII classes are attached with colleges and therefore neither covered by school education department nor by Higher Education Department. It is, therefore, necessary to identify (Segmental) 'Focal Points' and appoint 'Nodal Officers' to ensure proper coordination. As regard to higher education, Secretary (Higher Education) has already written a letter to Chief Secretaries of all the States to appoint a Nodal Department/ Officer in the State for co-ordination, collection and compilation of education statistics in the States.

2.   Unified system of data collection

There are various sources of school education data such as Statistics of School Education published by MHRD; District Information System of Education (DISE), a data collection mechanism under SSA; Secondary Education Management Information System (SEMIS), a data collection mechanism under RMSA; NCERT Surveys etc. Data Capture Formats under these systems are also different. Multiplicity of data collection agencies often leads to confusion and delay. Therefore, is is of utmost importance to eliminate the multiplicity of channels and introduce one unified system of data collection (annually on a census basis), processing and, publication by integrating parallel systems into a common matrix. This is also one of the major recommendations of Satyam Committee. With this in view, Ministry has already initiated the exercise and constituted a committee under the chairmanship of Prof. R. Govinda, Vice Chancellor, NUEPA to develop a common Data Capture Formats and other related issues.

3.   Coverage:

Recently MHRD conducted regional meetings to review the status of Statistics provided by the States. It has been found that there is a mismatch between the number of Institutions located in the States and data provided to the Ministry. A number of Institutions are left out of the coverage and thus lead to underreporting of data.

4.   Time Lag:

There is a problem of huge time lag in the reporting of data to the Ministry. Due to which MHRD could finalize data for school education only upto the year 2008-09 and for higher education upto 2007-08.

5.   Quality & Reliability of data provided by the State

The data published by the MHRD become the official data at the national level and is being used widely by the national and international agencies. The importance of timely submission of correct and reliable data is needless to emphasize. The data received from States is thoroughly being scrutinized by the MHRD but at table it is not possible to detect all the inconsistencies. While scrutiny, it has been found that there is a lot of discrepancy in the data provided by States. This puts a question mark on the data published by the MHRD.

6.   All India Survey on Higher Education:

With a view to develop a sound database on higher education, Ministry has proposed an All India Survey on Higher Education and constituted a Task Force for this purpose under the Chairmanship of Shri Sunil Kumar, Additional Secretary (Higher Education). Modalities of conducting the survey are still to be finalized.

7.   Online data collection in higher education

In the era of Information Technology, it becomes imperative to adopt modern technology for collection of Education Statistics also. Satyam Committee has also recommended the same. As of now, the data collection process of the Ministry is completely manual. Online data collection system will not only reduce the time lag but also improve the quality, coverage etc of the education data. Some of the benefits are outlined hereunder-

- ■   timeliness of the operations;
- ■   quality of the statistics produced;
- ■   proper validation of the data collected;
- ■   elimination of redundancies;
- ■   accountability of data suppliers and collectors;
- ■   warehousing of raw data;
- ■   variegated analyses;
- ■   on-line access to all.

In the school education system, though Ministry is collecting data manually, there exist other systems such as DISE and SEMIES which are using information technology as a tool for collection of data. But no such system exists in higher education. It is, therefore, proposed to develop an online data collection system for higher education sector also. Ministry along with UGC is already working in this direction.

8.   Estimation of Population for Calculation of GER

Gross Enrolment Ratio (GER) which is nothing but the Total enrolment in a specific level of education, regardless of age, expressed as a percentage of the eligible official school-age population corresponding to the same level of education in a given school-year. GER is an important and most widely used indicator for measuring the performance of education sector. The accuracy of this indicator is affected by the population of the particular age group in a particular year. Single year age population is available only in the decennial census and therefore presently it is available for the year 2001. Therefore, to get the age-group wise population for a particular year certain estimation has to be made. Various agencies involved in the collection of education statistics, estimate the population with their own method. There is no standard method of estimation of population. This leads to the variation in GER even if the enrolment is same.

9.   Data gap on some important items

Although various data capture formats cover most of the items relevant to educational planners and administrators, there are still a few items on which data is not available. Some of the important items are listed as follows:

- **Non-formal Education**: Presently many programmes of Non-formal education are being offered in various States. It is important to collect adequate data on regular basis for all such courses and educational programmes, which are not covered within the school system.
- **Average daily attendance**: At present no data are collected systematically on average daily attendance in schools. Average attendance data are extremely important for planning and other purposes, as they indicate how the existing facilities are being utilized.
- **Unrecognized institutions**: The Education Departments in the States generally do not collect information from the unrecognized institutions. In the All India Educational Survey conducted by NCERT, data from such institution has also been collected, but it has not been possible to ensure complete coverage and reliability of information from such institutions.
- **Private expenditure on education**: While the data on educational expenses from the Government and public funds are usually available, there is hardly any data exist on the private expenditure on education. Special studies and surveys are needed for getting information on this important aspect of educational cost.
- **Unit costs:** There is no data on the expenditure incurred in different stages of education. It is therefore difficult to find out the unit cost of primary level, middle level, or secondary level of education.
- **Drop out Rate in Higher Education:** Due to flexibility provided for the completion of course in the higher education system, it is very difficult to measure the Drop-outs in higher Education which is an important indicator of efficiency of the higher education system.

Education Statistics – Issues

Directorate of Economics & Statistics, Government of Puducherry

Education plays a vital role in the Socio-economic development of a nation. Literacy level and Education in general and of women in particular is an important indicator of economic growth. National policy on education accords priority to the universalisation of primary education for children in the age group 6-14 years and eradication of adult literacy. Education is the only gate way for reaching the pinnacle of progress in life. The XI Five Year Plan has accorded the highest priority to education since education is an important input for harnessing the skills and talents of younger generation. we are now witnessing an unprecedented technological revolution at present and unless we equip ourselves and improve our knowledge we will not be able to compete with other developed notions of the world. Accordingly policies and programme formulation is necessary   to achieve Millennium Development Goals (MDG) of universal primary education i.e. to ensure that all boys and girls complete – Primary education. The Govt. of India has recently passed the Right to Education Act 2009 for ensuring free and compulsory education to all children of India in the 6-14 age-group.

Education Scenario in Puducherry

The Educational attainments in the U.T of Puducherry analysed with the help of educational statistics and indicators reveals that the development of both school education and Post – Metric education is good in terms of coverage in the U. T. The highest literacy rate 81.24% as per 2001 census reveals that the educational facilities have reached the people. In the UT., 100% enrolment is ensured in the age of 5+ even in interior habitation with small population of 500. The Gross Enrolment ratio is more than 100 in the age group of 6-11 and 11-14 viz., . Primary and upper Primary Stages. In all categories, the enrolment of boys and girls are almost equal signifying the achievement of gender equality During the year 2009-10 there are 300 Primary Schools 118 middle Schools 167 Secondary Schools and 105 higher secondary schools in the U.T. As regards higher education there is one university and 21 Arts and Science colleges including 2 Government colleges exclusively for women, 58 Professional Institutes (below degree level) and 67 Professional colleges (degree level and above). The development of all levels of education in the Union Territory has been possible mainly due to higher budgetary outlay for education made by the union Territory Administration. In 2009-10 (RE) , expenditure on education was 12.38 % of total budget expenditure and it is   3.73   % of GSDP. The UT is at present witnessing the phenomena of higher growth in Private educational Institutions and has become a hub of educational institutions.

To achieve the goals of education for all envisaged in the National Policy on Education, proper planning is required. Educational planning has to be done both at the macro level i.e district/State Level. Comprehensive micro level planning in education sector in respect of all States/UTs is yet to be achieved since grass root level data on infrastructure and student enrolment , no. of teachers, education indices are not available. The system of collection, compilation of educational statistics needs improvement for making available sufficient accurate and comprehensive information on various essential parameters in time. The problems faced in the availability of education statistics are as follows:-

1. Data-gaps – Non-availability of information on important items especially expenditure on education
2. Inconsistencies observed between data obtained from different sources.
3. Time delay in release of statistics
4. Weak Infrastructure for data collection

5. Lack of co-ordination between various agencies

1.   **Time Series data**

One of the main lacuna found in the existing education information system is non-availability of time series data on selected educational variables like Institutions, enrolment, Teachers, expenditure incurred, physical infrastructure etc., More over data is available only at the State/district level whereas such data is not available at the village/ward level. Time series data at the grass root level is imperative for proper planning and policy initiatives.

2.   **Rural-Urban distribution**

Time series data for rural and urban areas separately is not also available. Whatever data is available for rural areas is found to be limited and inadequate and basic information in respect of good number of variables is simply not available.

3.   **Administrative staff**

Data on administrative and non-teaching staff is not available to the expected level and as such the total requirement is difficult to determine.

4.   **Demography and literacy**

Though population figures are available from the Census publications, projections of population in the specific age group and single age at the State/district level is not available for future planning. Year-wise data on literacy is not also available. Decennial population Census and NSS surveys are the only source on Literacy data. There is considerable time delay in release of census data and NSS data in respect of UTs do not have data at the grass root level.

5.   **Teaching Personnel**

Presence of sufficient number of teachers and existence of healthy pupil teacher ratio is essential for educational development of a State. But to study the present situation, the details of number of teachers, sex, qualification, training, subject-wise is not available. Rural urban break-up is not also available . As such it is not possible to ascertain whether teachers are equally distributed in the rural and urban areas and the distribution of qualified teachers is even.

6.   **Financial Statistics**

Budgeted expenditure on education as aggregate of all levels of education is only available. The data needed for calculation of unit cost at different levels of education viz., Primary, Middle, Secondary/Higher Secondary and other high level is not readily available. The information on private expenditure is generally not available and is very difficult to determine. Many private schools particularly those which are unaided do not supply the information.

