

Status of Secondary Education in Odisha

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Abstract: This paper examines the status of secondary education in Odisha with respect to quantitative and qualitative achievements by using secondary data collected from Odisha Primary Education Programme Authority and Directorate of Economics and Statistics, Govt. of Odisha on various indicators of secondary education like enrolment, teachers, infrastructure, outcome etc. The findings clearly show that GER and NER are less than 100 in the State as well as in all the districts. Dropout rates in the schools have declined but it still remains high in the tribal dominated backward regions. The average number of teachers in the schools has started declining to 7 after stagnating at 8 for quite a few years. Many teachers do not have the required qualification and have been engaged by the government on contractual basis. An appreciable proportion of schools do not have drinking water facilities, separate toilet for girls and boys, and electricity. About half of the schools go without a playground. Needless to say that, the status of secondary education is not satisfactory. Therefore, there is need to universalize secondary education by making good quality education available, accessible and affordable to all children by providing secondary schools within 5 km. and higher secondary schools within 7-10 km. of habitations.

Keywords: Odisha, Secondary Education, Status.

I. Introduction

The educational programmes in India have focused on elementary education since independence. The constitution of the country is committed to provide free and compulsory education to all children up to the age of fourteen. Secondary education was never in focus, though it is a key instrument for socio economic development of the people. People are enabled by secondary education to acquire better skills, absorb new technologies and harness their innate abilities. It is a key input for broadening of outlook, widening of horizon and infusing confidence. Through Secondary education, young people acquire skill to take advantage of opportunities demanding knowledge and experience in modern technologies and raise their earnings in well-paid jobs. Higher quality secondary education opens up opportunities for promotion of young people in the work place. In view of the above, high quality secondary education is in demand all over the world, particularly in the developing countries with higher growth and coverage of primary education. India, a developing country is no exception and recent emphasis on secondary education in the country is in order.

Task Forces have been constituted by the government to suggest measures for quantitative as well as qualitative improvement of Secondary education in the country. The government has launched Rastriya Madhyamik Shiksha Abhiyan (RMSA) in March, 2009 with the objective of enhancing access to and raising quality of secondary education. It is envisaged to increase enrolment rate at this level from 52.26% in 2005-06 to 75% by the end of 12th five year plan. To achieve this, secondary schools should be provided within a reasonable distance of any human habitation. Another objective of the programme is improving quality of education imparted at secondary level by making all schools conform to the prescribed norms. Besides, the programme aims at removing gender inequality and socio-economic barriers, and providing universal access to secondary education by this time i.e., 2017 (end of 12th Five Year Plan). It is further proposed to achieve universal retention by 2020. In Odisha, the pressure on the secondary school system is increasing day by day to absorb the large scale pass-outs from the elementary schools which have witnessed a phenomenal growth during the last few years. Has the achievement in the state being satisfactory? Has there been adequate expansion in secondary education to meet the challenge of increasing demand? Is the quality of education in the schools of satisfactory level? Are universal enrolment and retention in these schools feasible within the stipulated time period? These are some of the questions which have been addressed in the present article.

II. Methodology

The analysis in the present paper is based mainly on the quantitative and qualitative variables influencing the status of secondary education in Odisha. Data have been collected for various indicators of secondary education like enrolment, teachers, outcome, etc.

III. Growth Of Enrolment In The State

Table-1 traces the trend of enrolment at secondary school level in the state. It may be observed that enrolment has shown consistently significant increase across categories all through the period from 1996-97 to 2013-14. Total enrolment in secondary schools during the period under reference witnessed an increase of 39% from 8,66,000 in 1996-97 to 12,05,999 in 2013-14. Increase in the enrolment of boys was 8% only compared to 96.5% in the case of girls.

Relatively higher proportionate increase in girls' enrolment over the period can be attributed to larger increase in absolute terms (2,94,312 in case of girls compared to 45,687 in case of boys) as well as lower base. Girls' enrolment was almost half (54%) of that of boys in the base year of 1996-97. The girls being almost as numerous as boys in the population, the scope for improvement in their enrolment from a lower base of 3,05,000 was better than that (5,61,000) of boys. The slogan of 'Beti Padhao, Desh Bachao', has worked well. With the progress of time, and creation of general awareness, the significance of womens' role in the country's economic development seems to have been well realized.

Similar picture emerges when compound annual growth rates are considered. When over the period, the compound annual growth (CGR) for all i.e. boys and girls taken together was 1.97%, the rates for girls and boys were respectively 4.05% and 0.46%.

The Scheduled caste and tribes are the deprived and disadvantaged groups and government gives special attention to their socio economic upliftment. The expansion of secondary education in the state exhibits such a pattern. Enrolment of both boys and girls in secondary schools has been appreciable in the case of both the communities.

In case of SCs, enrolment in secondary schools increased from 1,04,000 in 1996-97 to 2,32,628 in 2013-14, thereby registering 124% growth. The corresponding figures for STs are 118000, 247304 and 110%. There were more ST students compared to SCs in high schools because of higher proportion of the former (22%) in the state's population.

Table-1: Growth of Enrolment in Odisha

Year	SC			ST			All community		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
1996-97	75000	29000	104000	85000	33000	118000	561000	305000	866000
2006-07	117400	92450	209860	101000	73680	174710	744970	618030	1363000
2013-14	116087	116541	232628	127388	119916	247304	606687	599312	1205999
CGR between 1996-97 and 2013-14	2.60	8.53	8.38	2.41	7.89	4.45	0.46	4.05	1.97
CGR between 1996-97 and 2006-07	4.58	12.29	7.27	1.74	8.36	4.00	2.88	7.32	4.64
CGR between 2006-07 and 2013-14	-0.16	3.33	1.48	3.37	7.31	5.09	-2.89	-0.44	-1.70

Source: Statistical Abstract of Odisha 2002, 2008 and 2012, Directorate of Economics and Statistics, Odisha & OPEPA

When the communities are considered separately, CGR of SCs are higher than those of STs and all categories for boys, girls and all. They seem to have taken advantage of their proximity to progressive general communities and less number of students in the earlier year of reference. CGR of enrolment of all students for SCs (8.38%) was almost twice that (4.45%) of STs, though approximately this is same in respect of girls for both the communities.

Considering the sub-periods CGRs of enrolment for boys, girls and all taken together were positive for all the communities. More students outside the school network were taken in. But the later period from 2006-07 to 2013-14 witnesses a negative growth in the case of all as well as girls and boys individually. It cannot be viewed as lack of interest of the parents for secondary education of their children. These figures speak of students' enrolment in government school system. Relatively well-off general caste people prefer to send their children to costly private schools, even though education in government schools is free. Another reason for this decrease in the number of school going children is the decline in the rate of growth of population in the state during the last decade and consequential fall in the number of school going children.

