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**Do public funds increase days of  
Instruction in primary schools?  
A Study of 3 Districts in India**

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# Do public funds increase days of instruction in primary schools?\*

## A Study of 3 Districts in India

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### Abstract

This article investigates the role of public funds in ensuring that primary schools in India have at least a certain minimum number of instructional days. Using data on primary schools from three districts, we first document that the distribution of instructional days may reasonably be thought of as a binary variable where a school is either functional (i.e., with more than 201 instructional days) or is not (i.e., has less than 201 instructional days). Secondly, we show that receiving any public funds is important for schools to be functional; however, the marginal effect of doses of public funding diminishes with larger amounts of funding. Finally, monitoring schools in terms of the number of academic visits, visits by BRC and CRC coordinators as well as the presence of head teachers are important in ensuring that primary schools are functional in the sense that we have defined. These findings seem to point to important ways to improve the quality of primary schooling in India.

### 1. Introduction

Primary education has always been seen as a key ingredient to economic growth from both efficiency and equity considerations; consequently, its performance has been an important area of public policy debate. These debates are generally concerned with which methods to use to

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improve schooling outcomes and often, which schooling outcomes are the most important to improve.<sup>1</sup> In either instance, public funding has always been an important mechanism for improving schooling outcomes such as gross enrollment rates, literacy rates, reduction in repetition rates, retention in school etc. A less frequently used, but no less important measure of schooling is the number of instructional days that a child potentially receives in school. The number of instructional days is known to be strongly related to actual time a student spends on learning activities and thus, is of paramount importance from a supply of education perspective as it determines the level of education that a child can potentially achieve.<sup>2</sup> This paper looks at the impact of public funds, and a number of other school-level attributes, on the functioning of primary schools in terms of its instructional days.

For this analysis we look at cross-sectional data from three neighboring and adjoining districts of India, namely, *Nizamabad* in Andhra Pradesh, *Nanded* in Maharashtra and *Bidar* in Karnataka, to investigate the role of public funds on instructional days in three different bureaucratic and public school management settings. Using administrative school-level data from the District Information System for Education data for 2006-07 we look at the disbursement of funds from two key school funding programs that have been driving public funding under the

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<sup>1</sup> A number of studies document the current and historically changing state of primary education on the basis of many different schooling outcomes. For example, the PROBE report investigates attitudes about primary schooling, role of child labor, costs of primary education, and the role of local bodies (such as the Village Education Committee) in five north Indian states. See Sanker (2007) to see an evaluation of primary schooling in terms of participation in schooling, role of private schooling as well as school infrastructure across the country for the last two decades.

<sup>2</sup> The relationship between time spent in school and student achievement is well documented, for a recent review of literature as well as a discussion of the state of time spent in primary school in a number of countries in the world see Abadzi (2007 a), Abadzi (2007 b) and UNESCO Institute of Statistics (2008).

*Sarva Sikshan Abhiyan* (SSA)<sup>3</sup>. In this paper we look at how provision of this kind of public funding translates into providing “adequate schooling” in terms of the number of instructional days.

A key concern in any study of cross-sectional data arises from the potential bias introduced by omitted variables that are co-related with both the potential non-random allocations of public funds to a school as well as to the number of instructional days in a school. We address these concerns in two ways: firstly, given the richness of our administrative data set, we are able to control for a number of school, teacher and school monitoring attributes that are traditionally not available in socio-economic surveys. Secondly, apart from detailed school level attributes, our dataset provides clear district, as well as block, level identifiers that allow us to estimate a series of increasingly demanding regression models that control for not only unobserved district level effects, but also for unobserved block level characteristics. Thus, we not only have a rich set of observed covariates in our regression model as controls for non-random assignment of public funds, we also have district (or block) level identifiers to control for unobserved covariates that affect the number of instructional days in a school in the same manner within a district (or block).

We begin our analysis by first showing that it is reasonable to *discretize* the number of instructional days into less than 201 days and more than 201 days of instruction based on the distribution of the number of instructional days in the sample. An obvious advantage of such a

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<sup>3</sup> As a step toward universal primary education (UPE) in India, the District Primary Education Program (DPEP) was initiated in late 1994. The District Information System for Education (DISE) was set up in 1995 to evaluate the functioning of the DPEP and provides extensive details on a range of school attributes. See the Appendix for the details of financing available under SSA.

modeling strategy is that it allows us to estimate the inherently non-linear relationship between the instructional days and its various covariates.

Our regressions show that schools are heterogeneous, not only across districts, but also within blocks; further, receiving any public funds, as opposed to receiving no public funds, has a statistically significant and substantially meaningful impact on a school being functional; thus the first tranche of funds has a significant impact; however, incremental impacts of public funds when they are already receiving funds is not significant for this purpose; in addition, monitoring schools in the form of academic inspections, as well as visits by block and cluster coordinators are important for primary schools being functional.<sup>4</sup> This paper is organized as follows: Section 2 describes the primary schooling in India with a focus on the DISE program; Section 3 describes the sample and presents summary statistics of key variables; Section 4 discusses our estimation strategy; Section 5 discusses our findings and concludes by placing our findings in the larger context of the primary education sector.

## **2. Primary Schooling in India**

### *Primary Schooling and its Financing in India:*

Primary education in India has always been given a lot of policy importance since independence and is guided by provisions made for it under the Constitution of India. One of the more important mandates from the Constitution is the assurance of free education for all

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<sup>4</sup> Throughout this paper we use functional to imply that a school has 201 or more days of instruction. We discuss the choice of 201 days of instruction more carefully later on in the paper. This matches well with other estimates of the number of days of school functionality; UNESCO documents that about 90% of primary schools in India operate for 204 days in an academic year (UNESCO Institute of Statistics 2008).

children under the age of 14 years. While initially, primary education was purely a state subject, it has been placed on the concurrent list since 1976 to enable national as well as state level focus. The financial burden for providing primary school has been with the state government, unless it is in the domain of a centrally sponsored scheme in which case the central government supports it independently, or in some sharing arrangement with the states, as for example in the case of the *Sarva Shiksha Abhiyan (SSA)*.<sup>5</sup>

The SSA is the flagship program of the Government of India that has a number of ambitious goals for primary (or elementary education) in India. Specifically, the SSA documents report the following major aims:

- (1) All children are either in a school, or in one of Education Guarantee Centre, Alternate School, or a ' Back-to-School' camp by 2003;
- (2) All children complete five years of primary schooling by 2007;
- (3) All children complete eight years of elementary schooling by 2010;
- (4) Focus on elementary education of satisfactory quality with emphasis on education for life;
- (5) Bridge all gender and social category gaps at primary stage by 2007 and at elementary education level by 2010;
- (6) Universal retention by 2010.

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<sup>5</sup> Section 1.8 details the financial norms and sharing ratios between the center and state over the IX<sup>th</sup> and the X<sup>th</sup> plan periods. [http://education.nic.in/ssa/ssa\\_1.asp](http://education.nic.in/ssa/ssa_1.asp)

The SSA was initiated in 2001 with these extremely ambitious goals and has set in place a number of very detailed and innovative ways to allocate public funds to enhance schooling outcomes.<sup>6</sup> Thus, apart from specifying teacher student ratios, the SSA makes teacher specific allowances within a school and school infrastructure specific allocations every year (see Appendix for a current version of these norms.). Shanker (2007) reviews trends in the education sector for the period 1986-87 to 2004-05 and finds that while significant improvements are seen in terms of access to schooling and getting children to enroll in school, particularly over the period 1999-2000 to 2004-05 that overlaps with the start of the SSA, there also remain alarming gaps. The hardest to reach children still remain out of school, rates for completing schooling remain very low, and while the role of private education in the sector has been increasing, states that had poor performances historically in enrollments, school infrastructure, and dropouts continue to have the most serious problems, even though they have made rapid progress. While much has been achieved, it is also clear that many of the proposed targets have not been and are not going to be met.

