



RESULTS FOR  
DEVELOPMENT

# **“Free” government schools and “Low-cost” private schools: What households really spend on education in Kasoa, Ghana**

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## Executive Summary

Using household and school-level surveys, this study seeks to better understand not only the costs of government and private education but also the factors influencing households' decision-making around education, such as households' demographics and educational values, accessibility of schools and perceptions of quality.

With support from the UBS Optimus Foundation, the Results for Development Institute (R4D) analyzed these issues in the peri-urban area of Kasoa, Ghana<sup>1</sup>. Education in Kasoa is heavily dominated by the private sector and thus serves as a rich bed for analysis on these issues; it is also the area of Ghana where most of schools in the Omega low cost private school chain are located.

The research consisted of a two complementary and comprehensive surveys: a 1,000 household-level survey completed first and then school-level survey of 30 government and private institutions, based primarily on the household-reported attendance. Study design and data collection were conducted in 2014 with the Ghana Center for Democratic Dialogue (CDD).

The study's main findings are that:

1. School attendance in Kasoa is very high and mainly in private schools. 88% of all children go to school and 83% of all households have at least one child in private school. Parents in Kasoa value equally the education of girls and of boys.
2. Private schools cost households about 54% more per student than government ones. The average total household cost per student per year in a government school is 793 GH¢ and 1218 GH¢ in a private one.
3. Fees at both government and private schools increase with the level of the school, being lowest at primary school and highest at senior high school.
4. The main difference is because of different tuition costs, though other household costs are also greater at private schools. The difference is 259 GH¢ for tuition costs (average formal tuition costs at government schools were 56GH¢/year, compared to 315GH¢ at private schools) and 166 GH¢ for household costs other than tuition (737GH¢ in government schools and 903GH¢ in private ones).
5. Beyond tuition, the most common extra charges were for food, uniforms/sports clothes, textbooks, exam fees, mandatory extra classes and parent teacher associations. Food charges were more common and higher at private schools; extra class charges higher at government schools.
6. Government school heads cited the insufficiency of their capitation grants as one reason for these charges.

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<sup>1</sup> R4D staff involved in carrying out and analyzing this study include Colin Felsman, Kavita Hatipoglu, Fatine Guedira, Jordan Worthington, Molly Eberhardt, Milan Thomas and Nicholas Burnett.



7. Neither government nor private schools disclosed all their household charges in the school survey when its results are compared to information from the household survey but private schools did disclose a higher proportion of these charges.
8. While this study has not explicitly calculated the total costs (household and public spending combined) per student per year, it must be the case that the private schools cost less per student overall, once the large government spending through the Capitation Grant Scheme is also factored in.
9. As the household costs of government schools are cheaper than those of private ones, the proportion of students attending government schools is greatest in the lowest income quintile. Yet this is still very low by international standards, at only 17%.
10. The effect of higher per student costs at private schools becomes clearer for second and subsequent children in households. The more children in a poor household the greater the likelihood of some attending a government school; 33% of second children in the lowest quintile attend government school compared to only 6% in the highest.
11. There is only very limited evidence on why some children are not enrolled in school. For those 65 children for whom a reason is given, 83 percent cite “lack of money for tuition fees” as the reason. The main reason for dropout (and absenteeism) cited by head teachers at both government and private schools is lack of financial resources. For absenteeism this is most commonly associated with paying for food.
12. Even for those in school, costs largely determine which school students attend. 80% of households reported that their children would complete secondary school were it not for those schools’ fees. 44% noted that the best school was out of reach for them financially.
13. Over 90% of households rank education within their top three expenditure priorities.
14. The proportion of their income that all households spend on education is very high, ranging from 35% in the highest quintile to 42% in the lowest. These proportions are much higher than are generally reported in Africa (4-6%) and in Ghana as a whole (15% for urban households and 11% rural ones). However, the percentage of children attending private school in Kasoa (83%) is much higher than is typical in Africa (20%) or in Ghana as a whole (28%).
15. The survey does not reveal enough information to conclusively determine if private schools are within reach of the very poorest, though this was found in another study in Mfantseman municipality (Akaguri 2013).
16. There are very few subsidy or scholarship measures for the very poorest. Government schools inconsistently offered discounts to poor families. The most common form of subsidy at private schools is a scholarship or fee rebate for the fourth child in a family. However few families in the Kasoa area have that many children. At both government and private schools, subsidies largely depended on the head teacher knowing the family and its needs and were generally not according to objective criteria. Parents generally seem unaware of any possible subsidies - these data come from the school survey; very few respondents in the household survey mentioned any type of subsidy.
17. The household cost gap between government and private schools is less at the JHS level than at the primary level; this is particularly true for the one chain of schools in the survey (Omega