7.   **Other data gaps**

1. Average daily attendance in schools
2. Information on unrecognized institutions
3. Correspondence courses

4. Distance education
5. Teachers by age and qualification.
6. Non-formal education
7. Part – Time courses

In the present system of educational data collection , many agencies are responsible for collection of information and dissemination. There are inconsistencies in the data presented for the same parameters apart from duplication of efforts and resources in data collection. Some suggestions for improvement of educational information system are as follows:-

1. Collection of information on un-recognised schools/Institutions since education statistics will be incomplete without their inclusion

2. Quality of data on single year of age of students should be improved

3. Ways and means should be devised to capture data on expenditure on education apart from budget expenditure. Expenditure of the private institutions and personal expenditure incurred by parent for educational improvements of children should be collected.

4. Comprehensive data base on Teachers covering all parameters viz., age, sex and qualification subject-wise should be created.

5. Micro level data on school attendance should be collected

6. Time lag in release of all kinds of educational surveys should be reduced.

7. Comprehensive data base on physical infrastructure of schools viz., details of building, class rooms, play ground, laboratory, Library, drinking water facility, dining facility, sanitation facility should be build up at the micro level.

8. Data base on sports activities, details of students showing pro-efficiency in sports should also be build up at the micro level.

9. Infrastructure for collection of information on education system should be strengthened and it should be made compulsory to the Panchayats to maintain a village based information system on Education.

Education Statistics – Issues

Directorate of Economics & Statistics, Government of West Bengal

In West Bengal, five departments viz. i) Department of Higher Education, ii) Department of School Education, iii) Department of Technical Education & Training, iv) Department of Minorities Affairs & Madrasah Education and v) Department of Mass Education Extension are mainly responsible for generation of educational statistics of West Bengal. These five departments produce and provide their sectoral educational information of West Bengal. To capture the entire scenario of Education Statistics of Bengal, we need to compile the data received from different departments mentioned above and disseminate them accordingly. At present the data published through DISE (District Information on School Education) is considered as the major source of Education Statistics of West Bengal. It may be noteworthy to mention here that no centralized statistical system exists here to collect, compile and disseminate the educational information in public domain. Attempts have been made through SSSP to overcome the problem and streamline the system for online collection, validation and computation of necessary tables, which will enable us to develop from a demand driven system to automatic supply of information system. However, some facts and findings regarding Education Statistics of West Bengal are given in the following table :-

Important Indicators on Education

Sl. No.	Indicators		Year	India	West Bengal
1	Educational Expenditure as percentage of GDP	(in Per Cent)	2007-08	3.67	5.96
2	Literacy Rate (All)	(in Per Cent)	2001	64.84	68.64
3	Literacy Rate (M)	(in Per Cent)	2001	75.26	77.02
4	Literacy Rate (F)	(in Per Cent)	2001	53.67	59.61
5	Gross Enrolment at Primary level (M)	(in Per Cent)	2006-07	114.4	102.13
6	Gross Enrolment at Primary level (F)	(in Per Cent)	2006-07	107.8	103.43
7	Gross Enrolment at Middle level (M)	(in Per Cent)	2006-07	77.4	70.01
8	Gross Enrolment at Middle level (F)	(in Per Cent)	2006-07	69.5	71.93
9	Net Enrolment Ratio (Primary)	(in Per Cent)	2007-08	95.92	84.07
10	Net Enrolment Ratio (Middle)	(in Per Cent)	2007-08	52.55	51.42
11	Gross Drop-out Rate in Primary (M)	(in Per Cent)	2006-07	24.4	30.90
12	Gross Drop-out Rate in Primary (F)	(in Per Cent)	2006-07	26.6	29.36
13	Gross Drop-out Rate in Middle (M)	(in Per Cent)	2006-07	46.5	63.01
14	Gross Drop-out Rate in Middle (F)	(in Per Cent)	2006-07	45.3	59.54
15	Gross Drop-out Rate in Secondary (M)	(in Per Cent)	2006-07	58.6	70.98
16	Gross Drop-out Rate in Secondary (F)	(in Per Cent)	2006-07	61.5	73.55
17	Male – Female Literacy Rate Gap		2001	21.59	17.41
18	Estimated Literacy Rate (through NSSO Surveys, various rounds)		2004-05	64	68
19	Per cent Enrolment among School going SC population (Primary)		2007-08	20.08	26.84
20	Per cent Enrolment among School going ST population (Primary)		2007-08	11.60	6.73
21	Per cent Enrolment among School going SC population (Middle)		2007-08	19.17	26.73
22	Per cent Enrolment among School going ST population (Middle)		2007-08	9.23	5.12
23	Apparent Survival Rate up-to grade V		2007-08	72	74
24	Average Drop Out Rate at Primary Level		2007-08	9.4	9.4
25	Pupil – Teacher Ratio (Primary)		2006-07	44	46
26	Pupil – Teacher Ratio (Middle)		2006-07	34	50
27	Pupil – Teacher Ratio (Secondary)		2006-07	31	55
28	Number of Girls per 100 Boys Enrolled (Primary)		2006-07	88	99
29	Number of Girls per 100 Boys Enrolled (Middle)		2006-07	82	98
30	Number of Girls per 100 Boys Enrolled (Secondary)		2006-07	73	77

Source : Selected Education Statistics, 2006-07

Education statistics – Issues

Directorate of Economics & Statistics, Government of Bihar

Education infrastructure is given in the table below:

Education Infrastructure of Bihar.

S. No.	Category	No. of Institutions	No. of Enrolment (in lakhs)
1.	Primary Schools	40337	70.04
2.	Middle Schools	9922	36.56
3.	High Schools	2939	11.57
4.	Higher Secondary	125	1.33
5.	Degree College	266	NA

(a) Agency- The Directorate of Primary Education and the Directorate of Secondary Education, are responsible for collection and compilation of education statistics.

(b) Principal outputs Generated

* Number of educational institutions, primary, middle, middle, high Schools & Higher secondary.
* Number of enrolments in these institution
* Number of teachers
* Number of students from SC&ST categories
* Condition of school buildings(government only)
* Drop out rates

(c) Frequency
The frequency of data collection is as follows:
* Enrolment - Annual
* Dropout rates- Annual
* School teachers finances - Annual
* Annual India Education Survey - five yearly.
Statistical reporting under Sarva Siksha Abhiyan ia monthly.

(d) Methodology

Two types of information are collected annually. thefirst relates to numerical data on enrolment in different classes by gender, number of teachers, etc. This is collected so as to relate to 30 September of each year. The other part relates to school finances, such as pay and allowances, buildings, etc. The financial data are collected so as to relate to 31 March of the year.

The basic reporting unit is the school. The Block Education Officer (BEO) collects annual data from the primary and middle schools in the block, compiles it for the block, and transmits it to the DEO. High schools and the HSS remit their annual data directly to the DEO. At DEO level, compilation for the district wise compiled data is sent to the state head   quarter. Data covers only the government and the aided institution. No attempts are made to cover private unaided institutions, which are coming up in bigger cities.

The Statistical Cell maintains registers, where the data received from DEO is posted in various columns. This posting is checked, and district wise - State wise totals are worked out through calculators. These totals are again checked before release of data/

Educational Statistics are also collected separately under the Sarva Siksha Abhiyan under Sarva Siksha Abhiyan, infrastructure is provided to the Primary and Middle level educational institutions. For this, another department viz . "Bihar Education Project" has been created .

(e) Time lag

The time lag in data dissemination is 24 months.

(f) Publications & Latest issues

No publications are brought out by the education department. The compiled Statistics utilised for office use.

(g) Interaction with other agencies

For Statistical purposes, the department mostly interacts with its District Education Officers.

(h) Statistical returns

The following Statistical returns are used:

* ES-I(S) Numerical data (School education)
* ES-II(S) Financial data School education
* ES-III Examination results- School and Higher education
* ES-IV(S) School educational Statistics for SC/ST
* ES-I(C) Numerical data in respect of Higher education
* ES-II(C) Financial data for Higher education
* ES-IV(C) Numerical data for Higher education of SC/ST

(i) Manpower employed

Manpower deployed for collection of educational Statistics is given in the table below:

Manpower deployed for educational Statistics

S.No.	Category	No. Sanctioned	No. Working
1.	Deputy Director	1	1
2.	Assistant Director	2	Nil
3.	Statistical Officer	1	Nil
4.	Statistical Supervisor	15	15(10)
	(4 Statistical Supervisor out of 15 are not working in the Statistical cell, but are working in the accounts cell and one Statistical Supervisor is working in the Planning Cell)		
5.	District Statistical Supervisor	30	17

(j) IT Tools used

The entire compilation of Statistical data from block level, to District and state level is done manually. No IT facilities are provided.

(k) Data Flow

Data Flow is depicted in a diagram given on next page.

Data Flow

Primary Schools		Dept of Education
↓		↑ ↓
B.E.O →	D.E.O →	State Edn. St Cell → Min of HR, GOI ←
↑	↑	↓ ↑
Middle Schools	High Schools & H.S.S(10+2)	State DSE

1.   Quality

The Quality of education data, like enrolment, suffers on account of : (i) inadequate data checking and validation mechanism; (ii) manual compilation of data at Block and District levels; (iii) institutional records (such as admission registers, attendance registers and stock registers) are not properly maintained as the institutions , as a result of which correct information based on records cannot always be given ;(iv) the tendency to give distorted information when it suits the school heads and the administrators; and (v) exclusion of private unaided institutions.

Education Statistics – Issues

Directorate of Economics & Statistics, Government of Tamil Nadu

As far as Education Statistics is concerned, the entire work is carried out by the Education Department itself utilizing their staff. Though this subject is not coming under the purview of this Department of Economics and Statistics, proposals have been made to create a 'Statistical Cell' in Higher Education Department headed by a Deputy Director of Statistics with minimum supporting staff to be drawn from the Department of Economics and Statistics.