*Impact of Number of Instructional Days on Schooling Outcomes:*

Lack of schooling in India has historically been a problem both in terms of provision of it in terms of a lack of human and capital infrastructure as well as a demand for it. The SSA shows that, within short periods of time, demand for schooling may be easily ramped up and infrastructural access may be improved, however, access to infrastructure alone is not sufficient if there isn't enough instructional activity centered on the school. The total number of

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<sup>6</sup> See Banerji (2003) for a discussion of the original SSA norms and an optimistic but very clear discussion of the size of the problem that the SSA is dealing with.

instructional days at school, or the length of school term is known to be strongly associated with learning outcomes as well as with later on outcomes in life such as the return to education measured in terms of wages earned later on in life.<sup>7</sup> Pishke (2007) uses a policy change in Germany that reduced the school term from 37 weeks to 24 weeks over two years without changing curriculum, or the highest grade from which a student leaves school, to demonstrate that a decline in the school term led to statistically observable declines in grade repetition, and reduction in the quality of education sought subsequently.<sup>8</sup> Similarly, in a developing country context, insufficient number of instructional days would dilute the impact of other schooling inputs (infrastructure, teacher training, etc.) on school outcomes. Lee and Barro (2001) develop a panel dataset to show that both family inputs as well as well as various school level inputs including the length of the school year lead to improved schooling outcomes even in developing countries. Thus, the number of instructional days is an important school input and any national program that seeks to provide education for all (*sarva siksha*) must necessarily ensure that adequate instructional school days are available to its students.

### **3. Data and Sample Description**

*Sample Composition:* Administrative data on approximately 7,000 schools from the districts of Nanded (Madhya Pradesh), Bidar (Karnataka) and Nizamabad (Andhra Pradesh) (see Figure 1) were extracted from the DISE web-portal for this paper. While these three districts are in close

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<sup>7</sup> Card and Kruger (1992), after controlling for cohort effects and location of birth effects, provide strong evidence to suggest that better school quality indicators, such as the average duration of the school term, amongst others, leads to improved individual earnings using data from the US.

<sup>8</sup> Schooling in Germany follows different merit based tracks and the author presents evidence, after controlling for all other observable differences, to suggest that a reduction in school terms lead to a decline in people going for higher merit schooling later on. There was no impact on later life earnings due to this.



geographical proximity to each other, they in fact belong to three different states and have very different management types for their primary school systems. Such variation in management structures within such a close geographical proximity allows us to compare and contrast our results. Table 1 provides details about each of these three districts from the 2001 census and we see that there are broad similarities in these three districts. Thus, broadly 75-80% of the population in each of these districts lives in rural areas, and each of these areas has seen a population growth rate of about 20% from their 1991 Census levels.<sup>9</sup> The fraction of the population that belongs to the schedule cast and scheduled tribe categories ranges from 21.91% to 32.02%. In terms of literacy attainments, each of these districts is at the lower end in the country, with literacy rates in India ranging from 44.54% to 56.52% (this is well below the national rate of 65% in the 2001 Census).

One dimension in which there is obvious variation is the geographical size of these districts, with Bidar being about half the size of Nanded and two thirds the size of Nizamabad implying that fewer number of schools would be needed to span the entire state assuming any geographical placement of primary schools that ensures children do not need to travel too far for education. Another important dimension in which these states differ is in terms of income levels; while it is difficult to estimate district level income, a good proxy for income has usually been the quality of housing that people have access to, and in this dimension, Bidar does considerably better than the other two districts with almost 75% of its population living in permanent structures with the remaining distributed across semi-permanent and temporary

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<sup>9</sup> In our sample about 87% of all school are in rural areas; 91% for Bidar, 84% for Nanded and 89% for Nizamabad.

housing; by way of comparison, only 50% of the population in Nizamabad and Nanded live in permanent structures. Finally, if we compare the population of these three districts with the other districts using the 2001 Census, we find that about 51% of all districts in India were smaller than Bidar, the smallest district in our sample. Nizamabad is the next largest district in the sample and it is smaller than 26% of the largest districts in India. Finally, Nanded is the largest district in the sample, and is smaller than about 16% of the largest districts.

Table 2 presents summary statistics of the variables we use in our analysis. About 17% of the sample consists of schools from Bidar, while the remaining 83% is split roughly evenly between Nanded (41%) and Nizamabad (42%). Together in these three districts there are 58 administrative blocks, with 5 from Bidar, 17 from Nanded and 36 from Nizamabad.<sup>10</sup> 78.2% percent of all schools receive some public funding, either from the School Development Grant (SDG) or from the Teaching and Learning Material (TLM) grant, both of which are two major schemes under SSA to support primary schools in India. Schools on average tend to be about 30 years old in the sample; however, there is considerable variation in the age of schools across and within the three districts. Thus, schools in Nanded tend to be oldest on average, followed by Bidar and then by Nizamabad. On average, Nizamabad's schools tend to be approximately 12-15 years younger than schools in the other two districts. A closer examination of the data (see Figure 2) shows that age of schools in these districts varies substantially; in Bidar and Nanded the distribution of the year of school establishment is bi-modal suggesting that there have been two major drives for building schools in these districts – one around the 1970s and

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<sup>10</sup> For our estimation we drop one of the blocks from Nanded, Nanded CS, which has only 10 observations, so in effect there are 57 blocks for our analysis.

another around the 1990s. In Nizamabad, however, there appears to have been a slow build up of schools with the peak of school establishment being seen only in the 1990s.

*Distribution of Alternative Management Structures:*

Table 3 provides the frequency distribution of the alternative school management types that are found in our sample as well as the distribution of public funds under school development grant and the training and learning materials grant. The data identifies five predominant management categories uniquely; these are Department of Education, Local Bodies, Private Aided, Private Unaided, and Social Welfare department. Looking at the district-wise distribution, it is reasonably clear that the Department of Education schools are predominantly in Bidar, Karnataka, while, most schools in Nanded and Nizamabad are managed by Local Bodies. There are likely to be important differences in schools from different management types and uniformity in schools within any management category. One of manifestation of this is the wide difference in mean allocation of both public funds across the three districts as seen in Table 3.

*Distribution of Public Funding:*

In terms of public funding there is lot of heterogeneity in the sample with approximately 78% of all schools receiving some public funding while the remaining manage on their own funds. The two most structured forms of public funding are through the School Development Grant (SDG) and the Training and Learning Materials grant (TLM); officially the former provide support up to Rs, 2000 per school per year for replacement of non-functional school

equipment, while the later provides Rs. 500 per teacher per year to each school and thus, they provide complimentary means of support to develop school infrastructure – capital and human. Not only is about 22% of primary schools in the sample completely dependent on their own funding (by and large all of these schools are managed by private institutions (mostly unaided), however, a small fraction of schools (20%) are publicly managed). We find that on average schools receive a statistically larger amount, by about Rs. 765, of SDG, than TLM. TLM allocations tend to depend on the number of teachers in the school while SDG allocations are a lump-sum allocation and thus, in the sample we find that SDG exceeds TLM in about 52% of the sample.