In order to assess the pattern of growth in enrolment in secondary schools across the districts of Odisha the annual compound growth rate has been calculated from 1994-95 to 2013-14 (Table-A1 and Table-A2). Over the period of 19 years (1994-95 to 2013-14) most of the districts have shown positive growth in enrolment excepting Kendrapara district with lowest CGR of -0.14% which shows approximate stagnancy in the growth of secondary education in the district. During the same period, CGR was maximum (6.31%) in Kalahandi district whereas the state CGR was 2.07%. Koraput was the only district exhibiting negative CGR in secondary school enrolment in the first sub period (1994-95 to 2006-07). This is an underdeveloped district without any pretention to industrialization.

Growth of secondary school enrolment in Koraput district was negative in the first sub period but positive in the latest sub period from 2006-07 to 2013-14. The rate of increase in the latter period was subsumed by the decline in the earlier one.

CGRs of enrolment were negative in 18 districts of the state during the latest sub-period compared to one district during the earlier sub period, indicating that the declines were not significant.

Annual CGRs of enrolment were negative for both girls and boys in only one district with negative value for the entire two decades period. However, decline in the boys secondary level enrolment rate is observed positive in more districts, namely, Balesore, Jajpur, Jagatsingpur, Kendrapara, Mayurbhanj, Nayagarh, Puri and Sundargarh districts which either coastal or industrialized districts.

Caste-category wise enrolments data are available only for the latest sub period 2006-07 to 2013-14. During this period SC secondary level students experienced negative growth in enrolment in ten districts, while this trend was observed for STs in two districts namely Jharsuguda and Keonjhar with high industrial and mining sector growth.

1.3 Gross And Net Enrolment Ratio In Secondary Education

The absolute enrolment figures do not indicate the proportion of children in the school going age group attending school. These figures hide the number of working children for whom the childhood is lost and future is doomed.

The percentage of children in the school going age group attending school is significant from the socio economic point of view. This is measured by Gross Enrolment Ratio (GER). Over the four years period from 2009-10 to 2013-14 GER in the state increased from 61.4 to 68.65. The increase had salutary effect as more children had the benefit of education. The increases were as high as 19 points from 60.95 to 80.14 in case for SC and 20 points from 42.27 to 62.92 for Scheduled tribe (Table-2). It reduced disparities in enrolment across communities.

Table-2: GER and NER in Secondary Education in Odisha

Category	GER		NER	
	2009-10	2013-14	2009-10	2013-14
ALL	61.40	68.65	40.51	56.70
SC	60.95	80.14	36.92	66.19
ST	42.27	62.92	23.76	51.97

Source: Statistical handbook of Odisha, OPEPA

Looked at the districts, GER (Table-A4) is the highest (84.42) in Boudh. The other districts with high GER are Bolangir, Deogarh, Bhadrak, Sonepur, Nuapada, Jharsuguda, and Jajpur with value more than 75. About 2/3rds of the districts have GER higher than the state average. Most of these districts have tribal concentration either original inhabitants or migrants in search of engagement in the newly coming up industries. The districts with low GER between 45-49 are Koraput, Malkangiri, Nawarangpur and Rayagada (parts of undivided Koraput districts), which also are tribal dominated. Really no inference can be drawn about the tribals' interest and attitude towards education.

Comparing the GER and NER at secondary level, no pattern can be traced. While GER for girls' is higher than that for boys in 18 districts, the situation is reverse in the balance 12 districts. Both the lists include high tribal concentrations.

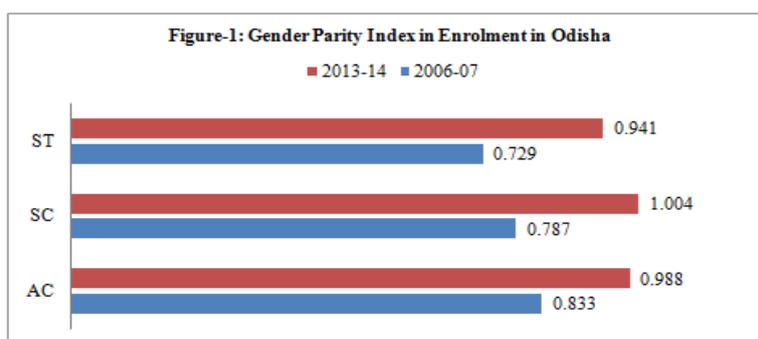
GER is not an effective measure of enrolment as it includes both over aged and under aged children in a class. Net Enrolment Ratio (NER), which takes into account only children in the relevant school going age group, is considered appropriate measure of enrolment. It is the number of school going children to the total number of children in the relevant age group. During the period 2009-10 to 2013-14, NER in the State increased from 40.51% to 56.7% over this period and the increases were remarkable. For SCs and STs the gap between the GER and NER has shrunken over the four years considered for the state as a whole and both SCs and STs. It implies that more children are attending classes now in the appropriate age group than before- a welcome sign.

In 2013-14, NER (Table-A4) in secondary schools was maximum in Bhadrak (75.84%) district whereas Koraput had the lowest ratio of 33.26% as against the state average of 56.7%. In other words, 43.3% of children in the age group of 14-16 years are out of school in the state. About the same number of districts as in the case of GER have NER more than the state average. Though the districts are not exactly the same in both the lists, there are a good number of districts common to both. The districts performing less than the state as a whole as regards NER are Koraput, Malkangiri, Nawarangpur and Rayagada and the top performing districts are Bhadrak, Boudh, Kendrapara and Sonepur. The picture is no different from that in case of GER. Otherwise speaking; NER takes the same pattern after GER in case of the districts of the state. Enrolment ratios in secondary schools of the state are not laudable.

IV. Gender Parity Index

Enrolment ratios for girls were higher than those of boys in about 2/3rds of the districts in year 2013-14. It is obvious that girls are not discriminated against in the state in recent years as regards educational attainment. But because of the initial skewedness, gender disparity in enrolment has not been rectified so far.

Gender parity index in enrolment measured by the girls' enrolment to that of boys'. It is a useful measure to know the proportion of girls in the school. Estimates of the index for different communities in the state are presented in Fig-1. It shows that gender parity index in enrolment for the state has improved over the years from 0.833 in 2006-07 to 0.988 in 2013-14. Improvement in the index is the highest in case of the SCs (1.004 in 2013-14) and the least for STs (0.941 in 2013-14).



