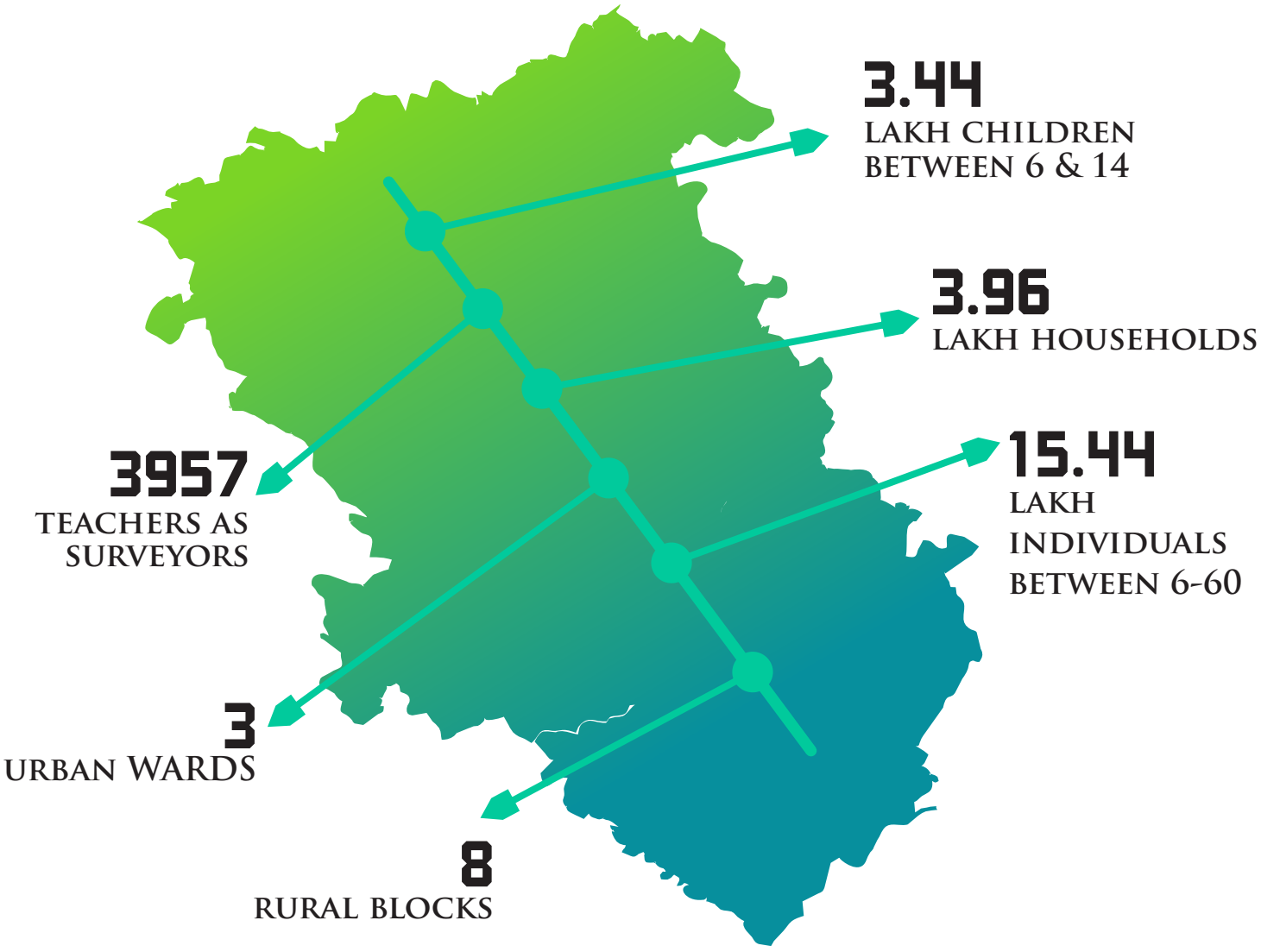
WHY CAN'T THE CHILDREN READ

AND WHAT CAN BE DONE ABOUT IT



GLOBAL DREAM SURVEY REPORT

Why can’t the children read?

Global Dream 2015 Survey Report

Abstract

This report presents the Global Dream 2015 survey’s findings on children’s literacy and enrolment rates.[i] The Global Dream 2015 survey covered a population of 3.25 lakh children (6-14) in Lucknow district, collecting information on basic demographics (age, gender, caste), enrolment status (not enrolled/ madrassa/ private/ government school) and administering a literacy test. Part 1 discusses the overall results of the survey. We found that enrolment rates are higher in rural areas (95%) than urban areas (91%). Poverty is the largest stated reason for non-enrolment (48% of respondents). Urban residents, SC/ST and minority students, and young teenagers are most at risk of dropping out of school. We find significant evidence for educational inequality by caste: 57% of ‘general’ children attend a private school, compared to 32% of SC/ST children; 77% of ‘general’ children can read compared to 65% of SC/ST children. While girls are under-represented in private schools, their literacy rates are now slightly higher than boys’. Private school students are more literate (74%) than government school students (65%), but much of this difference can be attributed to socioeconomic differentials. Overall, the quality of schooling is unacceptably low, with only 22% of illiterate children learning to read with an additional year of school. Part 2 goes on to discuss potential policy implications. We propose a range of measures to boost enrolment rates, including a conditional cash transfer for teenagers from SC/ST and minority communities. However, with approximately 90% of all illiterate children already in school, the focus must shift towards improving the quality of education. We explore various initiatives, including mechanisms to foster teacher accountability and motivation, ways to train and support teachers, and school vouchers. Part 3 then present the details of the different rural blocks, and Part 4 does likewise for urban wards.

Key words: education, primary & upper primary, Hindi literacy, caste, private schools, government schools, conditional cash transfer, political economy of education, teachers

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Executive Summary

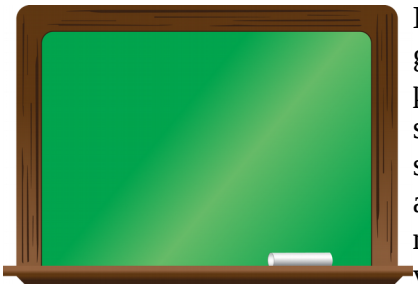
Key Findings

***Enrolment**: Urban areas have lower enrolment rates and higher drop out rates compared to rural areas. There are approximately 70,000 out-of-school children in Lucknow.*

Enrolment rates are lower in urban areas compared to rural (91% vs 95%). Our study found approximately 8,000 rural and 10,000 urban school-age children who are out of school. Given the proportion of Lucknow's population that our survey covered, this yields an estimated 15,000 rural and 53,000 urban children in Lucknow who are not enrolled.[ii] Enrolment rates peak around age 9, as younger children trickle into school and a significant minority of young teenagers drop out of school. The majority of children in rural areas attend government schools rather than private ones (51% vs 39%); while in urban areas government schools are less prevalent than private ones (32% vs 51%).

Highlights: The enrolment rates are relatively high, especially in rural areas.

***Enrolment inequalities**: Boys and children from high castes are over-represented in private schools. The single most commonly given reason for why children are not in school is poverty.*



Boys are slightly more likely to attend private schools (43%) than girls (40%). 'General' caste children are far more likely to attend a private school than SC/ST children (57% vs 32%). Poverty is the single most commonly given reason for why children aren't in school (48% of respondents), and is especially significant in urban areas (64%). Dropout rates are especially problematic among religious minorities and teenagers: 18% of religious minority 14-year-olds are out of school.

Opportunities: There is a major opportunity to decrease dropout rates through conditional cash transfers (CCTs) and improving the quality of education.

***Urban vs rural**. In spite of higher enrolment rates, rural areas have lower literacy rates than urban areas. This is because rural 6-year-olds are far less literate.*

Urban children are more literate than their rural counterparts (73% vs 66%), though this gap of 7% is lower than the urban-rural literacy gap among adults (11%). The literacy gap is very significant at age 6: 52% of 6-year-olds in urban schools can read, compared to 28% of rural 6-year-olds. This is primarily because 43% of urban 5-year-olds are enrolled, compared to 22% of rural 5-year-olds. The gap shrinks dramatically: by age 14, 92% of urban and 91% of rural school students can read.

Highlights: Rural areas' literacy rates are catching up with urban areas.

Opportunities: Rural areas could look to implement preschool programs and motivate parents to teach their children, to improve the literacy rates of young children.

***Caste and Gender**: While SC/ST and minority children have lower than average literacy rates, the caste gap is much lower among children (12%) than adults (25%). Girls are slightly more literate than boys.*

The caste gap is closing significantly. The child literacy rate varies by caste, though not as much as among adults. 77% of 'general' children, compared to 65% of SC/ST and minority children can read – a caste gap of 12%, compared to 25% among adults. The child literacy rate is 69% for girls and 67% for boys. In all 8 blocks and 3 wards surveyed, girls are slightly more literate than boys.

Highlights: The gender gap has fully closed, and the caste gap is shrinking.

Opportunities: Literacy rates for children are still unacceptably low, especially for SC/ST and minorities.

***Government vs Private**: 74% of private students can read, compared to 65% of government school students. However, much of this differential can be attributed to socioeconomic differences between government and private school students.*

There is a significant difference in literacy levels at age 6 between government and private schools: 37% of private school students aged 6 can read, compared to 28% of government school students. The difference at age 6 probably reflects the difference in socioeconomic backgrounds of those who send their children to private versus government schools. This gap between private and government schools reduces by age 14 (93% vs 89%). An illiterate child has a 21% chance of learning how to read in the next year of education if they are in a government school, compared to a 25% gap if they are in a private school.

Opportunities: Literacy levels in both government and private schools remain unacceptably low.

Policy Recommendations

- Improve enrolment rates, especially among urban preteens and teenagers from SC/ST and minority backgrounds, through a cash transfer scheme conditional on school attendance and enrolment.
- Consider experimenting with school voucher systems to boost the quality of private schools.
- Boost teachers' intrinsic motivation through encouraging and providing opportunities for teachers to share their classroom innovation with peers. Recognise and award teachers for outstanding performances.
- Enhance teacher accountability through a combination of parental visits, 3rd party evaluations, and a helpline for complaints about teacher absenteeism and malpractice.
- Consider 'grandfathering' existing public school teachers while introducing a new system of pay and accountability for incoming teachers.
- Find a middle way between permanent and contract teachers, which gives some job security but not a permanent job, and pays a living wage but not an exorbitant salary.
- Conduct teacher training that addresses both underlying worldviews of teachers, and their day-to-day practice. Training to be complemented by long-term support and school visits.
- Include a values component in primary education.

Methodology

The Survey was conducted in 2015, in eight rural blocks and three urban wards of Lucknow district. 3957 government school teachers were trained in the techniques of conducting a survey. Survey participants were asked demographic questions, about their age, sex, caste. They were also asked about their current educational status. A literacy test was then conducted, in which survey participants were asked to read two passages – one without matras, one with (see below). Those who could read both passages, with few mistakes albeit slowly, were deemed to be literate.

A *मात्रा वाले वाक्य*

झिलमिल एक अच्छी लड़की है। उसे तितली पकड़ने का शौक है। तितलियाँ सुन्दर और रंग-बिरंगी होती हैं। पकड़ने से तितलियाँ डर जाती हैं।

B *बिना मात्रा वाले वाक्य*

अमर ऐनक पहन। बस पर चढ़। आज नगर चल। ऋषभ छत पर चढ़। इधर-उधर मत टहल। अंगद फल रख। कमल अक्षत व जल ढक। यश आम व ईख रखकर पत्र पढ़। हर एक अक्षर पढ़। जय जगत कर।

Relevance: comparison with other surveys

Throughout this report, we compare our findings with those of various other surveys. The global dream survey fills a gap in that it is the only survey (to our knowledge) which directly measures literacy, and correlates it with both sociodemographic and enrolment information. The table below compares the Global Dream survey with three major studies: the Census, ASER and NAS.

	Year	Scope	Size (# children 6-14)	Involves direct testing	Collects caste information?	Compares govt & private schools?	Includes out-of-school children
Global Dream	2015	Lucknow district	3.25 lakh	Y	Y	Y	Y
Census	2011	All India	23.4 crore	N	Y	N	Y
ASER	2016	Rural India	5.6 lakh	Y	N	Y	Y
NAS	2017	All India Gr 3, 5 & 8	22 lakh	Y[iii]	N	N	N

Unlike the Census, the Global Dream Survey measured literacy directly. Self-reported literacy rates tend to be inflated, as some people over-estimate their own literacy.[iv] For instance, the Census reports rural UP literacy of 7-14 year-olds to be 85%, compared to our finding of 66%. Our data, which matches more closely with other direct-testing surveys, indicates that the problem of illiteracy is much greater than Census figures suggest.

While the Annual Status of Education Report is an excellent and comprehensive survey, it does not detail differences in literacy by sociodemography, such as caste. The Global Dream Survey enables us to examine caste inequalities in enrolment and literacy rates.

The National Achievement Survey is conducted in government schools only, so does not allow for the comparison of government and private schools. Furthermore, because it was conducted in schools themselves, it could not capture information on out-of-school students. The Global Dream Survey presents interesting information on enrolment and dropout rates, including stated reasons for children not being in school.

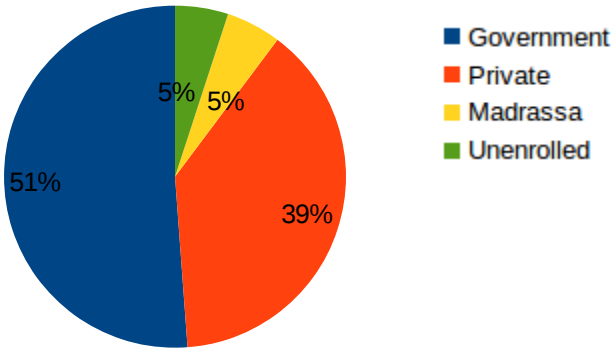
The Global Dream survey fills an important gap in knowledge of the Indian education system. While smaller in scope and size, it provides an accurate and detailed snapshot of the education system in the capital of India’s largest state.

Part 1: Overall Results

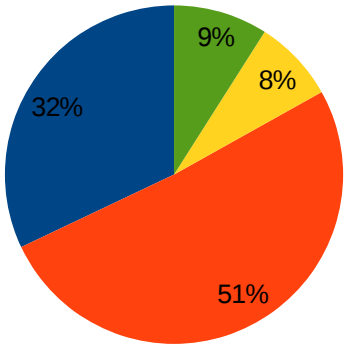
1.1 Enrolment rates: rural/urban and age

Enrolment rates are higher in rural areas (95%) than urban ones (91%)[iii], while private schools are more widespread in urban areas. This survey found enrolment rates similar to ASER (95% , rural UP)[iv] and MHRD (97%, all India)[v]. 51% of rural children attend a government school, while 39% go to a private school. In urban areas, this has reversed, as 51% attend private schools and only 32% government schools.[vi] Madrassas educate around 5% of rural children and 8% of urban children – a difference that can be primarily attributed to a larger Muslim population in urban areas. Our survey found a total of 18,000 unenrolled children; based on the proportion of Lucknow's population our survey covered, we estimate there to be 70,000 out-of-school children in Lucknow.

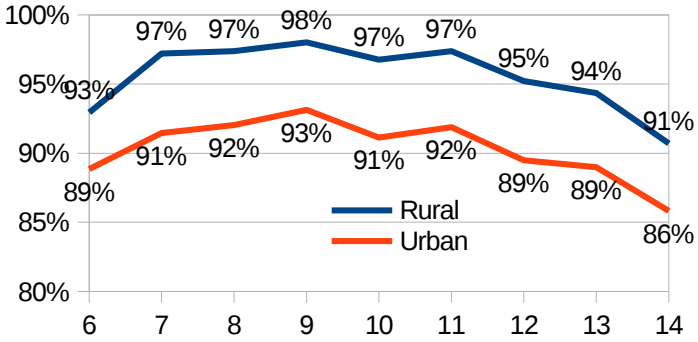
Graph 1.1.1: Enrolment by school type, rural



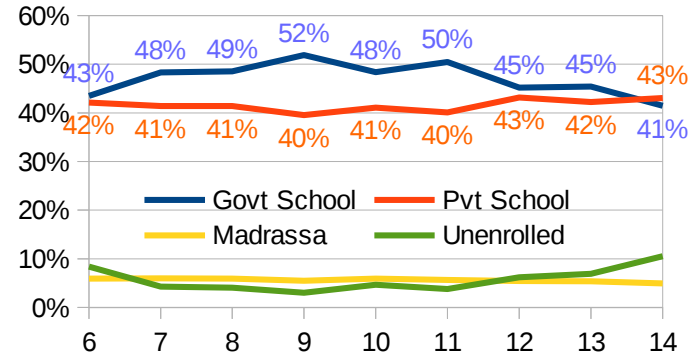
Graph 1.1.2: Enrolment by school type, urban



Graph 1.1.3: Enrolment rate by age



Graph 1.1.4: Enrolment by age and school type.



Enrolment rates peak around age 9, at an impressive 98%. Some children only start school at 7. By early teenage years, students start dropping out: at the age of 14, 14% of urban teenagers are out of school.[vii] This survey only considers enrolment, rather than actual attendance.

Parents tend to prefer private schools especially for younger and older children. 43% of 6-year-olds are enrolled in government schools, compared to 42% in private schools. By age 9, there are far more students enrolled in government schools than private (52% vs 40%). However, the enrolment rates in government schools drop off again in early teenage years, such that at age 14, there are more children in private schools (43%) than government (41%).

14% of urban 14-year-olds are not enrolled.

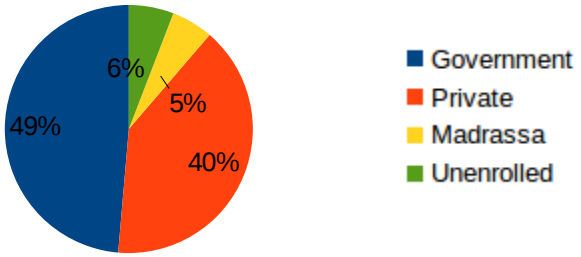
Highlight: Overall, enrolment rates are high.

Opportunity: Further effort to retain urban teenagers is required.

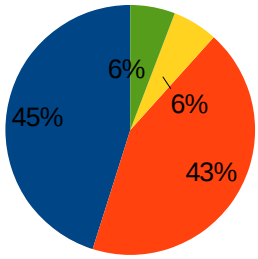
1.2 Enrolment inequalities: gender and caste

Boys are more likely to attend private schools than girls. While 49% of girls attend government schools and 40% private schools; 45% of boys go to government schools and 43% private.[viii] Similar proportions of girls and boys are unenrolled.

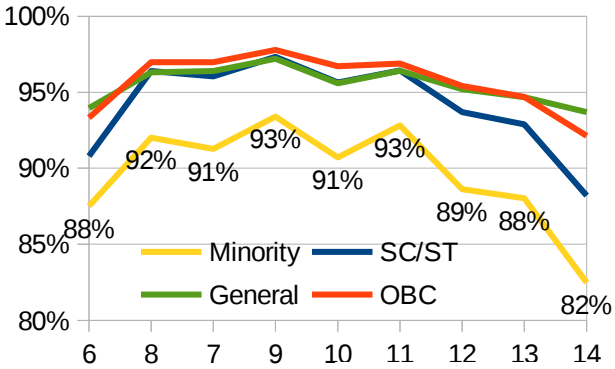
Graph 1.2.1: Enrolment by school type, girls



Graph 1.2.2: Enrolment by school type, boys

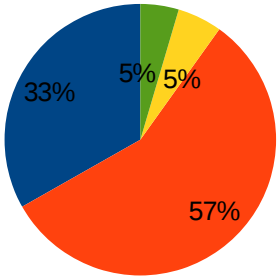


Graph 1.2.3: Enrolment by caste & age

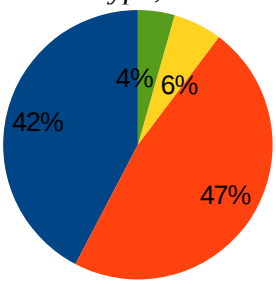


Children from 'general' caste are far more likely to attend a private school than SC/ST children. 57% of 'general' children attend a private school, compared to 32% of SC/ST children. In contrast, 33% of 'general' children go to government schools, compared to 57% of SC/ST children. A large proportion (11%) of religious minorities are out of school. This is especially problematic in urban areas, where 15% of religious minority children are out of school. 18% of religious minority 14-year-olds don't attend school: far more than any other caste.[ix]

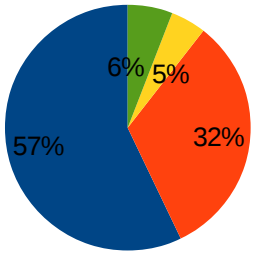
Graph 1.2.4: Enrolment by school type, general



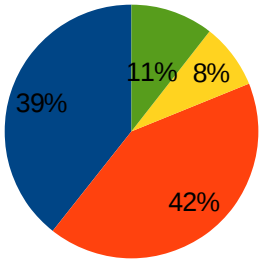
Graph 1.2.5: Enrolment by school type, OBC



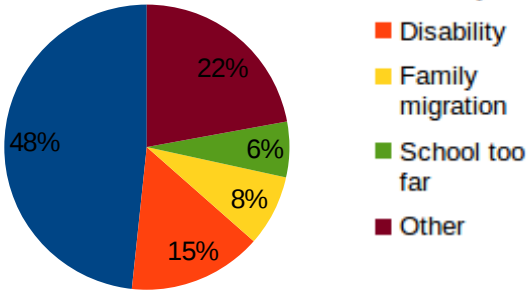
Graph 1.2.6: Enrolment by school type, SC/ST



Graph 1.2.7: Enrolment by school type, minority



Graph 1.2.8: Reasons for non-enrolment



Poverty is the single greatest factor holding back enrolment.[x] Poverty emerged as the single greatest factor (48%), followed by disability (15%), family migration (8%) and school being too far away (6%).[xi] Poverty emerged even more strongly as the greatest factor in urban areas (64%) compared to rural areas (37%). Poverty was a more significant reason for children from minority religions. These responses showed little gender difference.