Table 4 reports the distribution of SDG and TLM in the sample as well as the correlation between funds received and funds spent. Panel (A) looks at SDG and we see that while about 55% of the sample receives precisely Rs 2,000 rupees per year, about 17% of the sample gets twice this amount, and the rest receive other amounts of funds. Similarly, Panel (B) looks at the distribution of the number of teachers in the sample, their predicted TLM that should have been received on the basis of Rs 500 per teacher rule, and the actually observed amount of public funds received. In both instances we note that there is a small but noticeable and presumably policy relevant discrepancy between how money is meant to be distributed and how it is distributed. Thus, under SDG an important fraction of the population has access to grants that are larger than the mandated Rs. 2000 and under the TLM it would appear that schools receive less money than what they should be receiving based on the number of teachers that they report. Additionally, the gap between actual and predicted TLM received is

larger in schools with larger numbers of teachers. As with most public policy programs, it would appear that the operational criteria under which the SSA functions is a lot more complicated than what the policy documents intend them to be. Finally, as with most public funds allocation, it is important to know not only the allocation of funds, but also their expenditures. The DISE system not only report funds received, but also funds spent and here, most of the schools do very well, as seen in the high correlations between funds received and spent for both of these programs in Panel (C) of Table 4. For SGD, the correlation coefficient is very high at 0.95 while it is a bit lower, but nevertheless very high at 0.83 for the TLM. Based on such high correlations we decided to go with funds allocated rather than funds spent as that is more a reflection of the public systems functioning without being contaminated with any kind of idiosyncratic behavior from the school that determines the difference between funds allocated and funds spent.

Another dimension of interest is the level of supervision, or monitoring, that the schools report. In the entire sample, schools on average receive about 7 visits a year from the Cluster Resources Center co-coordinators, more than 2 a year from the Block Resource Center, as well as almost 1 academic inspection a year. Thus, on average there are about 10 visitors per school year from outside the school with whom the teaching staff can interact. Apart from monitoring of primary schools, we can also control for within school quality of teachers and teaching as we observe the number of teachers, if the school has a head teacher, and how many teachers the school has with graduate education, as well as the amount of non-teaching tasks that the school is engaged with. We find that on average there are more than 5 teachers to a school,

only about 30% of the schools have a head teacher, just under 3 teachers tend to be college graduates, collectively all teachers in a school tend to only spend 6 days on non-teaching activities. We also have a number of details about the school's infrastructure such as age, number of classrooms, availability of toilets, if it has a book-bank, number of blackboards, source of drinking water etc. Finally, we also observe the fraction of students enrolled in class one who are SC, ST and OBCs are 22%, 15.7% and 37.1% respectively in the sample, and this broadly conforms to the SC or ST distribution in the 2001 Census in Table 1.

#### **4. Estimation Strategy**

*Functionality of Primary Schools:* We are interested in the relationship between public funds that are allocated to a school and the number of instructional days that the school has in the academic year. Two sets of concerns arise in trying to characterize such a relationship:

- Identifying the impact of what would have happened if a school didn't have public funds - a credible counterfactual; and
- Modeling the relationship between public funds and the outcome given the structural nature of our outcome variable – the instructional days.

This section discusses both these issues and presents our estimation strategy in the process.

Identifying a causal relationship in an observational setting is complicated because there is no a priori reason to believe that schools are allocated public funds randomly. Lacking randomness in allocation of public funds raises the possibility of schools with certain attributes

being more likely to receive funds.<sup>11</sup> Thus, for example, an MLA for whom education in a specific block is important for electoral purposes, may not only work hard to ensure that schools receive public funds, but may also visit schools to check on them thereby ensuring more instructional days leading to an overestimate of the impact of public funds on instructional days.<sup>12</sup> Given the cross-sectional, but grouped nature of our data (grouped at the district and at the block level) we can control for certain forms of omitted variable bias that may affect our estimates. Given that we have data on many schools in a block, within a district, we can control for unobserved district level (or block level) unobserved factors that affect schools within a district (or a block) in an identical fashion with district (block) level fixed effects. We exploit variation in schools across districts as well as across blocks to estimate our coefficients. To reinforce this variation, we choose districts that are closely located to each other, but are situated in different states to maximize variation across administrative boundaries. To account for possible non-independence and non-identical distribution within our sample, we cluster at the block level to ensure that our results are as robust as possible.

Our outcome of interest is the number of instructional days in the school year. This variable has a very natural upper limit of 365 calendar days as well as a minimum of 0 days. The

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<sup>11</sup> An example of this is the case of endogenous program placement where interventions are made in districts where people are doing poorly. Thus, Angeles et. al. (1998) discusses the case of fertility programs being targeted to areas where fertility is particularly high. After the intervention if we find that fertility is higher in intervention areas than in non-intervention areas then we need to be careful about what to infer; is the program dysfunctional or if a normally functioning program has led to declines but the high fertility area remains higher fertility even after the program. The appropriate counterfactual in such a case is not necessarily the fertility in non-intervention areas, but a subset of it, and baseline levels of fertility in both program and non-program areas.

<sup>12</sup> Let  $X^O$  be the omitted variable (here progressive MLA) then the omitted variable bias in estimating the effect of  $X$  is given by  $E(\hat{\beta}) = \beta - \beta^O Cov(X, X^O)$  where  $\hat{\beta}$  is the estimated coefficient for  $X$  when  $X^O$  has been omitted from the regression,  $\beta$  is population parameter for  $X$ ,  $\beta^O$  is the population marginal effect of  $X^O$  and  $Cov()$  is the population covariance. In the story above we argued that both  $\beta^O$  and  $Cov()$  are positive for the progressive MLA and hence  $E(\hat{\beta})$  would overestimate  $\beta$ .

top panel of Figure 3 shows the histogram of the number of instructional days in the sample; this shows the bi-modality of the number of instructional days with about 10% of the sample with exactly zero instructional days and most other schools being close to around 230 instructional school days. We use this bi-modality in the distribution of the instructional days to empirically motivate our definition for “functionality” – or having an appropriate number of instructional days.<sup>13</sup> While about 12% of the entire sample has zero instructional school days, the sub-sample with more than 200 days of instruction (or about 8+ months at the rate of 24 instructional days in a month), has a median of 232 days of instruction (or slightly less than 10 months) with a standard deviation of 10 days (or about half a month). Thus, most schools, if they operate, tend to provide close to 10 months of instructions for their students and most of them have about 8 to 12 months of instruction.

A plot of the quantiles of the number of instructional days greater than zero against the quantiles of a normal distribution suggests that the distribution of instructional days, given that it is positive, is approximately normal (see bottom panel of Figure 3). With a normal distribution, we know that roughly 99.7% of the distribution is within  $\pm 3$  standard deviations of the mean, and so we identify a range of  $231 \pm 30$  days i.e. [201, 261]. For the analysis we investigated other cut-offs as well, but the data between 0 and 200 days is quite sparse as seen in Figure 3, and hence the analysis is robust to other rules to identify schools that are functional. Thus, we use 201 instructional days, or a little over eight months as the cut-off for

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<sup>13</sup> A natural concern is that the sample tracks schools that have opened too recently or are too old and hence are not functional. Looking at the age distribution of schools we find that median duration for which schools with zero functional days have been operating is about 28 years, with a minimum of 1 to a maximum of 106 years and thus spans the entire age distribution for schools that are functional and have positive number of instructional days. Additionally, the distribution of schools that have no zero instructional days are mostly in Bidar (20%) and Nanded (19%) and less so in Nizamabad (5%).



functionality for a primary school. For the sake of symmetry we also drop observations with more than 261 days of observation for this investigation (this accounts for a mere 0.43 % of the sample).