In the case of School Education, District Institute of Education and Training (DIET) eight Assistant Director of Statistics are sanctioned and in Sarva Shiksha Abhiyan (Education fro all movement), a Statistical officer posted in each district and one Assistant Director of Statistics is posted to co-ordinate statistics on School Education.

However, the required data for the preparation of Statistical Abstract are periodically obtained from the Education Department.

Education Statistics – Issues

Most of the statistical systems are designed to capture the interface between the development programmes and various aspects of the human well being and their quality of life. Education is fundamental to all-round human, material and spiritual development, in our national perception. As a result of Education Policy, there has been a considerable emphasis on expansion of educational facilities throughout the country. The concept of education as basic input for human resources development is the guiding principle for educational development. Accurate and timely educational information is important for monitoring development. Accurate and timely educational information is important for monitoring development. Quality, timely and transparent data as well as sound statistical analysis are important for decision making and formulation of policy.

Kerala has a unique place in the educational map of India. Educational initiatives taken by various agencies for the last century made Kerala the most literate state in India. Data on the various aspects of the educational sector and the relationship of the sector with the rest of the economy is essential for planning.

Sources of Educational Data

The major sources of educational data in Kerala are the following :

1. Directorate of Public Instructions

The Directorate of Public Instructions is the principal source of educational statistics. The statistics cell in the Directorate of Public Instructions is responsible for the collection, tabulation, analysis of educational statistics pertaining to institutions, teachers, enrolment, transition and achievement of students in the educational ladder. They collect the following information:

1. Updated list of the institution.
2. Type of institution
3. Type of management.
4. Enrolment by standard and sex wise
5. Enrolment by social category
6. Name of the course offered and
7. Number of teacher – sex-wise, section wise and category wise
8. Examination results of standard X and XII
9. Repeaters Statistics
10. Infrastructure facilities in schools
11. Dropout Rate

Data Collection Method

Educational data are regularly collected, from all institutions except unrecognized educational institutions, for a variety of administrative and planning purposes. Each recognized institution is required to maintain a number of registers which form the backbone of all types of educational statistics. The primary and the upper primary schools send their returns to the Assistant Educational Officers, from where they are forwarded to the Deputy Director of Education. The D.E.Os are responsible for collection of returns for high schools, teacher, training schools vocational and technical

schools and special schools. They forward the data to the Deputy Director the concerned district, from where the consolidated data is forwarded to the Directorate of Public Instructions.

2. Ministry of Human Resources & Development (MHRD)

Since educational planning and administration for elementary educational is a state subject, the primary responsibility for collection, tabulation, analysis of educational data therefore lies with education departments of the states/UTs. The state/UT level data is aggregated and reported the national level in the prescribed formats. Collection, compilation, analysis and publication of the national data is coordinated by the Department of Education, Ministry of HRD. Data on educational institutions, enrolment, teachers and expenditure are collected annually with 30th September as the record date. Financial data pertains to 31st March of every year MHRD published annually two reports. These are 'Selected Educational Statistics' (SES), which contains state wise and level wise enrolment and the number of teachers by stages. Besides some budgetary data on plan and non-plan expenditure of the states is also given in the report. The second publication entitled "Education in India' contains a more detailed and disaggregated data.

3. All India Educational Surveys

All India Educational Surveys conducted by National Council of Educational Research and Training (NCERT) with the assistance of state education departments is an additional source of data. Survey reports provide information on the geographical access to school education in different states. The availability of physical facilities like nature of school building, basic amenities in schools, incentive schemes, availability of educational inputs, teachers qualifications, status etc. are reported. Income and expenditure of different schools by management wise are also available. The data collection work of the eighth survey is completed.

4. The Population Census

The population census is the most comprehensive source of data on the educational attainment of the whole population such as rates of literacy and stocks of manpower according to levels of education etc. The unit is household and not the educational institution. The significance of the population data lies in its complete enumeration of the household members along with a large variety of data on social and economic variables. These data are available at various levels of aggregation/disaggregation. The census data reflects the stock of education manpower and cumulative outcome of the past educational efforts. The data on literacy is available by gender and caste. The census data can also be used to assess the social demand for elementary education. The population structure and its distribution in school going age group are most commonly used for estimating the demand for education.

The District Census Handbook is a source of district level data. It contains general information of the District, amenities available and analysis of population by various demographic characteristics. It provides details of panchayats by ward. District Census Handbooks also give information on section wise availabilities of the educational facilities.

5. National Sample Survey (NSS)

Various rounds of NSS collect information on education such as level of education, expenditure on education etc.65th round of NSS (2008-09) covered the details such as participation and expenditure in education.

Data Gaps

The database of education in Kerala is satisfactory in a relative sense. In Kerala, the educational statistics collected and published by the Directorate of Public Instruction is the most reliable source of data. But this information is not complete, as DPI collects information in the organized sector only. Over the years, a large segment of unorganized sector has emerged and encompasses all level of education. Studies reveal that at the primary state, the number of children attending unrecognized schools is large and varies between 5-30 percent. But no information is available regarding their number, status, scheme of syllabus, scheme of syllabus, enrolment of students, fee structure, number of teachers, their qualification and tenure.

The enrolment figures collected are inaccurate particularly at the level of primary education. Enrolment figures at this level are likely to be inflated. Since the security of employment of teachers at the school level depends on enrolment figures, there is likelihood of over reporting of enrolment for fear of retrenchment, transfers or getting included in the category of protected teachers posted to schools in faraway places.

It is important to understand the magnitude of the problem of out-of school children. While some data is available from various source including the national Sample Surveys, Census of India, Department of Education of the central and state government and the household surveys and other research studies conducted under the DPEP. The disaggregation of children never enrolled is not available. This is very important information for planning of intervention strategies.

Information on management of schools also is not complete. Private managements in the aided sector have different status like individual ownership, Trusts and Corporates. The community wise distribution of managements is not attempted to identify the major communities in the educational sector. Absence of this data leads to unequal distribution of schools among different communities.
No information is available on the professional qualification of a teacher. Data on academic qualifications and training of teachers, the number of teachers leaving the profession due to any reasons, the number of teachers staying outside the village where the school is located, the housing facilities available to teachers, the total beneficiaries, the average experience of teachers, the number of teachers teaching the subject of their specialization etc., are not available.

Educational statistics again do not furnish information on the physical facilities of a school. These include total land area, area of the school building, ownership of school premises, the adequacy of amenities in schools, expansion potential of a school etc. the income and expenditure statement of schools either in the aided or unaided category provide no accurate data.

A series limitation of the educational statistics is the absence of a co-ordinating agency to collect data from different types and stages of education, the paucity of arrangements to publish the data and to avoid delays in publishing.

The practical utility of whatever data is being collected and tabulated at national level is further reduced due to large time lags in its availability. It takes about 1-2 years to finalize the national data for all states.

Census being a highly time-bound operation, one cannot ensure the correctness of the response except on a few items. Again educational data collected, compiled and published do not touch upon a variety of aspects of school education like enrolment, expenditure, teacher strength, the number of aided and unaided schools etc.

Suggestions

Presently, the school statistics cover only the recognized educational institutions. These include both aide and unaided schools. However, in the recent years a large number of unrecognized primary and upper primary schools has been started in both rural as well as urban areas. Thus the actual enrolment for the children attending primary and upper primary is under-estimated. At present there are no studies which have estimated the magnitude of enrolment, type and quality of education in the unrecognized private schools. In order to realistically assess the magnitude of non-enrolled children, the enrolment in unrecognized private schools may be collected. Census/Sample studies can be conducted for the estimation of enrolment in private unrecognized schools. However, the apt methodology needs to be worked out.

The present system at state collects data only on the input and output of the school system. Data on the utilization and impact of facilities like blackboards, kits, books, teacher training, special incentives, average school attendance and working days is not being collected at the moment. Attempts may be made to collect such vital information along with the routine work.

The information may be collected at panchayat level. In addition to the above information on various items, which are presently not being collected and are necessary for micro level educational planning may also be collected and made available to planners and administrators. This proposed coverage would facilitate the requirements of planner not only working at the national and regional levels but also at the grass root level.

It has also emphasized the need for introducing ICT in data collection, handling, storage and sharing of key data among a variety of users. There is a need for capacity building among educational administrators so as to promote the use of educational data for planning, evaluation and decision making. It is essential that institutional level database must be generated and maintained at the grass root level for decentralised planning.

Higher Education (Collegiate Education)

Data on higher education is now limited to arts & science colleges coming under government and government aided institutions. This data is incomplete as technical colleges, medical colleges and paramedical colleges are not covered in the existing system. But the director or collegiate education is nominated as the nodal agency for higher education in the State. In the above circumstances the following strategy of data capture has to be attempted to ensure full coverage in data collection on higher education. Self financing institutions and private colleges have to be captured at University level through a effective arrangement to file a data sheet at the time of university registration and its periodical renewal. Private institutions (Engineering & Medical) have to be compelled to file the necessary data sheet while furnishing the seat sharing agreement with government every year. The data system existing in Directorate of Medical Education (DME) and Technical Education departments have to be integrated to build a good a data base on higher education.

It may be necessary to provide statistical personnel in the regional offices of collegiate education. Strengthening of statistics cell in the Directorate of Collegiate Education (DCE) also has to be addressed under SSSP. It may also be necessary to set up statistical cells in DME and DTE. The DES has to develop the data filling formats in consultation with DME and DTE. Computer facilities available in the DCE and other directorates may be made use of for the data transfer.

Education Statistics- Some Issues

Directorate of Economics & Statistics, Government of Assam

Education is the key input for Human development of individual as well as the society. Education is accepted as crucial one of the inputs for nation building, it is necessary to increase the level of literacy by providing elementary education to all and to build technical skills to cater the needs of the economy by providing technical education to the aspirants. Considering the importance of education statistics in the context socio-economic development, the Directorate of Economics and Statistics of Assam has continued its endeavour in collection and dissemination of education statistics to cater the need of the State Government in policy making for education sector. A brief idea of education statistics of Assam pertaining to State education sector is analysed in the following paragraph.