Highlight: Girls have reached parity with boys in terms of enrolment rates.

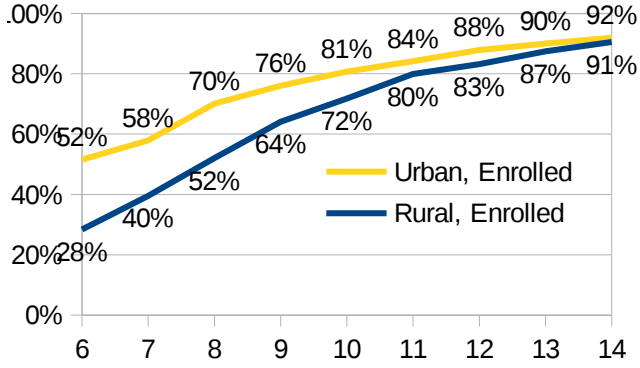
Opportunity: There is a big opportunity to improve enrolment rates of religious minorities, especially through reducing dropouts. Private schools also need to do more to include children from 'lower' castes.

1.3 Literacy rates: rural/urban and age

68% of the children surveyed (6-14 year-olds) could read. While enrolment rates are lower in urban areas compared to rural (91% vs 95%), literacy rates are higher in rural areas (73% vs 66%).[xii] The easiest possible explanation for this is that urban schools tend to be better than their rural counterparts. However an age-wise analysis shows that this is not the case: the gap between urban and rural school-student literacy rates decreases among older children. While an impressive 52% of 6-year-old school students in urban areas can read, only 28% of their rural counterparts can. However, as these students age, the literacy rates grow and converge: 92% of urban 14-year-old students and 91% of rural students can read.

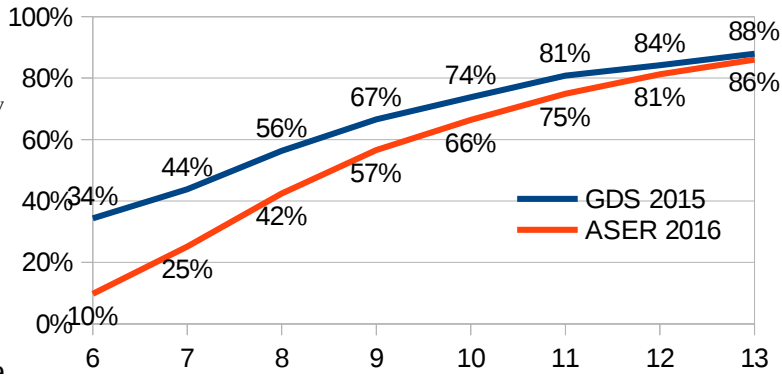
This indicates that the gap between rural and urban child literacy rates may be caused not so much by lower quality schools in rural areas, but rather by more urban parents teaching their children how to read. This may be facilitated by adults – especially women, who may be more likely to teach their children – being more literate in urban areas than rural (73% vs 62% for adults overall, 70% vs 54% for women). Another factor may be that more urban children go to preschool or enrol in school early. The 2011 Census indicates that 43% of urban 5-year-olds in Lucknow district are enrolled, compared to 22% of rural 5-year-olds.[xiii]

Graph 1.3.1: Literacy rates for school student by age and rural/urban



Our findings for literacy in schools can be compared to ASER's rural nationwide statistics.[xiv] Our statistics show a substantially higher literacy rate for younger children compared to the ASER figures (34% vs 10%).[xv] The difference dwindles among older children (88% vs 86% at age 13).

Graph 1.3.2: Global Dream Survey (2015, UP) compared to ASER (2016, rural nationwide)



Our statistics indicate that an illiterate child in school has a 22% chance of learning how to read in the next year.[xvi] Other studies indicate similar disappointingly low rates of learning progress in other parts of India, in other learning areas. The Andhra Pradesh Randomized Evaluation Study reports around 10% students unable to solve simple maths problems are able to solve them after a year in school.[xvii] A longitudinal study by Bhattacharjea et al indicated that, of students who could not write a dictated word in Grade 2, 23% learnt to do so by grade 3.[xviii]

Highlight: It is encouraging that, despite rural areas having lower literacy rates, their schools are helping their children's literacy rates catch up with urban areas.

91% of 14 year old school students can read

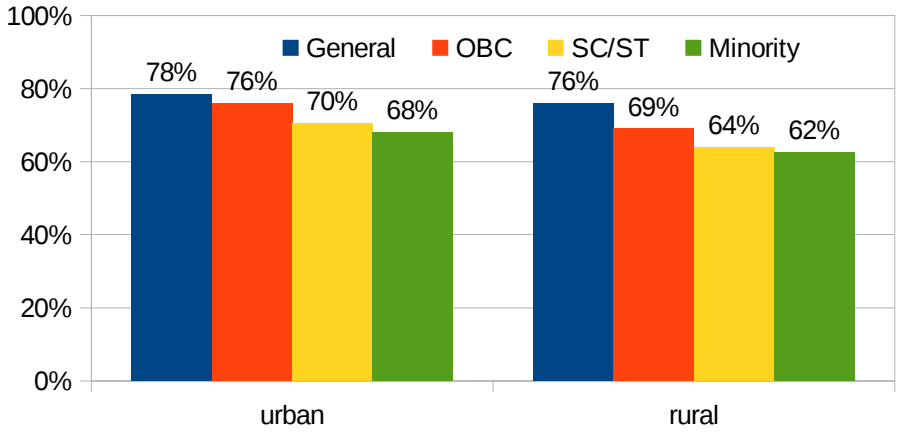
Opportunity: It is deeply problematic that a significant minority of students spend many years in school without becoming literate. All schools need to pay special attention to students who are not yet literate, possibly through supplemental education programs. Rural areas may consider increasing the availability of preschool programs, to improve the basic literacy of children entering schools.

1.4 Literacy inequalities: gender and caste

All of the blocks and wards surveyed had a slightly higher literacy rate for girls than for boys. The gender gap among children's literacy is much smaller than among adults, and in the opposite direction: 68.6% of girls can read, compared to 67.3% of boys. This is impressive, given that girls are less likely to attend private schools than boys (see Section 1.2).

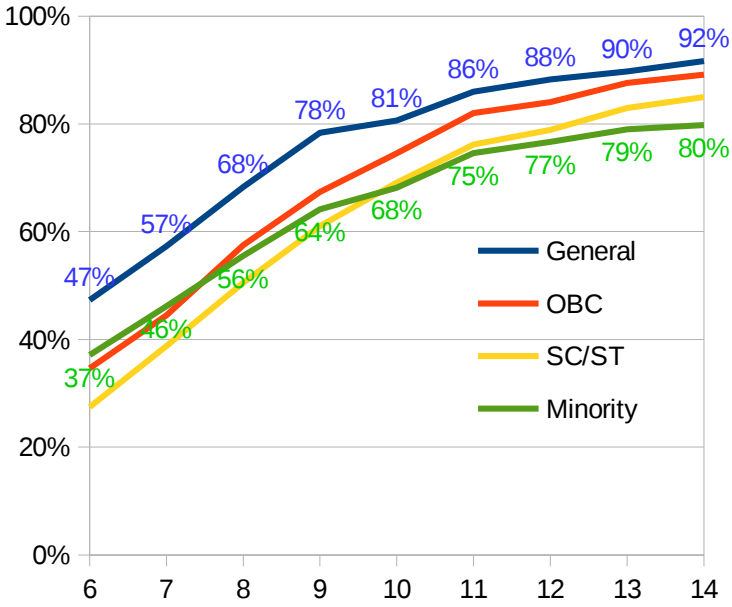
The child literacy rate varies by caste: 77% of 'general' children and 65% of 'minority' children can read. This 'caste gap' of 12% is much smaller than the equivalent adult caste gap of 25%, and is indicative of the closing literacy gap.[xix] The caste gap is lower in urban areas (10%) than rural areas (14%) - there is a similar trend in the adult caste gap.

Graph 1.4.1: Literacy by caste, urban vs rural.



Among 6-year-old children, SC/ST are the least literate (27%) among the different castes, a massive gap to general (47%). This may be because SC/ST adults are the least literate caste (57%) and/or are less able to afford sending their children to preschool. However, the schooling system serves SC/ST children relatively well: by age 14, 85% are literate. In contrast, religious minority children, who have a literacy rate of 37% at age 6, have seen their literacy rise to just 80% by age 14. This relatively slow rise in literacy rates may indicate that schools are not serving religious minorities well – and, as discussed previously, a significant proportion of minorities drop out of schools.[xx]

Graph 1.4.2: Literacy by caste and age



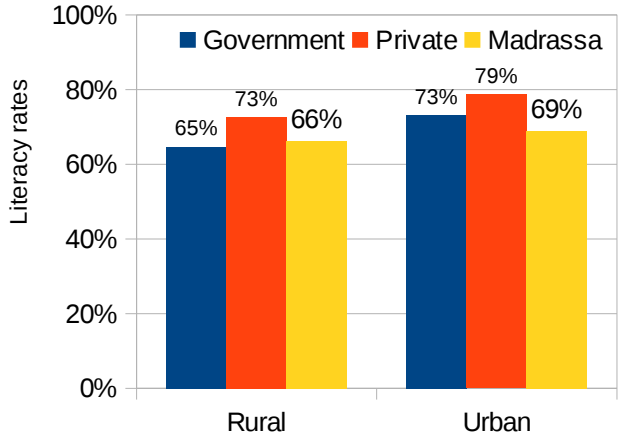
Highlight: It is encouraging that the gender gap has closed in child literacy, and that the geographical and caste gaps in literacy are significantly lower among children than adults.

Opportunity: Literacy rates remain unacceptably low, especially for SC/ST and minority children.

The child caste gap is half that of adults (12% vs 25%).

1.5 Literacy by school type

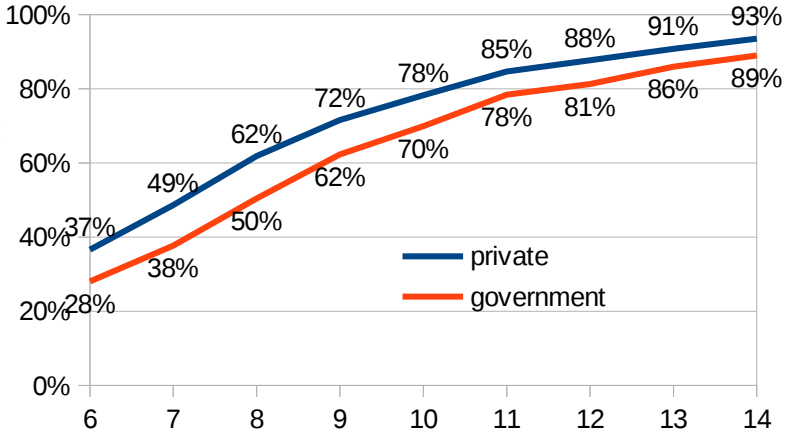
Graph 1.5.1: Literacy by school type, rural/urban



Private school students are somewhat more likely to be literate than government or madrassa-educated children. 74% of private school students aged 6-14 can read, while 67% of madrassa-educated and 65% of government school students can read. The literacy gap between government and private schools is slightly higher in rural areas (8%) than urban (6%). Of the 80,000 illiterate children surveyed, 52% attend government schools, 33% attend private schools, 6% madrassas, while 9% are unenrolled.

As other studies have found, much of the literacy gap between private and government schools can be attributed to students' differing backgrounds.[xxi] As discussed above, private schools are more prevalent in urban wards than in rural blocks (51% vs 39%), and urban areas have higher literacy rates (73% vs 66%). Similarly, general children are far more likely than SC/ST children to attend a private school (57% vs 32%), and also have higher literacy rates (77% vs 65%). Once caste and rural/urban differences are taken into account, the difference between private and government schools is no longer as significant. This is indicated by the fact that the gap between private and government school students at age 6, when their schooling cannot have made too much difference on their literacy, is 9% (37% vs 28%) - the same as the overall gap (74% vs 65%).

Graph 1.5.2: Private vs government schools' literacy by age



However, some difference remains between private and government schools. An illiterate government school student has, on average, a 21% chance of becoming literate with an additional year of school (rural government school: 21%; urban government school: 20%).[xxii] The same statistic for private school students is 25% (rural: 26%, urban: 22%). By comparison, illiterate out-of-school children have just a 2% chance of learning how to read over the next year. Expressed by another metric, a private school student in class 'z' has approximately the same chance of being literate as a government school student in class 'z+1', although this gap grows slightly. In terms of literacy, 1 year of private schooling seems equivalent to around 1.05 years of government schooling.[xxiii]

Highlight. Government schools are doing almost as well as private schools, once students' backgrounds are taken into account.

Opportunity. The vast majority of illiterate children are in school, so there is a tremendous chance to boost literacy by improving the quality of schooling.

An illiterate government school student has a 21% of learning to read over the next year; a private school student has a 24% chance.

Part 2: Policy Recommendations

A child's education is a major determinant of their future well-being. Uneducated children are likely to spend the rest of their lives in poverty. Their children, in turn, are less likely to receive an education. Educational disparities are thus a key factor in the inter-generational transmission of inequality. Consequently, it is also vital to understand the sociodemographic differences in educational enrolment and achievements:

- **Rural-urban:** Enrolment rates are higher in rural areas (95%) than urban (91%). Drop out rates are problematic: 14% of urban 14-year-olds and 9% of rural 14-year-olds are out of school. In terms of literacy, urban areas (73%) are ahead of rural (66%). However, this is primarily due to out-of-school factors: 52% of urban 6-year-olds can read, compared to 28% of rural 6-year-olds.

- **Gender**: The gender gap has closed. The earlier challenges of enrolling girls no longer exist – girls, although slightly under-represented in private schools, have very similar overall enrolment rates to boys. Girls are more literate than boys (68.6% vs 67.3%).

- **Caste**: Children from 'lower' castes are less likely to attend private schools than 'higher' caste children. Religious minorities have a significantly lower enrolment rate (89%) than any other caste. While caste still affects children's literacy levels, the 'caste gap' is much smaller in children than among adults. Literacy rates of SC/ST/Minority children are 12% lower than their General caste counterparts. The equivalent gap in adults (15-60 year-olds) is 25%.

Where does all this information leave us, in terms of implications for educational policy makers? Quite simply, while great progress has already been made, there is significant need for both increasing the quantity of children in the education system (as indicated by enrolment rates) and the quality of the education system (as indicated by literacy rates among school students). This part considers potential policy mechanisms to improve the quantity and quality of the education system.

Quantity: Improving enrolment

Schools, especially in urban areas, still have some way to go to retain young teenagers – particularly from minority and SC/ST communities. Greater effort must be taken to understand the pressures that lead to children dropping out of school. As this survey revealed, the single most important factor is poverty. Consequently, ways must be found to make school attendance more attractive for the poor.

Incentivising school attendance

There are already several useful schemes which provide incentives for school attendance. The mid-day meal scheme is a powerful motivator for children from impoverished families. Provision of uniforms and books has also helped reduce economic barriers to schooling. Various other material incentives have been trialled – from the provision of bicycles to laptops.[xxiv] Though popular, these one-off incentives may not have as lasting an impact on school attendance.

Many young teenagers – especially in urban areas – are dropping out of school to earn meagre incomes through various forms of child labour. A possible policy response would be further incentivising school attendance through conditional cash transfers, such as Brazil's Bolsa Familia program.[xxv] Similar programs have also been tried in Bangladesh[xxvi] and Pakistan[xxvii]. A regular cash transfer, conditional on a child's ongoing enrolment, attendance and possibly performance, could

motivate parents and children to stay in school for longer. Indeed, numerous studies suggest that conditional cash transfers are effective in boosting enrolment and attendance rates.[xxviii]

This conditional cash transfer could initially be targeted at SC/ST and minority young teenagers, and could be limited to urban areas where dropouts are a major issue. For instance, parents of SC/ST and minority children[xxix] in Grades 7-8 Aliganj could be paid a small sum – perhaps Rs 200 per month[xxx] – provisional on school enrolment and attendance.[xxxi] This payment would make it significantly less attractive for children to drop out of school for child labour.

Alternative schooling systems

The second most significant reason for lack of attendance is disability (15%). We need to consider what can be done to integrate children with disabilities into the mainstream of schooling, both through improving physical infrastructure and changing attitudes of teachers and peers. In some cases – children who are too disabled to travel to school, or who require far greater support – school should, perhaps, go to them. There could potentially be a system of specially trained teachers visiting children with disabilities in their homes and encouraging and engaging family members in caring for and educating their child.

A third reason cited for not attending school was family migrancy (8%). Children of construction workers and other labourers with short-term or seasonal work currently face many challenges in accessing an education. Changes in registration and transfer policies might help children of migrant workers attend the local school wherever they are, and easily change schools as their families move.

The link between quantity and quality

Enrolment rates in Lucknow – and India overall – are higher than the global average of 91% net primary enrolment; and far above regions like sub-Saharan Africa, where net enrolment is just 79%.[xxxii] While the focus has been rightly on enrolment, at the margin it is more important to ensure that children are actually learning in school. As the MHRD has found, a boost in enrolment rates has not resulted in the improvement in children's learning level we would expect.[xxxiii]

To improve retention, we must ensure that school attendance actually benefits children's learning outcomes. When parents and children feel that genuine, useful learning is taking place, that will often be motivation enough to stay in school, especially for the older students who are more capable of judging the quality of engagement and schooling they are getting.

Quality: Improving learning in school

It is shocking that nearly 90% of illiterate children are, in fact, already enrolled in school. Only 69% of students at school can read. Clearly, the quality of the education system must be improved.

Are private schools the solution?

While it may be tempting to herald private schools as a solution, they do not fare much better than government schools once students' varying socioeconomic backgrounds are taken into account. Private school students have a higher literacy rate (74% vs 65%) than government school students. However, much of this difference can be attributed to non-school factors, as indicated by the significant differential in the literacy rates of private and government 6-year-old students (37% vs 28%). Nevertheless, it is worth considering a mechanism to potentially improve the quality of schools via privatisation: school vouchers.

School Vouchers: quality through competition?

Government provision of vouchers – which can be redeemed up to a certain amount on school fees – would enable far more children to access private schools. There are three primary mechanisms through which vouchers can improve the overall quality of schools:[xxxiv]

1. By enabling more children to access private schools, the private sector's share increases. If private schools generally provide higher quality education, then this improves the overall quality of education.
2. By providing a relatively easy option for children to leave the public sector, there is pressure on public schools to improve.
3. By providing an influx of money to the private sector, competition between private schools is enhanced, which should lead to higher quality private education.

While many people assume that private schools provide higher quality education, as we've seen, private schools do not significantly outperform government schools once the socioeconomic background of students has been taken into account. Consequently, the first mechanism alone is unlikely to yield significant results: simply shifting a student from a public to a low-rung private school is unlikely to improve results.

There is little evidence that the second mechanism will work in India, as the political economy of education prevents public teachers from feeling much effective pressure. Vouchers may well result in more students leaving the public sector – indeed, a flight from public schools has already been underway for several years, with enrolments in public schools decreasing by 11 million from 2011 to 2015.[xxxv] One might hope that this would put pressure on public schools to lift the quality of education or be shut down. However, during this period of falling enrolment, the total number of government schools has increased 16,000; such that now 40% of all government schools have fewer than 50 enrolments.[xxxvi] The government has neither shut down nor applied effective pressure on tiny schools – in part because of RTE requirements, in part due to the aforementioned political power of government school teachers.

The third mechanism may yield better results: competition between private schools can enhance the quality of education. This may be particularly the case in urban areas, in which there are many private schools to choose from. However, an important aspect of competition is informed choice. In a position of information asymmetry, many parents struggle to accurately discern the quality of education a school provides. Instead, many parents choose schools on the basis of the socioeconomic background of their students.[xxxvii] For vouchers to improve the quality of private schools through enhanced competition, some form of publicly published comparison of schools may be important. However, these comparisons often revolve around test scores, which can lead to a problematic 'teaching to the test'.[xxxviii]

While theoretically vouchers are an appealing way to enhance the quality of education, the empirical evidence – mainly gathered from developed countries – is mixed.[xxxix] While there have been relatively few voucher experiments in India, the Andhra Pradesh School Choice Project demonstrated modest success in raising the achievements of 2,000 lottery-selected rural voucher recipients by 0.13 standard deviations, relative to those who applied for but did not receive vouchers.[xl] School vouchers have the potential to improve the quality of the education system – especially, in the Indian context, of private schools themselves – so it may be worth trialling a voucher experiment in Lucknow. Overall, however, there is little alternative to improving the quality of the public education system through greater teacher accountability.

Teacher accountability

Lack of teacher accountability is a root problem with the public education system, and a function of India's political economy of education. Permanent teachers receive relatively comfortable salaries

and have excellent job security. As Kingdon documents, the entrance-level pay for primary teachers in UP is around Rs 30,000 per month – about ten times the comparable salary for private school teachers.[xli] Government school teachers also, in practice, enjoy permanent jobs. Pritchett and Murgai have deemed this a 'high pay/zero accountability' outcome: arguably, a recipe for apathy.[xlii] Indeed, high teacher absenteeism has been a major problem for a long period. According to a 2004 World Bank study: "*25% of teachers were absent from school, and only about half were teaching, during unannounced visits to a nationally representative sample of government primary schools in India. Absence rates varied from 15% in Maharashtra to 42% in Jharkhand, with higher rates concentrated in the poorer states. We do not find that higher pay is associated with lower absence.*" [xliii] On top of this, a significant proportion of teachers' time at school is spent on non-teaching activities.[xliv] Clearly, greater teacher accountability is needed. There are several ways this can be achieved.

In the 'carrot and stick' approach, teachers are given promotions and financial rewards if their students' learning outcomes improve well, or have disciplinary action taken against them if they are absent or underperforming. These approaches are gaining prominence in many parts of the world,[xlv] though they remain somewhat limited by political economy constraints in India. Regardless, external rewards or punishment seldom improve intrinsic motivation.[xlvi] Incorporating CCTV cameras, more student testing, and generally greater performance monitoring, have not proven as effective as may be imagined in other parts of the world. Linking teachers' pay to their students' learning, as indicated by test scores, generally leads to an unhealthy focus on examinations - 'teaching to the test'.[xlvii] An excessively punitive model can also result in teachers feeling pressured and defensive[xlviii] – a psychological state that is inimical to good teaching.