We treat schools with less than 201 days of instruction as being “not functional” (spanning about 14% of the sample) and rest as being “functional”.<sup>14</sup> With a binary outcome ( $y_i = 0$  indicating  $i$  is not a functional school and  $y_i = 1$  indicating  $i$  is a functional school) a natural way to study the relationship between the flow of public funds and the school being functional is to impose a distributional assumption on the probability of a school being functional (i.e.  $p_i = P(y_i=1)$ ). Specifically, we assume that the probability of being functional is a logistic function of a set of covariates  $x_i$  such that:

$$p_i = \frac{\exp(\beta x_i)}{1 + \exp(\beta x_i)}$$

where  $x_i$  is a vector of covariates for school  $i$  such as the amount of public funds it received, age of the school, number of academic inspections, certification of teachers, distance from block head quarters etc. In this context, the most important advantage of the logistic regression is that the size of the marginal effect of each of the covariates depends upon where in the distribution of that covariate that we calculate the effect at (thus, size of the effects reported in Table 5 are all calculated at the mean, if we calculate the effect of another academic visits at say one standard deviation below the mean, then the size of the coefficient would change). This has two explicit advantages with modeling the number of instructional

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<sup>14</sup> This appears to confirm pretty well to international notions of a full academic school year. Thus, UNESCO Institute of Statistics (2008) reports that in India most students have a school year of 204; this is longer than school years in Argentina, Brazil, Malaysia, Paraguay, Peru, and Uruguay, but shorter than school years in Chile and Philippines.

days: first, schools simply cannot have more than 365 instructional days and thus, as the values of the covariates change, the number of instructional days cannot change linearly since it would eventually imply having more than 365 days; secondly, schools do not appear to have a uniform distribution between zero and 232 days of instruction; thus, we are able to handle both issues of natural limits of the number of instructional days as well as the inherent non-linearity in the distribution of the outcome variable with a logistic regression. Expanding  $x_i$ , and collecting  $x_{ib}$  terms to one side, we model the log odds of being a functional school as a additive and linear, in coefficients function, of its covariates as:

$$\log\left(\frac{p_{ib}}{1-p_{ib}}\right) = \beta_0 + \beta_1 PF_{ib} + \beta X_{ib} + \mu_1 + \dots + \mu_{56} \quad (1)$$

where  $i$  is an index for all primary schools in the sample,  $b$  is an index for the blocks from which data is used,  $PF_{ib}$  is a dummy variable to indicate if a school  $i$  in block  $b$  received any public funds under the Training and Learning Materials (TLM) grant and  $X_{ib}$  is a set of covariates that includes key school level characteristics such as level of monitoring that the school has (number of academic inspections, visits by block and cluster resource coordinators), type of teaching staff (headmaster, male and female teachers, obligations to non-teaching work), school characteristics (access to electricity, playground, # of blackboards etc.) and fixed effects for each of the blocks where schools are located.<sup>15</sup>

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<sup>15</sup> Panel logit model with  $N$  units, each observed for  $T_i$  periods is known to produce estimates of marginal effects that are not consistent when  $T_i$  is small and fixed. These fixed effects in non-linear models have been traditionally seen as problematic because  $T_i$  have been small and asymptotic arguments about the consistency of the estimators require large  $T_i$  and  $N$ . However, Heckman (1981) shows in a simulation study that with  $T_i = 8$ , and  $N = 100$ , that with the maximum likelihood fixed effects estimator, estimates of the regression coefficient can be arbitrarily close to its population values. In our study,  $N = 57$  and the median  $T_i = 86$  and thus, we have ample data to argue for

While (1) is the basic specification we use in our results, we also discuss alternative specifications where instead of a dummy variable for receiving any funds, we look at the amount of SDG and TLM received and there are some specifications where we look at district level fixed effects. For all except one model, we use clustered standard errors, where we cluster the data at the block level to account for potential non-independence and non-identical distribution at the block level. The key coefficient of interest in Equation (1) is  $\beta_1$ , i.e. the impact of receiving any public funds on the probability that the school is functional.

## 5. Results

Table 5 presents results from our logit regressions that look at the role that different covariates, particularly public funding has on the probability that a school will be functional. Each of the columns report different specifications with the first model being the least demanding in terms of assuming independent and identical distribution (iid) of all schools across block and district lines. The second model improves on the first model by being more conservative on the standard errors by allowing within block non-independence of school outcomes. The third model tries to reduce bias in the model by improving on the second model with district fixed effects. Thus, unobserved district level influences (such as the competency of the bureaucracy, weather, etc.) that would have the same impact across schools would be accounted for. The fourth model differs from the third in that it looks at

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large  $T_i$  and  $N$ . One of the blocks, Nanded C S has only ten schools – we remove these from the final estimation sample otherwise we'd have  $N = 58$  in the sample. Also see Green (2001) for an updated discussion on this.

the logarithm of the amount of money received under the SDG and TLM to investigate the semi-elasticity of public funds on school functionality. The fifth and sixth models are the counterparts of the third and the fourth model, except that we are much more conservative and use block fixed effects rather than district fixed effects.

Our estimate for  $\beta_1$ , the key coefficient of interest, varies substantially across our models from about 2 probability points<sup>16</sup> in model (1) to 9.7 probability points in model (5) suggesting that some of the corrections that we made to reduce bias are particularly relevant. The standard errors were also under-estimated with the iid assumption as once we cluster at the block level they are about 4 times larger. Thus, by granting public funds to a school that was not receiving any funds earlier, we raise the probability of its becoming a functional school about 9.7 points on the probability scale. This is statistically significant and fundamentally important as well.

This increase in the probability is substantially smaller when we look at SDG, TLM and their logarithms. We report models only for the logarithms since the impact of just SDG and TLM are both not significant.<sup>17</sup> The coefficient on logarithms should be interpreted as the change in the probability for a percentage growth in SDG (or TLM). The effect of TLM is positive but not statistically significant, while that of SDG is positive and statistically significant, but substantially very small; thus, a one percentage increase in SDG will lead to an increase in probability of a school becoming functional by 0.5 probability points. We

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<sup>16</sup> We use the term *probability points* to refer to values on the unit interval (i.e. between 0 and 1). Thus, if a variable increases the conditional probability of being functional by 10% we refer to this as an increase 10 probability points.

<sup>17</sup> TLM and SDG have a statistically significant, but have a substantially small correlation coefficient of 0.08.

reconcile these findings by suggesting that for school with no public funds, access to public funds has a strong impact on the school's becoming functional, however, subsequent incremental increases in public funding have little impact.

One set of covariates that are systematically significant across all models that we estimate is the number of academic, BRC coordinators, and CRC coordinators who visit a school. The coefficients on these models are always statistically significant, and positive. An additional academic visit raises the probability of school being functional by 3.2 probability points on our two most conservative models, while visits by BRC and CRC coordinators have a much smaller impact at 0.8 probability points and 0.4 probability points respectively. In model (6) where we are looking at a continuous measure of public funds, the largest (and positive) coefficient is on the number of academic visits suggesting that in schools which already receive funds, thus, while the impact of public funding is large for schools not receiving any public funds (9.7 points), amongst schools receiving funds, an additional academic visit has a stronger impact on the school being functional than an additional one thousand rupees of public funds.<sup>18</sup>

Amongst the other coefficients that are statistically significant, but have smaller coefficients are, the presence of a head teacher (1.2 probability points), and the number of non-teaching days (0.1 probability points), and the number of teachers engaged in non-teaching tasks (-0.7 probability points). While the sign on the coefficients for the presence of a head teacher and the number teachers engaged in non-teaching tasks is expected, that

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<sup>18</sup> The confidants on log(SDG) and Number of Academic Visits are not only substantively different, they are also statistically different with a pvalue of 0.001 for a test of equality of coefficients.

for non-teaching days is unexpected. We expected that the number of non-teaching days would have a negative influence on the probability of being functional, paralleling the effect we see on having another teacher engaged in non-teaching tasks; however it is positive, though small in magnitude. A closer look at the summary statistics (see Table 2) shows that schools on an average have about 5 teachers in a school, and cumulatively, they have about 6 days of non-teaching assignment per year which is very modest. Thus, we interpret participating in non-teaching days as a sign of efficiency; schools which are not functional not only do not have any significant number of instructional days, but they also do not have teachers who report participating in non-teaching assignments.

