

# KEY FEATURES OF DISTRICT INFORMATION SYSTEM FOR EDUCATION AND MAJOR FINDINGS OF EDUCATIONAL INDICATORS BASED ON ANALYSIS

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#### Abstract

The State of Maharashtra collects and provides consistent District Information System for Education (DISE) data in timely manner over the years. The DISE data for the every year has been submitted to National level. This section focuses on the significant indicators of elementary education. These include GER, NER, Gross Completion Ratio, Dropout, retention and transition rates, Gender Gap in Enrolment etc. The data presented in the tables below is based on the DISE provided by State team. The State-wise EDI has also been calculated at the National level separately for Primary and Upper primary level. The district wise EDI has also been calculated by the states. The EDI has been calculated on four components (Access, Infrastructure, Teachers and Outcomes).

#### **Keywords:**

DISE- District Information System for Education, Educational Indicators, GER- Gross Completion Ratio, NER- Net Enrolment Ratio, PTR-Pupil Teacher Ratio, Dropout, retention and transition rates, Gender Gap, Enrolment, Ratios, EDI-Educational Development Index, RTE- Right to Education.

#### INTRODUCTION

The State has been of providing consistent DISE data in timely manner over the years. This data is being used for planning and other educational purposes. National University of Planning and Administration analyze data of whole country and based on the various parameters.



**Educational Ratios:** various indicators also analyzed based on the data available from DISE. Some of the key indicators are as mentioned below and findings have also been mentioned there.

#### 1. Educational Ratio: Enrolment Ratios.

Year	Boys	Girls	Total
2009-10	104	102	103
2008-09	104	103	104
2007-08	113	111	112
2006-07	106	106	106
NER : Primary l	evel	I	
Year	Boys	Girls	Total
2009-10	99.74	99.76	99.75
2008-09	99.66	99.61	99.64
2007-08	106.43	101.87	104.26
2006-07	96.61	97.22	96.90

The above table shows GER is 103 & NER is 99.75. 19 districts have the GER below than the state level GER. Although the state level is showing an increasing trend but still there are districts like Buladana, Aurangabad, Gadchiroli, Nagpur, Dhule, Sangli, Nashik and Wardha which have reported more than 5% reduction in the GER from the previous year.

GER : Upper Primary level					
Year	Boys	Girls	Total		
2009-10	101	99	100		
2008-09	100	100	100		



2007-08	92	91	92
2006-07	100	100	100

NER : Upper Primary level					
Year	Boys	Girls	Total		
2009-10	99.78	99.77	99.77		
2008-09	99.67	99.61	99.65		
2007-08	95.00	95.10	95.05		
2006-07	95.00	95.10	95.05		

The above table depicts that the GER at the upper primary shows the stagnant picture from the 2006-07 and the NER shows marginally increase from the previous year. 18 district below the state level GER. Although the state level is showing an increasing trend but still there are districts like Mumbai, Aurangabad, Dhule, Nashik, Jalgaon, Gondia, Gadchiroli, Yavatmal, Ratnagiri, and Beed which have reported more than 5% reduction in the GER from the previous year.

## **MATERIAL AND METHOD:**

As per the DISE flash statistics 2008-09, the state is having 15% and 18% of under age and over age children's at the primary level and upper primary level respectively.

When we look at the dropout which is 3% for primary and 8% for upper primary and on the other hand NER is nearly 100 percent for both the level.

# **Enrolment Primary:**

Year	Boys	Girls	Total	Increased/decreased		
				Boys	Girls	Total
2006-07	5394975	4844696	10239671	-	-	-



2007-08	5476467	4881587	10358054	1.5%	0.8%	1.2%
2008-09	5503324	4900422	10403746	0.5%	0.4%	0.4%
2009-10	5562496	4936961	10499457	1.1%	0.7%	0.9%

The enrolment at the primary level has shown a slightly increasing trend from the previous year at the state level.

In the districts level some of the districts which have shown decreasing trend in enrolment at primary level by more than 2% are Ratnagiri (7), Gadchiroli, Sindhudurg, Mumbai II by 4% decreased, and Hingoli, Mumbai (BMC), Kolhapur, Satara, Yavatmal & Bhandara have decreased by 3%.