Informal teacher accountability to the public – especially the parents of their students – is a constructive alternative to the carrot and stick model. Parents should be encouraged to visit their school and take an active interest in their child's education. A helpline number – similar to 1090 – could be set up, to receive complaints about teacher absenteeism or incompetency. This could be an avenue for redress of complaints, by a call, visit to an erring teacher, or media expose. The 1090 helpline has been highly effective in keeping the identity of the complainant hidden and yet being able to take corrective action; a similar system would be needed for an educational helpline number. An educational helpline could be run by the government, or even an NGO.

International evidence suggests that community accountability is effective at least in reducing teacher absenteeism (UNESCO, 2017). However, social distance between parents and teachers can be a major barrier: "*Representatives of local communities can visit classrooms, for instance, to ensure that teachers are present. Community report cards are a more complex tool, usually used to hold schools accountable but typically including a focus on teachers. Community-led surveys concerning teachers have been used in several low income contexts, especially in rural or disadvantaged regions. Parent–teacher meetings are the most basic avenue for parents. However, they are often infrequent and offer limited opportunity to monitor teaching and learning. Their usefulness in accountability is especially poor for parents from disadvantaged backgrounds.*"[xlix]

To aid parents in holding teachers accountable, some system of third-party school evaluation may also be needed. This would involve some organisation conducting random, unannounced school visits to check on teacher attendance and activity. The results of these visits could be published in a public forum. Where disciplinary action is needed, the current model of transferring underperforming teachers is clearly problematic. It would be preferable if a body of teachers themselves could decide what form the discipline would take.[l]

Ultimately, the current 'high pay/zero accountability' of government school teachers in unsustainable, both financially and educationally. The current system is also 'anti-teacher', in the

sense that government school teachers – even those who perform well – often suffer a low reputation and low work satisfaction.[li] While most experts agree that the political economy of education in India precludes major changes to the pay and accountability structures of current teachers, interesting proposals have been made to 'grandfather' existing teachers while introducing a new system for incoming teachers.[lii] Teachers must take greater responsibility for, and have greater accountability towards their students.

Permanent vs Contract teachers

As has been discussed, permanent teachers in India receive large salaries – much larger than their counterparts in other nations – and also cannot be sacked. Many states, including Uttar Pradesh, have realised the financial difficulty of employing enough permanent teachers to meet the prescribed student-teacher ratio. They have instead started employing 'contract teachers'. Contract teachers often have lower qualifications, receive a much smaller salary (closer to the market rate), and have very limited job security.

There is some evidence that, despite their lower qualifications, contract teachers do as well as permanent teachers. This is, perhaps, because they know that low performance will result in them losing their jobs. However, this dualism in the teaching cadre is deeply problematic. What is required is a middle path between the two extremes of permanent and contract teachers.[liii] We need teachers to be paid a living wage but not an exorbitant salary, to have job security but not a permanent job, to be trusted and respected but also held accountable.

Teacher recruitment, training, motivation & support

The government is to be commended for investing many resources in teacher recruitment and training. Unfortunately, judging from student results, much of this teacher training doesn't lead to long term improvements in pedagogy. The reason is that training often doesn't address teachers' worldviews, fails to foster intrinsic motivation, and lacks models for long-term support.

Teacher recruitment procedures are deeply problematic in that they rely almost exclusively on formal qualifications and the national teacher eligibility test, which may be poor proxies for actual teaching competence. Instead, recruitment should involve practical tests of teaching skills. Unfortunately, the high demand for government teaching jobs has not resulted in a large pool of talent to choose from, but rather has led to people with qualifications but lacking the motivation becoming teachers.[liv]

Teacher training generally seeks to shift teaching practices, but often fails to address the worldviews and habits which underpin these practices.[lv] For instance, learner-centred practices, such as activity and discussion based learning, are unlikely to stick if the teacher has a worldview which emphasises education as the transmission of information.[lvi] Teacher training thus needs to address teachers' underlying worldviews and attitudes about education, as well as practical skills and techniques.

Teachers in countries with highly successful education systems, such as Finland and Singapore, are generally treated as professionals: they are given significant autonomy over, and respect for, their work.[lvii] Crucial to this sense of professionalism is that teachers have strong intrinsic motivation to serve their students well. To this end DIET Lucknow has developed a platform on which teachers can document the innovations they are practising in the classroom.[lviii] This form of peer evaluation and recognition can provide non-financial incentives for teaching excellence, and has already proven effective in boosting teacher motivation.[lix] It can further be improved by teachers sharing their methods with each other.

Supervision and observation, not just one-off training, is required for long term improvements in teaching practice. As well as in-service training, teachers should have the opportunity for their trainers to visit them in their classrooms, to offer support and advice. Training should be followed by observation, to see what implementation is taking place, and offer feedback for further

improvement.[lx] A hallmark of the aforementioned Finnish and Singaporean education systems is their significant investment in ongoing professional development of teachers.

Values and Life Skills education

When a mother asked why she was sending her 10 year old son to work, instead of school, she responded: “What’s the point of sending him to school when all he’ll learn there is gambling and swearing?”

Whether or not values are consciously taught, schools are extremely formative places for children and young teenagers, as their values will be moulded by both teachers and peers. Unfortunately, with little emphasis on positive values or life skills education, children often imbibe problematic beliefs and behaviours at school.

Primary schooling should include a values and life-skills component, helping students to critically reason and develop their own values. We need to find especially powerful ways to engage preteens and teens in developing life skills. Defined by the World Health Organisation as ‘abilities for adaptive and positive behaviour’,[lxi] life skills break down into 10 core areas, such as critical and creative thinking, effective communication, decision-making, self-awareness and empathy.

A good example is Delhi’s Yuva Youth Empowerment Program, developed under leadership of Rina Ray, currently Secretary, MHRD.[lxii] Yuva covers a range of sensitive topics, including sex education, relationships, body image and drugs & alcohol. Crucially, rather than just imparting information, it encourages students to critically engage with these issues through discussions and activities. Educational programs such as this, which are directly relevant to young people’s lives, are also likely to keep students in school.

Conclusion

The focus on improving enrolment rates has largely paid off: 95% of children are enrolled in school, a significant improvement compared to 30 years ago. However, student learning levels remain low, as indicated by ACER and NAS surveys.[lxiii] To improve the quality of education, we must bolster teacher preparation, accountability, through a combination of parental visits, 3rd party evaluations and an educational helpline. Ultimately, teachers’ internal motivation and sense of professional duty needs to be fostered. Teacher training should address teachers’ worldviews about education. School vouchers may be able to boost the quality of education in private schools. A values component should also be included in primary schools. All children deserve a high-quality education – but we need to work hard to transform this dream into reality.

Part 3: Rural Blocks

3.1 BKT (Bakshi ka Talab)

Statistics in brief

NB numbers in parentheses are average figures for the 8 rural blocks, and are included to aid comparison.

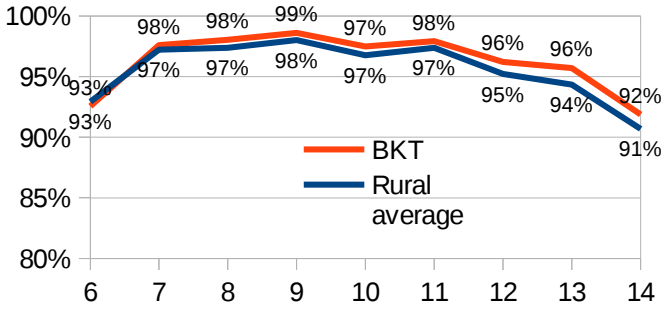
Child population[lxiv]	44,301 (246,367)	Enrolment: Govt	53% (51%)	L% Govt students	68% (65%)
Enrolment rate	96% (95%)	Enrolment: Private	38% (39%)	L% Private students	71% (73%)
Literacy rate (L%)	68% (66%)	Enrolment: Madrassa	5% (5%)	L% Madrassa students	64% (66%)

Enrolment rates

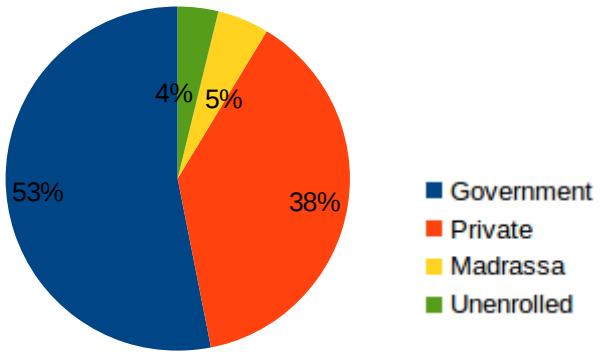
The enrolment rate in BKT is slightly higher than the rural average, and displays similar trends to it. Enrolment rates rise steeply between 6 and 7, peak at age 9, and drop off in early teenage years.

The majority of children in BKT go to government schools (53%), slightly more so than the rural average (51%).

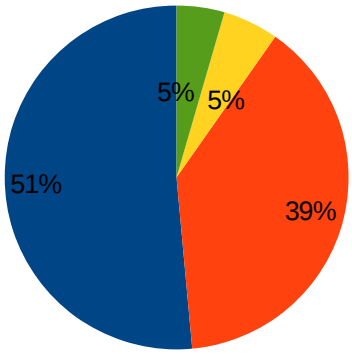
Graph 3.1.1: Enrolment by age



Graph 3.1.2: Enrolment by school type, BKT



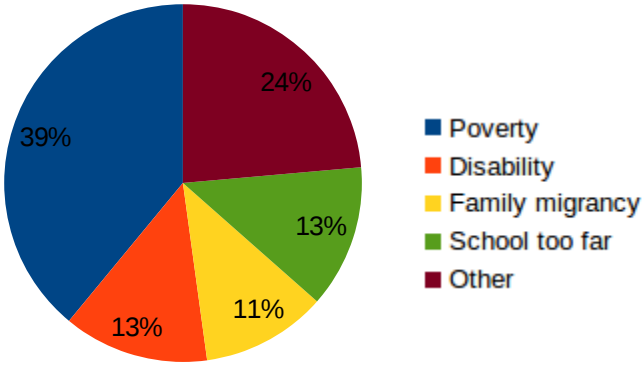
Graph 3.1.3: Enrolment by school type, rural



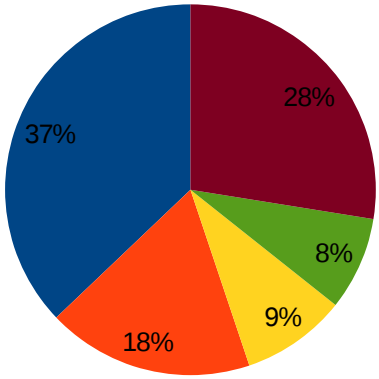
Reasons for not being enrolled

The enrolment rate in BKT is 96%. Of the 4% not enrolled (1644 children), poverty was the largest single reason given for not being enrolled (39%, compared to 37% for the rural average). 13% of BKT parents felt that school was too far away, compared to 9% for the rural average. Fewer BKT parents suggested their child's disability as the primary cause (13% vs 18%).

Graph 3.1.4: non-enrolment reasons, BKT



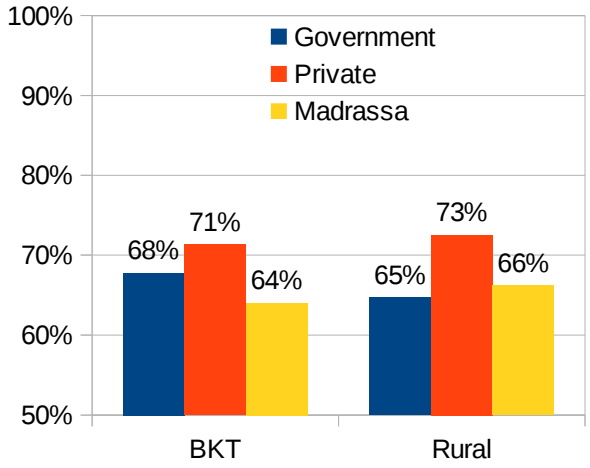
Graph 3.1.5: non-enrolment reasons, rural



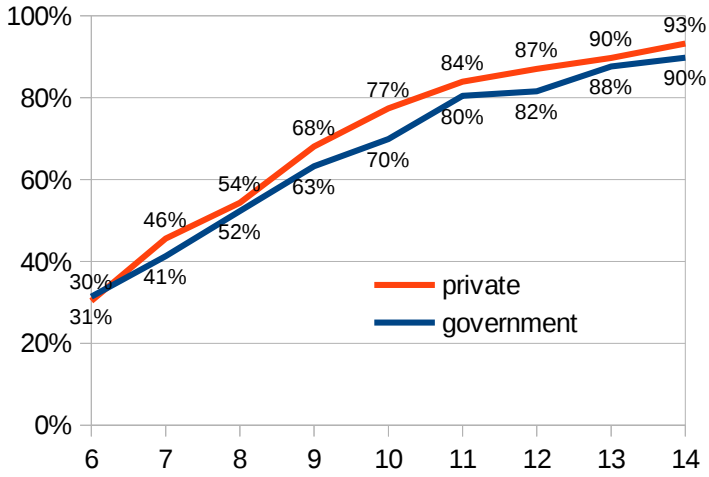
Literacy by school type

Government school students in BKT have better literacy rates (68%) than the rural average (65%). On the other hand, BKT's private and madrassa school students have a marginally lower literacy rate than the rural average. This means that the gap between government and private schools in BKT is significantly lower (3%) than the rural average (8%). This is primarily because, unlike many blocks, there is no gap between government and private in 6-year-old's literacy.

Graph 3.1.6: Literacy by school type



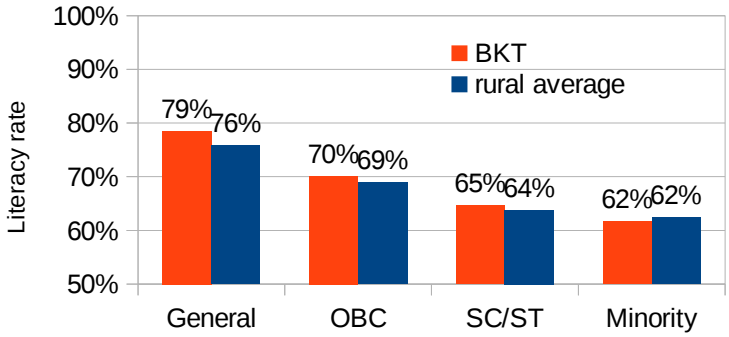
Graph 3.1.7: Literacy by age



Literacy by sociodemography

The literacy rate in BKT is slightly higher than the rural average for both males (67.3% vs 65.7%) and females (68.5% vs 67%). The caste-based literacy rates in BKT are similar to the rural average, although higher for the 'general' caste. This implies a marginally larger caste gap (17% vs 14%).

Graph 3.1.8: Literacy by caste



Highlights

- BKT has an impressively high enrolment rate (96%, compared to 95% for rural average).
- Literacy rates in BKT are higher than the rural average (68% vs 66%).

Opportunities

- Literacy is slightly more inequitable by caste in BKT, providing an opportunity to target literacy interventions among lower castes and religious minorities.

3.2 Mohanlalganj

Statistics in brief

NB numbers in parentheses are average figures for the 8 rural blocks, and are included to aid comparison.

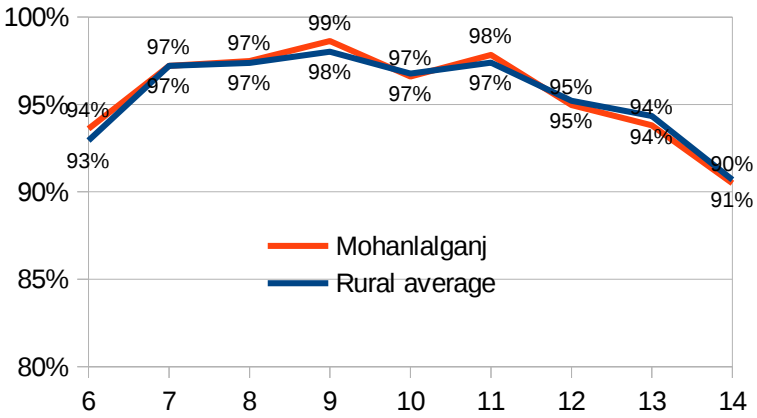
Child population	38,629 (246,367)	Enrolment: Govt	63% (51%)	L% Govt students	66% (65%)
Enrolment rate	96% (95%)	Enrolment: Private	29% (39%)	L% Private students	74% (73%)
Literacy rate (L%)	67% (66%)	Enrolment: Madrassa	3% (5%)	L% Madrassa students	73% (66%)

Enrolment rates

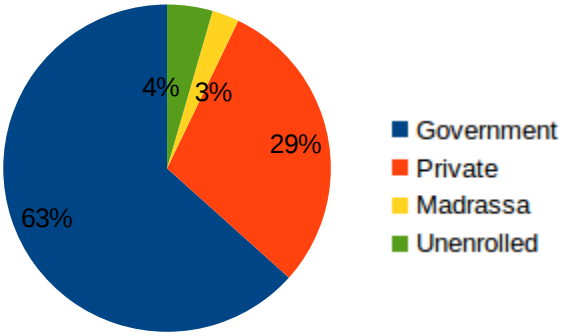
The enrolment rate in Mohanlalganj is slightly higher than the rural average, and displays similar trends to it. Enrolment rates rise steeply between 6 and 7, peak at age 9, and drop off in early teenage years.

A substantial majority of children in Mohanlalganj go to government schools (63%), significantly more so than the rural average (51%). Private schools thus make up a smaller share (29% vs 39%), as do madrassas (3% vs 5%).

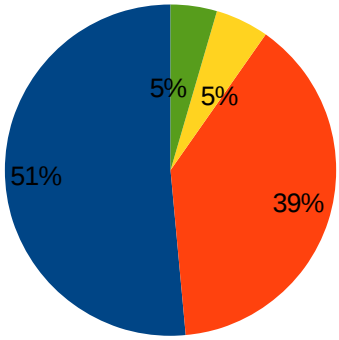
Graph 3.2.1: Enrolment by age



Graph 3.2.2: Enrolment by school type, Mohanlalganj



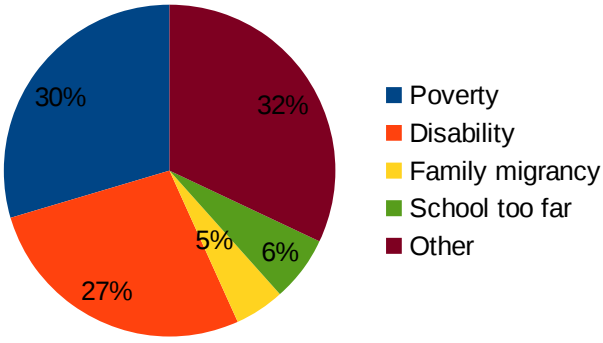
Graph 3.2.3: Enrolment by school type, rural



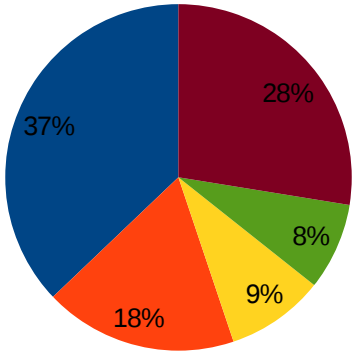
Reasons for not being enrolled

The enrolment rate in Mohanlalganj is 96%. Of the 4% not enrolled (1689 children), poverty remains the largest reason for not enrolment (30%), though less so than the rural average (37%). Disability makes up a much larger proportion in Mohanlalganj compared to the rural average (27% vs 18%).

Graph 3.2.4: non-enrolment reasons, Mohanlalganj



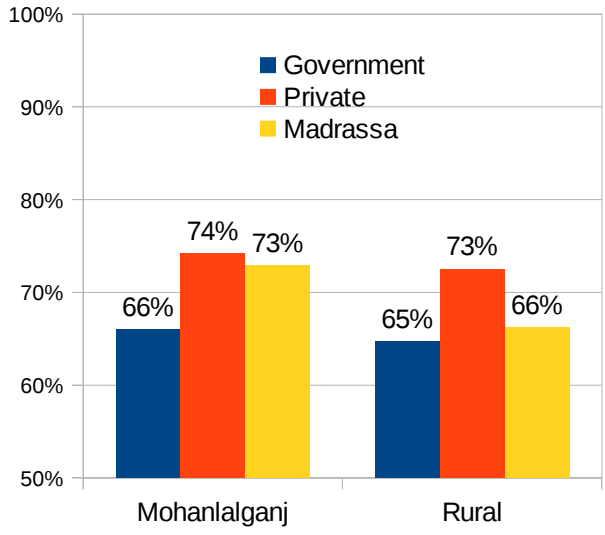
Graph 3.2.5: non-enrolment reasons, rural



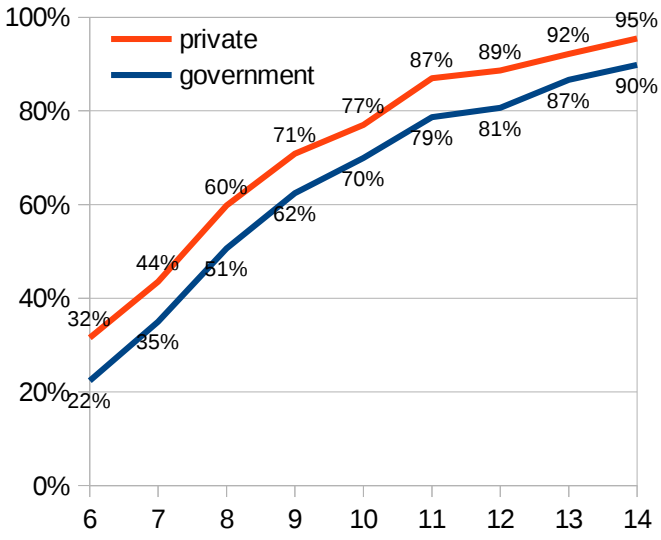
Literacy by school type

The literacy rates in both government and private schools are slightly higher in Mohanlalganj compared to the rural average. Madrassa students are significantly more literate in Mohanlalganj compared to the rural average. The gap between government and private schools in Mohanlalganj displays similar trends to the rural average: a 10% gap among 6-year-olds (32% vs 22%) which gradually diminishes to a 5% gap among 14-year-olds (95% vs 90%).