In conclusion, we find evidence to suggest that schools that receive public funds are more likely to be functional in the sense of offering more than 201 instructional days to its students. However, the size of this effect doesn't have a relationship with the volume of funds that schools receive. A part of this could be because of the very nature of the public funding mechanism where schools receive a fixed amount for each school, under the SDG, or a fixed amount for each teacher, under the TLM. Thus, if there had been little variation from the institutional norms then the only significant variation in receiving public funds in our sample would have come from schools who receive some or no funds. However, this is not the case and we do find that there are operational differences between how the schools receive funding from what is stated. From a data perspective, these differences need greater documentation and understanding; however, we do see large and robust effects of receiving school funding on the length of the school term.

Apart from public funding, we also find strong evidence that schools which have greater number of visitors in the form of academic visitors, BRC and CRC coordinators, have a higher probability of being functional and this is an important, low-cost policy lever that may be used to enhance instructional days. Amongst teacher variables, one of the key variables that appear to be important is the presence of the head teacher in the school. Looking at our sample only 29% of the sample reports having a head-teacher and thus, staffing schools with head teachers could potentially have large effects in the population.

We end with the caveat that generalizing these findings to the entire country is not a valid statistical exercise in so far as these districts are quite unique and our data only comes from these districts. We hope to confirm these by investigating this for other districts in India, as well as looking at how these trends have varied over time since the inception of the SSA.

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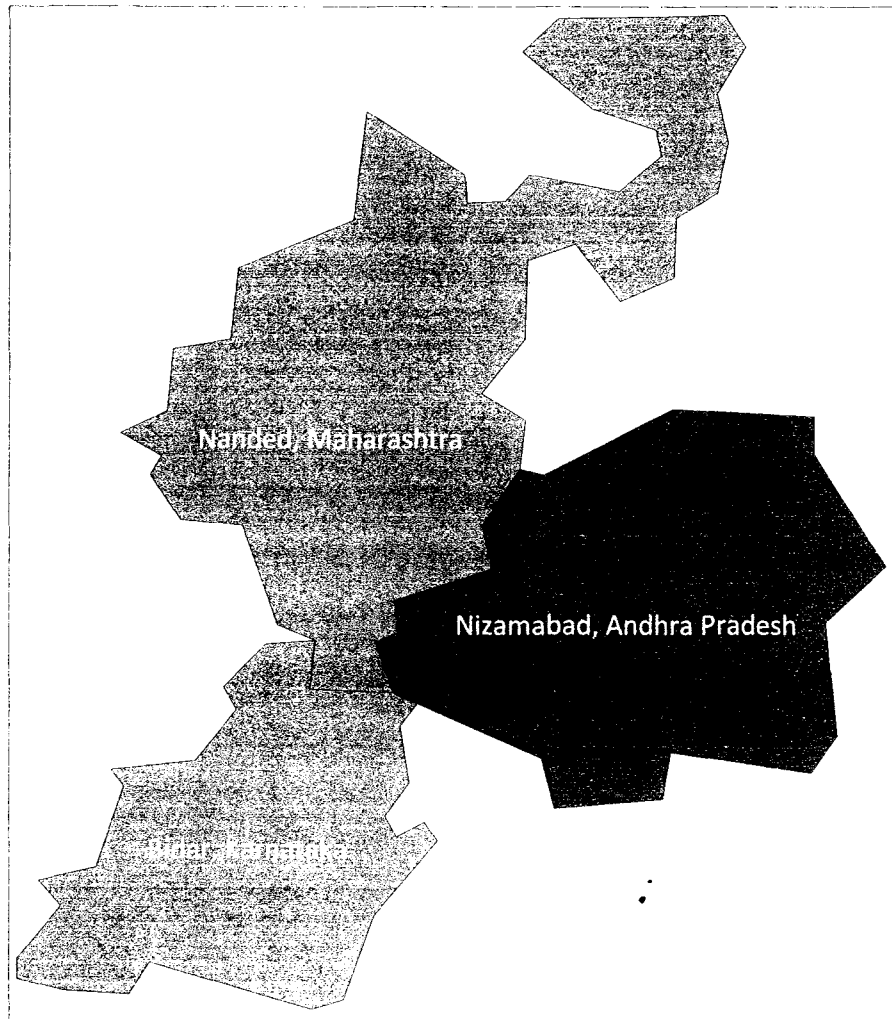
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## Figures and Tables

Figure 1: The Three Districts



Source: These district lines are based on data from GeoCommunity (<http://www.geocomm.com/>)

**Table 1: Census Details for the Three Districts**

Variables	Bidar	Nanded	Nizamabad
<b>Population</b>			
Persons	1502373	2876259	2345685
% Female	48.68%	48.50%	50.42%
Rural	77.04%	76.04%	81.89%
Growth (1991-2001)	19.56%	23.08%	14.98%
% SC or ST	32.02%	26.14%	21.91%
Area (sq.kms)	5,448	10,322	7,956
<b>Education Level Attained</b>			
Literacy	51.14%	56.52%	44.54%
Without Level	1.82%	2.49%	1.86%
Below Primary School	13.17%	18.25%	12.30%
Primary School	14.86%	14.47%	12.98%
Middle School	5.10%	6.64%	4.54%
Matric and Above	13.10%	11.48%	10.64%
Graduate and Above	3.10%	3.20%	2.21%
<b>House Type</b>			
Permanent	75.20%	49.40%	52.80%
Semi-permanent	22.50%	44%	37.60%
Temporary	2.30%	6.50%	9.60%

Source: Census of India 2001 and NIC website for each district for geographical area.

**Table 2 Summary Statistics of Sample**

Variable	N	Mean	S.D.	Min	Max
District == Bidar	7006	0.168	0.374	0	1
District == Nanded	7006	0.408	0.492	0	1
District == Nizamabad	7006	0.424	0.494	0	1
Unique Block Identifier	7006	34.596	16.684	1	58
<b>Public Funds received by primary schools</b>					
Does the school receive any public funds?	6980	0.782	0.413	0	1
SGD Funds received (Rs. Per 1000)	6980	2.207	7.661	0	410
TLM Funds received TLM (Rs. Per 1000)	6980	1.610	2.178	0	50
<b>Monitoring of primary schools</b>					
# of visits by CRC coordinators	6980	7.126	6.614	0	73
# of visits by BRC coordinators	6980	2.630	3.891	0	70
# of Academic Inspections	6980	0.970	1.410	0	32
<b>Attributes of teachers in primary schools</b>					
# of teachers in School	7006	5.479	4.497	0	71
Does the school have a head teacher?	6753	0.297	0.487	0	6
# of teachers who are college graduates	6753	2.778	3.374	0	41
# of days involved in non teaching tasks	6753	5.907	43.241	0	1881
# of teachers reporting non teaching tasks	6753	0.588	1.570	0	18
<b>School infrastructure</b>					
Age of the school	6951	29.88	20.51	1	127
Does the school run in shifts?	6953	0.128	0.334	0	1
School has common Toilets	6743	0.651	0.477	0	1
Total number of classrooms	6753	4.989	4.259	0	80
School is electrified	6750	0.523	0.500	0	1
School has a book bank	6751	0.743	0.437	0	1
School has a playground	6751	0.669	0.471	0	1
# of Blackboards	6753	5.886	4.777	0	88
<b>Source of Drinking water</b>					
Tap	7006	0.297	0.457	0	1
No water	7006	0.293	0.455	0	1
Hand-pump	7006	0.239	0.426	0	1
Well	7006	0.029	0.168	0	1
<b>Other School Attributes</b>					
% SC students in class 1	5926	0.221	0.256	0	1
% ST students in class 1	5926	0.157	0.284	0	1
% OBC students in class 1	5926	0.371	0.345	0	1
Total village enrollment	7006	399.560	1077.894	0	7197

Note: BRC stands for Block Resource Center and CRC for Cluster Resource Center. These are centers that make available to primary schools a head master or a graduate teacher, and high school teachers with B.Ed. training.