Source: Directorate of Economics and Statistics, Odisha.

Gender Parity indices of the districts are presented in Table-A3. In the year 2006-07, Bhadrak district is credited with the highest Gender Parity index of 1.000 followed by Cuttack and Sambalpur districts respectively with indices of 0.967 and 0.958. The districts with the lowest Gender Parity Indices during that period were Koraput (0.525), Nuapada (0.555) and Malkangiri (0.564). In 2013-14, districts with GPI more than 1.000 for all communities numbered as many as twelve and Ganjam district had the highest GPI of 1.077. The districts with very low GPI in respect of all communities were Malkangiri (0.829), Nawarangpur (0.835) Rayagada (0.836) and Koraput (0.838), the erstwhile undivided Koraput district. The index in respect of SCs for all the districts lied below 1.000 in 2006-07 but went above it in 14 districts during 2013-14. The corresponding index for STs were 2 in 2006-07 but increased to 8 districts in 2013-14. In a nutshell Gender Parity Index has registered improvement across communities in the districts of the state.

V. Dropout Rate

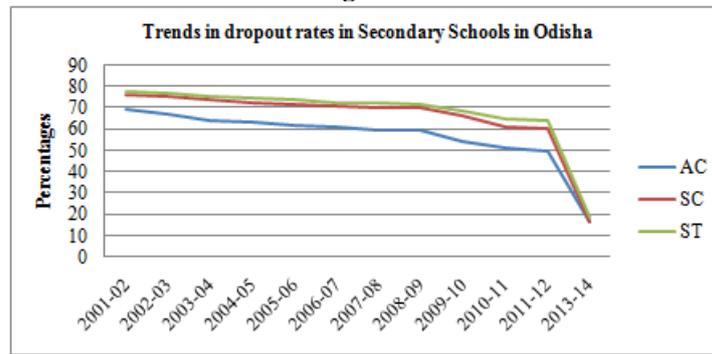
Dropout rate is one of the negative indicators of educational development. It reflects the internal inefficiency of the education system. Dropout rate increases with movement from lower to higher class/grade. In Odisha, the dropout rates exhibit a decreasing trend over the years but still remain very high among the girls in all categories. It decreased from 69.5 % in 2001-02 to 16.5% in 2013-14 (Table-3 and Fig-2). A similar trend is observed in case of Scheduled Caste and Scheduled Tribe students – declining over the years. In 2013-14, the dropout rate for scheduled Caste was as low as 16.3% but slightly higher 19.0% for Scheduled Tribes.

Table-3: Dropout Rate in Secondary Schools of Odisha

Year	All Categories			Scheduled Caste			Scheduled Tribe		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
2001-02	67.0	72.0	69.5	75.0	77.0	76.0	79.0	77.0	78.0
2002-03	65.9	68.5	67.2	74.1	76.5	75.3	78.0	76.5	77.3
2003-04	62.5	66.7	64.4	73.0	74.0	73.5	77.0	75.0	76.0
2004-05	61.0	66.0	63.5	72.0	73.0	72.5	76.5	74.0	75.3
2005-06	60.0	64.0	62.0	70.8	72.5	71.7	75.0	73.0	74.0
2006-07	59.0	62.0	61.0	70.0	71.8	70.9	74.0	72.0	73.0
2007-08	58.2	61.0	59.6	69.0	71.0	70.0	73.6	71.0	72.8
2008-09	58.0	60.6	59.3	68.5	70.7	69.6	73.0	70.0	71.6
2009-10	52.8	55.2	54.0	65.3	67.5	66.4	70.6	67.7	69.2
2010-11	49.9	52.1	51.0	60.0	63.0	61.0	66.7	64.0	65.4
2011-12	47.2	51.8	49.5	59.2	61.8	60.5	65.9	62.7	64.3
2013-14	18.3	14.6	16.5	18.7	13.9	16.3	20.5	17.4	19.0

Source: Statistical Abstract of Odisha, 2012 & OPEPA

Figure-2



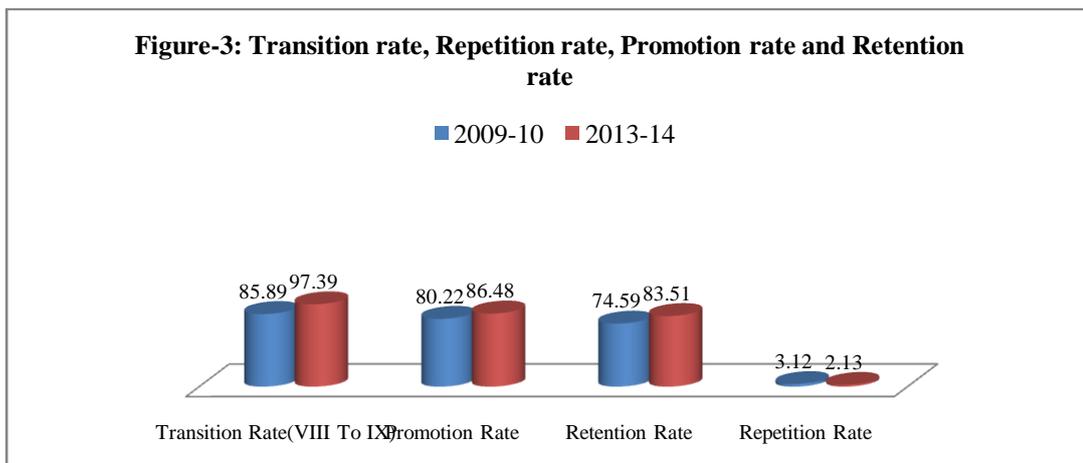
Source: Statistical Abstract of Odisha, 2012

The dropout rates for boys and girls considered separately have registered decline over the years for each community, but the decline was more in case of the later. Dropout rate of girls was more than that of boys for all communities and SCs in 2001-02, but the opposite in case of the STs. In 2013-14, the latest year for which data are available, the rate was lower for girls than for boys.

When dropout rates in individual districts (Table-A5) are considered, almost identical situation emerges with respect to various communities as well as boys and girls in recent years. Dropout rates in 2013-14 were very high for boys and girls and both taken together across communities in the districts like Boudh, Nawarangpur and Angul (Table-A5). It is interesting to note that dropout rates for girls are high in the districts where more boys leave schooling halfway. The districts which succeeded the most in arresting dropout rates are Koraput, Malkangiri, Jagatsinghpur and Kalahandi. Backwardness of communities are not reflective of school drop outs. Of the four districts mentioned, three are tribal dominated while Jagatsinghpur is a coastal district which virtually no tribal pockets.