Graph 3.2.6: Literacy by school type



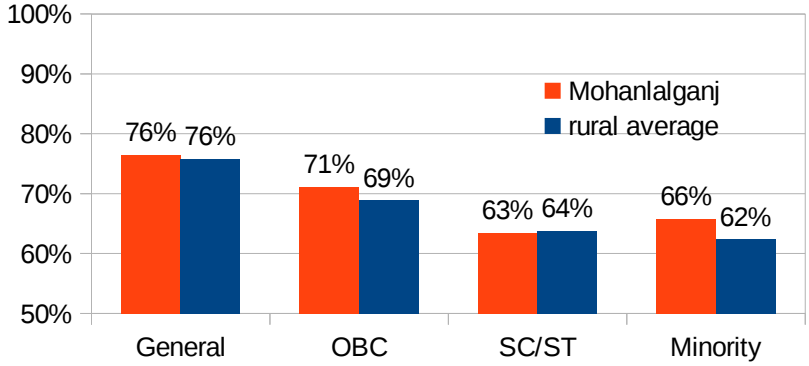
Graph 3.2.7: Literacy by age



Literacy by sociodemography

Religious minorities in Mohanlalganj have a better chance of being literate compared to the rural average (66% vs 62%), whereas SC/ST children have a marginally worse chance (63% vs 64%). Both boys (66.9% vs 65.7%) and girls (67.6% vs 67%) have a slightly higher chance of being literate in Mohanlalganj compared to the rural average.

Graph 3.2.8: Literacy by caste



Highlights

- Mohanlalganj has higher enrolment rates (96% vs 95%) and literacy rates (67% vs 66%) than average.
- Religious minorities in Mohanlalganj have better literacy rates than the rural average (66% vs 62%), perhaps related to Madrassa students having better literacy rates (73% vs 66%).

Opportunities

- As with many rural blocks, Mohanlalganj faces a challenge to convert near-universal enrolment to universal literacy, by improving the quality of school education.
- To improve further on its enrolment rates, Mohanlalganj schools need to become more inclusive of children with disabilities.

3.3 Mall

Statistics in brief

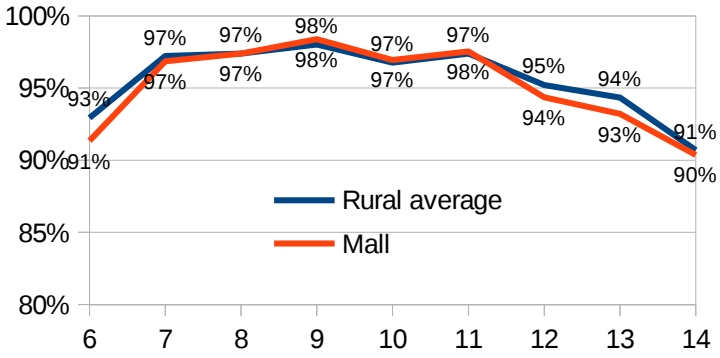
NB numbers in parentheses are average figures for the 8 rural blocks, and are included to aid comparison.

Child population	31,210 (246,367)	Enrolment: Govt	55% (51%)	L% Govt students	62% (65%)
Enrolment rate	95% (95%)	Enrolment: Private	37% (39%)	L% Private students	76% (73%)
Literacy rate (L%)	65% (66%)	Enrolment: Madrassa	3% (5%)	L% Madrassa students	70% (66%)

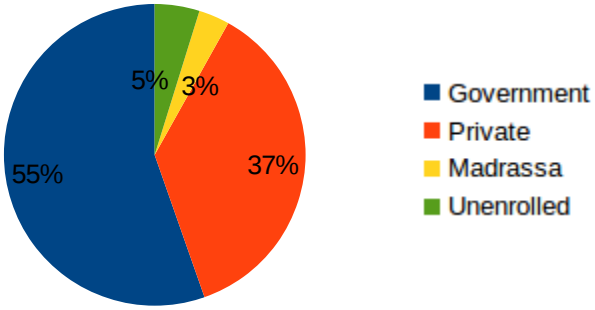
Enrolment rates

Enrolment rates in Mall are very similar to the rural average, with enrolment rising steeply between 6 and 7, peaking at age 9, and dropping off in early teenage years. More children in Mall attend government schools compared to the rural average (55% vs 51%). Fewer children attend private schools and madrassas. The proportion of children enrolled in madrassas is relatively low partially because religious minorities make up a smaller proportion of the child population in Mall (7%) than in the rural average (11%).

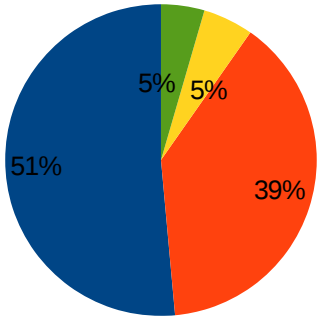
Graph 3.3.1: Enrolment by age



Graph 3.3.2: Enrolment by school type, Mall



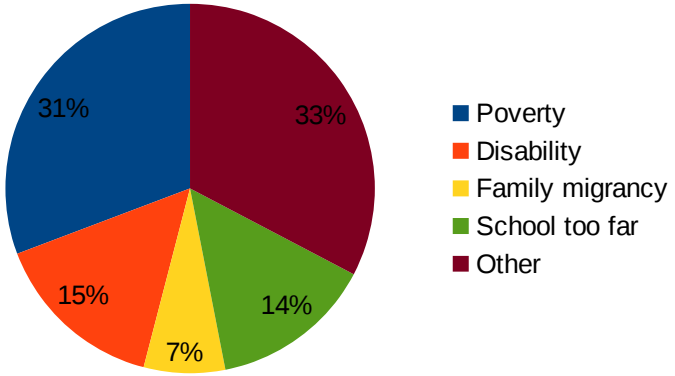
Graph 3.3.3: Enrolment by school type, rural



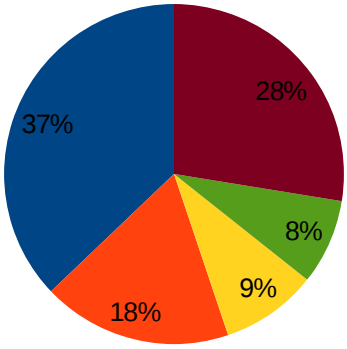
Reasons for not being enrolled

The enrolment rate in Mall is 95%. Of the 5% not enrolled (1459 children), poverty was still the largest reason (31%), though less than 37% for the rural average. A significant proportion (14%) of parents felt that school was too far, compared to 8% for the rural average.

Graph 3.3.4: non-enrolment reasons, Mall



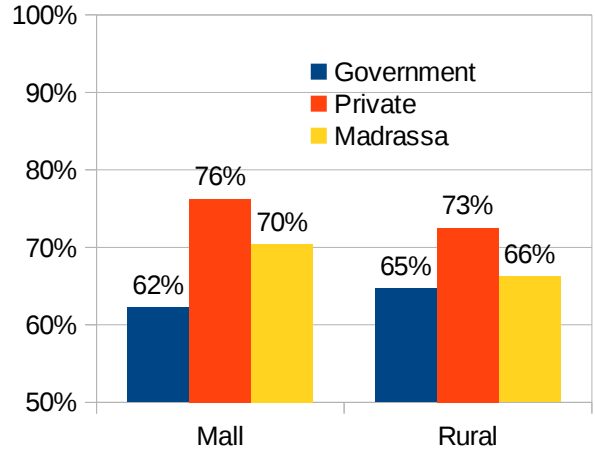
Graph 3.3.5: non-enrolment reasons, rural



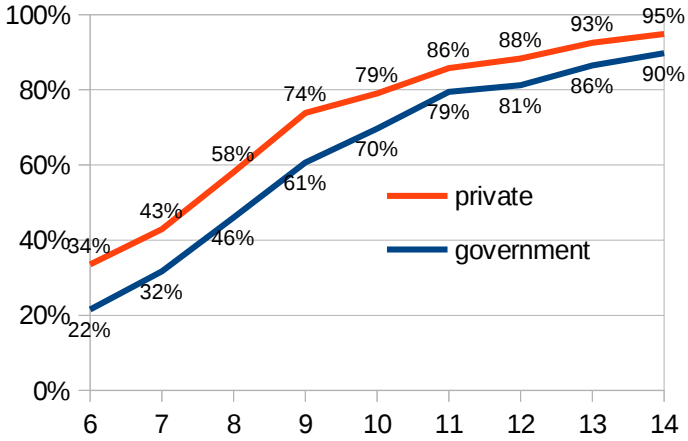
Literacy by school type

Mall has a very large gap between literacy rates in government and private schools, as the literacy rates are somewhat lower in government schools compared to the rural average (62% vs 65%) but higher in private schools (76% vs 73%). However, similarly to other rural blocks, the private-government gap diminishes from 12% (34% vs 22%) at age 6 to 5% (95% vs 90%) at age 14. Another reason underlying the deceptively large gap between private and government schools in Mall is that parents prefer to send their older children to private schools. The government:private enrolment ratio at age 6 is about 2:1, whereas at age 14 it is 1:1. In other words, the average private school student in Mall is older than the average government school student.

Graph 3.3.6: Literacy by school type



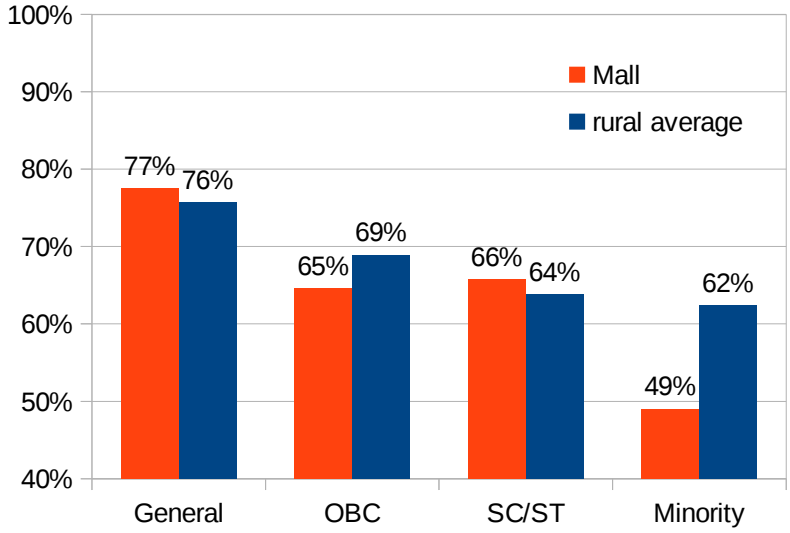
Graph 3.3.7: Literacy by age



Literacy by sociodemography

The caste gap in Mall is double that of the rural average (28% vs 14%). This is because religious minority children have a disturbingly low literacy rate of 49% - slighty surprising, considering that madrassa students have a relatively high literacy rate (70%) in Mall. An explanatory factor is that Mall's religious minority adults also have a very low literacy rate of 42%. Both boys (64.6% vs 65.7%) and girls (66.1% vs 67%) have slightly lower literacy rates in Mall.

Graph 3.3.8: Literacy by caste



Highlights

- Private school students in Mall have better literacy rates than the rural average (76% vs 73%).

Opportunities

- Schools in Mall have an important opportunity to rectify the multigenerational disadvantage faced by religious minorities.

3.4 Sarojini Nagar

Statistics in brief

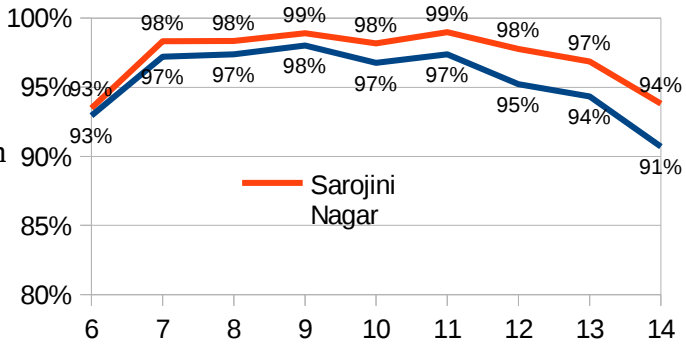
NB numbers in parentheses are average figures for the 8 rural blocks, and are included to aid comparison.

Child population	29,789 (246,367)	Enrolment: Govt	50% (51%)	L% Govt students	66% (65%)
Enrolment rate	97% (95%)	Enrolment: Private	41% (39%)	L% Private students	72% (73%)
Literacy rate (L%)	66% (66%)	Enrolment: Madrassa	7% (5%)	L% Madrassa students	73% (66%)

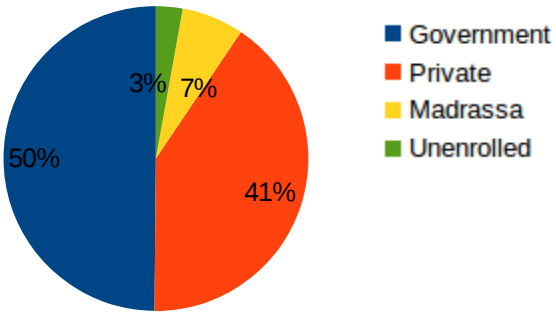
Enrolment rates

Sarojini Nagar has the highest enrolment rate of the blocks and wards surveyed. This is particularly because schools succeed in retaining more young teenagers than the rural average (94% vs 91% at age 14). More children attend madrassas (7% vs 5%), and government and private schools have similar shares compared to the rural average.

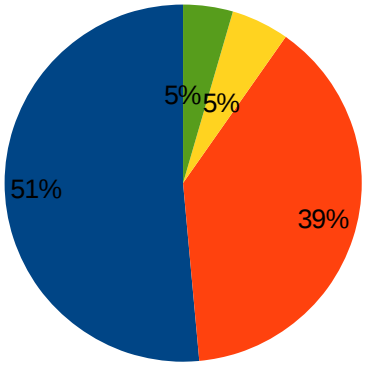
Graph 3.4.1: Enrolment by age



Graph 3.4.2: Enrolment by school type, Sarojini Nagar



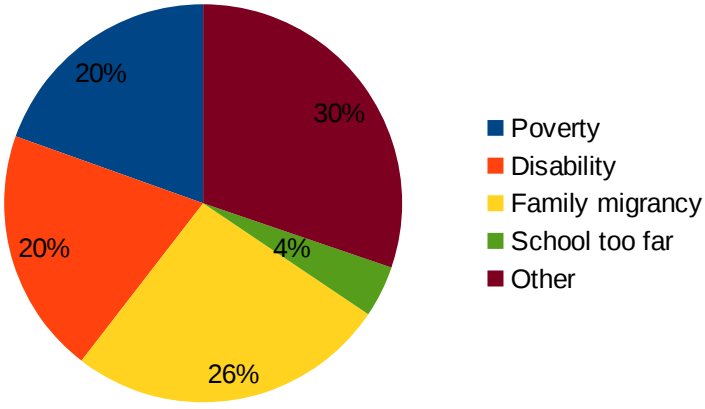
Graph 3.4.3: Enrolment by school type, rural



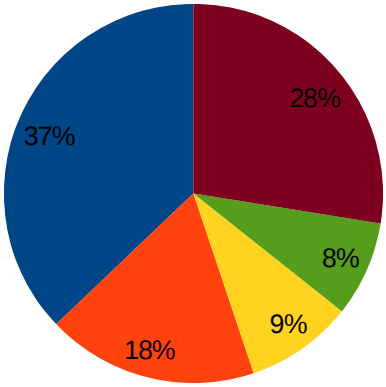
Reasons for not being enrolled

The enrolment rate in Sarojini Nagar is 97%. Of the 3% not enrolled (857 children), the largest reason for not being enrolled is family migrancy (a remarkable 26% vs 9% for the rural average). Poverty, while still a significant factor (20%), is far less so than in the rural average (37%).

Graph 3.4.4: non-enrolment reasons, Sarojini Nagar



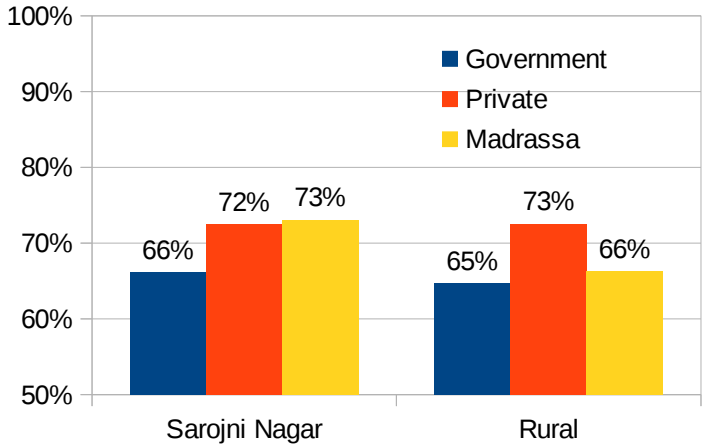
Graph 3.4.5: non-enrolment reasons, rural



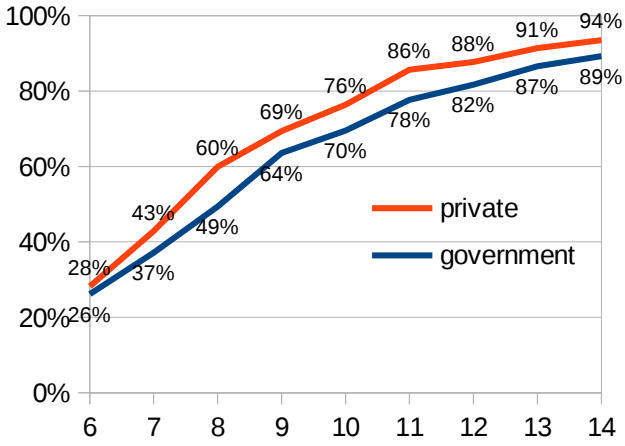
Literacy by school type

The literacy rates in both private and government schools in Sarojini Nagar are similar to the rural average, while madrassas have significantly higher literacy rates (73% vs 66%). Sarojini Nagar has a marginally smaller gap between private and government schools (6% vs 8%). This is attributable primarily to the fact that there is a minimal gap between private and government schools in 6 year old literacy in Sarojini Nagar.

Graph 3.4.6: Literacy by school type



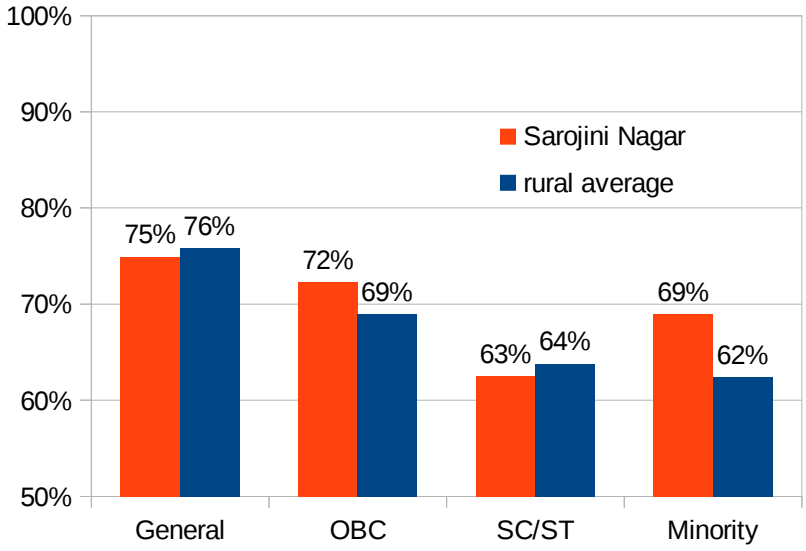
Graph 3.4.7: Literacy by age



Literacy by sociodemography

The caste gap in Sarojini Nagar is marginally lower than the rural average, because religious minorities are significantly more literate (69% vs 62%). However, SC/ST children are slightly less likely to be literate than the rural average (63% vs 64%), making them the least literate caste in Sarojini Nagar. There is a marginally wider gender gap in literacy in Sarojini Nagar, as boys are less literate than the rural average (65.4% vs 65.7%), while girls are more literate (67.6% vs 67%).

Graph 3.4.8: Literacy by caste



Highlights

- Sarojini Nagar has the highest enrolment rate of all the blocks and wards surveyed (97%).
- Sarojini Nagar's religious minorities are significantly more literate than the rural average (69% vs 62%).

Opportunities

- Sarojini Nagar can further improve on its enrolment rates by finding ways to facilitate the education of children whose families migrate.
- Given its high enrolment rates, Sarojini Nagar has a great opportunity to universalise literacy through improving the quality of schooling.

3.5 Malihabad

Statistics in brief

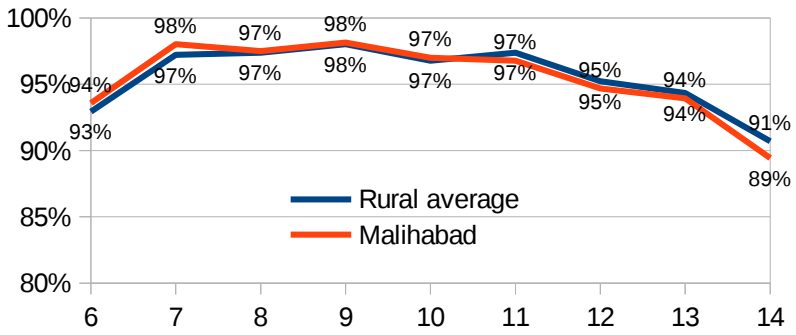
NB numbers in parentheses are average figures for the 8 rural blocks, and are included to aid comparison.