The Literacy rate of Assam has increased to 63.25 per cent, as per 2001 census, which was 52.89 per cent in 1991, census, but Assam's position is still behind the national average of 64.8 per cent. For achieving the objective Universal Elementary Education (UEE) Sarva Siksha Abhijan (SSA) is being pursued. To give more thrust on the issue, some other schemes under the State Plan, such as community ownership of elementary schools operationalized through formation of School Managing Committees and Mother Groups has been introduced, Free textbooks have been given to all the students, MIS known as District Information System on Education (DISE) has been operationalized, etc.

STATUS OF CHILD POPULATION, SCHOOL GOING AND
OUT OF SCHOOL CHILDREN IN ASSAM

Year	Child Population (5-14 years)	Children out of school	Children in school	% of children out of school
1	2	3	4	5
2004	5237963	424845	4813119	8.11
2005	5651040	640330	5001710	11.49
2006	5848094	429875	5418219	7.35
2007*	5437373	395161	5042212	7.27
2008*	5437756	339100	5098656	6.24

*Child population 6-14years

Source: District Information System on Education, Sarva Siksha Abhijan (SSA)

There has been an impressive growth of the elementary education system in Assam in the last few decades. This significant increase in the number of Primary schools and Upper Primary Schools, the number of teachers at Primary & Upper Primary and enrolments at both the levels of elementary education is reflected in the following.

**STATISTICS OF ELEMENTARY EDUCATION IN GOVT/
PROVINCIALISED SCHOOL IN THE STATE**

Year	Primary				Upper Primary			
	No. of School	Student	Teacher	PTR	No. of School	Student	Teacher	PTR
1	2	3	4	5	6	7	8	9
1951-52	11172	626282	16554	38	1012	107649	3714	32
2001-02	30068	3906000	83573	47	6730	2716000	58791	46
2008-09	30053	2367302	NA	NA	45107	4191501	NA	NA

PTR: Pupil Teacher Ratio.
Source: State Education Department, Assam.

Though the Pupil-Teacher ratio at Primary and Upper Primary school in the State has been found nearly satisfactory but statistics reveals that during 2008-09, as many as 6517 numbers of Primary school [i.e. around 20 percent of total Primary school] with more than 15 students are identified as single teacher school in the State.

PUPIL TEACHER RATIO, 2008-09			
Primary		Upper Primary	
Rural	27.8	Rural	22.4
Urban	18.1	Urban	19.2
Source: State Education Department.			

GROSS ENROLMENT RATIO (GER):

The Gross Enrolment Ratio of Primary School has been increased from 85 percent in 2003-04 to 100 percent in 2007-08 and is expected increase to 110 percent in 2015 by covering underage and overage of 6-14 years of age. In case of Upper Primary School the Gross Enrolment Ratio has increased to 97 percent in 2007-08 from 60 percent in 2003-04 and it is expected to increase to 105 percent in 2015. The GER is quite low as compared to the GER of country as a whole at the same standard of classes. However, these GER is only the reflection of State sector schools, not inclusive of private sector schools.

**GROSS ENROLMENT RATIO, NET ENROLMENT RATIO AND
DROPOUT RATIO IN PRIMARY AND UPPER PRIMARY LEVEL**

(Figure in percentage)

ITEM	2003-04	2008-09	2015
1	2	3	4
GER Primary	85	103	110
GER Upper Primary	60	93	105
NER Primary	73	94	100
NER Upper Primary	42	88	100
Dropout Primary	10	8.77	0
Dropout Upper Primary	NA	15.54	0

Source: Sarva Siksha Abhijan (SSA).

The State Govt has been increasing its fund/plan allocation for fulfilment of the aim   and objective of universalisation of elementary education to all. Allocation of plan and non plan fund for Elementary Education and utilisation there of presented in the following.

BUDGET PROVISION AND EXPENDITURE OF ELEMENTARY EDUCATION

(Rs. in lakh)

Year	Plan			Non Plan		
	Budget allocation	Amount received	Amount utilised	Budget allocation	Amount received	Amount utilised
1	2	3	4	5	6	7
2001-2002	20867.50	22553.66	22553.66	124104.61	124104.61	83530.99
2002-2003	22586.55	22417.71	22417.71	111977.79	111977.79	89867.30
2003-2004	13071.80	12587.93	12587.93	165949.42	165949.42	116175.42
2004-2005	11115.00	13484.95	13484.95	149479.98	149479.98	123587.80
2005-2006	21595.00	21595.00	21595.00	163991.31	163991.31	121633.76
2006-2007	4484.10	4044.09	4044.09	176192.86	176192.86	162067.47
2007-2008	4250.00	4151.48	4151.48	192271.77	189991.03	146820.23
2008-2009	9380.00	9380.00	9380.00*	190423.77	192271.77	192271.77*

*Anticipated, Source: Draft Annual Plan (2009-10), Volume –II, P& D Department.

MID DAY MEAL SCHEME:

The Government of India has launched a countrywide Programme of Nutritional support to Primary education commonly known as Mid-Day- Meal Scheme on 15th August, 1995 through the State Governments in order to give boost to universalization of Primary Education by increasing enrolment, attendance and retention in Primary Education and to improve the standard of education. In Assam this scheme has been started on January/ 2005.

The programme covered all Government and Provincialised Primary schools and Primary Section of MV School receiving financial assistance, EGS and AIE centres. During 2009-10, it has been proposed to cover all the aforementioned schools/centres as well as their enrolment from class I to V. The State Govt provides 10 percent of total fund as State share for cooking cost @ Rs. 0.20 per student per teaching day for implementation of cooked Mid-Day-Scheme For this scheme, the Government of India provides cost free food grains (rice) and the cost of cooking. The Government of India also reimburses the transport charges under the scheme.

Total requirement of cooking cost for the year 2009-10	Rs.14677.48 lakh
State share (10%)	Rs.146.75 lakh

Source: P&D Department, Dispur, Assam.

ADULT EDUCATION:

Adult Education programme was started on National Basis in the year 1978-79.Subsequently after constitution of National Literacy Mission (NLM) in 1988, the total literacy campaign came into being.

The tasks of implementation of adult literacy programmes have been entrusted upon Zila Saksharata Samitees (ZSS) of different districts of the State. The Programme is funded on sharing basis between the State Government and Government of India. The State Government bears one third costs as State share. So far 22 Districts have been covered under Total Literacy Campaign (TLC) and out of the total 22 Districts, 7 Districts have been covered under Post Literacy Programme (PLP). During the Annual Plan 2009-10, it is proposed to provide educational facility to 4000 illiterate child labour.

TECHNICAL EDUCATION:

There are three Engineering Colleges, ten Polytechnic Institutions and two junior technical Schools in the State sector. Besides these there exist two National levels Institutes viz. NIT at Silchar and IIT at Guwahati.

INTAKE CAPACITY OF THE TECHNICAL INSTITUTIONS

Institution	No. of Seats available			
	Graduate	Post Graduate	Diploma	Post Diploma
1.	2	3	4	5
2. Three (3) State Engineering Colleges	855	85	-	11
2. State Polytechnics	-	-	1445	180

Source: Directorate of Technical Education, Assam.

HIGHER EDUCATION:

Higher education created technical and skilled human resource as an important input for overall economic development. It covers education in agriculture, veterinary, medical, pharmaceutical, engineering, technical and vocational education, etc., along with general higher education.

The Higher Education Department consist of Universities, Colleges, Voluntary and Literacy Organisation and Sanskrit Education. There are 5 Universities and 375 Degree standard and above colleges, 209 Junior Colleges, 42 colleges for professional education and 9 institutions of National importance in the State. The State Government has passed the Private University Act, 2005 for establishment of Private Universities in the State.

MEDICAL EDUCATION (HEALTH):

The Directorate of Medical Education, Training and Research, Assam were separated from the Health & Family Welfare Department, Govt. of Assam in the year 1984. Since then the Directorate is functioning independently. The Directorate of Medical Education, Assam has a host of Institutions under its control all over the State viz., Assam Medical College & Hospital, Dibrugarh, Gauhati Medical College & Hospital, Guwahati, Silchar Medical College & Hospitals, Silchar, Government Ayurvedic College & Hospital, Guwahati, Regional Dental College, Guwahati, Regional College of Nursing, Guwahati, three Homoeopathic Medical Colleges located at Nagaon, Guwahati and Jorhat and three Pharmacy Institutes one each attached to AMC, Dibrugarh, GMC, Guwahati and SMC, Silchar and Medical Institute at Jorhat and three Institutes of Paramedical Sciences at Guwahati, Dibrugarh and Silchar. Besides these three new Medical college have been started functioning from the 2010 at Jorhat, Barpeta and Sonitpur.. Moreover, one separate University for medical education - the Srimanta Sankardeva University of Health Sciences, Assam at Guwahati has been set up.

In above discussion the data base of education statistics is only include State sector education institutions.

Education Statistics- Some issues:

Following are the important issues involved in education sector in Assam

1. Disparities in Data-

There is a vast disparities in data in respect of number of educational institutions functioning in the state sector and gross enrolment ratio there of due to lack of coordination in data management between Sarva Siksha Abhijan Mission and the State Education Department. As for example the data of Gross Enrolment Ratio furnished for class V by Sarva Siksha Abhijan and State Education Department is 599784 and 186694 respectively as on 30.09.09.

2. Data Gap-

It is very difficult to get information on education statistics from private sector educational institutions of the state. The educational statistics of these institution, such as number of educational institutions in the State, number of staff, and their scale of salary, facilities (e.g. class room facility, play ground facility, laboratory facility etc.) providing to the students of the school etc. are not readily available. Data pertaining to Gross Enrolment Ratio (GER) in these institutions as well as all classes/level in elementary, secondary and higher/ technical/professional education is also not available and thus barred analysis of the complete picture of student enrolment ratio as a whole in the State. Besides due to lack of intra coordination, in between State Education Department and education institutions under their control, the data management is very poor.