VI. Transition, Repetition, Promotion And Retention Rate

The efficacy of an education system in serving its stake holders, the students is reflected by transition, retention, promotion and repetition rates. While the first three indicators are considered positive, the last one highlights the deficiency in the system. Transition rate measures the proportion in which students move to higher class. Likewise retention rate is indicative of the proportion of students who remained in the school till the end. The pass outs are captured in promotion rate. The unsuccessful students repeat classes for success in next chance. The relevant rates for secondary education are presented in Fig-3. It may be read off the figure that transition rate from class-VIII to IX rose from 85.89% in 2009-10 to 97.39% in 2013-14 and retention rate increased from 74.59% to 83.51%. During the same period, promotion rate increased from 80.22% to 86.48%. Given the situation, expectedly repetition rate is showing a downward trend from 3.12% to 2.13% during this period.



Source: www.opepa.in

The gap between transition and promotion rates reveals that all enrolled under secondary education are not promoted to higher secondary classes. The gap between the two was approximately 5% in 2009-10, but it increased to 9% (approx.) in 2013-14, reflecting increasing failures. In the year 2013-14, transition rate (Table-A6) was highest in Dhenkanal district and more than 100% in 11 districts. The rate was very low in the tribal dominated backward districts like Boudh, Gajapati, Kalahandi, Keonjhar, Nawarangpur, Nuapada and Rayagada. The tribals with limited exposure are yet to appreciate the benefits of education. Not only the transition rate in the state is higher for girls (99.66%) than boys (95.21%), it is so in case of two-thirds of the districts. The credit for the highest transition rate for girls goes to Dhenkanal district (122.31%) while the rate was highest in case of boys of Jagatsinghpur district (108.25%).

Retention rate (Table-A6) of less than hundred speaks of drop outs from the school and so is the case in Odisha with a retention rate of 83.51% in 2013-14. No district in the state had 100% retention rate. The High rates are observed in districts like Koraput (97.95%), Malkangiri (93.99%), Jagatsinghpur (93.04%) and Kalahandi (90.14%). Except Jagatsinghpur others have high concentration of tribals. The retention rate of girls (85.39%) was higher than that of the boys (81.7%) not only in the state but also in each district. The maximum retention rate both for girls (99.30%) and boys (96.86%) is observed in Koraput district (Table-A6).

VII. Growth Of Secondary Schools And Teachers In Odisha

There has been a significant growth in the number of secondary schools in the state. During this period the number of secondary schools increased by 25% from 5967 to 8945. As per State report cards, 2013-14 of DISE, 88% of the schools having secondary education is situated in rural areas and only 12% is in urban areas.

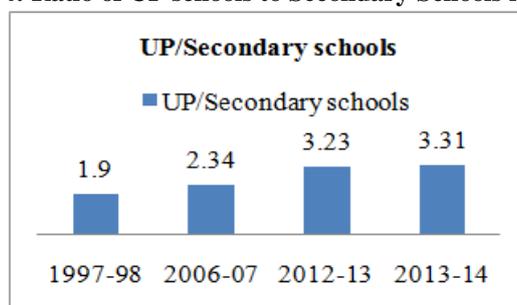
Table-4: Growth of Secondary Schools and Teachers in Odisha

Year	Secondary Schools	Number of Teachers					Number of teachers per school
		Male	Female	Total	SC	ST	
1996-97	5967	39608	10610	50218	802	848	8.4
1997-98	6072	40529	10907	51436	815	873	8.5
1998-99	6160	40529	10907	51436	1394	1189	8.4
1999-00	6160	40613	10925	51538	1394	1189	8.4
2000-01	6165	40630	10940	51570	1394	1189	8.4
2001-02	6282	40630	10940	51570	1380	1171	8.2
2002-03	6820	46922	13353	60275	1548	882	8.8
2003-04	6939	47455	13505	60960	1469	985	8.8
2004-05	7141	47397	13611	61008	1482	1028	8.5
2005-06	7361	48485	13454	61939	1614	1105	8.4
2006-07	7408	47393	14155	62094	2003	1079	8.4
2007-08	7435	47956	14771	62727	2026	1089	8.4
2008-09	7506	48113	15190	63303	2057	1114	8.4
2009-10	7799	49210	15757	64967	2696	1641	8.3
2010-11	7974	49527	15762	65289	2652	1721	8.2
2011-12	8945	46759	16040	62799	2744	1793	7.0

Source: Statistical Abstracts 2002, 2005, 2008 and 2012

In the state secondary schools on an average are required to serve more UP schools overtime. As evident from Figure-4, a secondary school serve 1.9 UP schools in 1997-98, but 3.31 in 2013-14, thereby creating demand for more secondary schools for better outcome.

Figure-4: Ratio of UP schools to Secondary Schools in Odisha



Source: Directorate of Economics and Statistics and DISE Flash statistics, 2013-14

Among the various factors influencing quality of education, qualification and character of teachers are undoubtedly most significant (Education Commission 1968). Teachers occupy a vital position in the education

system and contribute to its efficiency and effectiveness (Panda, 2004). Table-4 indicates number of teachers in secondary Schools in Odisha in different years starting from 1996-97 to 2011-12. It is evident from the table that teachers' number increased by 49.9% from 50218 in 1996-97 to 62799 in 2011-12. Total number of teachers across caste categories shows an increasing trend over the years. The number of teachers per school hovered around 8 in most of the years, but declined to 7 in the last year under reference.

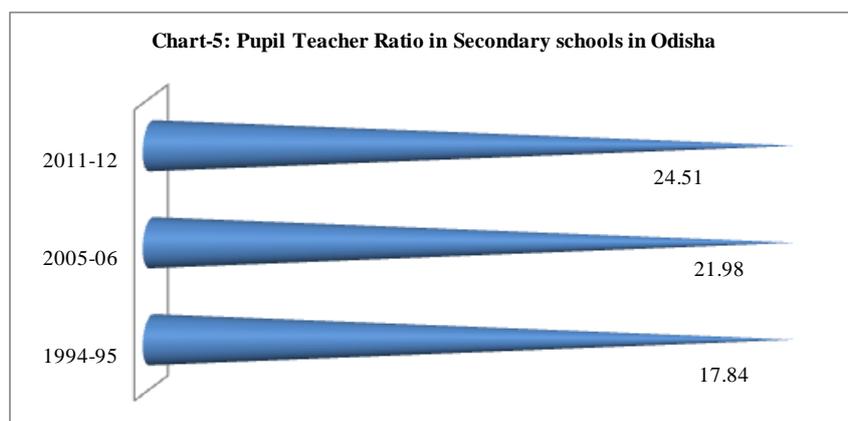
Growth of female teachers in the secondary schools was 68% but that of male teacher was less at 29% in the state. The proportion of female teachers which was 21% in 1996-97 increased to 26% in 2011-12. Increase in the number of female teachers has been helpful to reduce drop out of girls in the secondary schools.