Child population	29,092 (246,367)	Enrolment: Govt	47% (51%)	L% Govt students	65% (65%)
Enrolment rate	94% (95%)	Enrolment: Private	42% (39%)	L% Private students	70% (73%)
Literacy rate (L%)	67% (66%)	Enrolment: Madrassa	6% (5%)	L% Madrassa students	67% (66%)

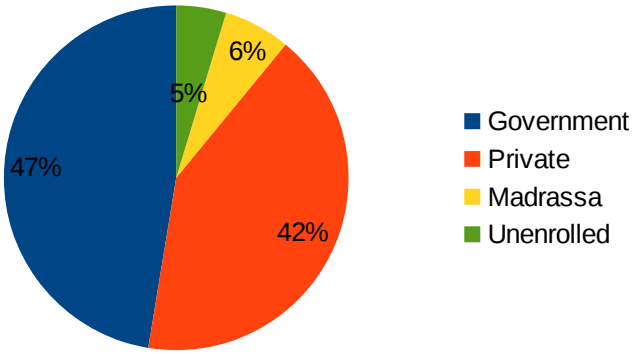
Enrolment rates

Enrolment rates in Malihabad are very similar to the rural average. Malihabad has slightly better enrolment among young children (age 6-7), but does marginally worse at retaining teenagers within the education system. Slightly more children in Malihabad attend private schools compared to the rural average (42% vs 39%).

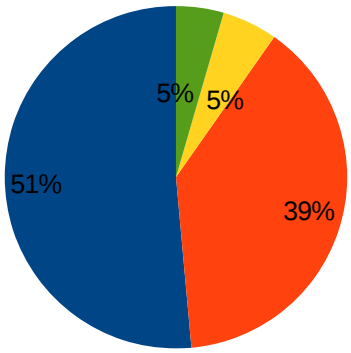
Graph 3.5.1: Enrolment by age



Graph 3.5.2: Enrolment by school type, Malihabad



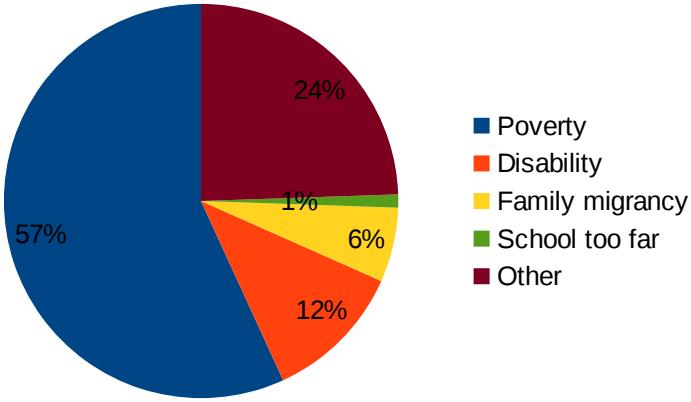
Graph 3.5.3: Enrolment by school type, rural



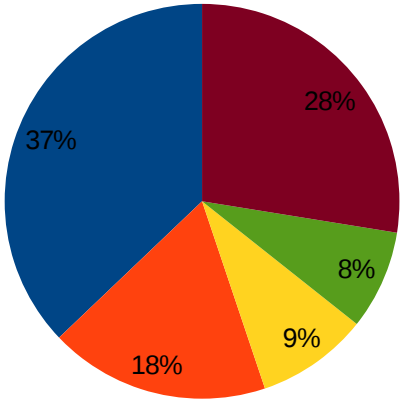
Reasons for not being enrolled

The enrolment rate in Malihabad is 94%. Of the 6% not enrolled (1308 children), a large majority (57%) state poverty as the main reason they are out of school. Only a very small proportion (1%) felt that school was too far away, compared to the rural average (8%).

Graph 3.5.4: non-enrolment reasons, Malihabad



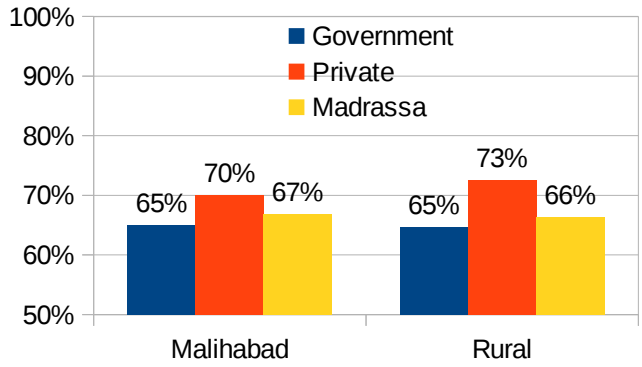
Graph 3.5.5: non-enrolment reasons, rural



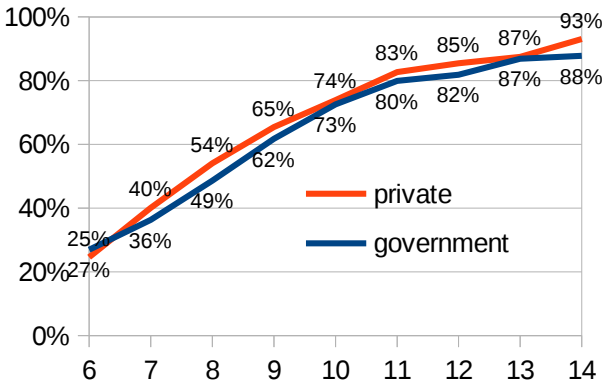
Literacy by school type

Literacy rates in Malihabad are similar to the rural average. Private school students in Malihabad have marginally lower literacy rates than the rural average (70% vs 73%). This smaller gap between private and government schools is largely because there is not the starting inequality present in many other blocks: 6-year-olds in government and private schools have similar literacy rates.

Graph 3.5.6: Literacy by school type



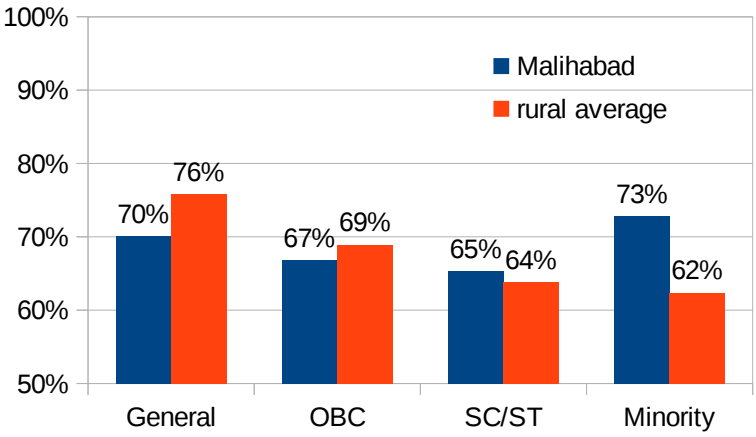
Graph 3.5.7: Literacy by age



Literacy by sociodemography

Malihabad is one of the most equitable blocks in terms of literacy by caste. In a remarkable reversal, religious minorities are the most literate group, with a literacy rate of 73% (rural average: 62%). The general caste has significantly lower literacy in Malihabad (70%) compared to the rural average (76%). Both boys (66.9% vs 65.7%) and girls (67.8% vs 67%) have slightly better literacy rates than the rural average.

Graph 3.5.8: Literacy by caste



Highlights

- Malihabad is one of the most caste-equitable districts; impressively, religious minorities have the best literacy rate (73%).

Opportunities

- Enrolment rates in Malihabad are marginally lower than the rural average (94% vs 95%), and poverty is the major reason for not being in school (57%). There is an important opportunity to motivate impoverished young teenagers to remain within the education system.

3.6 Gosaiganj

Statistics in brief

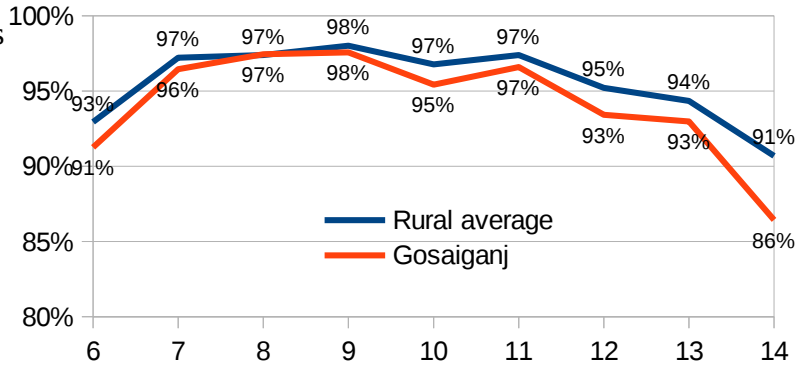
NB numbers in parentheses are average figures for the 8 rural blocks, and are included to aid comparison.

Child population	27,187 (246,367)	Enrolment: Govt	53% (51%)	L% Govt students	60% (65%)
Enrolment rate	94% (95%)	Enrolment: Private	37% (39%)	L% Private students	73% (73%)
Literacy rate (L%)	65% (66%)	Enrolment: Madrassa	4% (5%)	L% Madrassa students	67% (66%)

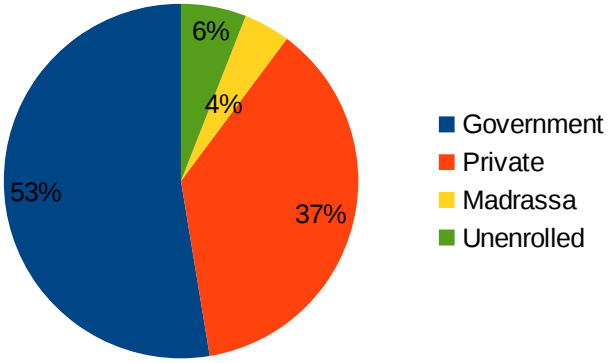
Enrolment rates

Enrolment rates in Gosaiganj are somewhat below the rural average. This is especially the case among its young teenagers. The enrolment rate at age 14 is 86%, compared to 91% for the rural average. The proportion of children attending government and private schools in Gosaiganj is similar to the rural average.

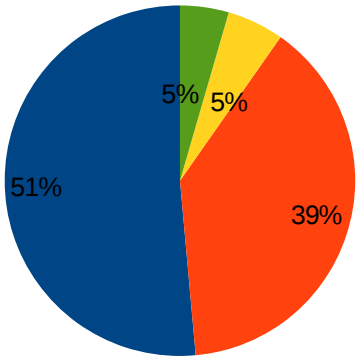
Graph 3.6.1: Enrolment by age



Graph 3.6.2: Enrolment by school, Gosaiganj



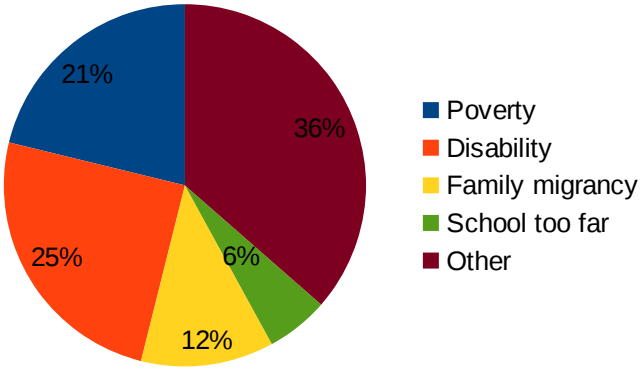
Graph 3.6.3: Enrolment by school, rural



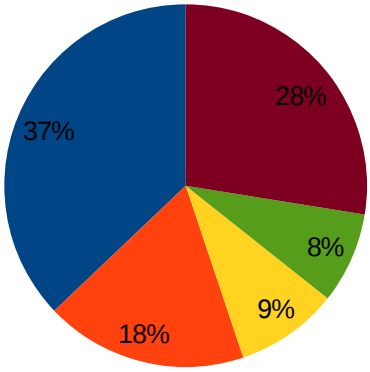
Reasons for not being enrolled

The enrolment rate in Gosaiganj is 94%. Of the 6% not enrolled (1511 children), disability emerged as the large single cause of not going to school (25%), significantly greater than the rural average (18%). Poverty accounted for 21% of cases, far lower than the rural average of 37%.

Graph 3.6.4: Non-enrolment reasons, Gosaiganj



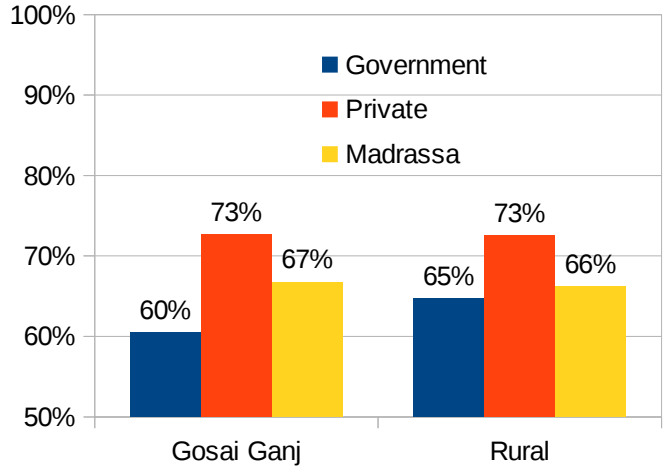
Graph 3.6.5: Non-enrolment reasons, rural



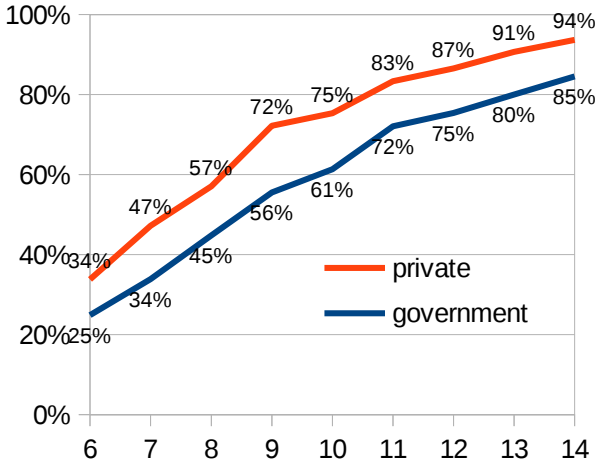
Literacy by school type

The literacy rates in Gosaiganj's private schools and Madrassas are very similar to the rural average. However, government school students have a disturbingly low literacy rate of 60%. It is particularly concerning that 15% of government school students aged 14 are illiterate. This is a larger proportion than any other block surveyed.

Graph 3.6.6: Literacy by school type



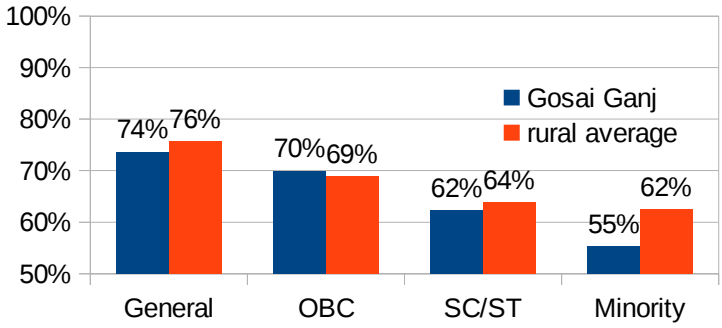
Graph 3.6.7: Literacy by age



Literacy by sociodemography

Gosaiganj has a larger caste gap than the rural average (19% vs 14%). This is because religious minorities in Gosaiganj have a significantly lower literacy rate than the rural average (55% vs 62%). Both boys (64.2% vs 65.7%) and girls (66.2% vs 67%) have marginally lower literacy in Gosaiganj compared to the rural average.

Graph 3.6.8: Literacy by caste



Highlights

- Gosaiganj schools are succeeding in being reasonably inclusive of the poor – only 21% of parents of out of school children identified poverty as the main factor preventing enrolment.

Opportunities

- Gosaiganj has an opportunity to improve enrolment rates by making schools more disability-friendly.
- Gosaiganj must strive to retain more teenagers within the education system – currently, 14% of 14 year-olds are unenrolled.
- Schools in Gosaiganj, especially government schools, need to strive to lift the literacy rates of their students.

3.7 Chinhat Rural

Statistics in brief

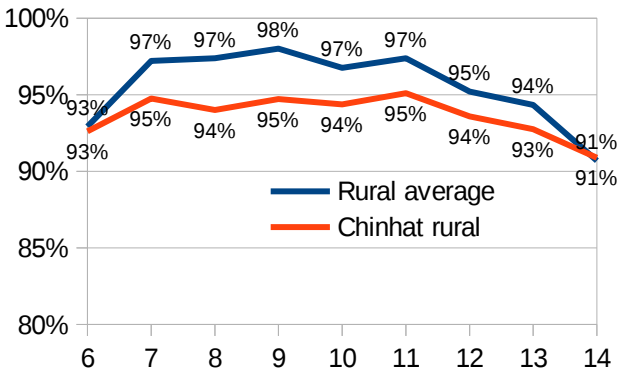
NB numbers in parentheses are average figures for the 8 rural blocks, and are included to aid comparison.

Child population	23,282 (246,367)	Enrolment: Govt	30% (51%)	L% Govt students	67% (65%)
Enrolment rate	94% (95%)	Enrolment: Private	56% (39%)	L% Private students	74% (73%)
Literacy rate (L%)	67% (66%)	Enrolment: Madrassa	7% (5%)	L% Madrassa students	56% (66%)

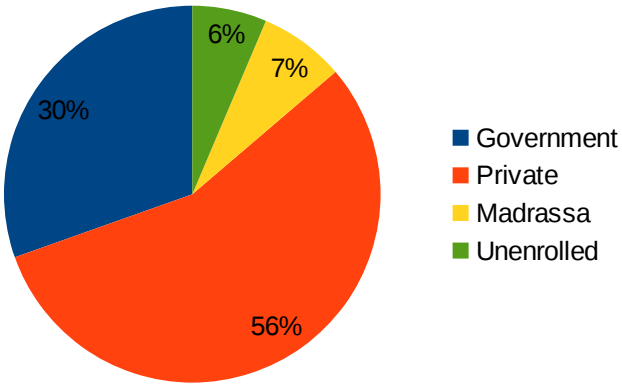
Enrolment rates

The enrolment rate in Chinhat rural is somewhat lower than the rural average. Interestingly, the enrolment rates are similar both among 6-year-olds and 14-year-olds. However, Chinhat rural has lower enrolment rates compared to the rural average, particularly in the 8-10 age range. Chinhat rural also has a striking predominance of private schools compared to the rural average (56% vs 39%), and a correspondingly low share for government schools (30% vs 51%).

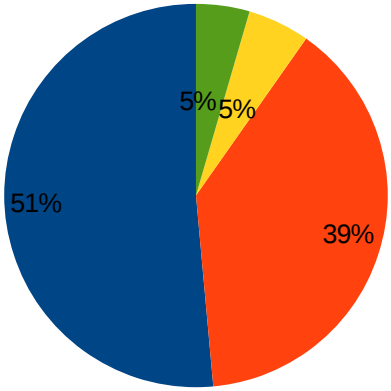
Graph 3.7.1: Enrolment by age



Graph 3.7.2: Enrolment by school type, Chinhat rural



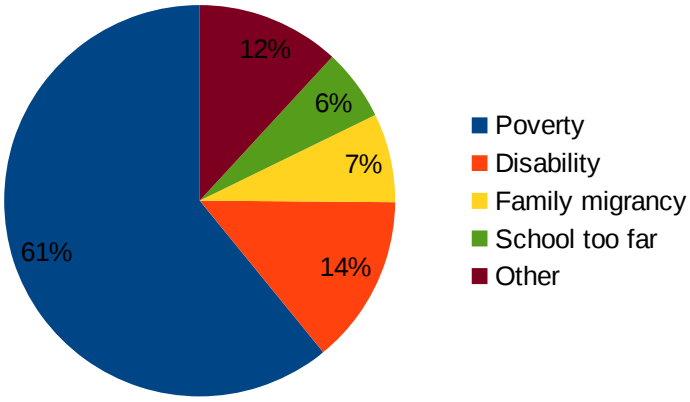
Graph 3.7.3: Enrolment by school type, rural



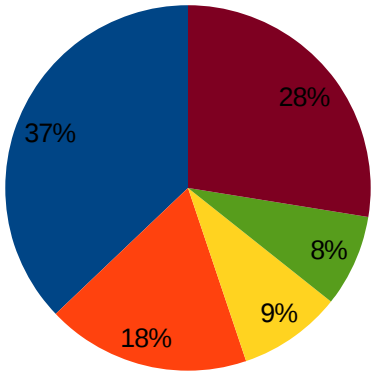
Reasons for not being enrolled

The enrolment rate in Chinhat rural is 94%. Of the 6% not enrolled (1431 children), poverty was the overwhelming reason (61%), far larger than the rural average of 37%.

Graph 3.7.4: non-enrolment reasons, Chinhat rural



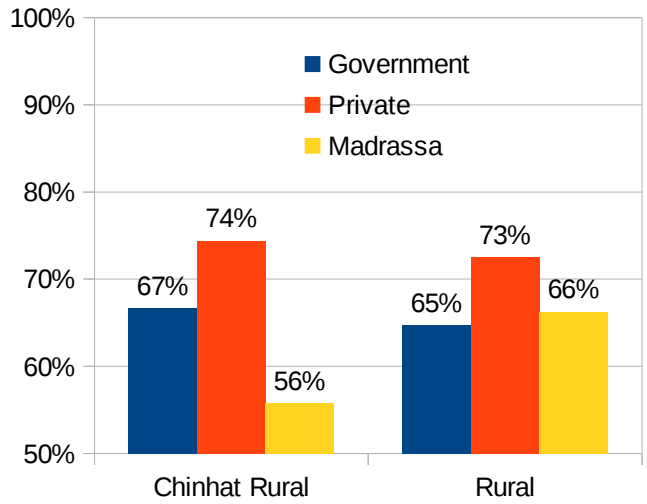
Graph 3.7.5: non-enrolment reasons, rural



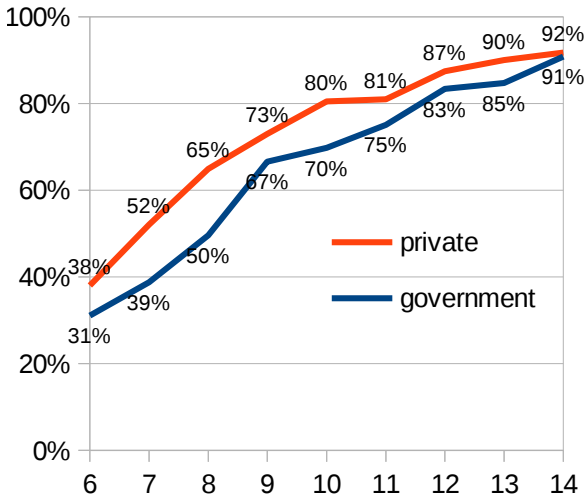
Literacy by school type

The literacy rates for government and private schools in Chinhat rural are similar to the rural average, although Madrassa students are significantly less literate (56% vs 66%). The gap between government and private school students (7%) dwindles during upper primary school: by age 14, 92% of private school students and 91% of government school students can read.