**Table 3 Distribution of Public Funds, by type, district, and school management**

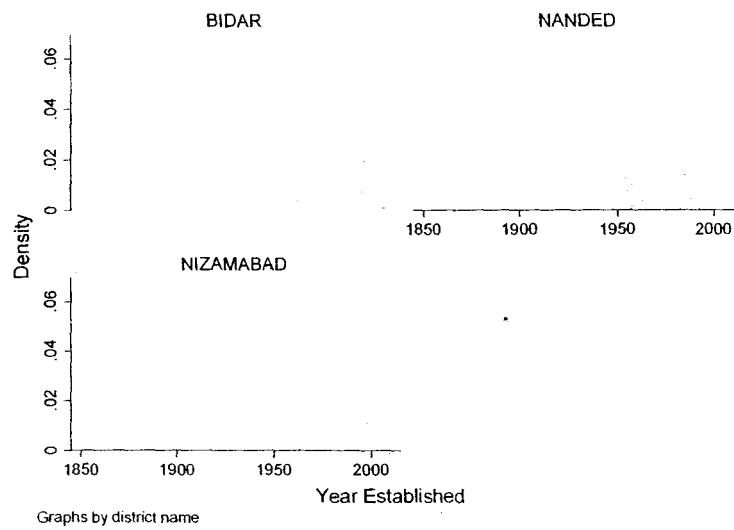
Managed By	Statistics	School Development Grant (Rs. per 000)			Training and Learning Materials (Rs. per 000)		
		Bidar	Nanded	Nizamabad	Bidar	Nanded	Nizamabad
Dept. of Education	<i>Mean</i>	4.17	NA	1.54	2.48	NA	1.39
	<i>SD</i>	14.95	NA	0.93	2.62	NA	1.21
	<i>Obs.</i>	1008	NA	57	1008	NA	57
Local Body	<i>Mean</i>	NA	2.53	2.08	NA	1.96	1.64
	<i>SD</i>	NA	1.08	3.68	NA	2.03	1.83
	<i>Obs.</i>	NA	2028	2107	NA	2028	2107
Social Welfare Depart.	<i>Mean</i>	0.50	1.11	NA	0.75	0.88	NA
	<i>SD</i>	1.24	1.39	NA	1.87	1.55	NA
	<i>Obs.</i>	12	94	NA	12	94	NA
Private Aided	<i>Mean</i>	NA	1.48	0.00	NA	1.83	0.00
	<i>SD</i>	NA	1.64	0.00	NA	3.32	0.00
	<i>Obs.</i>	NA	589	50	NA	589	50
Private Unaided	<i>Mean</i>	0.16	0.49	0.00	0.15	0.15	0.00
	<i>SD</i>	0.77	0.87	0.05	0.84	0.69	0.01
	<i>Obs.</i>	112	146	617	112	146	617
Others	<i>Mean</i>	0.28	2.00	4.74	0.05	2.25	0.05
	<i>SD</i>	1.42	0.00	35.92	0.26	3.18	0.22
	<i>Obs.</i>	47	2	111	47	2	111

**Table 4 Distribution Public Funds Received**

Panel (A)			Panel (B)				
SDG Received (in Rs per 1000)	Freq.	Cumulative	# of Teachers	Freq.	TLM (in Rs per 1000)		
					Predicted	Received	Gap
0	23.8	-	0	4.17	0	0.58	-0.6
0.2-1.98	0.63	24.43	1	2.95	0.5	0.38	0.12
2	55.63	80.06	2	24.94	1	0.86	0.14
2.25-3.99	0.38	80.44	3	11.1	1.5	1.13	0.37
4	16.59	97.03	4	8.21	2	1.49	0.51
4.01-410	2.97	100	5	6.29	2.5	1.63	0.87
			6	7.02	3	2.14	0.86
			7	7.41	3.5	2.64	0.86
			8	8.89	4	2.75	1.25
			9	5.87	4.5	3.15	1.35
			10	3.6	5	3.11	1.89
			11	1.93	5.5	3.82	1.68
			12+	7.62	8.32	5.01	3.32
			<b>Total</b>	<b>100</b>	<b>2.6</b>	<b>1.83</b>	<b>0.76</b>

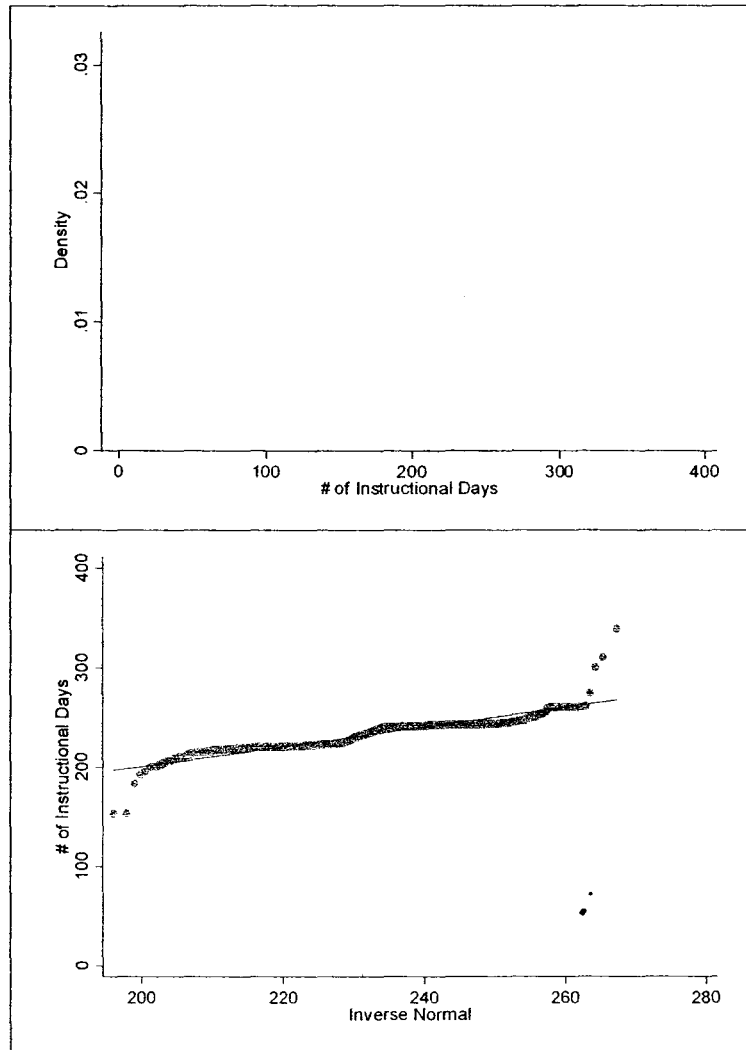
Panel (C)				
	SDG Received	SDG Spent	TLM Received	TLM Spent
SDG Received	1			
SDG Spent	0.953	1		
	0			
TLM Received	0.0813	0.072	1	
	0	0		
TLM Spent	0.0754	0.0765	0.8282	1
	0	0	0	

**Figure 2 Distribution of the Year Schools were established in each District**



Note: Age of the school is the difference between 2007 and the year of establishment. In all districts the 1990s have been a period of primary school creation, presumably in response to the SSA. However, there was also an earlier wave of school construction in the decade immediately following independence that seems to have not existed for Nizamabad.