Presence of SC and ST teachers in the school are expected to attract students from these communities. But the situation in the schools of Odisha in this respect is a cause of worry. The proportion of SC teachers has increased from 2% in 1996-97 to 4% in 2011-12 while the increase in the number of ST teachers was only 1% point.

It is worry some that most of the secondary school teachers in the state work on contractual basis, always under the threat of termination and such have no zeal to put in their best. As per Flash statistics, 2013-14 of DISE, only 18.56% of the teachers in Odisha have Master's degree and 63.62% of them are graduates.

VIII. Pupil Teacher Ratio

One of the important indicators that influence the quality and effectiveness of classroom interaction is the number of students per teacher. In 1994-95 the overall pupil-teacher ratio in the secondary schools of the state was 17.84. It increased to 24.51 in 2011-12 indicating that higher PTR over the years.(Figure-5).



Source: Directorate of Economics and Statistics, Odisha

PTR in secondary schools lied below 30 across all the districts as against the norm of 40. But it is not gratifying as the average subsumes the deviations in individual cases. The PTR is very high in the inaccessible backward areas where it is needed the most.

IX. Infrastructural Facilities In Secondary Schools Of Odisha

Provision of different facilities in the school has favourable psychological impact on the children. These facilities open up avenues for children to release tension and pursue studies with cheerfulness. The following table depicts the facilities available in the secondary schools of the state.

Table 5: Infrastructural facilities in Secondary schools in Odisha, 2013-14

Sl. No.	Facilities not present	Availability (%)
1	Drinking water	87
2	Girls' toilet	83
3	Boys' toilet	69
4	Play ground	56
5	Boundary wall	84
6	Electricity	70

Source: OPEPA, Odisha

The table shows that the infrastructural facilities are not fully available in all the schools. As many as 13% of the secondary schools go without drinking water facilities, 17% have no toilets for their girls and there are no boys toilet in 31% of the schools. Needless to say, that these are the basic requirements in a place where so many children stay for about 8 hours a day. There is no play ground in slightly less than half of the schools

(44%). It makes the study atmosphere monotonous and fails to provide opportunities to young children to excel in sports in later years. Electricity is a basic requirement of modern life, but about one third of the schools lack in it. Absence of boundary walls in schools (16%) exposes the children to outside disturbances. Lack of these facilities stand in the way of imparting of undisturbed teaching in the schools.

X. Results Of Secondary Level Examination, Odisha

The Secondary School examinations are conducted every year by Board of Secondary Education, Orissa, Central Board of Secondary Education, New Delhi and Indian Certificates of Secondary Education, New Delhi. Table 6 and Fig 6 present the results of secondary schools in Odisha under three Boards from 2003 to 2012. The pass percentage in BSE Odisha increased from 44.2% to 67.9% in 2003 to 2012. The pass percentage under CBSE and ICSE has been consistently higher, increasing to about 99% in the recent years. The rate of failure is very high (32%) under BSE compared to about 1% under the other two Boards. Relatively a very large number of students take up BSE examination and many flunk it. There is great need to reform the oriya medium secondary schools and examinations.

Table 6: Results of Secondary level Examination, Odisha

Year	BSE, Odisha (Annual)			CBSE, New Delhi			ICSE, New Delhi		
	Appeared	Passed	% of Success	Appeared	Passed	% of Success	Appeared	Passed	% of Success
2003	376.30	166.18	44.20	7.17	6.05	84.30	4.73	4.41	93.20
2004	395.01	182.74	46.20	7.58	6.53	86.10	5.02	4.64	92.40
2005	350.41	183.37	52.30	7.91	7.07	89.30	5.15	4.80	93.20
2006	411.37	204.54	49.72	8.40	7.48	88.60	5.41	5.19	95.90
2007	394.32	223.23	56.62	9.34	8.78	94.00	5.43	5.37	98.90
2008	433.14	207.57	47.92	10.16	9.63	94.85	5.64	5.55	93.30
2009	397.23	236.62	59.56	10.09	9.59	95.08	5.51	5.40	98.00
2010	423.76	291.57	69.17	10.82	10.33	95.50	5.50	5.40	98.00
2011	475.35	294.50	62.99	12.26	12.23	99.80	5.84	5.75	98.50
2012	504.00	334.73	67.90	13.65	13.57	99.40	5.94	5.87	98.80

Source: Board of Secondary education, Odisha; CBSE, India and ICSE, India

Figure-6: Percentage of success in secondary schools in Odisha



Source: Board of Secondary education, Odisha; CBSE, India and ICSE, India

XI. Concluding Observations and Suggestions

It is evident from the above that much remains to be desired for secondary education in the state. Enrolment as indicated by GER and NER is less than 100 in the State, which implies children in the school going age group of 14-18 years remain outside the school network for which their childhood is lost and they permanently remain disabled to take advantage of skill development for better earning. This is the story in all most all the districts. The girls were the most disadvantaged as girls' school enrolment in the earlier years was very less. Though the situation has been improving for them in the recent years, there is still a long way to go. Dropout rates in the schools have declined but it still remains a matter of concern specifically in the tribal dominated backward regions.

The growth in the number of secondary schools in the state has been slow and pressure on these schools is mounting as they are called upon to serve more UP school pass outs in the recent years. The average number of teachers in the schools has started declining to 7 after stagnating at 8 for quite a few years. Many teachers do not have the required qualification and have been engaged by the government on contractual basis.

This discourages them to exert themselves in the work place. The proportion of female, SC and ST teachers are too low to attract girls and students of these communities to the schools.

The schools in the state are deficient in basic infrastructural facilities. An appreciable proportion of schools do not have drinking water facilities, separate toilet for girls and boys, and electricity. About half of the schools go without a playground. Absence of these facilities makes school life monotonous and lack lustrous for the young minds and kills their zeal to pursue study and learn new things. Needless to say that, the status of secondary education is not satisfactory.