Graph 3.7.6: Literacy by school type



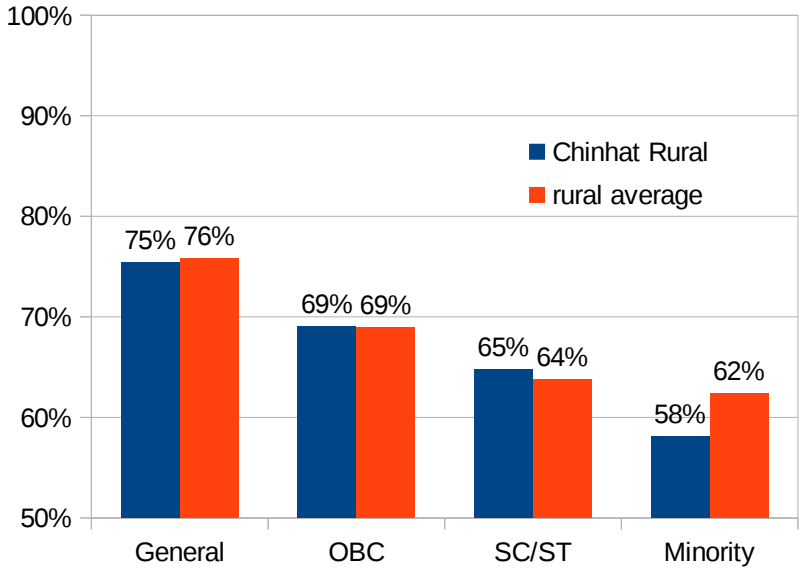
Graph 3.7.7: Literacy by age



Literacy by sociodemography

Most caste groups in Chinhat rural have very similar literacy rates to the rural average. However, religious minorities have a somewhat lower literacy rate (58% vs 62%), perhaps reflecting the lower literacy rates in madrassas. Both boys (66.9% vs 65.7%) and girls (67.7% vs 67%) have slightly higher literacy rates in Chinhat rural.

Graph 3.7.8: Literacy by caste



Highlights

- Literacy rates are slightly higher in Chinhat rural than the rural average.
- Chinhat government schools have succeeded in closing the gap with private schools in upper primary school.

Opportunities

- Chinhat rural has the chance to increase literacy rates for religious minorities, including by improving the quality of madrassa education.
- Chinhat rural has an opportunity to lift enrolment rates by addressing the accessibility of education for the poor, as poverty was noted as the reason for being out of school by 61% of respondents.

3.8 Kakori

Statistics in brief

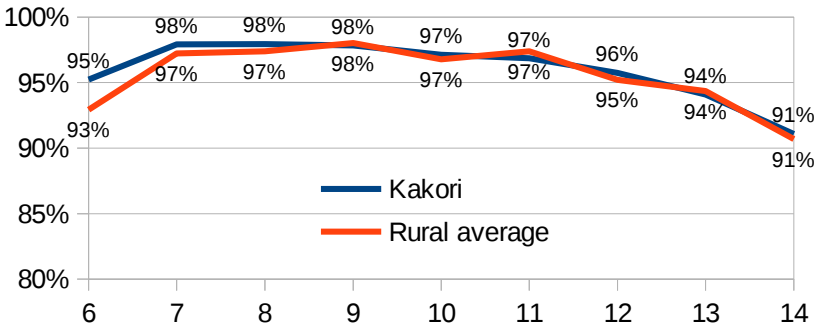
NB numbers in parentheses are average figures for the 8 rural blocks, and are included to aid comparison.

Child population	22,877 (246,367)	Enrolment: Govt	48% (51%)	L% Govt students	60% (65%)
Enrolment rate	96% (95%)	Enrolment: Private	39% (39%)	L% Private students	69% (73%)
Literacy rate (L%)	63% (66%)	Enrolment: Madrassa	9% (5%)	L% Madrassa students	63% (66%)

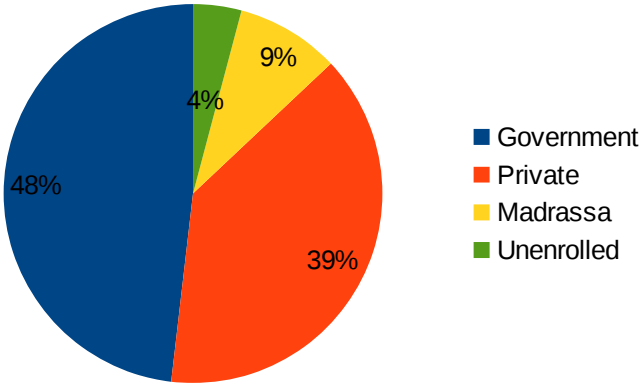
Enrolment rates

Enrolment rates in Kakori are marginally higher than the rural average. This is especially the case for young children: Kakori has 95% of 6-year-olds enrolled, compared to the rural average of 93%. Kakori has a more significant portion of children enrolled in madrassas (9%) compared to the rural average (5%).

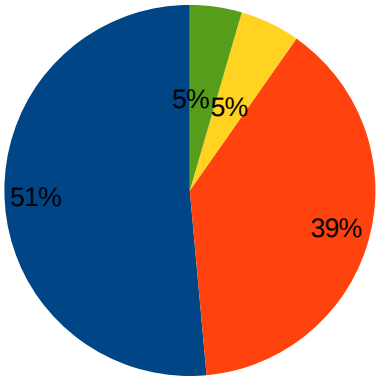
Graph 3.8.1: Enrolment by age



Graph 3.8.2: Enrolment by school type, Kakori



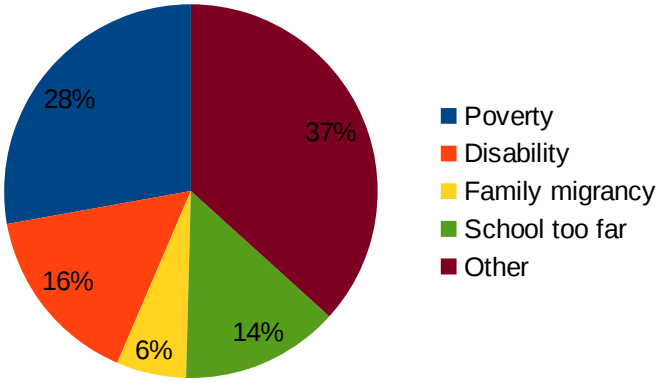
Graph 3.8.3: Enrolment by school type, rural



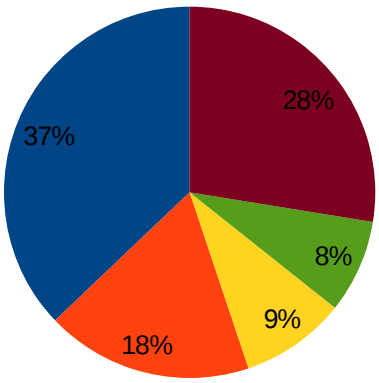
Reasons for not being enrolled

The enrolment rate in Kakori is 96%. Of the 4% not enrolled (925 children), poverty was the reason most commonly given (28%), though less so than the rural average (37%). A significant proportion (14%) felt that school was too far away (compared to 8% for the rural average).

Graph 3.8.4: non-enrolment reasons, Kakori



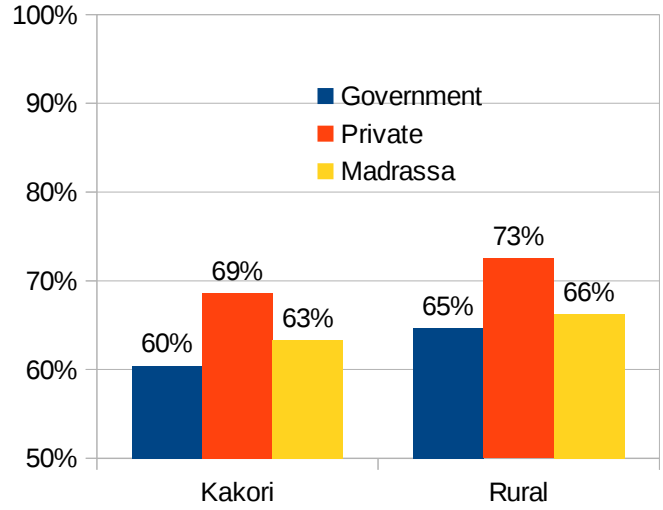
Graph 3.8.5: non-enrolment reasons, rural



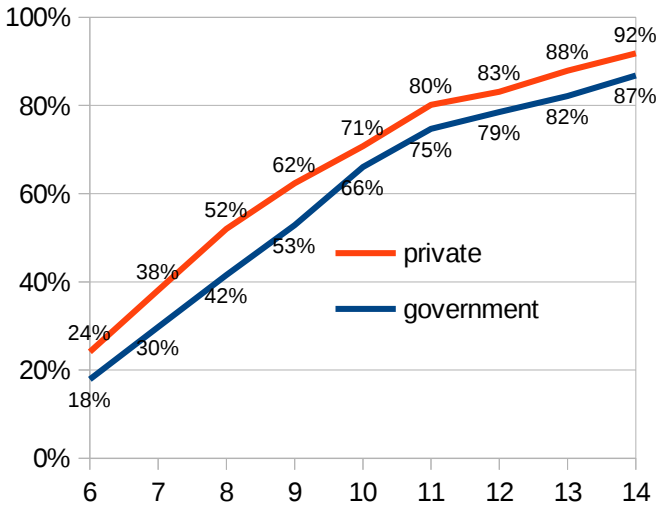
Literacy by school type

Kakori has the lowest literacy rate among the blocks surveyed. The literacy rate in Kakori is below the rural average across the different school types. Government schools have a literacy rate of just 60%, compared to a rural average of 65%. This is partially because 6-year-olds in government schools in Kakori have a literacy rate of 18%, the lowest of the blocks surveyed. Thus Kakori's low literacy cannot be entirely blamed on its schools, as fewer children are learning to read before school, compared to other blocks.

Graph 3.8.6: Literacy by school type



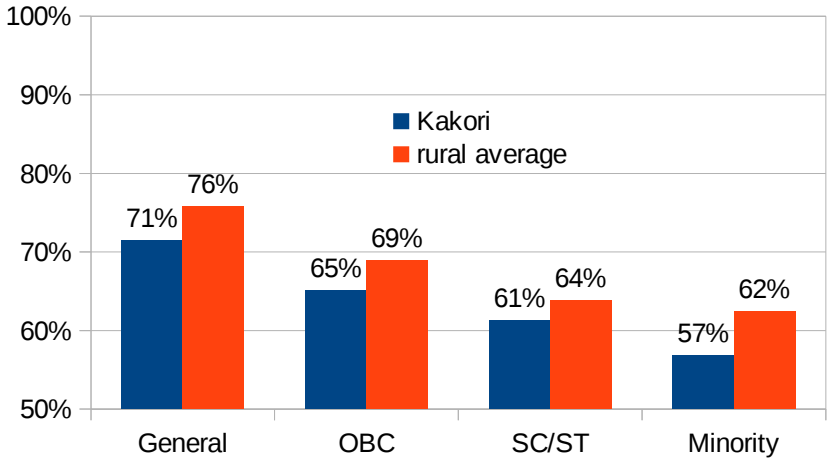
Graph 3.8.7: Literacy by age



Literacy by sociodemography

Kakori has lower literacy rates than the rural average across each caste. Both boys (62% vs 65.7%) and girls (63.2% vs 67%) have lower literacy rates than the rural average.

Graph 3.8.8: Literacy by caste



Highlights

- Kakori has a high enrolment rate, with fewer than 1000 children out of school.

Opportunities

- Kakori has a crucial chance to improve its literacy rates by enhancing the quality of primary school education.

Part 4: Urban Wards

4.1 Aliganj

Statistics in brief

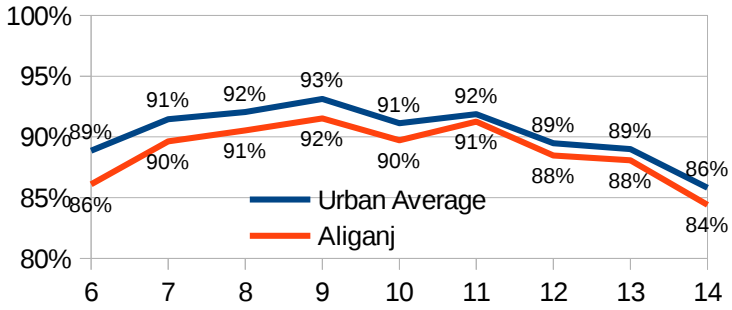
NB numbers in parentheses are average figures for the 3 urban wards surveyed, included to aid comparison.

Child population	33,860 (79,278)	Enrolment: Govt	26% (32%)	L% Govt students	76% (73%)
Enrolment rate	89% (91%)	Enrolment: Private	57% (51%)	L% Private students	78% (79%)
Literacy rate (L%)	72% (73%)	Enrolment: Madrassa	6% (8%)	L% Madrassa students	81% (69%)

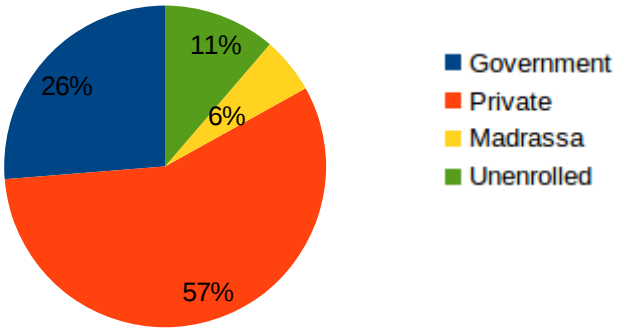
Enrolment rates

The enrolment rate in Aliganj is lower than the urban average. Similar to other wards, enrolment rates rise to around age 9, and drop off in early teenage years. The majority of children in Aliganj go to private schools (57%), considerably more than the urban average. Conversely, fewer children attend government schools (26% vs 32%).

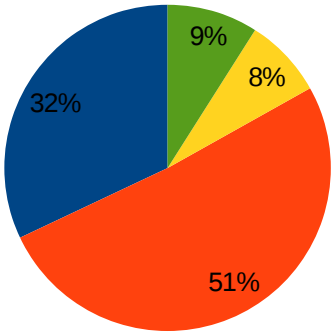
Graph 4.1.1: Enrolment by age, Aliganj



Graph 4.1.2: Enrolment by school type, Aliganj



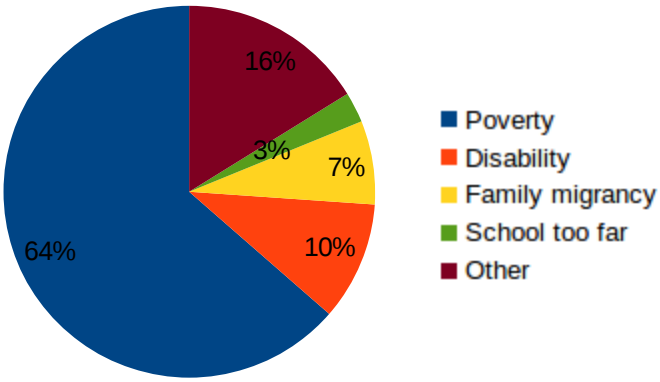
Graph 4.1.3: Enrolment by school type, urban



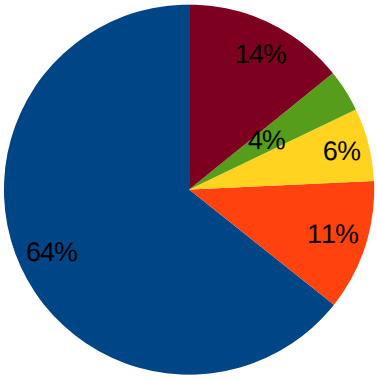
Reasons for not being enrolled

The enrolment rate in Aliganj is 89%. Of the 11% not enrolled (3556 children), poverty was cited as the primary reason (64%) for not attending school. Aliganj parents offered reasons for why their children were not enrolled that were very similar to the urban average.

Graph 4.1.4: non-enrolment reasons, Aliganj



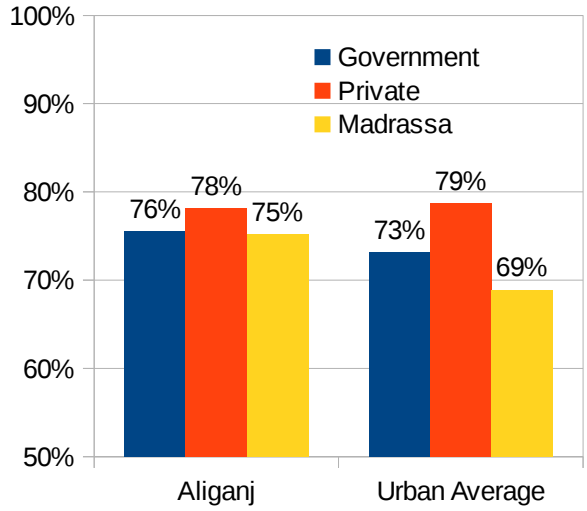
Graph 4.1.5: non-enrolment reasons, urban



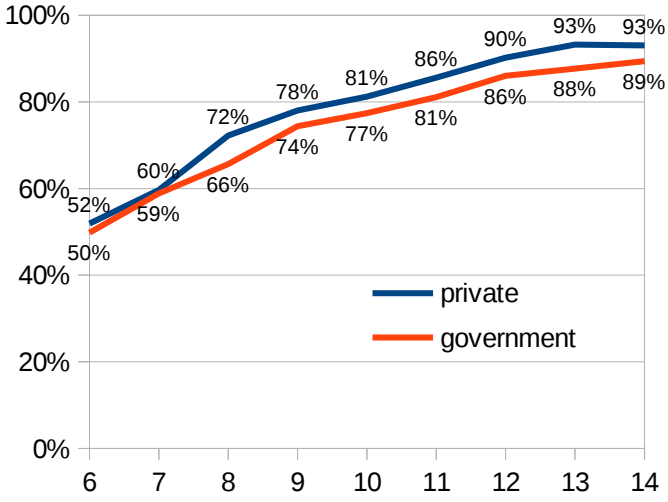
Literacy by school type and age

Government school students in Aliganj have slightly better literacy rates (76%) than the urban average (73%), which makes it a little surprising that fewer parents choose to send their kids there (previous page). Madrassa-educated children have a higher literacy rate in Aliganj (75%) compared to the urban average (69%). In contrast, private school students have a slightly lower literacy rate than the urban average, and a relatively small gap with government schools.

Graph 4.1.6: Literacy by school type



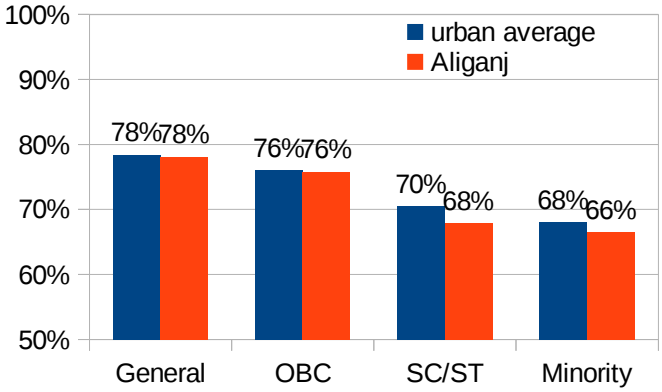
Graph 4.1.7: Literacy by age, Aliganj



Literacy by sociodemography

The literacy rates in Aliganj are equal to the urban average for the General and OBC caste. However, the disadvantage of SC/ST and minorities is slightly greater in Aliganj, resulting in a 'caste gap' of 12%, compared to the urban average of 10%. The literacy rate in Aliganj is slightly lower than the urban average for both males (71.4% vs 72.3%) and females (72% vs 73.6%).

Graph 4.1.8: Literacy by caste, Aliganj



Highlights

- Literacy rates in government schools in Aliganj are higher than the urban average (76% vs 73%).
- Literacy rates are also significantly higher in Madrassas (75% vs 69%).

Opportunities

- The enrolment rate in Aliganj is somewhat lower (89%) compared to the average for urban areas (91%). There is a big opportunity to increase enrolment rates in primary schools, and reduce the dropout rates, especially for children in upper primary schools.
- The caste gap is slightly larger in Aliganj (12%) than the urban average (10%), providing an opportunity to focus on education for children from religious minorities and lower castes.

4.2 Alam Nagar

Statistics in brief

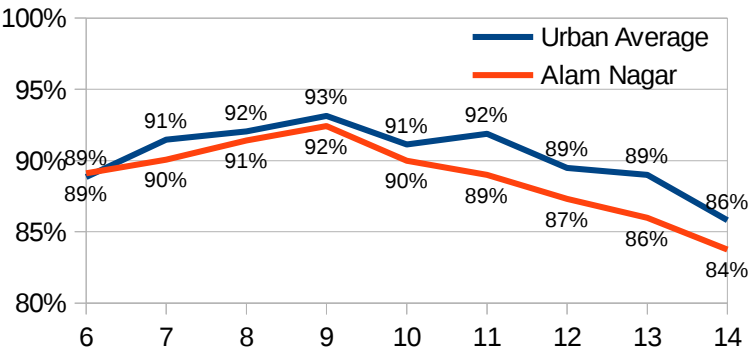
NB numbers in parentheses are average figures for the 3 urban wards surveyed, included to aid comparison.