**Figure 3: Distribution of Number of Days of Instruction in Primary Schools**



Note: The top panel shows the entire distribution of the number of instructional days while the bottom panel shows a Q-Q plot of the number of instructional days greater than 178 days against the quintiles of draws from a normal distribution.



**Table 5: Logistic Regression Models for P(Functional = 1 | X)**

	est1	est2	est3	est4	est5	est6
<b>Public Funds received by primary schools</b>						
Does school receive public funds? <sup>(v)</sup>	0.042*** [0.008]	0.042 [0.024]	0.049* [0.024]		0.097*** [0.024]	
Log of SGD received (Rs. Per 1000)				0.004** [0.001]		0.005*** [0.001]
Log of TLM received (Rs. per 1000) <sup>(iv)</sup>				0 [0.001]		0.001 [0.001]
<b>Monitoring of primary schools</b>						
# of visits by BRC coordinators	0.019*** [0.001]	0.019*** [0.003]	0.017*** [0.004]	0.016*** [0.004]	0.008*** [0.002]	0.008*** [0.002]
# of visits by CRC coordinators	0.004*** [0.001]	0.004*** [0.001]	0.004*** [0.001]	0.004*** [0.001]	0.004*** [0.001]	0.004*** [0.001]
# of Academic Inspections	0.025*** [0.003]	0.025** [0.008]	0.028*** [0.007]	0.027*** [0.007]	0.032*** [0.006]	0.032*** [0.006]
<b>Teacher Characteristics at school</b>						
# of teachers in School	-0.001* [0.001]	-0.001 [0.001]	-0.001 [0.001]	-0.001 [0.001]	0.001 [0.001]	0 [0.001]
Does school have a head teacher?	0.014*** [0.004]	0.014** [0.005]	0.012** [0.004]	0.011** [0.004]	0.013** [0.004]	0.012** [0.004]
# of college graduate teachers	0.007*** [0.001]	0.007** [0.002]	0.003** [0.001]	0.003** [0.001]	0.001 [0.001]	0.002 [0.001]
# of days of non teaching tasks	0.001* [0.001]	0.001* [0.001]	0.001* [0.000]	0.001* [0.000]	0.001** [0.001]	0.001** [0.001]
# of teachers on non teaching tasks	0.003 [0.004]	0.003 [0.004]	-0.004 [0.003]	-0.003 [0.003]	-0.007* [0.003]	-0.007* [0.004]
<b>School infrastructure</b>						
Age of the School	-0.001*** [0.000]	-0.001* [0.000]	0 [0.000]	-0.001 [0.000]	0 [0.000]	0 [0.000]
Square of Age of the School	0.000* [0.000]	0 [0.000]	0 [0.000]	0 [0.000]	0 [0.000]	0 [0.000]
Does the school run in shifts?	-0.01 [0.006]	-0.01 [0.010]	0.003 [0.005]	0.002 [0.005]	0.003 [0.006]	0.003 [0.006]
School has common Toilets?	0.008 [0.004]	0.008 [0.006]	0.002 [0.005]	0.001 [0.004]	0.008 [0.005]	0.007 [0.006]
Total number of classrooms	0 [0.001]	0 [0.001]	0 [0.001]	0 [0.001]	0 [0.001]	0 [0.001]

(contd.)

	est1	est2	est3	est4	est5	est6
School is electrified?	-0.007 [0.004]	-0.007 [0.005]	-0.002 [0.004]	-0.003 [0.004]	-0.002 [0.005]	-0.004 [0.005]
School has a book bank?	0.005 [0.004]	0.005 [0.007]	0.009 [0.006]	0.007 [0.006]	0.013 [0.009]	0.011 [0.009]
School has a playground?	0.005 [0.004]	0.005 [0.005]	0.008 [0.005]	0.006 [0.005]	0.007 [0.007]	0.005 [0.007]
# of Blackboards	-0.001 [0.001]	-0.001 [0.001]	0 [0.001]	0 [0.001]	0 [0.001]	0 [0.001]
<i>Source of Drinking water</i>						
Tap	-0.01 [0.007]	-0.01 [0.009]	-0.006 [0.005]	-0.005 [0.006]	-0.002 [0.007]	-0.002 [0.007]
No water	-0.016* [0.007]	-0.016* [0.008]	-0.003 [0.006]	-0.002 [0.006]	-0.006 [0.008]	-0.004 [0.008]
Hand-pump	-0.004 [0.007]	-0.004 [0.006]	-0.002 [0.005]	-0.002 [0.005]	-0.003 [0.008]	-0.003 [0.008]
Well	-0.042* [0.017]	-0.042* [0.018]	-0.027* [0.013]	-0.029* [0.013]	-0.019 [0.013]	-0.022 [0.013]
Total village enrollment	0.000*** [0.000]	0.000** [0.000]	0.000*** [0.000]	0.000*** [0.000]	0 [0.000]	0 [0.000]
Observations	5717	5717	5717	5685	5717	5621
R-Squared	0.3073	0.3073	0.3259	0.3192	0.4442	0.4278
Fixed Effects	None	None	District	District	Block	Block
Standard Error	iid	clustered	clustered	clustered	clustered	Clustered

**Notes:**

- (i) In all models the standard errors when clustered are clustered on the Block except for the model (1) where sampling is assumed to be clustered within blocks.
- (ii) We report the marginal effect of each of the covariates on the probability scale and standard errors are reported below these marginal effects square brackets.
- (iii) \*\*\*, \*\* and \* indicates significance at  $> 0.001$ ,  $> 0.05$  and  $> 0.10$  levels.
- (iv) As TLM funds are dependent on the # of teachers in the school we standardize TLM across schools by dividing the TLM by the # of teachers.
- (v) Schools which have missing data on SDG and TLM are assumed to receive no funding.