## **Enrolment (Upper Primary):**

			Change from previous year		
Boys	Girls	Total	Boys	Girls	Total
2689191	2392260	5081451			
2872632	2525387	5398019	6.8%	5.6%	6.2%
2924110	2595247	5519357	1.8%	2.8%	2.2%
2959992	2604493	5564485	1.2%	0.4%	0.8%
	2872632 2924110	2689191 2392260 2872632 2525387 2924110 2595247	2689191 2392260 5081451 2872632 2525387 5398019 2924110 2595247 5519357	Boys         Girls         Total           2689191         2392260         5081451           2872632         2525387         5398019         6.8%           2924110         2595247         5519357         1.8%	Boys         Girls         Total           2689191         2392260         5081451           2872632         2525387         5398019         6.8%         5.6%           2924110         2595247         5519357         1.8%         2.8%

The enrolment at Upper Primary level has shown slightly increased but less than the previous year in the state level.

However, in the district level, some of the districts which have shown decreasing trend from previous year are Hingoli(7), Mumbai II(6), and Dhule, Latur, Ratnagiri by 4 % and Solapur, Bhandara, Osmanaba by 3%.



#### **Gender Gap in Enrolment:**

Year	Pry	U. Pry
2006-07	4.2	5.0
2007-08	4.4	5.2
2008-09	4.3	4.8
2009-10	4.3	5.2

The above table depicts that the Gender gap at the primary level and upper primary level is slightly reduced from the previous years.

Distribution of the district with various range of Gender Gap

Year	Above State Avg.	> 5	< 5
2008-09	16	12	22
2009-10	15	10	25
2008-09	18	15	20
2009-10	15	15	20

At the primary level Gender Gap in enrolment is high in the Jalgaon (7.8) district and at upper primary level it is high in the Kolhapur (15) district.

Social Category wise Gender Gap in Enrolment

Category	Pry	Upper Primary
SC	3.9	5.2



ST	5.1	7.8
Muslims	2.8	2.3

Distribution of the district with various range of Gender Gap

Category	Above Average	>10		5-10		<5		
	Pry.	U. Pry.	Pry	U. Pry	Pry	U. Pry	Pry	U. Pry
SC	19	14	0	6	6	14	29	19
ST	14	16	2	11	13	13	20	11
Muslims	17	23	0	1	4	7	31	27

Districts with high gender gap

Primary level:

SC Category - Mumbai Suburban (9)

ST Category - Mumbai Suburban (17)

Muslims Category - Washim (7)

Upper Primary level:

SC Category - Nandurbar (11)

ST Category - Sangli (25)

Muslims Category - Nandurbar (14)



## **Drop Out Rate:**

Primary level:

	2008-09			2009-10		
	BOYS	GIRLS	TOTAL	BOYS	GIRLS	TOTAL
State	1.27	1.94	1.58	2.15	3.28	2.68

In the year 2009-10 the dropout rate has slightly increased 1.58 to 2.68 at the primary and the 16 districts have more than the state level dropout rate. Drop out more than 10% are in namely in 5 districts; Mumbai (BMC) 65, Nandurbar 21, Jalgaon 11, Hingoli 11, Dhule 11.

# **Elementary level (Class VII)**

	2008-09	2009-10				
	BOYS	GIRLS	TOTAL	BOYS	GIRLS	TOTAL
State	4.45	3.34	10.44	6.81	8.44	7.58

In the year 2009-10 the dropout rate has decreased 10.44 to 7.58 at the elementary level. 13 districts have more than the state level drop-out rate. Drop out more than 10% are in namely in 13 districts; Mumbai (BMC) 65, Aurangabad 21, Hingoli 18, Ratnagiri 17, Parbhani 17, Nanded 16, Jalgaon 14, Nashik 12, Dhule 11, Latur 11, Solapur 11, Thane 10 & Yavatmal 10.