3. Drop out ratio:

Drop out ratio is one of the major indicators for judgement of education scenario of a society. There is a total crunch of data in respect of drop out ratio in the different level of education standard. Therefore, it is not possible to get the statistics of how many children are leaving school

when there is free and compulsory education facility for all children of 6 to 14 years, provided by the constitution of our country.

4. Legislation and School:

Many education institutions are growing without following the rules and regulation of the State Government. In this context it is to be mentioned that several schools for kids are running from individual household without following the guidelines of the Government rules and norms. Thus the statistics of such institutions is not possible to get.

Directorate of Economics & Statistics, Government of Orissa

Introduction

Education is important not only for the full development of one's personality, but also for the sustained growth of the nation. It is an instrument for development of the nation. An educated population leads to increased productivity which, in turn, can contribute effectively to output growth. Therefore collection and maintenance of education statistics assumes greater importance for better planning & policy decisions at the Govt level.

Demographic Profile of the State

Orissa comprises 4.77% of India's land mass with a population of 36.71 million (2001 Census), which accounts for 3.58% of the country's population. The decennial growth rate of population of Orissa during 1991-2001 was 16.25% as against 20.06% in the previous decade.

The number of females per one thousand males marginally increased from 971 in 1991 to 972 in 2001. The density of population which was 203 persons per sq. km. in 1991 increased to 236 per sq. km. in 2001.

Administrative Structure

Orissa's administrative structure is given in Table below

Administrative Units - Orissa	Administrative Unit	Number
1.	Districts	30
2.	Subdivisions	58
3.	Zilla Parishads	30
4.	Tehsils	316
5.	Gram Panchayats	6234
6.	Blocks	314
7.	Tribal Blocks	118
8.	Municipal Corporations	3
9.	Municipalities	32
10.	Notified Area Councils	68
11.	Villages (2001)	51349

Statistical System of the State

The system of official statistics in the State of Orissa is a decentralized one. The Directorate of Economics and Statistics (DES) is the apex organization for collection and dissemination of data relating

to the State while individual line departments are responsible for collection and release of data in their own specialized field/subject. The Key statistical activities undertaken by various agencies in the State are given below.

Key Statistical Activities in the State

SN	Activity	Agency/ Department Responsible
1	State Domestic product	DES
2	Capital formation	DES
3	District Domestic Product	DES
4	Contribution of Local Bodies	DES
5	Major fiscal data	Finance Deptt.
6	Annual Survey of Industries	DES
7	Index of Industrial Production	Under Compilation at DES
8	Crop area and production statistics	DES
9	Wholesale Price Index	Under Compilation at DES
10	Consumer Price Index	DES
11	Health, Morbidity, Mortality and family welfare statistics	Directorate of Health Services and Directorate of Family Welfare
	Birth and Death Registration Statistics	Directorate Health Services
12	Education and Literacy Statistics	
	Institutional (primary) /Enrolment/	Directorate of Elementary Education (School) /OPEPA
	Institutional (Secondary)/Enrolment	Directorate of Elementary Education (School)
	Institutional (Higher) /Enrolment	Directorate of Higher Education (School/ colleges)/ Council of Higher Education
	Literacy Rate	RGI
13	Labour and Employment Statistics	
	Labour Statistics	Directorate of Labour
	Employment Statistics[4]	Directorate of Employment
14.	Housing Statistics	HUD Deptt/DES
15	Electricity Production and Distribution Statistics	Energy Department
16	Environmental Statistics	
	Forestry Statistics	Forest Department
17	Water Supply and Sanitation Statistics	RD/HUD Deptt
18	Participation in National Sample Survey	DES
19	Transport Statistics/Road length/Accidents	Transport Deptt/State Transport Authority/Works Deptt/Police Deptt
20	Statistics for Local Area Planning	Rural Development Department /DES

Education in Orissa

Free and compulsory education to children in the age group of 6-14 years has been made a Fundamental Right under the 86th Constitutional Amendment. Both the State and Central Governments have framed policies, strategies and programmes for universal elementary education (UEE) as well as for higher-level studies and training.

In 1947–48, the entire state had only 6,814 primary schools with an enrolment of 2.55 lakhs, 286 Middle English (ME) schools with 32,000 enrolments and 106 secondary schools with 15,000 enrolments. The total number of colleges in Arts, Science, and Commerce was only 12 with an enrolment of 4104.

After Independence the educational policy of the Government of Orissa changed & Educational facilities expanded rapidly, with a remarkable rise in the enrolment of students.

In 2008-09, there were 50062 primary schools functioning with 45.57 lakh enrolment & 1.27 lakh teachers. The total Upper Primary Schools increased to 19057 with 55832 teachers & 21.28 lakh students. The number of High Schools, teachers & students were found 7500, 63000 & 14 lakh respectively .The position of General Colleges was also raised to 1176. Due to series of measures for improvement of technical skills taken by the Govt , the number of technical Institutions in the State were rapidly increased. There were 7 Govt Engineering Colleges, 88 Private Engineering Colleges, 12 Govt Engineering Schools, 206 ITI/TTC, 1 NIT, 3 Govt Medical Colleges, 3 Private Medical Colleges , 17 Pharmacy College , 47 Private MCA Colleges are functioning in the State.

Literacy level

According to census 2001, Orissa has a population of 3,67,06,920. The population in the age group of 0 to 6 is 51,80,551. The number of literates is 2,05,53,786. The literacy rate of persons of seven years age and above is 63.61%. Male literacy is 75.95% and female literacy is 50.97%. The literacy level in Orissa at 63.61% is comparable with all-India average of 65.38%. However, there are considerable regional disparities between areas, and communities.
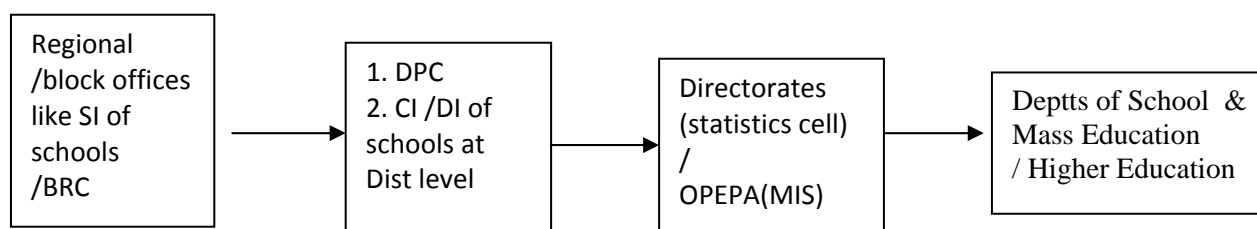
Structure of Education

The following structure of education is prevalent in the State

- Primary (I-VII)
- Secondary (VIII-X)
- Higher Education (10 +2)including vocational education,
Graduation (+3 Arts, Science, Commerce , Professional education like Medical, Engineering, , Management),
- Post Graduation

Education Statistics

The education statistics provides information on system of education, how it operates & illustrates wide range of educational outcomes & comparing. It includes personnel, enrolment, & expenditure etc which helps taking various policy decisions for further improvement.