Child population	25,388 (79,278)	Enrolment: Govt	36% (32%)	L% Govt students	76% (73%)
Enrolment rate	89% (91%)	Enrolment: Private	46% (51%)	L% Private students	82% (79%)
Literacy rate (L%)	78% (73%)	Enrolment: Madrassa	7% (8%)	L% Madrassa students	81% (69%)

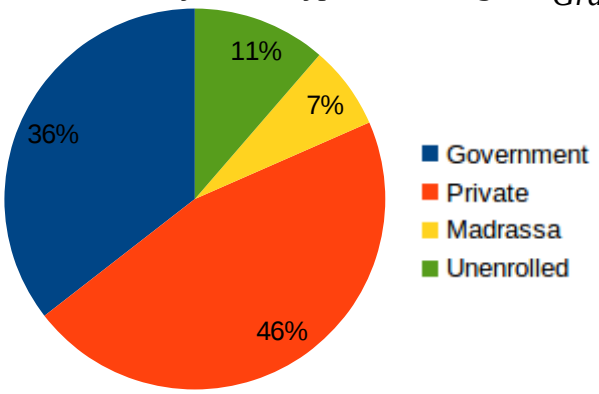
Enrolment rates

Enrolment rates in Alam Nagar are slightly below the urban average. This is primarily because enrolment rates drop off more steeply after age 9 in Alam Nagar: only 84% of 14 year-olds are enrolled. In terms of school type, more Alam Nagar children go to government schools compared to the urban average (36% vs 32%) while fewer attend private schools (46% vs 51%).

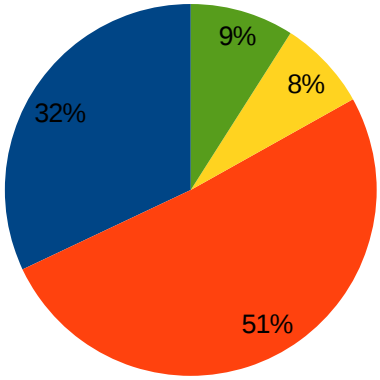
Graph 4.2.1: Enrolment by age



Graph 4.2.2: Enrolment by school type, Alam Nagar



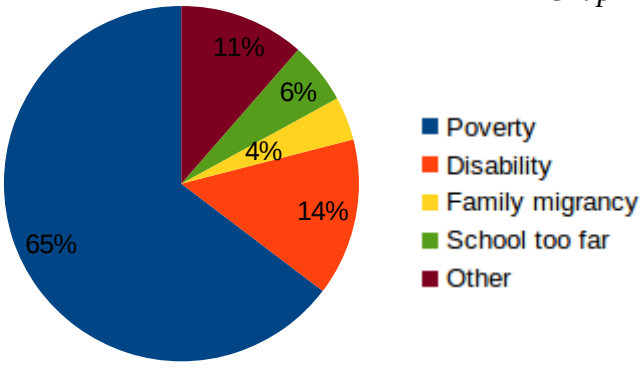
Graph 4.2.3: Enrolment by school type, urban



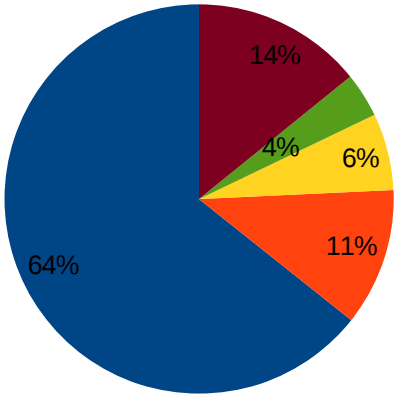
Reasons for not being enrolled

The enrolment rate in Alam Nagar is 89%. Of the 11% (2519 children) not enrolled in Alam Nagar, poverty was the overwhelming reason, accounting for almost two thirds. Alam Nagar parents offered reasons for why their children were not enrolled that were similar to the urban average. Disability accounted for a somewhat higher proportion in Alam Nagar (14%) than for the urban average (11%).

Graph 4.2.4: non-enrolment reasons, Alam Nagar



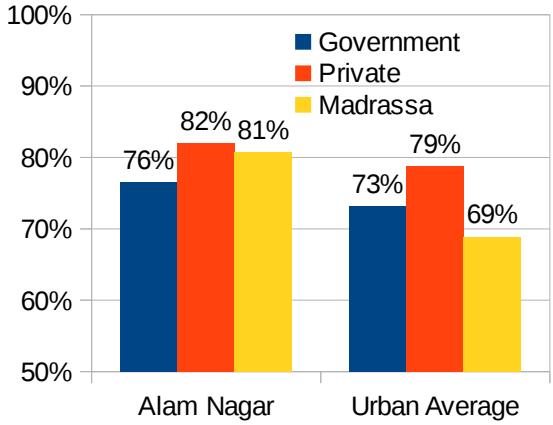
Graph 4.2.5: non-enrolment reasons, urban



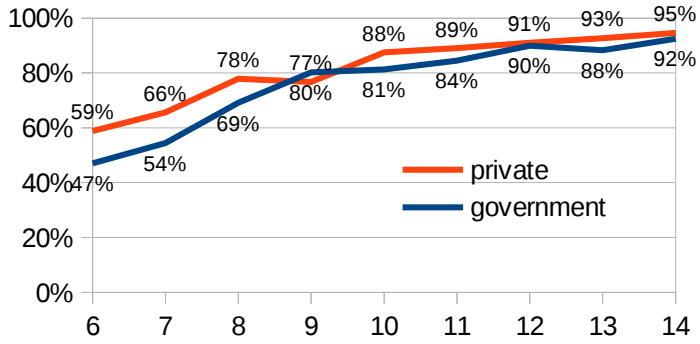
Literacy by school type

The literacy rates in Alam Nagar are slightly higher than the urban average for both government schools (76% vs 73%) and private schools (82% vs 79%). Strikingly, madrassa students are far more literate in Alam Nagar than in the urban average (81% vs 69%). The 6% gap between government and private schools is primarily caused by the significant starting difference: 59% of 6 year-olds in private schools are literate, while only 47% of government school students at the same age are.

Graph 4.2.6 : Literacy by school type



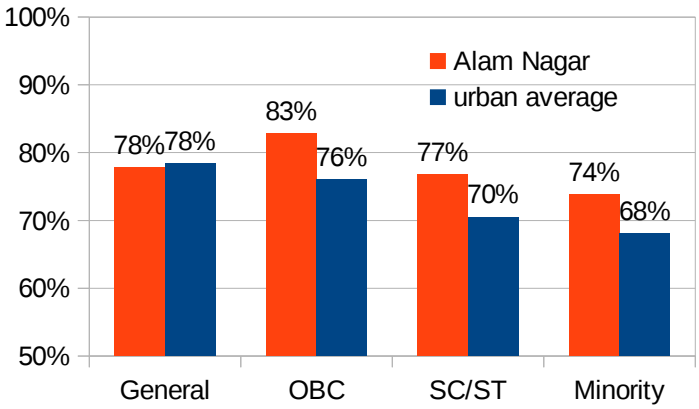
Graph 4.2.7: Literacy by age



Literacy by sociodemography

Alam Nagar has a significantly higher literacy rate compared to the urban average for both boys (77% vs 72%) and girls (79% vs 74%). Alam Nagar is more equitable by caste than the urban average. Surprisingly, ‘other backward castes’ are the most literate group in Alam Nagar (the only block or ward for which this is the case).

Graph 4.2.8: Literacy by caste



Highlights

- Private schools in Alam Nagar have a higher literacy rate than the urban average (82% vs 79%), as do government schools (76% vs 73%) and madrassas (81% vs 69%).
- Alam Nagar’s child literacy rates are more equitable by caste than the urban average, with OBC, SC/ST and Minority groups all having 6-7% higher literacy than the urban average.

Opportunities

- The enrolment rate in Alam Nagar is somewhat lower (89%) compared to the average for urban areas (91%). There is a big opportunity to increase enrolment rates in primary and junior schools, and reduce the dropout rates, especially for children in upper primary schools.

4.3 Chinhat Urban

Statistics in brief

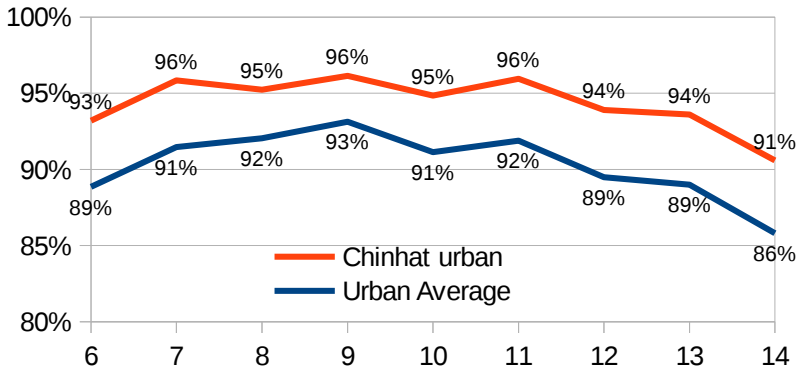
NB numbers in parentheses are average figures for the 3 urban wards surveyed, included to aid comparison.

Child population	20,030 (79,278)	Enrolment: Govt	28% (32%)	L% Govt students	69% (73%)
Enrolment rate	94% (91%)	Enrolment: Private	57% (51%)	L% Private students	76% (79%)
Literacy rate (L%)	69% (73%)	Enrolment: Madrassa	9% (8%)	L% Madrassa students	60% (69%)

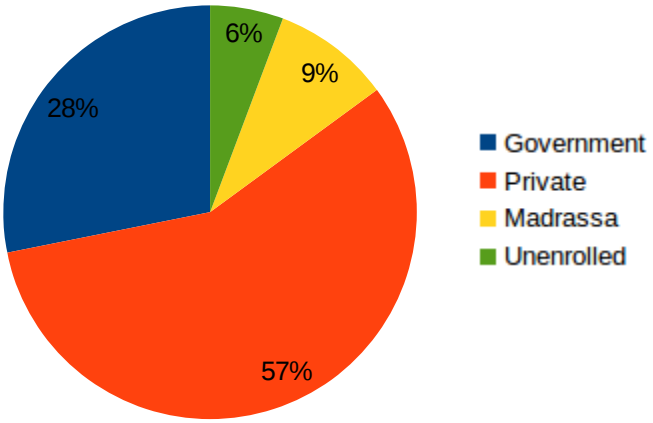
Enrolment rates

The enrolment rate in Chinhat Urban is significantly higher than the urban average, while following the same trends. Far more children in Chinhat Urban go to private schools than government schools (57% vs 28%), a bigger difference than for the urban average.

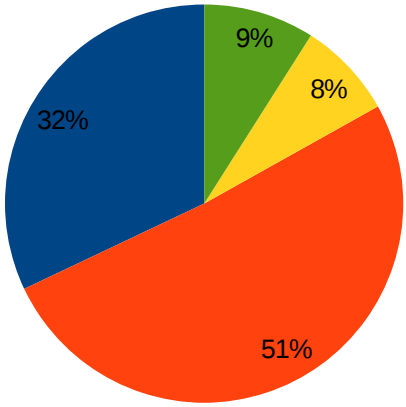
Graph 4.3.1: Enrolment vs age



Graph 4.3.2: Enrolment by school type, Chinhat Urban



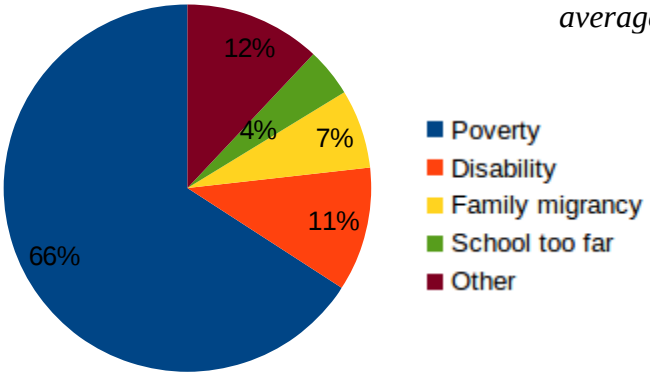
Graph 4.3.3: Enrolment by school type, urban average



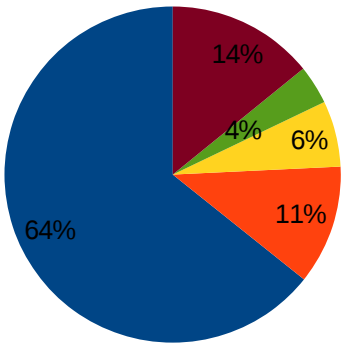
Reasons for not being enrolled

The enrolment rate in Chinhat urban is 94%. Of the 6% not enrolled (1119 children), poverty emerged as the overwhelming reason for not attending school, similarly to the urban average.

Graph 4.3.4: non-enrolment reasons, Chinhat urban



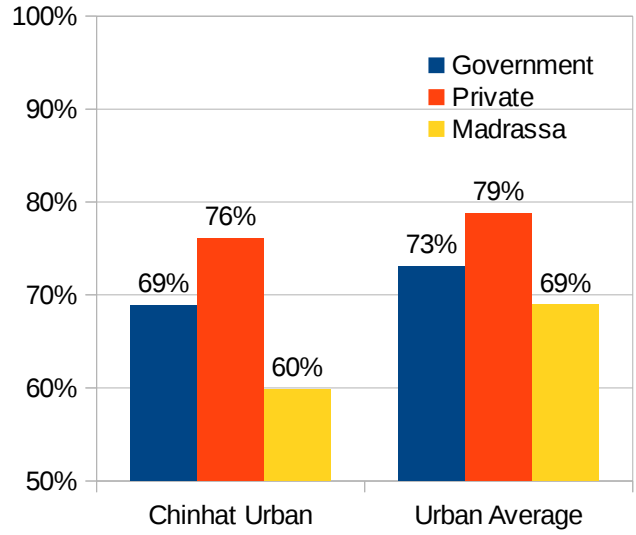
Graph 4.3.5: non-enrolment reasons, urban average



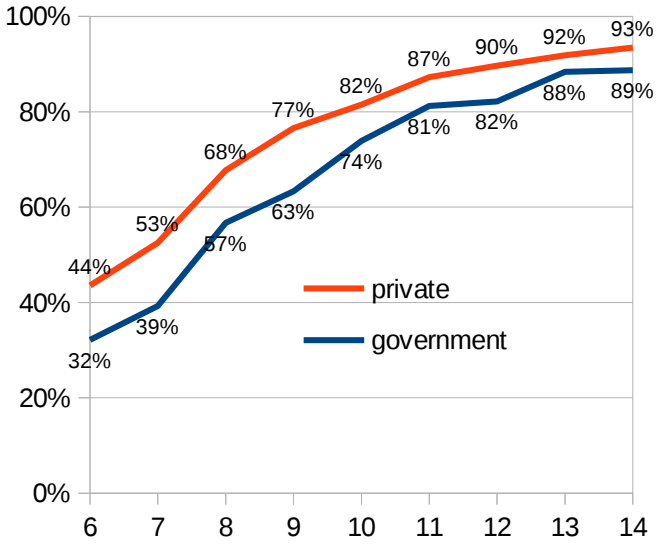
Literacy by school type

The literacy rate in Chinhat urban are somewhat below the urban average. This is the case across the different school types: government (69% vs 73%), private (76% vs 79%) and especially madrassa (60% vs 69%). There is a literacy gap of 7% between government and private schools in Chinhat urban, but, as with other blocks, much of this can be attributed to student's differing backgrounds, as reflected by the 12% gap between the literacy of 6-year-old private and government school students.

Graph 4.3.6: Literacy by school type



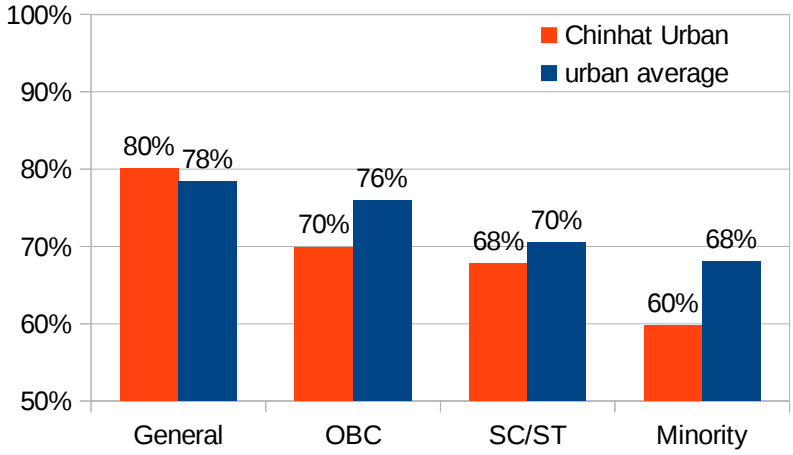
Graph 4.3.7: Literacy by age



Literacy by sociodemography

Literacy rates in Chinhat are relatively inequitable viewed through a caste lens. While the 'general' caste has slightly higher literacy in Chinhat compared to the urban average (80% vs 78%), all other castes have lower literacy rates. This is especially the case for religious minorities (60% vs 68%), resulting in a caste gap of 20% (compared to the urban average gap of 10%). This may be linked to the relatively low literacy rate among madrassa students. Both boys (68% vs 72.3%) and girls (69.4% vs 73.6%) were less literate in Chinhat compared to the urban average.

Graph 4.3.8: Literacy by caste, Chinhat urban



Highlights

- Chinhat has significantly higher enrolment rates (94%) than the urban average (91%).

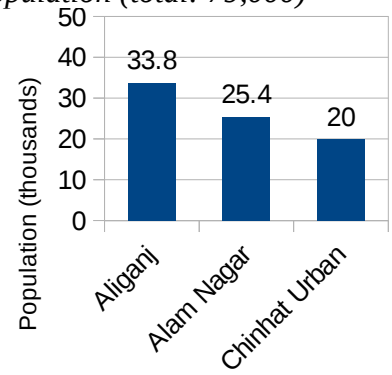
Opportunities

- Chinhat urban has lower overall literacy rates, providing an opportunity to improve the quality of school education.
- Chinhat urban has significant caste-based inequality, providing an important opportunity to target literacy programs to low castes and religious minorities.

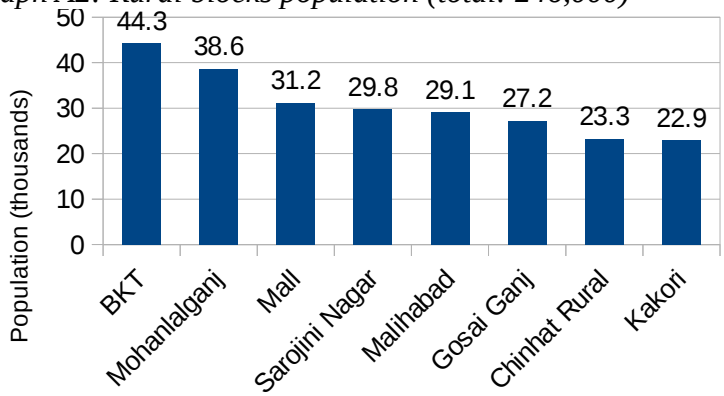
Appendix: Survey demographics

The survey population showed considerable demographic diversity. The graphs below shows population distribution of 6-14 year-olds among the three urban wards (left) and eight rural blocks (right). Areas had child populations ranging from roughly 20,000 to 45,000. Overall, our survey covered an urban population of 79,000 children and a rural population of 246,000 children.[lxv]

Graph A1: Urban wards population (total: 79,000)

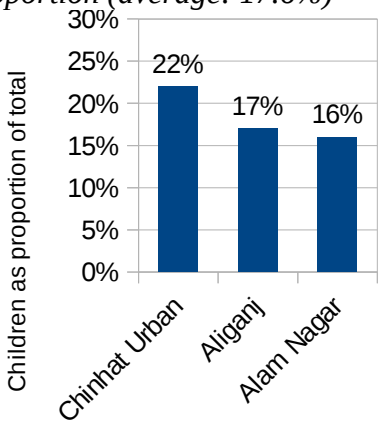


Graph A2: Rural blocks population (total: 246,000)

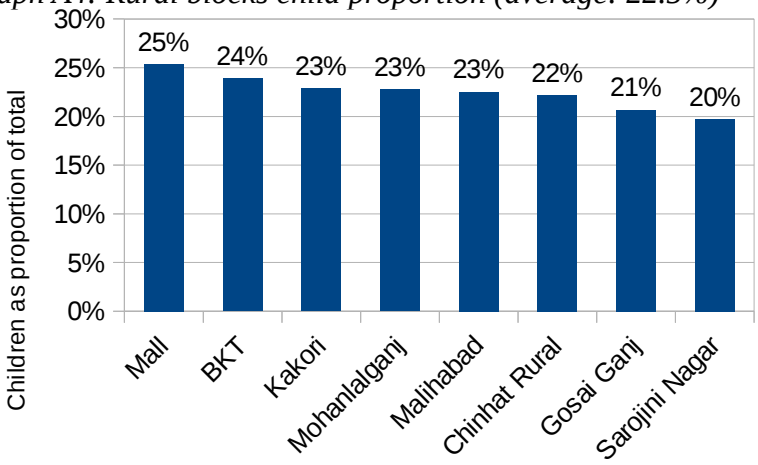


The wards and blocks showed considerable variation in what proportion children (6-14) made up of their total population aged 6-60. In general, children make up a lower proportion of the population in urban wards, perhaps reflecting adult migration from rural to urban areas.