#### Distribution of Districts with various Drop- Out Rate

Levels	Year	> State Average	> 10	5-10	< 5
No of Districts – Primary	2008-09	15	3	18	14
	2009-10	16	5	16	14
No of Districts –	2008-09	15	16	10	9
Elementary	2009-10	13	13	12	10



#### **Transition Rate:**

Year	Transition Rate IV/V					
	Boys	Girls	Total			
2009-10	104.4	102.0	103.3			
2008-09	104.6	102.9	103.8			
2007-08	104.9	102.4	103.7			
2007-08	104.9	102.4	103.7			

The transition rate is one of the important indicators in elementary education. The indicator shows the percentage of children going moving to the upper primary level. It is observed that a large number of students drop out from the system during this transition. The state has used the number of students passed grade IV and enrolment in grade V for calculating the indicator. There is marginal difference between the girls and boys transition rate. 2 districts show less than 80% Transition Rate. The lowest Transition Rate is Mumbai (BMC) – 46.1 and Nandurbar 77.6% district. The state may like to find out the reasons in these districts and take necessary steps in order to improve up on the indicator.

# **Retention Rate:**

Primary level:

Year	Retention Rate : Primary level				
Tear	Boys	Girls	Total		
2009-10	92.39	91.95	92.2		
2008-09	89.21	89.25	89.15		
2007-08	87.28	87.99	87.83		

Retention Rate at the primary level shows continuously improvement from 87.83 to 92.2 during the period of 2007-08 to 2009-10. A good number of districts namely; Bid 77, Raigarh 78, Nagpur 78, Gadchiroli 81, Chandrapur 82, Amravati 83 less than 85% retention rate at primary level.



	Retention Rate : Elementary level				
Year	Boys	Girls	Total		
	20,5				
2009-10	92.36	91.54	91.98		
2008-09	90.67	90.69	92.03		
2007-08	-	88.67	89.21		

Retention rate at the elementary level shows continuous improvement from 89.21 to 91.98 during the period of 2007-08 to 2009-10. but still a good number of districts namely; Bid 65, Raigarh 78, Gadchiroli 80, Nagpur 81, Akola 85, Buldhana 86, Dhule 88, Chandrapur 88, Ahamednagar 88, Wardha 89, Nanded 89 & Thane 89 less than 90% retention rate at primary level.

# **Pupil Teacher Ratio:**

State PTR at the primary level is 29.88 and upper primary level is 32.12. The state has a favorable PTR at both the primary and upper primary level still state have a good number of single teacher schools and a good number of schools having adverse PTR which are mention in the below table.

BI-M	Primary level (%)		Upper Primary Level (%)		
	PTR > 40	PTR >60	PTR > 40	PTR >60	
State Level	9.71	2.24	12.98	2.55	

District wise have high PTR > 60:1 in the namely in the districts; Parbhani (4.58% P & 7.70 U.P.), Aurangabad (4.65% P & 6.17% U.P.), Mumbai (15.91% P), and Jalna (4.23% U.P.), and Pune (4.34% U.P.).



#### **Single Teacher Schools:**

	2006-07		2007-08		2008-09		2009-10	
	Primary Only Schools	All Schools						
STATE	12.65	6.53	10.32	5.31	17.20	9.14	10.42	5.58

As the table above reflects, at the state level 10% Primary schools are single teacher school. The state not only has large number of single teacher schools at primary level. The table below mentions the district with very large number of single teacher schools.

#### **CONCLUSION:**

Right of children free and compulsory education act have mandates on Government and Local Authority to provide free and compulsory education to all children of age six to fourteen till completion of class eighth. It is necessary to understand educational scenario of the state. Above analysis of various Educational Indicators indicates trends, gaps and emerging issues. This will help state to develop action plan and strategy for 100% completion of Elementary Education. The Management Information System strgthening at state project office (SPO) and District project office (DPO) is an essential and integral part form Management of Data. This information being collected from every Schools so need to aware all the schools Head Masters and concerned system to provide the information in DISE data through wide publicity. The filled up DCF of the schools checked by their respective CRC coordinators and if found incomplete the Head teachers were asked to provide the needed information. Checked & collected DCFs submitted for data entry at BRC level where Block Education Officer had checked the DCFs on random basis. After the computerization of DCFs through DISE software the district level sharing workshop need to be conducted for Steps taken to be ensure authenticity of supplied data, 10% physical verification at block level, 100% physical verification at Cluster level, For significant variation the school Head Masters was contacted over telephone, submission of Certificate of data authenticity.

DISE data is used for various purposes i.e. Formulation of AWP&B EDI analysis for each district EDI analysis for each block Access analysis Teachers database Infrastructure gaps State Flash statistics School Report Cards



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