Flow of Data

```
┌──────────────┐      ┌──────────────┐      ┌──────────────┐      ┌──────────────┐
│ Regional     │      │ 1. DPC       │      │ Directorates │      │ Deptts of    │
│ /block offices│ ──→ │ 2. CI /DI of │ ──→  │ (statistics  │ ──→  │ School &     │
│ like SI of   │      │ schools at   │      │ cell)        │      │ Mass Education│
│ schools      │      │ Dist level   │      │ /            │      │ / Higher     │
│ /BRC         │      │              │      │ OPEPA(MIS)   │      │ Education    │
└──────────────┘      └──────────────┘      └──────────────┘      └──────────────┘
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Primary Education

Primary education is the first stage of compulsory education. The Government have laid emphasis to Primary education up to the age of fourteen years. The State has made a huge progress in terms of increasing Primary education attendance rate and expanding literacy to approximately two thirds of the population. The State aims to provide primary schools within one kilometer and upper primary schools within three kilometers from habitations having a population of more than 300 and 500 respectively.

The Directorate of Elementary Education & OPEPA (Orissa Primary Education Programme Authority)are responsible for collection & compilation of statistics on Primary Education. The following statistics are collected & out puts are generated under Primary Education through DISE (MIS) for the State/Dist level.

Data on Primary Education Statistics	Outputs Generated
No of Schools for primary & upper primary level by type of management	1. % Govt & Private Schools by region
Enrolment by region, type of management, sex, social groups, by religion, medium of instruction	2. % Enrolment by type of management, sex, social groups, by region
No of teachers by sex, qualification, by social groups	3. Gross Enrolment Ratio/Net Enrolment Ratio by level of education
Educational Infrastructure	4. Drop-out rates by sex, social groups
Funding of School	5. Gender parity Index by Primary
Incentives by type(no of beneficiaries)	6. Transition rate
Examination Results	7. Pupil Teacher Ratio
No of children out of school by sex & religion/region	8. Student Class Room Ratio
	9. % schools with girls toilet, common toilet, drinking water facility, blackboard, single teacher,
	10. % teachers by sex & social groups
	11. % passed & passed with >60%
	12. % school received grant

Secondary education

Secondary education is the stage of education following primary school. Generally all high schools are covered under secondary education of the state. The Directorate of Elementary Education is responsible for collection of education statistics for state & district level on Secondary education.

Data on Secondary Education Statistics	Outputs Generated
No of Schools by type of management	1. % schools by type of management.
Enrolment by Sex & Social groups	2. % of enrolment by sex , social groups
No of Teachers by sex, qualification	3. % teachers by sex & qualification
Examination Results	4. Pupil-Teacher Ratio

Higher Education

The Council of Higher Secondary Education regulates the higher secondary education in the State. The Deptt of Higher Education of the State looks after education at university, post graduate, graduate & higher secondary levels. It also over sees vocational education, promotes professional courses & provides grants to institutes for development studies.

The following statistics relating to higher education are being collected.

Data on Higher Education Statistics	Outputs Generated
No of Colleges by type of management (general , engineering , medical & management)	1. % of institutions by type, region, management
	2. % of enrolment by sex & social groups
No of Faculties by institutions	3. % passed out of total appeared by subjects
Enrolment by sex & social groups	4. Pupil –Teacher Ratio at Colleges
Types of courses at colleges	
Funding wise college details	
Intake & out-turn capacity institutions	
Examination results by subjects	

Maintenance of Education Statistics by the DES

The DES also collects & compiles education statistics on Primary, Secondary & Higher Secondary/ Colleges from secondary sources on the following indicators at a regular intervals through the District Statistical Offices.

Data on Education Statistics collected by DES	Out-puts generated	Publications
No of Schools by type, Management	1. Dist/Block-wise no & % of schools by school type	1.Dist Statistical Hand Book
Enrolment by sex, social groups	2. Dist/Block wise no & % teachers by sex & qualification by school type	2.Statistical Abstract of Orissa
No of teachers by institution & sex		
No of colleges by type & management	3. Dist/Block wise enrolment by school type ,sex & social groups.	3. Districts At A Glance
In-take capacity of institutions by subjects	4. % no of higher secondary schools / colleges (general/technical/management) by type.	4. Fact Book of Manpower
Examination results	5.Enrolment in colleges by sex & social groups	5. Economic Survey Report
	6. % passed out of total appeared in schools/ colleges.	
	7. Pupil-Teacher Ratio at Schools	

Data gaps in Education Statistics & Challenges Ahead

Producing of quality data covering various aspects improves efficiency of the organization. Although a large volume of education data of the state are collected & compiled , there still exists data gaps in different levels of education. The data gaps in secondary & higher levels of education are found acute compared to primary level in the State. The reasons may be attributed to inaccessibility, education not properly evaluated or studied , inadequate manpower & IT tools.

The following data gaps & out-puts to be generated in education systems in the state are identified .

Data Gaps	Out-puts to be generated
Literacy rates for State/Dist/block for intermittent year	1.Availability of secondary schools /colleges by lower administrative levels will indicate access of education
Private educational Institutions/Un-recognized institutions (secondary/Higher level)	2. Availability of Schools per Sqr KM
Attainment levels	3. Regions with Teacher-Pupil Ratio greater than State average will show quality of education
Drop outs at various levels of education by sex/social groups	4.Region wise enrolment with block /GP comparision will indicate challenge of participation
Investment in education(income –expenditure) of schools/colleges by type	5.Dists/Blocks having GER less than State Average .
Students according to economic status by regions/lower administrative levels	6. Literacy rate comparision among blocks/regions/GPs
Habitation wise distance of schools by type	7.Disparity in GER/Gender education
Educational Infrastructures at Secondary /Higher/College levels	8.% BPL & APL students by Schools & region comparision
Educational Institutions with rural /urban / regional break up	9.Educational Development Index by

Data on age of students, expenditure on education incurred by parents	Dist/Block/GPs
Teacher back ground details, experience	10.Drop-out Rates at all levels
Use of IT tools by schools/Colleges	11. Region wise comparision of quality teachers
	12. Expenditures of educational institutions related to the gross domestic product
	13. Out come analysis (placements by type ,institutions, social groups, religion).
	14. Private / Govt Schools results comparision
	15. Ratio of Primary to UP, UP to Secondary, Secondary to colleges for accommodation of children
	16. Attainment level analysis
	17. Projections in expenditure, enrolment
	18. Development of education data base
	19.Peridic publications

In order to address above data gap problems , the following suggestions are given.

1. Computerization of education information at all levels
2. Strengthening of Physical Infrastructure
3. Creation of Statistics Cell in the Education Deptt to be headed by the Professional Statistician
4. Provision of adequate statistical manpower at all levels with IT tools
5. The Directorate of Economics & Statistics as a nodal agency to coordinate data collection , compilation , validation & dissemination activities within a specified time frame
6. Provision of incentives & recognition for timely supply of accurate data
7. Penalties may be imposed for non-response / non compliance i.e., like non release of funds / grants / cancelation of recognition on non receipt of statistical returns on time.
8. Periodical study /sample survey may conducted in the field of education
9. Up gradation of knowledge & skill of manpower through proper training
10. Regular publications on education statistics

The proposed flow of education data for better compilation & management   is outlined below
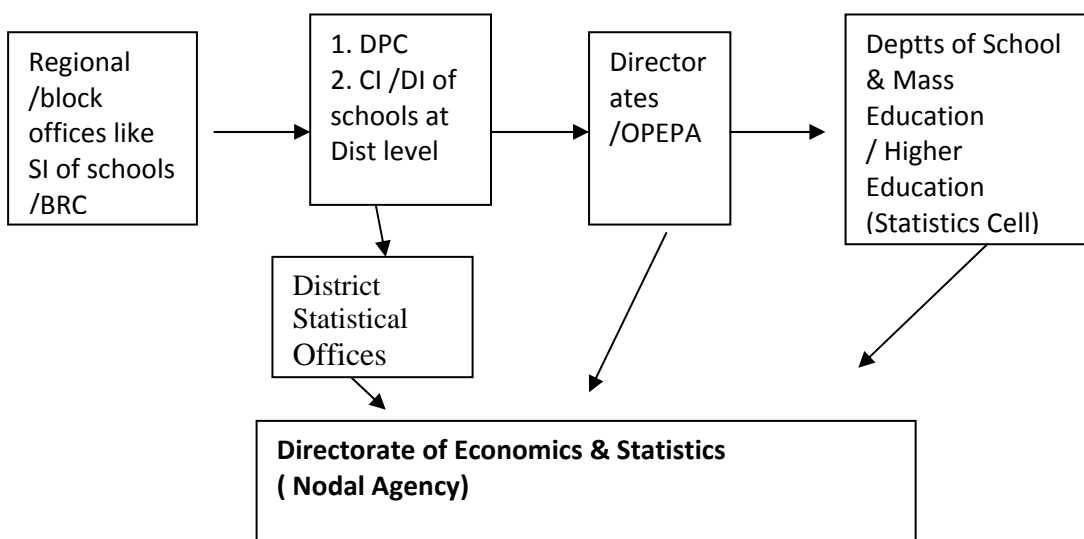
Conclusion

For successful implementation of any programme, effective monitoring, coupled with efficient information system, is essential. Education is the key to human development . As such information on education   becomes essential for formulating development policies. Various statistics on school education collected through agencies of State Govt are generated by Ministry of Human Resource Development, New-Delhi. But the deficiencies of data gaps in secondary & higher education, quality , reliability & time lag in collection of data are noticed. The system requires improvement for better educational planning to improve literacy, provide quality education, make education accessible to all segments of the society.

Education Statistics – Issues

Directorate of Economics & Statistics, Government of Uttarakhand

In Uttarakhand different educational statistics programmes are being run which are as follows:

- DISE (District Information System in Education):- With the help of NUEPA, New Delhi, DISE is being used for *offline entry* of different data of Elementary Education (class -1 to class-8) based on needs of the Project Sarva Shiksha Abhiyan (SSA).

- SEMIS (School Education Management Information System):- With the help of NUEPA, New Delhi, SEMIS is being used for *online entry* of different data of Secondary Education (class-9 to class-12) based on needs of the Project Rastriya Madhyamic Shiksha Abhiyan (RAMSA).

- All India School Education Survey:- In every 7 years, NCERT, New Delhi conducts All India School Education Survey, in which data entry (regarding different educational aspects/ parameters) is being done with the help of NIC.

Issues/ obstacles in maintaining Educational Statistics:

Following are the major issues regarding Education Statistics in Uttarakhand:-

- Department of Education is the largest department of Uttarakhand Government, in which data is collected from remote schools for different prospects. But in proportionate to volume of data collection in the state, numbers of working personnel in Statistical Section of the Department are insufficient and there is no full time Statistical Section at different levels i.e. Cluster level, Block level and District level.

- In addition, there is scarcity of sufficient related infrastructural facilities, lack of training facilities for the employees performing statistical duties and lack of online Statistical Software which is based on all those data related needs which are required by GoI and GoUK from time to time.

Education Statistics in Uttarakhand:
A Look at the Missing Links and Disconnects

PANKAJ NAITHANI1
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Directorate of Economics and Statistics, Government of Uttarakhand

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PHASES OF INDIAN EDUCATION SYSTEM

Education is one of the major components that fetch socio-economic opportunities to people. Acquiring minimum literacy through basic education is needed to get placed-well in the society that is networked with written and print media. However, existence and growth of a literate society is possible only through a well-established educational system. And, it is an essence for such a system to provide equal opportunities to various sections of the society. Societies and nations across the globe have made, apart from taking care of health of people, considerable expenditure in educating them, making them literate. There are number of stakeholders or partners playing in the field. These include, government, individuals, NGOs, missionaries etc.