Therefore, there is need to universalize secondary education by making good quality education available, accessible and affordable to all children within the age group of 14 – 18 years with focus on gender, equity and social justice. The state government needs to provide secondary school within 5 km. and higher secondary school within 7-10 km. of habitations, to increase secondary school enrolment and quality of secondary education in the state.

References

- [1]. Education Commission (1968), "Education for Development", Report of the Education Commission, 1964-66, NCERT, New Delhi.
- [2]. Panda, M. (2004), " Reform Imperatives that matter", paper presented at the workshop organized by Department of School and Mass Education, Government of Orissa in collaboration with UNICEF, Orissa on 19-20, February, 2004 at New Delhi.
- [3]. Odisha Human Development Report (2004), Planning and Co-ordination Department, Government of Odisha.
- [4]. Odisha Development Report (2002), Planning Commission, Government of India, New Delhi.
- [5]. Government of Odisha (2007), Economic Survey 2007-08, Planning and Co-ordination Department, Bhubaneswar.
- [6]. Government of Odisha (2014), Economic Survey 2013-14, Planning and Co-ordination Department, Bhubaneswar.
- [7]. Government of Odisha (2007), Statistical Abstract 2008, Bureau of Economics and Statistics, Bhubaneswar.
- [8]. Government of Odisha (2012), Statistical Abstract 2012, Bureau of Economics and Statistics, Bhubaneswar.
- [9]. Das, Amarendra (2007), "How Far Have We come in Sarva Siksha Abhiyan?", Economic and Political Weekly, January 6, 2007.
- [10]. Mehta, Arun C, (2002) "Status Of Secondary Education In India" Fellow *National Institute Of Educational Planning And Administration*
- [11]. Das, Atal Bihari (2009), "Status of Education of Scheduled Tribes in KBK Districts of Orissa", Odisha Review, Oct, 2009.

Appendix

Table- A1: Compound Growth Rate of Enrolment in secondary education

Districts	CGR(94-95 to 13-14)			CGR(94-95 to 2006-07)			CGR (06-07 to 13-14)		
	All Community			All Community			All Community		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Angul	1.55	4.57	2.83	4.02	7.80	5.55	-2.56	-0.73	-1.69
Balasore	-0.01	3.51	1.48	3.32	7.89	5.17	-5.47	-3.60	-4.56
Baragarh	2.81	5.36	3.93	5.34	8.90	6.86	-1.38	-0.44	-0.92
Bhadrak	1.18	4.29	2.53	3.59	8.28	5.60	-2.84	-2.21	-2.52
Bolangir	2.85	7.27	4.56	4.90	10.12	6.79	-0.59	2.56	0.86
Boudh	3.03	7.54	4.87	3.66	6.66	4.72	1.96	9.06	5.12
Cuttack	0.24	2.25	1.15	3.54	6.44	4.83	-5.16	-4.56	-4.86
Deogarh	1.78	4.38	2.92	3.76	6.18	4.76	-1.53	1.36	-0.16
Dhenkana	0.58	3.45	1.79	3.20	7.36	4.92	-3.76	-2.91	-3.35
Gajapati	1.20	6.69	3.07	0.18	5.85	1.89	2.97	8.15	5.12
Ganjam	0.06	6.34	2.40	0.22	7.00	2.45	-0.21	5.22	2.32
Jagatsinghpur	-0.24	1.96	0.73	3.27	6.60	4.71	-5.97	-5.52	-5.75
Jajapur	-0.91	1.14	0.01	1.23	3.94	2.42	-4.49	-3.47	-3.99
Jharasuguda	2.84	5.65	4.07	6.15	10.11	7.84	-2.61	-1.58	-2.10
Kalahandi	4.75	8.91	6.31	7.64	9.60	8.26	-0.02	7.74	3.06
Kandhamala	3.09	5.23	4.03	5.12	5.97	5.46	-0.30	3.96	1.61
Kendrapara	-1.20	1.14	-0.14	2.95	1.86	2.53	-7.92	-0.07	-4.55
Keonjhar	0.41	2.12	1.18	4.86	6.89	5.76	-6.78	-5.57	-6.20
Khurda	2.10	4.68	3.22	8.72	11.31	9.78	-8.32	-5.78	-7.13
Koraput	1.07	2.61	1.71	-2.52	-2.22	-2.41	7.53	11.45	9.18
Malkangiri	3.95	6.11	4.82	2.87	2.91	2.88	5.84	11.83	8.23
Mayurbhanja	-0.32	4.29	1.48	0.70	6.17	2.68	-2.04	1.14	-0.55
Nawarangpur	4.89	6.75	5.66	3.79	4.17	3.93	6.79	11.33	8.67
Nayagarh	-1.04	1.66	0.13	0.88	2.70	1.60	-4.23	-0.09	-2.34
Nuapada	4.81	8.37	6.21	7.21	8.55	7.66	0.82	8.07	3.77
Puri	-0.90	1.81	0.25	0.51	4.49	2.17	-3.28	-2.61	-2.96
Rayagada	2.34	3.89	2.99	0.08	0.43	0.21	6.33	10.11	7.92
Sambalpur	2.76	5.33	3.92	4.21	7.59	5.69	0.33	1.56	0.95
Sonepur	2.51	7.02	4.37	4.59	10.51	6.90	-0.96	1.30	0.16
Sundargarh	-0.08	2.23	0.96	0.39	3.51	1.76	-0.88	0.07	-0.41
ORISSA	0.81	3.79	2.07	2.99	6.34	4.34	-2.83	-0.44	-1.70

Source: Directorate of Economics and Statistics, Govt. of Odisha and OPEPA

Table-A2: CGR OF Enrolment for SC &ST in Secondary Schools (2006-07 to 2013-14)