Graph A3: Urban wards child proportion (average: 17.6%)

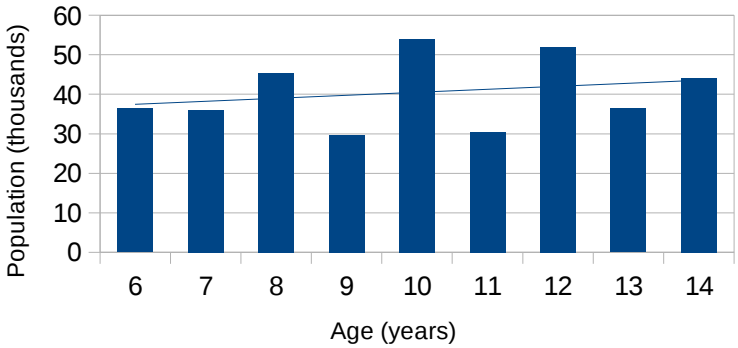


Graph A4: Rural blocks child proportion (average: 22.5%)



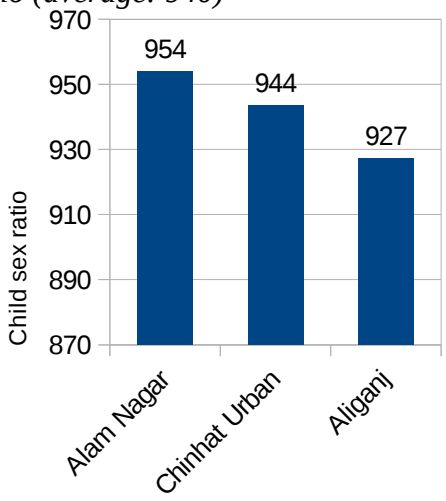
Considerably more children were reported to be an even number of years old: people reported 8, 10 & 12 more frequently and ages 9, 11 and 13 less so.[lxvi] This would suggest a certain approximation of age is going on. Once this noise has been filtered out, it seems that there is a slightly larger number of older children compared to younger ones – perhaps reflecting declining fertility rates.

Graph A5: Population by age

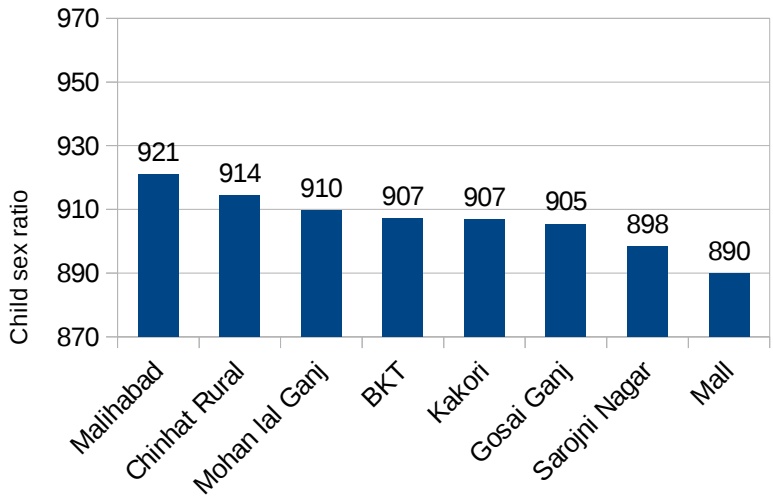


The overall child sex ratio was 914 females per 1000 males, which is somewhat better than the adult sex ratio (884 women per 1000 men). Similar to the adult sex ratio, the child sex ratio was also significantly better in urban areas.[lxvii]

Graph A6: Urban wards child sex ratio (average: 940)

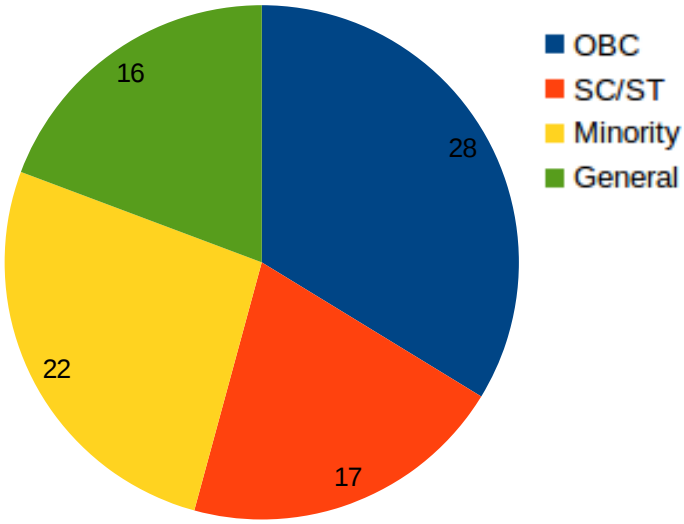


Graph A7: Rural blocks child sex ratio (average: 906)

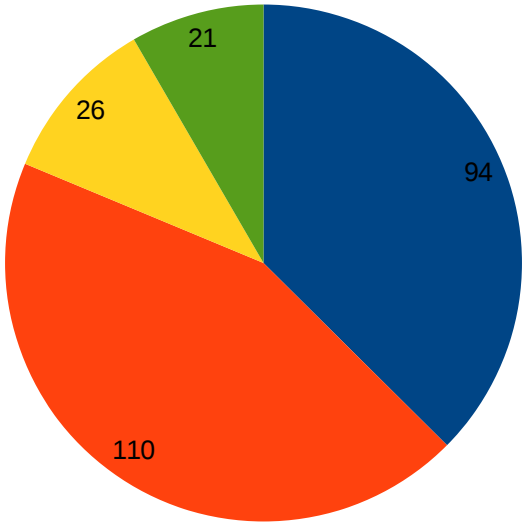


The distribution of the child population by caste was, unsurprisingly, near identical to the adult population. 'Other Backward Castes' and 'Scheduled Castes/Tribes' made up a large proportion of the population (37% and 38% respectively). OBC and SC/ST were especially concentrated in rural areas. In contrast, religious minorities and the 'General' caste made up a more significant proportion of the urban population.[lxviii]

Graph A8: Urban population (thousands) by caste



Graph A9: Rural population (thousands) by caste



i A separate report examines adult literacy rates.

ii Our data is significantly more comprehensive for rural areas, as we surveyed almost 10 lakh people out of a total rural population of 15 lakh. As we surveyed only 3 urban wards out of 110, with a population of 4.5 lakh compared to a total Lucknow urban population of 30 lakh, our urban findings are not as conclusive.

iii The 2011 Census finds the same trend in Lucknow district: Enrolment rates for 10-year-olds in rural areas is 87%, compared to 82% in urban areas. (This further indicates that enrolment rates have improved significantly in the 4 years between Census 2011 and our survey.)
India Census. 2011. *Population Enumeration: Population Attending Educational Institutions by Age, Sex and Type of Educational Institution*. (Click on link C-10)
http://www.censusindia.gov.in/2011census/population_enumeration.html

iv Annual Status of Education Report (rural). 2016. p43 http://img.asercentre.org/docs/Publications/ASER%20Reports/ASER%202016/aser_2016.pdf.

v Ministry of Human Resource Development. 2016. *Educational Statistics at a Glance*.
http://mhrd.gov.in/sites/upload_files/mhrd/files/statistics/ESG2016_0.pdf

vi The phenomenon of private schools being more prevalent in urban areas has been well documented. See, for instance, Kingdon, Geeta. 2017. *The Private Schooling Phenomenon in India: A Review*. IZA Discussion Paper. P6.
http://ftp.iza.org/dp10612.pdf
NSSO. 2015. Key Indicators of Social Consumption in India: Education.

vii The 2011 Census finds the same trend in Lucknow district: Enrolment rates for 7-year-olds are a low 77%, rising to 86% by age 9, and then dropping again to 81% by age 14.
India Census. 2011. *Population Enumeration: Population Attending Educational Institutions by Age, Sex and Type of Educational Institution*. (Click on link C-10)
http://www.censusindia.gov.in/2011census/population_enumeration.html

viii Other studies have also found some parental bias in sending boys to private and girls to public schools. See:
Azam, M. and Kingdon, G. G. 2013. Are girls the fairer sex in India? Revisiting intra-household allocation of education expenditure. World Development, Vol. 42, pp. 143-64.
Maitra, P., Pal, S. and Sharma, A. 2011. Reforms, Growth and Persistence of Gender Gap: Recent Evidence from Private School Enrolment in India. Bonn, Germany, Institute for the Study of Labor. (IZA Discussion Paper, 6135.)

ix Some explain Muslim's high drop-out rates, even relative to other disadvantaged groups, as a function of government reservation policies which benefit SC/STs but not Muslims.
Desai, Sonalde and Kulkarni, Veena. 2008. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2474466/

x Other studies have similar findings. See, for instance:
Mondal, Prahlad & Pal, PK. 2016. Reasons For Non-Enrollment And School Drop-Out In Traditional Rural Communities Of West Bengal, India.

xi This graph, and other graphs in this report, may have figures that don't add to 100% due to rounding.

xii Census 2011 gives figures of 81% literacy for 7-14 year olds in urban UP, compared to 85% for rural 7-14 year olds. Our findings contradict this: in GDTPS 2015, child urban literacy rates are higher than rural literacy rates. This is likely due to problematic estimations of literacy in Census 2011: for instance, assuming that those who are in school can read.
India Census. 2011. *Population Enumeration: Education level by religious community and sex for population aged 7 and above*. (Click on link C-9) http://www.censusindia.gov.in/2011census/population_enumeration.html

xiii India Census. 2011. *Population Enumeration: Population Attending Educational Institutions by Age, Sex and Type of Educational Institution*. (Click on link C-10)
http://www.censusindia.gov.in/2011census/population_enumeration.html

xiv Annual Status of Education Report. 2016. p52 http://img.asercentre.org/docs/Publications/ASER%20Reports/ASER%202016/aser_2016.pdf.
'Literate' is regarded as being able to read a grade 1 text or above. To compare, we have assumed that age 6 is equivalent to grade 1, age 7 equivalent to grade 2, and so forth.

xv Much of the differences between ASER's findings and ours may be accounted for by the fact that our survey is just from Lucknow, whereas ASER is rural India. Lucknow children may be relatively privileged.

xvi Our study is not a longitudinal one, so we have no direct measure of individual students' progress over time. However, this 22% figure refers to the average rate of illiteracy reduction between successive grades. See endnote xxii below.

xvii Cited in Pritchett and Beatty. 2012. *The negative consequences of overambitious curricula.* See table on p6

xviii Ibid.

xix Nagarajan, Rema. 2013. *SC/STs take rapid strides, close literacy gaps*. Times of India.
https://timesofindia.indiatimes.com/india/SC/STs-take-rapid-strides-close-literacy-gap/articleshow/25536193.cms

xx Another possibility is that minorities have recently had a boost in literacy rates of young children, which has not yet translated to teenagers. This is a limitation of our study, which could best be addressed through a longitudinal study.

xxi Kingdon, Geeta. 2017. *The Private Schooling Phenomenon in India: A Review*. IZA Discussion Paper. P28 http://ftp.iza.org/dp10612.pdf

xxii This was calculated as follows: 72% of 6-year-old government school students were illiterate, compared to only 11% of 14-year-old government school students. -21% is the growth rate needed, over 8 years, to reduce 72% to 11%. That is: 1 - (11% / 72%)^(1/8) = 21%

xxiii This was calculated as follows: There is an 11% literacy gap between private and government school students at age 7 (49% vs 38%). There is a 22% literacy gap between government school students aged 8 and aged 6 (50% vs 28%). This indicates that for government students aged 7, the rate of literacy increase is approximately 11% per year. Consequently, there is a literacy gap between government and private schools of approximately 1 year at this age. Similarly, at age 13 there is a 5% gap between private and government (91% vs 86%), whereas the rate of literacy increase in government students aged 13 is approximately 4%. This means that the gap between private and government has grown to 1.25 years. The gap has grown by 0.25 years, over a period of 6 years; indicating that 1 year of private school is roughly equivalent to 1.05 years of government school.

xxiv Sawai, Ram. 2016. *Distribution of Free Bicycles to Students of Class X*. Gov Info. https://govinfo.me/distribution-free-bicycles-students-class-x/

Vajpayee, Prince. 2017. *Rajasthan Free Laptop Scheme 2017-18*. My Government Schemes. https://www.mygovernmentschemes.com/rajasthan-free-laptop-scheme-2017-18/

xxv Wetzel, Deborah and Economico, Valor. 2013. *Bolsa Familia: Brazil's Quiet Revolution*. World Bank. http://www.worldbank.org/en/news/opinion/2013/11/04/bolsa-familia-Brazil-quiet-revolution

See also an analysis of the merits of conditional cash transfers:

Fiszbein and Schady. 2009. *Conditional Cash Transfers: Reducing Present and Future Poverty*. World Bank. http://documents.worldbank.org/curated/en/914561468314712643/pdf/476030PUB0Cond101Official0Use0Only1.pdf

xxvi United Nations Girls Education Initiative & Global Partnership for Education. 2014. *Cash Transfer Programs for Gender Equality in Girls' Secondary Education.* http://www.ungei.org/index_5739.html

Schurmann, Anna. 2009. *Review of the Bangladesh Female Secondary School Stipend Project Using a Social Exclusion Framework.* PMC. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2928106/

xxvii Fiszbein and Schady. 2009. *Conditional Cash Transfers: Reducing Present and Future Poverty*. World Bank. P129. http://documents.worldbank.org/curated/en/914561468314712643/pdf/476030PUB0Cond101Official0Use0Only1.pdf

Chaudhary, Nazmul & Parajuli, Dilip. 2006 Conditional Cash Transfers and Female Schooling: The Impact of the Female School Stipend Program on Public School Enrollments in Punjab, Pakistan. World Bank

xxviii UNESCO. 2017. *Global Education Monitoring Report: Accountability in Education*. P 68

However, there is limited and mixed evidence on CCTs improving student learning outcomes. See Fiszbein and Schady. 2009. *Conditional Cash Transfers: Reducing Present and Future Poverty*. World Bank. Ch 5. http://documents.worldbank.org/curated/en/914561468314712643/pdf/476030PUB0Cond101Official0Use0Only1.pdf

xxix UNESCO. 2015. *Education for All 2000-2015: Achievements and Challenges*. p89

Many countries use income-testing for education-related conditional cash transfer programs. However, income-testing in India is liable to both inclusion and exclusion errors. Caste may be a reasonable proxy for educational disadvantage.

xxx For instance, the National Child Labour Project runs 'Special Training Centres', similar to schools, which provide a Rs 150/ month stipend to motivate child labourers to attend. A conditional cash transfer program in Pakistan also transferred Rs 200/month.

Ministry of Labour & Employment. 2016. National Child Labour Project. https://labour.gov.in/childlabour/nclp

Chaudhary, Nazmul & Parajuli, Dilip. 2006. Conditional Cash Transfers and Female Schooling: The Impact of the Female School Stipend Program on Public School Enrollments in Punjab, Pakistan. World Bank. https://openknowledge.worldbank.org/handle/10986/9260

xxxi Based on our data, there are about 3,000 SC/ST and Minority children in Aliganj (which is the worst ward in terms of dropout rate) in grade 7 & 8. A conditional cash transfer of Rs 200 per month would thus cost Rs 6 lakh per month. This could be trialled for one school year, to analyse whether it makes a change in dropout rates and educational achievements.

Fiszbein and Schady note that some programs with very small payments, including in the culturally and geographically similar nations of Bangladesh and Pakistan, can have great effects on enrolment (p132). They also find that CCTs tend to be most effective in lowering the dropout rate in the pre-teen and early teenage years (p134).

xxxii UNICEF. 2018. *Education: Current Status + Progress*. https://data.unicef.org/topic/education/primary-education/

xxxiii Ministry of Human Resource Development. 2016. Educational Statistics at a Glance. p3 http://mhrd.gov.in/sites/upload_files/mhrd/files/statistics/ESG2016_0.pdf

xxxivLadd, Helen. 2002. *School Vouchers: A Critical View*. P8. Journal of Economic Perspectives—Volume 16, Number 4 —Fall 2002.
Rouse, Cecilia & Barrow, Lisa. 2009. *School Vouchers and Student Achievement: Recent Evidence and Remaining Questions*. P18-19 Annual Economic Review.

xxxvKingdon, Geeta. 2017. *The Private Schooling Phenomenon in India: A Review*. IZA Discussion Paper. P6-7 http://ftp.iza.org/dp10612.pdf

xxxviKingdon, Geeta. 2017. *The Private Schooling Phenomenon in India: A Review*. IZA Discussion Paper. P7-8 http://ftp.iza.org/dp10612.pdf

xxxviiLadd, Helen. 2002. *School Vouchers: A Critical View*. P8. Journal of Economic Perspectives—Volume 16, Number 4 —Fall 2002. P6-7.

xxxviiiSee Kohn, Alfie. 1999. *The Schools Our Children Deserve.* Boston: Houghton Mifflin.

xxxixLadd, Helen. 2002. *School Vouchers: A Critical View*. P8. Journal of Economic Perspectives—Volume 16, Number 4 —Fall 2002.
Rouse, Cecilia & Barrow, Lisa. 2009. *School Vouchers and Student Achievement: Recent Evidence and Remaining Questions*. P18-19 Annual Economic Review.
Waslander, S., Pater, C. and van der Weide, M. 2010. *Markets in Education: An Analytical Review of Empirical Research on Market Mechanisms in Education*, *OECD Education Working Papers.* No. 52, OECD Publishing, Paris. http://dx.doi.org/10.1787/5km4pskmkr27-en

xl Muralidharan, Karthik and Venkatesh Sundararaman. 2015. *The Aggregate Effect of School Choice: Evidence from a Two-Stage Experiment in India*. The Quarterly Journal of Economics 130(3): 1011-1066. https://www.povertyactionlab.org/evaluation/school-choice-andhra-pradesh-india

xli Kingdon, Geeta. 2017. *The Private Schooling Phenomenon in India: A Review*. IZA Discussion Paper. P25-27 http://ftp.iza.org/dp10612.pdf

xlii Pritchett and Murgai. 2006-7. *Teacher Compensation: Can Decentralization to Local Bodies Take India from the Perfect Storm Through Troubled Waters to Clear Sailing?* World Bank.

xliii Kremer, Michael et al. 2004. Teacher Absence in India: A Snapshot. World Bank http://siteresources.worldbank.org/DEC/Resources/36660_Teacher_absence_in_India_EEA_9_15_04_-_South_Asia_session_version.pdf

xliv Pritchett and Murgai. 2006-7. *Teacher Compensation: Can Decentralization to Local Bodies Take India from the Perfect Storm Through Troubled Waters to Clear Sailing?* World Bank.

xlv UNESCO. 2017. *Global Education Monitoring Report: Accountability in Education*. P75-76

xlvi *Carrots or Sticks? Alfie Kohn on Rewards and Punishments.* http://web.uvic.ca/~gtreloar/Articles/Motivation/Carrots%20or%20Sticks%20rewards%20or%20punishments.pdf

xlviiSee Kohn, Alfie. 1999. *The Schools Our Children Deserve.* Boston: Houghton Mifflin.
See also UNESCO. 2017. *Global Education Monitoring Report: Accountability in Education*. P 77

xlviiiTucker, Marc. 2007. *Accountability and Motivation*. National Centre on Education and the Economy. http://ncee.org/2014/03/accountability-and-motivation/

xlix UNESCO. 2017. *Global Education Monitoring Report: Accountability in Education*. P 81,82

l Many countries' teaching unions develop a 'code of conduct'. See UNESCO. 2017. *Global Education Monitoring Report: Accountability in Education*. P 80

li Pritchett and Murgai. 2006-7. *Teacher Compensation: Can Decentralization to Local Bodies Take India from the Perfect Storm Through Troubled Waters to Clear Sailing?* World Bank.

lii ibid

liii Dreze and Sen. 2013. *An Uncertain Glory: India and its contradictions*. Allen Lane. P135

liv ibid

lv Kumar, Krishna. 2008. *A Pedagogue's Romance.* Delhi: Oxford UP, p.40

lvi Brinkmann, Suzana. 2015. *Learner-centred education reforms in India: the missing piece of teachers' beliefs*. Policy Futures in Education. http://journals.sagepub.com/doi/pdf/10.1177/1478210315569038

lvii Hatch, Tom & Hammerness, Karen. 2014. *Professional Autonomy and Independence among Finnish Teachers.* https://internationalednews.com/2014/06/02/professional-autonomy-and-interdependence-among-finnish-teachers/
Stewart, Vivien. n.d. *How Singapore Developed a High Quality Teacher Workforce*. Centre for Global Education. Global Cities Education Network. https://asiasociety.org/global-cities-education-network/how-singapore-developed-high-quality-teacher-workforce

lviii This is an SCERT initiative, endorsed by Anupama Jaiswal, UP Minister for Basic Education.

lix UNESCO. 2017. *Global Education Monitoring Report: Accountability in Education*. P 78-79

lx UNESCO. 2017. *Global Education Monitoring Report: Accountability in Education*. P 77-78

lxi World Health Organisation. 2009. *Violence Prevention: The Evidence.* http://www.who.int/violence_injury_prevention/violence/life_skills.pdf

lxii Bancroft, Sarah. 2006. *Teaching Teens about Life.* The Guardian. https://www.theguardian.com/world/2006/aug/18/outlook.development

[lxiii] Annual Status of Education Report. 2016. http://img.asercentre.org/docs/Publications/ASER%20Reports/ASER%202016/aser_2016.pdf
National Achievement Survey Class V. 2014. National Council of Education, Research & Training. http://www.ncert.nic.in/departments/nie/esd/pdf/NationalReport_subjectwise.pdf

[lxiv] Figure in parentheses is total number of rural children surveyed in the 8 blocks.

[lxv] This excludes several thousand children who did not sit the literacy test.

[lxvi] Similar trends can be found in the 2011 Census. See
India Census. 2011. Population Enumeration. http://www.censusindia.gov.in/2011census/population_enumeration.html

[lxvii] This is a surprising finding, given that, in general, urban areas in India have lower sex ratios than rural areas.
Amarnath, Tarun. 2017. *Urban India has a Serious Sex Ratio Problem*. The Wire. https://thewire.in/gender/urban-sex-ratio-declining

[lxviii] This is in line with the findings of the 2011 Census, which reported that 40% of Muslims lived in urban areas, compared to 31% of all Indians.
Varma, Subodh. 2015. *More religious minorities live in urban areas than rural*. Times of India. https://timesofindia.indiatimes.com/india/More-religious-minorities-live-in-urban-areas-than-rural/articleshow/48680765.cms