Indian education system had passed different phases. In ancient India children were sent or formally admitted in the *Ashram* to receive education. The education system at that time was having three processes – *Sravana (Hearing), Manana (Thinking)* and *Nidhyasana (Practicing)* – and Sanskrit was the medium of teaching. But, due to number of factors ancient educational system deteriorated during the medieval period. Then, Wood's Dispatch of 1854 during the British regime changed the scenario of the country's education system. English became language for higher education and British started granting funds to indigenous schools as help to make them government-aided.

The present education system, which has by-and-large continued from the British period, has been strengthened to reduce inequalities of caste, class and gender. After independence, through the Directive Principles of the State Policy of the Constitution of India the basic education has been made obligatory for up to the age of 14 years. However, the targets set out for time limits of 10 years under the Directive Principles could not be achieved during the 1960s and 1970s. It is due to these observations that National Policy on Education (NEP) has been announced in 1986, and modified in 1992. A number of schemes have been introduced in India in order to ensure country's active participation in the global movement on 'Education for All'. Some of the major initiatives are: National Literacy Mission (1988), Scheme for Teacher Education (1987-88), Operation Blackboard (1987-88), Mahila Samakhya Programme (1989), District Primary Education Programme (1994), Mid-day Meal Scheme (1995), Sarva Sikhsa Abhiyan (2001-02), and Kasturba Gandhi Balika Vidhayalaya (2004). Finally, 'Right of the Children to Free and Compulsory Education Act' has been enacted in 2009.

In order to frame, implement, monitor and evaluate impact of these schemes, various conventional statistics are being collected from time-to-time, either through national or state-level initiatives. Important statistical indicators and collection procedures in respect of school education in Uttarakhand are focal in this paper and discussed in the subsequent sections.

SCHOOL EDUCATION STATISTICS OF UTTARAKHAND

The Department of School (Primary and Secondary) Education is one of the largest departments of the State of Uttarakhand. It is comprised of six wings – The Directorate, SCERT, SIEMAT, Uttarakhand Examination Board, SSA Project and State Literacy Mission. Though some of the project-specific statistical requirements are being captured by the project implementing authorities, the conventional statistics is being collected and/ or collated by the Directorate. The major indicators available are:

Table-1:
Conventional Educational Indicators Available

Indicator	Data Types	Source
Number of Literates and Literacy Rate	Gender-wise, Caste-wise and Rural-Urban Distribution	Census, 2001
Number of Schools	School Type-wise, Management-wise and Rural-Urban Distribution	District Information System in Education (DISE) and School Education Management Information System (SEMIS)
Student's Enrolment Statistics	Class-wise, Gender-wise, Caste-wise and Rural-Urban Distribution	DISE and SEMIS
Drop-out Statistics	Class-wise, Gender-wise and Caste-wise	DISE and SEMIS
Number of Teachers	School Type-wise and Gender-wise	DISE and SEMIS
Pupil-Teacher Ratio	School Type-wise	DISE and SEMIS

The status of un-derived educational indicators of Uttarakhand for the year 2008-09 is as follows:

Table-2:
Educational Indicators (Un-derived):2008-09

Indicator	Statistics
Number of Literates, 2001 (Total/Male/Female) in Lakh	51/ 30/ 21
Number of Schools	21978
(a) Secondary and Higher Secondary	2326
(b) Middle School	4296
(c) Primary School	15356
Number of Students	2424307
(a) Secondary and Higher Secondary	732864

(b) Middle School	488127
(c) Primary School	1203316
Number of Students	85099
(a) Secondary and Higher Secondary	31926
(b) Middle School	15300
(c) Primary School	37873

Source: *Uttarakhand- At A Glance (2009-10), Directorate of Economics & Statistics, GoUK*

Whereas DISE and SEMIS respectively capture the data needed for Sarva Sikhsa Abhiyan (SSA) and *Rastriya Madhayamik Shiksha Abhiyan* (RAMSA), the other major source of educational statistics is All-India School Survey[2], which is conducted in every seventh year. It provides an opportunity to capture detailed data on number of qualitative measures, such as the accessibility, infrastructural facilities etc. Let us now peer into some of the important educational statistics of Uttarakhand (2007-08) vis-à-vis All-India figures:

Table-3:
Important Educational Indicators

Indicator	*Uttarakhand*	*All-India*
Literacy Rate, 2001 (Total/ Male/ Female)	72/ 84/ 60	65/ 75/ 54
GER, I-VIII: 6-13 Years (Total/ Male/ Female)	109/ 106/ 113	100/ 102/ 98
GER, IX-XII: 14-17 Years (Total/ Male/ Female)	65/ 70/ 59	45/ 49/ 42
Gender Parity Index (I-VIII) and (IX-XII)	1.07 and 0.84	0.96 and 0.85
Drop Out Rate, I-V (Total/ Male/ Female)	20/ 22/ 18	25/ 26/ 24
Pupil-Teacher Ratio & Percentage of Trained Teachers		
(d) Higher Secondary	25 100%	37 93%
(e) High School	23 100%	33 89%
(f) Middle School	16 100%	35 91%
(g) Primary School	25 100%	47 90%
Per Capita Expenditure on Education (Rs.)	14239	1430

Source: *Statistics of School Education (2007-08), Ministry of Human Resource, Govt. of India*

The above indicators are enough to show that performance of the state's educational system is quite satisfactory. However, the mechanism of data collection and management of statistics by the department needs to be strengthened in respect of the observations given in the following section.

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2 Latest one conduct in 2003.

IDENTIFICATION OF MISSING LINKS AND DISCONNECTS

A reliable and accurate statistics is an essential pillar of development planning in any state. It helps in many ways, such as:

- Reaching to the needy and deprived,
- Ensuring quality in the delivery of services,
- Keeping pace with other players/ states, and
- Managing political pressures within

Thus, it becomes necessary for each of the department to collect, collate and manage its statistics properly. However, some of the important observations mentioned here reflect that the system of educational statistics in Uttarakhand needs critical improvement:

- The school system of Uttarakhand is primarily comprised of primary (I-V), senior-primary/ middle (VI-VIII), secondary (IX-X) and higher secondary (XI-XII) school. There is procedure of upgrading schools from one category to the other. However, there have been instances when data related to number of schools in each category could not be maintained properly by the department after completion of the upgrading process.
- It has been observed that fresh appointments and transfers are done simultaneously. Since data on school-wise vacant posts is not maintained properly, it seldom becomes a curse for fresh appointees.
- The GER for I-VIII is high in Uttarakhand. This needs to be examined appropriately as possibilities of over-reporting by the teachers to avoid transfers can not be denied along with the political pressure against the closure of the school.
- Data collected on condition of school buildings (Seventh All-India Education Survey) reflect that about 5% schools in Uttarakhand are being run on *Kuccha* Structure or in Open Space. The current status of this indicator is missing or not appropriate as there have been instances of natural disaster and abandoning.
- Percentage of Trained Teachers is being reported as 100%. It is doubtful whether it is a reality or a myth as there are number of Para Teachers (*Siksha Mitra*) appointed in government-owned schools. Further, it is not clear whether or not data from private schools is also collected and collated in this regard.
- There are number of scholarship schemes being run by the Social Welfare Department for SC, ST, Minority and OBC students. Though school-wise distribution of SC and ST students is available, it is missing for Minority and OBC students. Moreover, there are Ashram-Type Schools for STs and Madarsas as well. Various conventional statistics related to these schools is supposedly not collected and colleted by the Education Department.
- Historically, various reputed and renowned schools are located in the state, especially in Dehradun, Mussoorie and Nainital. And, with time many more have come up in Dehradun. Uttarakhand has, therefore, developed as a hub for schooling in India. There are number of private schools affiliated with the Central Board of Secondary Education (CBSE), the Council of Indian School Certificate Examination (CISCE) and participating in the International Baccalaureate (IB) Programme. The conventional statistics related to these schools is also not being updated by the Education Department.

- Gender Parity Index (IX-XII) reflects that accessibility of secondary and higher secondary schools is one of the major concerns for female students. There is lack of information about the specific need of secondary schools or construction of hostels for female students.
- The estimate of Per Capita Expenditure on Education for Uttarakhand (Rs. 14239) as stated above is much higher compared to otherwise minimum (Rs. 183) for Uttar Pradesh and maximum (Rs. 4352) for Sikkim. This needs reconciliation and thorough examination, and also critical review of expenditure under various state-owned schemes.

And, words highlighting weaknesses of the statistical system of education department are imperative. Some of the weaknesses are:

- The data on various quantitative and qualitative measures of schools is flowing basically through DISE and SEMIS. Number of statistical employees at different levels, such as cluster, block and district, of data collection and flow are insufficient to handle the size of data they are presently dealing with.
- The infrastructural facilities, basically ICT, at various levels of data flow are critically scarce. The need for on-line software is being felt.
- The staff engaged (teaching, non-teaching and statistical) in the collection and flow of data needs to be given inputs on the following:
    - Definition of indicators and sources of data for each indicator that is to be compiled
    - Comparison between the various national and international standards related to educational indicators
    - Details of the state-owned schemes and centrally-sponsored programmes and hence data requirements of the centre and the state
    - Statistical procedures and methods of data collection including examination of data for its reliability and accuracy
    - Usage of software and managing it for requirements at various levels (district, state and centre)
    - Methods of data transfer, its storage and management

Note: **Views expressed in this paper are that of the author. These do not necessarily reflect the outlook of his department.**

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4. Statistical Abstract – India (2005 & 2006), Central Statistical Organisation, Ministry of Statistics and Programme Implementation, Government of India, New Delhi
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Status paper on Education Statistics

Directorate of Economic and Statistics, Government of Uttar Pradesh

Education is one of the largest social development programme. It is a unique development sector with the highest penetration in geographical space than any other organised activity under the management and control of government. It employs largest number of educated manpower spread all across the country. Management and monitoring of the progress of social development activities require data on key variables not only relating to particular sector and its sub sectors but from variety of sources allied to the sub sector. Moreover there has to be regular flow and sharing of data across its various users.

In U.P. there are different agencies managing different level of educational activities. They all generate educational statistics for their respective field. The main sources for educational Statistics in U.P. are:-

1.   Census of India.
2.   Directorate of Basic, Secondary & Technical education U.P.
3.   State Institute of educational management & training (SIEMAT)
4.   National Council for educational research & training (NCERT)
5.   Govt. of India - Ministry of Human Resource Development - Statistics Division, New Delhi (selected educational statistics)
6.   Directorate of Technical Education