Districts	ST			SC		
	Boys	Girls	Total	Boys	Girls	Total
Angul	4.84	12.21	7.94	3.54	6.80	5.08
Balasore	3.76	9.93	6.42	-2.46	1.28	-0.62
Baragarh	0.57	3.91	2.19	0.58	1.78	1.16
Bhadrak	10.78	19.47	13.91	-1.26	2.51	0.55
Bolangir	-1.06	3.58	0.9	-0.22	3.04	1.30
Boudh	6.69	20.66	12.5	4.1	13.04	7.89
Cuttack	17.85	26.62	21.51	-1.03	0.66	-0.20
Deogarh	1.26	4.14	2.64	-0.11	2.49	1.12
Dhenkana	3.97	8.74	6.13	1.78	5.05	3.34
Gajapati	11.49	23.67	15.79	-3.86	0.20	-2.37
Ganjam	11.37	31.26	17.35	5.58	12.44	8.57
Jagatsinghpur	6.73	21.86	11.92	-3.48	-1.70	-2.63
Jajapur	3.8	6.37	4.94	-1.52	1.59	-0.02
Jharasuguda	-0.98	0.03	-0.46	-1.86	-0.61	-1.25
Kalahandi	8.79	20.96	13.16	2.64	12.65	6.57
Kandhamala	1.71	8.21	4.52	-3.57	-0.86	-2.37
Kendrapara	7.39	32.24	13.42	0.97	8.62	4.39
Keonjhar	-3.88	-2.38	-3.18	-5.97	-3.69	-4.87
Khurda	-0.5	3.06	0.99	-5.48	-1.46	-3.69
Koraput	17.64	32.55	22.66	10.61	18.22	13.60
Malkangiri	15.03	25.01	18.36	3.21	9.71	6.00
Mayurbhanja	-0.27	5.59	2.33	0.82	2.90	1.84
Nawarangpur	13.04	22.61	16.66	2.62	7.76	4.91
Nayagarh	5.02	11.35	7.82	-6.44	-1.52	-4.22
Nuapada	15.92	26.53	20.10	-1.45	7.41	1.97
Puri	24.91	32.53	27.99	-0.03	1.19	0.56
Rayagada	15.92	27.27	19.86	3.29	11.04	6.37
Sambalpur	3.73	4.84	4.30	3.19	4.30	3.74
Sonepur	4.99	8.76	6.88	0.56	3.86	2.15
Sundargarh	0.49	1.33	0.91	-0.86	0.21	-0.34
ORISSA	3.37	7.21	5.09	-0.16	3.36	1.48

Source: Directorate of Economics and Statistics, Govt. of Odisha and OPEPA

Table- A3

Gender Parity Index (Secondary Education)

Districts	2006-07			2013-14		
	AC	SC	ST	SC	AC	ST
Angul	0.863	0.810	0.591	1.006	0.982	0.951
Balasore	0.902	0.859	0.634	1.118	1.034	0.951
Baragarh	0.932	0.917	0.847	0.997	0.996	1.065
Bhadrak	1.000	0.828	0.446	1.077	1.045	0.756
Bolangir	0.770	0.791	0.639	0.990	0.958	0.882
Boudh	0.656	0.574	0.491	1.021	1.051	1.161
Cuttack	0.967	0.918	0.579	1.033	1.011	0.956
Deogarh	0.824	0.830	0.845	0.993	1.009	1.028
Dhenkana	0.909	0.831	0.723	1.037	0.966	0.990
Gajapati	0.612	0.511	0.397	0.683	0.863	0.821
Ganjam	0.743	0.638	0.258	0.991	1.077	0.814
Jagatsinghpur	0.943	0.878	0.348	0.998	0.975	0.879
Jajapur	0.932	0.842	0.742	1.046	1.004	0.881
Jharasuguda	0.946	0.921	1.002	1.007	1.018	1.075
Kalahandi	0.525	0.486	0.406	0.933	0.886	0.853
Kandhamala	0.717	0.735	0.633	0.892	0.961	0.977
Kendrapara	0.586	0.648	0.165	1.081	1.039	0.707
Keonjhar	0.896	0.879	0.843	1.039	0.98	0.939
Khurda	0.810	0.707	0.649	0.947	0.981	0.830
Koraput	0.652	0.531	0.352	0.846	0.838	0.812
Malkangiri	0.564	0.625	0.388	0.959	0.829	0.695
Mayurbhanja	0.797	0.904	0.671	1.043	0.996	1.000
Nawarangpur	0.624	0.692	0.475	0.974	0.835	0.839
Nayagarh	0.741	0.704	0.665	1.008	0.997	1.001

Nuapada	0.555	0.483	0.497	0.883	0.902	0.918
Puri	0.920	0.911	0.568	0.992	0.966	0.860
Rayagada	0.655	0.529	0.399	0.877	0.836	0.767
Sambalpur	0.958	0.950	1.017	1.024	1.043	1.096
Sonepur	0.916	0.845	0.910	1.060	1.072	1.165
Sundargarh	0.951	0.904	0.981	0.975	1.016	1.039
ORISSA	0.833	0.787	0.729	1.004	0.988	0.941

Source: Directorate of Economics and Statistics, Govt. of Odisha and OPEPA

Table- A4: Gross and Net Enrolment ratio

District	GER 2013-14 (Secondary Education)			NER 2013-14 (Secondary Education)		
	Boys	Girls	Total	Boys	Girls	Total
Angul	72.51	72.73	72.62	53.57	53.17	53.37
Balasore	69.59	73.52	71.53	53.43	55.48	54.44
Baragarh	72.36	73.61	72.98	61.41	62.95	62.17
Bhadrak	76.76	81.96	79.33	74.02	77.71	75.84
Bolangir	82.46	80.65	81.56	61.44	62.92	62.17
Boudh	81.46	87.44	84.42	68.29	72.01	70.13
Cuttack	59.46	61.39	60.41	48.68	50.11	49.39
Deogarh	78.2	80.61	79.39	58.65	59.47	59.06
Dhenkanal	73.93	72.92	73.43	62.67	61.17	61.93
Gajapati	64.46	56.83	60.69	54.96	48.23	51.63
Ganjam	64.95	71.41	68.14	53.85	58.58	56.19
Jagatsinghpur	71.53	71.24	71.38	62.44	62.14	62.29
Jajpur	74.77	76.64	75.70	57.68	57.19	57.44
Jharsuguda	74.90	77.85	76.36	64.27	67.51	65.87
Kalahandi	73.82	66.83	70.36	61.48	56.01	58.77
Kandhamal	71.97	70.62	71.30	63.08	61.28	62.19
Kendrapara	72.45	76.85	74.63	65.33	68.27	66.78
Keonjhar	66.36	66.41	66.39	52.49	52.77	52.63
Khurdha	69.49	69.6	69.54	66.56	64.9	65.74
Koraput	48.16	41.21	44.72	35.69	30.79	33.26
Malkangiri	53.3	45.14	49.26	40.65	37.58	39.13
Mayurbhanj	64.96	66.09	65.52	47.18	47.42	47.30
Nawarangpur	52.02	44.36	48.23	43.74	36.42	40.12
Nayagarh	71.20	72.49	71.84	62.85	63.23	63.04
Nuapada	78.91	72.67	75.82	61.40	57.52	59.48
Puri	71.02	70.05	70.54	61.79	60.83	61.32
Rayagada	53.48	45.68	49.62	45.06	39.54	42.33
Sambalpur	66.59	70.96	68.76	59.2	62.43	60.79
Sonepur	74.40	81.56	77.94	67.29	74.23	70.72
Sundergarh	68.66	71.26	69.94	54.64	55.95	55.29
Odisha	68.35	68.95	68.65	56.59	56.81	56.7