## Appendix

### Norms for Financial Interventions under SSA

INTERVENTION	NORM
1. Teacher	<ul style="list-style-type: none"> <li>▪ One teacher for every 40 children in Primary and upper primary</li> <li>▪ At least two teachers in a Primary school</li> <li>▪ One teacher for every class in the upper primary</li> </ul>
2. School / Alternative schooling facility	<ul style="list-style-type: none"> <li>• Within one Kilometre of every habitation</li> <li>• Provision for opening of new schools as per State norms or for setting up EGS like schools in unserved habitations.</li> </ul>
3. Upper Primary schools/ Sector	<ul style="list-style-type: none"> <li>• As per requirement based on the number of children completing primary education, up to a ceiling of one upper primary school/section for every two primary schools</li> </ul>
4. Classrooms	<ul style="list-style-type: none"> <li>• A room for every teacher in Primary &amp; upper Primary, with the provision that there would be two class rooms with verandah to every Primary school with at least two teachers.</li> <li>• A room for Head-Master in upper Primary school/section</li> </ul>
5. Free textbooks	<ul style="list-style-type: none"> <li>• To all girls/SC/ST children at primary &amp; upper primary level within an upper ceiling of Rs. 150/- per child</li> <li>• State to continue to fund free textbooks being currently provided from the State Plans.</li> </ul>
6. Civil works	<ul style="list-style-type: none"> <li>• Ceiling of 33% of SSA programme funds.</li> <li>• For improvement of school facilities, BRC/CRC construction.</li> <li>• CRCs could also be used as an additional room.</li> <li>• No expenditure to be incurred on construction of office buildings</li> <li>• Districts to prepare infrastructure Plans.</li> </ul>
7. Maintenance and repair of school buildings	<ul style="list-style-type: none"> <li>• Only through school management committees/VECs</li> <li>• Upto Rs. 5000 per year as per specific proposal by the school committee.</li> <li>• Must involve elements of community contribution</li> </ul>

8.	Upgradation of EGS to regular school or setting up of a new Primary school as per State norm	<ul style="list-style-type: none"> <li>• Provision for TLE @ Rs 10,000/- per school</li> <li>• TLE as per local context and need</li> <li>• Involvement of teachers and parents necessary in TLE selection and procurement</li> <li>• VEC/ school-village level appropriate body to decide on best mode of procurement</li> <li>• Requirement of successful running of EGS centre for two years before it is considered for upgradation.</li> <li>• Provision for teacher &amp; classrooms.</li> </ul>
9.	TLE for upper-primary	<ul style="list-style-type: none"> <li>• @ Rs 50,000 per school for uncovered schools.</li> <li>• As per local specific requirement to be determined by the teachers/ school committee</li> <li>• School committee to decide on best mode of procurement, in consultation with teachers</li> <li>• School Committee may recommend district level procurement if there are advantages of scale.</li> </ul>
10.	Schools grant	<ul style="list-style-type: none"> <li>• Rs. 2000/- per year per primary/upper primary school for replacement of non functional school equipment</li> <li>• Transparency in utilisation</li> <li>• To be spent only by VEC/SMC</li> </ul>
11.	Teacher grant	<ul style="list-style-type: none"> <li>• Rs 500 per teacher per year in primary and upper primary</li> <li>• Transparency in utilisation</li> </ul>
12.	Teacher training	<ul style="list-style-type: none"> <li>• Provision of 20 days In-service course for all teachers each year, 60 days refresher course for untrained teachers already employed as teachers, and 30 days orientation for freshly trained recruits @ Rs. 70/- per day</li> <li>• Unit cost is indicative; would be lower in non residential training programmes</li> <li>• Includes all training cost</li> <li>• Assessment of capacities for effective training during appraisal will determine extent of coverage.</li> <li>• Support for SCERT/DIET under existing Teacher Education Scheme</li> </ul>
13.	State Institute of Educational Management and Training (SIEMAT)	<ul style="list-style-type: none"> <li>• One time assistance up to Rs. 3 crore</li> <li>• States have to agree to sustain</li> <li>• Selection criteria for faculty to be rigorous</li> </ul>
14.	Training of community leaders	<ul style="list-style-type: none"> <li>• For a maximum of 8 persons in a village for 2 days in a year - preferably women</li> </ul>

		<ul style="list-style-type: none"> <li>• @ Rs. 30/- per day</li> </ul>
15.	Provision for disabled children	<ul style="list-style-type: none"> <li>• Upto Rs. 1200/- per child for integration of disabled children, as per specific proposal, per year</li> <li>• District Plan for children with special needs will be formulated within the Rs. 1200 per child norm</li> <li>• Involvement of resource institutions to be encouraged</li> </ul>
16.	Research, Evaluation, supervision and monitoring	<ul style="list-style-type: none"> <li>• Upto Rs. 1500 per school per year</li> <li>• Partnership with research and resource institutions, pool of resource teams with State specific focus</li> <li>• Priority to development of capacities for appraisal and supervision through resource/research institutions and on an effective EMIS</li> <li>• Provision for regular school mapping/micro planning for up dating of household data</li> <li>• By creating pool of resource persons, providing travel grant and honorarium for monitoring, generation of community-based data, research studies, cost of assessment and appraisal terms &amp; their field activities, classroom observation by resource persons</li> <li>• Funds to be spent at national, state, district, sub district, school level out of the overall per school allocation.</li> <li>• Rs. 100 per school per year to be spent at national level</li> <li>• Expenditure at State/district/BRC/CRC/ School level to be decided by State/UT, This would include expenditure on appraisal, supervision, MIS, classroom observation, etc. Support to SCERT over and above the provision under the Teacher Education scheme may also be provided.</li> <li>• Involvement of resource institutions willing to undertake state specific responsibilities</li> </ul>
17.	Management Cost	<ul style="list-style-type: none"> <li>• Not to exceed 6% of the budget of a district plan</li> <li>• To include expenditure on office expenses, hiring of experts at various levels after assessment of existing manpower, POL, etc.;</li> <li>• Priority to experts in MIS, community planning processes, civil works, gender, etc. depending on capacity available in a particular district</li> <li>• Management costs should be used to develop effective teams at State/ District/Block/Cluster levels</li> <li>• Identification of personnel for BRC/CRC should be a priority in the pre-project phase itself so that a team is available for the intensive process based planning.</li> </ul>

18.	Innovative activity for girls' education, early childhood care & education, interventions for children belonging to SC/ST community, computer education specially for upper primary level	<ul style="list-style-type: none"> <li>• Upto to Rs. 15 lakh for each innovative project and Rs. 50 lakh for a district per year will apply for SSA</li> <li>• ECCE and girls education interventions to have unit costs already approved under other existing schemes.</li> </ul>
19.	Block Resource Centres/ Cluster Resource Centres	<ul style="list-style-type: none"> <li>• BRC/CRC to be located in school campus as far as possible.</li> <li>• Rs. 6 lakh ceiling for BRC building construction wherever required</li> <li>• Rs. 2 lakh for CRC construction wherever required - should be used as an additional classroom in schools.</li> <li>• Total cost of non-school (BRC and CRC) construction in any district should not exceed 5% of the overall projected expenditure under the programme in any year.</li> <li>• Deployment of up to 20 teacher in a block with more than 100 schools; 10 teachers in smaller Blocks in BRCs/CRCs.</li> <li>• Provision of furniture, etc. @ Rs. 1 lakh for a BRC and Rs. 10,000 for a CRC</li> <li>• Contingency grant of Rs. 12,500 for a BRC and Rs. 2500 for a CRC, per year</li> <li>• Identification of BRC/CRC personnel after intensive selection process in the preparatory phase itself.</li> </ul>
20.	Interventions for out of school children	<ul style="list-style-type: none"> <li>• As per norms already approved under Education Guarantee Scheme &amp; Alternative and Innovative Education, providing for the following kind of interventions</li> <li>• Setting up Education Guarantee Centres in unserved habitations</li> <li>• Setting up other alternative schooling models</li> <li>• Bridge Courses, remedial courses, Back-to-School Camps with a focus on mainstreaming out of school children into regular schools.</li> </ul>
21.	Preparatory activities for microplanning, household surveys, studies, community mobilization, school-based activities, office equipment, training and orientation at all levels, etc.	<ul style="list-style-type: none"> <li>• As per specific proposal of a district, duly recommended by the State. Urban areas, within a district or metropolitan cities may be treated as a separate unit for planning as required.</li> </ul>

Source: SSA Framework Revised available at [http://ssa.nic.in/page\\_portletlinks?foldername=ssa-framework](http://ssa.nic.in/page_portletlinks?foldername=ssa-framework) (accessed 21<sup>st</sup> October 2008).