7.   University Grant Commission
8.   Directorate of Higher Education
9.   Department of Labour and Employment
10.   The Indian Council of Agriculture Research
11.   Department of Medical Education
12.   Medical Council of India
13.   NIEPA
14.   NSSO
15.   Institute of Applied Manpower Research
16.   Indian Council for Medical Research
17.   DISE

In addition to above sources many other departments and agencies of GOI and State department collect useful data on education related parameters of the household. Most of the educational data is collected on the annual basis with 30th September as record date. Educational data are regularly collected from all recognised educational institutions for a variety of administrative and planning purpose. The primary data collected from recognised institutions are compiled to produce block level, district level and state level reports.

Status of Education Statistics in Uttar Pradesh

At present reports on following indicators are available for U.P. These reports are brought out by various departments and institutions of Central and State Government. A brief summary of them are given below .

Sl.No.	Indicator	Year	Value
1.	Literate Population	2001	75719284
2.	Literacy Rate	2001	56.3 %
3.	No. of Universities	2008-09	35
4.	No. of Degree colleges	2008-09	1834
5.	No. of Higher Secondary Schools	2008-09	16331
6.	No. of Upper Primary School	2008-09	51491
7.	No. of Primary School	2008-09	144058
8.	No. of Teachers Training College	2008-09	121
9.	No. of Teachers Training School	2008-09	64
10.	No. of Degree colleges (exclusively for Girls)	2008-09	337
11.	No. of Higher Secondary Schools (exclusively for Girls)	2008-09	3346
12.	No. of Upper Primary School (exclusively for Girls)	2008-09	5780
13.	No. of Teachers in Primary school	2008-09	330660
14.	No. of Teachers in Upper Primary school	2008-09	136191
15.	No. of Teachers in Higher Secondary school	2008-09	211887
16.	No. of Teachers in Degree College	2008-09	29374
17.	No. of Students in Primary school	2008-09	27044512
18.	No. of Students in Upper Primary school	2008-09	9712196
19.	No. of Students in Higher Secondary school	2008-09	10230116
20.	No. of Students in Degree College	2008-09	2474451
21.	Pupil- Teacher ratio in Primary School	2008-09	82
22.	Pupil- Teacher ratio in Upper Primary School	2008-09	71
23.	Pupil- Teacher ratio in Higher Secondary School	2008-09	48
24.	Pupil- Teacher ratio in Degree Colleges	2008-09	84
25.	Density of Primary School per 10 sq km.	2008-09	5.78
26.	Density of Upper Primary School per 10 sq km.	2008-09	2.40
27.	Average Number of Instructional Days (In Previous Academic Year)	2008-09	187
28.	Average Number of Classrooms in all schools	2008-09	4.4
29.	Average Student-Classroom Ratio (SCR)	2008-09	39
30.	% Single-Teacher Schools	2008-09	7.49
31.	% Schools having Drinking Water Facility	2008-09	97.58
32.	% Schools having Common Toilet	2008-09	92.65
33.	Apparent Survival Rate: Grade V	2008-09	81
34.	Transition Rate from Primary to Upper Primary Level	2007-08	63.59
35.	Average Repetition Rate (Primary Classess)	2007-08	1.13
36.	Average Drop-out Rate at Primary Level	2007-08	12.65

Education statistics on elementary education are available in large number. In fact the report" Elementary education in India" brought out by "National university of Educational Planning and

Administration" list state wise value of many indicators of Elementary Education. However situation is not so rosy for other level of Educations. Statistics for Secondary Education, Higher Education, are not easily available and whatever data is available it is incomplete. Data are also not easily available from Universities. Data from unaided degree college are difficult to obtain.

Limitations and inadequacies of the data collected

The educational statistics in U.P. suffer from many limitations such as redundancy of data, confusion regarding concepts and definitions, inaccuracies in reporting and analysis and irrelevance of data as the emphasis is on ease of collection rather than on the need of users.

The existing manual system of data collection, analysis and presentation is higher labour intensive. All operations are carried out manually with limited staff who are often assigned duties other than dealing with educational statistics.

The educational institutions in U.P. fall under the management of various departments. The Primary school are run by department of Primary education, department of social welfare and the agencies of Central government like KVS and Navodya Vidyalaya. The data collection is the responsibility of department of primary education who cannot exercise any control on schools run by other agencies/ department. This results in considerable delay in obtaining data from schools run by other agencies/department. The non availability of data from one institution delays the aggregation of block wise data which in turn causes a cascading effect on higher level of aggregation. There is no legal basis for coordination of educational statistics. Further there is no single agency in the State which act as nodal agency for collection of Educational Statistics. DES can act as nodal agency only it is given legal mandate to coordinate activities of educational statistics.

The practical utility of whatever data is being collected, collated and tabulated is further reduced due to large time lags in its availability. Lack of adequate financial resources and   limited availability of professional manpower acts as hindrance to large scale computerization of education department.

The reliability and quality of educational data is always open to question . This is more serious for enrollment data. The quality of data is affected due to (i) the practice of over reporting enrollment to show that targets have been fulfilled and also to justify additional requirements for teachers (ii)the data enumeration and tabulation error due to manual handling of huge quantities of data (iii) little use of data in planning , management or day to day administration (iv) low priority for systemization of educational statistics and (iv) no cross checking and validation of data.

Step needed to revatialize Educational Statistics

- Development of a set of simple and easily measurable set of performance indicators at the school , district and state level.
- Development a methodology and framework for estimation of enrollment in private unaided school.
- Stregthening of data collection machinery and making them more accountable.
- Development of multi pronged strategy for capacity building of the educational administrator at various level in the use of computers and computer based information system.
- Exploring of alternative source of data generated by NCERT , population census, NSS surveys etc.
- Establishment of Statistical cells in different departments at field and state level. These cells should be manned by statistical persons and at headquarter level, to coordinate and monitor

activities of these cells in effective manner, a senior level statistical officer, preferably from state statistical service should be appointed.

- Utilization of modern methodologies of data collection to generate estimate of enrollment and other performance indicators by collecting data on sample basis.
- Provision of post enumeration checks by independent agencies.

Education Statistics – Some Issues

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The role of education in facilitating social and economic progress is well recognized. In view of the important role of education in the national development and in building up a truly democratic society, the Government considered it necessary to evaluate and examine the entire education sector, in order to realize a well balanced, integrated and adequate system of national education capable of making a powerful contribution towards all aspects of human life. Even in the XIth FYP highest priority was given to education in order to achieve rapid & inclusive growth. The 86[th] constitutional amendment has also made elementary education a fundamental right for the children between the age group 6 to 14.

Issues

To monitor and evaluate the status of education, accurate, timely & reliable statistical information on all facets of education and the availability of infrastructure is a basic necessity. Some of the issues regarding the educational statistics are discussed below.

➢ The Sarva Shiksha Abhiyan (SSA), implemented by Govt. of India to provide useful and relevant elementary education for all children in the age group 6 to 14 is being implemented effectively in all the States. Elementary education considered in SSA comprises of Std. I to VIII, whereas in Maharashtra, State Govt. considers elementary education from Std. I to Std. VII. To have compatibility of data, the level of Standard should be same.

➢ National policy developed by Govt. of India insists education for all. However, different State as well as Central Board (CBSE, ICSE etc.) exists for elementary and secondary education,. The curriculums as well as the grading pattern of these boards are not uniform. To compare the statistics of different States curriculum and the grading / marking pattern should be uniform.

➢ The State as well as Central Government implements various schemes for better education viz. SSA, Mid Day Meal. The enrolment data from SSA and Mid Day Meal scheme is given below.

Year	Enrolment (in lakh) according to	
	Sarva Shiksha Abhiyan	Mid Day Meal
2008-09	157.56	131.57
2009-10	159.22	139.53
2010-11	159.27	135.55

Though the coverage of SSA and Mid Day Meal scheme is same, the statistics such as enrolment data from SSA and Mid Day Meal scheme are different so, there should be proper coordination between different implementing agencies.

- There are many unaided institutions providing school, higher, & technical education. But statistics of these institutions is not available. Statistics of aided as well as unaided institutions should be available with single agency. Therefore the Central Government should take initiative to develop MIS system to collect education statistics from all educational institutions. The access to these data and reports should be made available to all states DES.

- In Maharashtra, the publication 'Education at a glance' of school education department is not published on regular basis (latest publication is available for the year 2003) because of lack of proper computerized system. However education dept. provides estimated data.

- Despite all the efforts to develop the education system in India, access, equity and quality of education in India continue to haunt the policy makers till date. This is mainly due to the widespread poverty and various prejudices. Also the inability to check the drop out rates among the marginalized sections of the population is another cause of worry. Regular surveys should be taken to monitor the drop out and timely corrective measures must be taken. An effective way of doing this can be giving a unique identity number to each school going child, which will remain same through out his education. Data should be updated every year, so that drop out can be easily identified.

- Statistics pertaining to infrastructure, facilities available in all institutions is not available. Along with education statistics viz. enrolment, dropout, Statistics pertaining to infrastructure, facilities available & availed by students be incorporated in MIS system.

- Mechanism should be made to collect information about teaching aids used. Regular training should be given to the teachers to make them aware of new techniques, new aids of teaching etc.

- Census data provides the information about literacy of the population. According to the 2001 census, the total literacy rate in India is 65.38%. The female literacy rate is only 54.16%. Also quinquinnial rounds of NSS surveys provide data on literacy depending upon sample observations. However to improve the education system in educationally backward areas, State government should regularly conduct surveys to check the literacy rate and drop out rate in such areas. Apart from this special surveys regarding quality education should be undertaken on regular basis through independent agencies.

Way Ahead

- MIS system covering all aspects of education system be developed & MIS should be GIS based system so that all issues can be monitored effectively.

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