Source: OPEPA, Bhubaneswar, Odisha

Table- A5

District	Drop-Out rate 2013-14 (Secondary Education)								
	All Community			Scheduled Caste			Scheduled Tribe		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Angul	30.09	27.99	29.05	34.19	28.51	31.4	25.97	25.55	25.77
Balasore	21.41	19.57	20.48	25.9	21.38	23.6	21.91	20.12	21.05
Baragarh	25.09	21.08	23.11	24.93	19.26	22.17	33.42	25.14	29.3
Bhadrak	16.52	13.72	15.10	23.30	14.75	19.03	2.97	-2.58	0.56
Bolangir	13.19	8.68	11.03	9.37	3.69	6.61	31.44	28.79	30.23
Boudh	41.16	33.24	37.3	42.21	39.43	40.84	44.55	28.87	36.85
Cuttack	15.26	13.1	14.18	7.11	1.31	4.21	3.03	6.99	4.98
Deogarh	14.43	7.75	11.11	21.39	14.97	18.22	28.75	17.79	23.44
Dhenkanal	11.05	9.28	10.18	14.52	10.65	12.57	19.29	19.72	19.5
Gajapati	14.37	17.24	15.72	15.28	35.25	23.94	7.08	12.93	9.76
Ganjam	23.59	16.5	20.03	26.28	20.27	23.41	8.84	5.8	7.54
Jagatsinghpur	8.91	4.87	6.96	8.86	6.09	7.50	11.48	12.15	11.78
Jajpur	12.11	9.05	10.58	14.99	13.44	14.19	27.31	18.35	23.19
Jharsuguda	23.70	18.10	20.95	25.75	21.10	23.48	30.37	20.87	25.64
Kalahandi	12.71	6.45	9.86	8.13	7.83	7.98	12.53	6.09	9.72
Kandhamal	20.1	20.77	20.43	23.02	26.95	24.91	19.81	19.67	19.74

Kendrapara	15.07	12.21	13.63	21.73	13.9	17.77	32.58	62.3	49.76
Keonjhar	15.42	11.56	13.53	5.99	0.39	3.20	18.28	15.81	17.10
Khurdha	18.47	11.54	15.16	10.56	9.07	9.83	22.25	12.23	18.04
Koraput	3.14	0.70	2.05	4.99	8.51	6.62	12.92	11.95	12.48
Malkangiri	5.83	6.24	6.01	3.80	-4.01	0.11	3.99	4.69	4.28
Mayurbhanj	14.1	14.63	14.36	0.50	7.49	4.23	18.5	15.97	17.26
Nawarangpur	33.96	31.88	33.02	24.73	21.59	23.21	38.4	35.07	36.88
Nayagarh	22.07	14.53	18.43	32.12	25.54	28.94	18.65	23.9	21.29
Nuapada	18.81	17.99	18.42	26.76	19.36	23.44	24.29	23.24	23.8
Puri	16.05	13.04	14.58	17.72	9.12	13.60	5.97	4.76	5.44
Rayagada	15.77	18.46	17.03	17.90	16.59	17.28	6.52	10.08	8.11
Sambalpur	31.77	22.00	26.96	31.79	9.43	21.76	29.04	18.28	23.55
Sonepur	23.88	14.97	19.38	15.98	6.61	11.24	5.00	4.49	4.73
Sundergarh	12.18	8.95	10.57	12.17	8.59	10.48	18.20	14.03	16.11
Odisha	18.3	14.61	16.49	18.68	13.9	16.34	20.47	17.44	19.02

Source: OPEPA, Bhubaneswar, Odisha

Table-A6: Transition rate and Retention rate in secondary education, Odisha,2013-14

District name	Transition rate (class viii-ix)			Retention rate		
	Boys	Girls	Total	Boys	Girls	Total
Anugul	94.71	101.60	98.07	69.91	72.01	70.95
Balasore	105.81	115.06	110.38	78.59	80.43	79.52
Baragarh	93.31	102.43	97.74	74.91	78.92	76.89
Bhadrak	94.27	95.90	95.09	83.48	86.28	84.90
Balangiri	93.39	92.39	92.91	86.81	91.32	88.97
Boudh	88.75	84.80	86.79	58.84	66.76	62.70
Cuttack	104.94	107.53	106.22	84.74	86.90	85.82
Deogarh	103.28	119.39	111.26	85.57	92.25	88.89
Dhenkanal	107.64	122.31	114.75	88.95	90.72	89.82
Gajapati	72.8	70.05	71.17	85.63	82.76	84.28
Ganjam	86.64	89.05	87.86	76.41	83.50	79.97
Jagatsinghpur	108.25	105.84	107.06	91.09	95.13	93.04
Jajpur	103.57	108.73	106.11	87.89	90.95	89.42
Jharsuguda	85.01	105.84	95.54	76.30	81.90	79.05
Kalahandi	88.95	84.17	86.69	87.29	93.55	90.14
Kandhamal	84.09	82.82	83.48	79.90	79.23	79.57
Kenrapada	103.12	110.163	106.88	84.93	87.79	86.37
Keonjhar	95.91	94.95	95.44	84.58	88.44	86.47
Khurda	97.49	102.32	99.81	81.53	88.46	84.84
Koraput	103.91	101.68	102.91	96.86	99.30	97.95
Malkangiri	90.47	99.76	94.62	94.17	93.76	93.99
Mayurbhanj	94.42	102.59	98.47	85.90	85.37	85.64
Nabarangpur	79.66	84.17	81.75	66.04	68.12	66.98
Nayagarh	101.56	102.8	102.17	77.93	85.47	81.57
Nuapada	84.81	78.2	81.66	81.19	82.01	81.58
Puri	103.89	111.04	107.38	83.95	86.96	85.42
Rayagarh	83.73	83.57	83.65	84.23	81.54	82.97
Sambalpur	76.68	90.82	83.83	68.23	78.00	73.04
Sonepur	105.88	117.22	111.46	76.12	85.03	80.62
Sundargarh	89.23	95.02	92.09	87.82	91.05	89.43
Odisha	95.21	99.66	97.39	81.70	85.39	83.51

Source: OPEPA, Bhubaneswar, Odisha