schools) where the chain may be able to realize economies of scale and reduce unit costs and hence charges.

18. Private schools generally have better physical facilities than government ones.
19. Private school teachers have generally fewer formal qualifications than government ones and are paid on average about one third of government teachers' salaries.
20. Other than facilities, parents have very little information on which to base school choice, as little is available on either school outcomes or teacher quality; in general, however, parents assume that private schools are better than government ones.

These findings, if confirmed for other peri-urban areas of Ghana as well as Kasoa, could have important implications for government policymaking on education, implying the need, among other things, for more subsidization of the poor's educational participation and more positive regulation of the private sector as well as the scope for much greater public-private education partnerships. More research is needed in both Kasoa and elsewhere in Ghana to confirm these preliminary implications.

## I. Introduction

With support from the UBS Optimus Foundation, Results for Development Institute (R4D) partnered with the Ghana Center for Democratic Dialogue (CDD-Ghana) to design and carry out a study to explore the household costs of education in Ghana.

Two features of the Ghanaian education system motivate this study: (1) the Government's commitment since 2005 to provide fee-free basic education in government schools to all children and (2) the surge of private school enrollment, particularly in urban and peri-urban areas. This study combines research questions related to both of these topics: (1) to what extent is government education really "fee-free"? and (2) how do the household costs of private education compare to the costs of government education?

The primary goal of this study is to compare the education costs of households with children enrolled in government schools to those with children enrolled in low-cost private schools. Aiming to learn more than the *total* cost of education to households, the study goes into great detail about the breakdown of education costs including those officially charged by schools and those "hidden" costs that households incur outside of a formal fee structure. A secondary goal of the study is a deeper understanding of households' decision-making and rationale related to school choice.

The study was conducted in the peri-urban area of Kasoa, where there is a high concentration of private schools. This study location yielded a large proportion of households reporting to have children enrolled in private schools. It included a household survey of 1,000 households and a school survey of 30 schools (21 private schools and 9 government schools). Households (the demand side) reported their education-related expenditures and schools (the supply side) reported the costs families were expected to cover for their enrolled children. This two-sided approach allowed the research team to unearth the "hidden" costs of education (using the household survey to capture costs that are not officially "charged" by schools) and to cross-check households' reported expenditures with schools' reported fees. It also captured data on households' perceptions of the quality of government versus private schools and the rationale for the enrollment choices households make.

### **Roadmap to this report**

This report begins by discussing education financing in developing countries generally, including average country expenditure and household contribution patterns. It then takes a closer look at the Ghanaian context including its education policies and enrollment rates in government versus private schools. The study methodology is then presented in detail. An overview of the Kasoa area is next provided, including data on household demographics and school characteristics that were collected as part of this study. The findings of the household and school surveys are then presented, followed by a comparison of the supply (school) and demand (household) reports on education expenditure. Finally, policy considerations and suggestions for future research are raised.





## II. Background on Education Financing

### Education Finance in Low- and Middle-Income Countries

As for any service, the accessibility and quality of education are dependent on adequate financing. And like any service with large social externalities (Psacharopoulos and Patrinos 2004), education is funded by a mix of public and private sources. Public education expenditure data is collected from public expenditure reviews, government budgets, and administrative surveys, and published by international sources such as the UNESCO Institute for Statistics, the World Bank, and the Education for All Global Monitoring Report (GMR). This enables comparative analysis of government education spending.

For the 101 countries with available data, public spending on education as a percentage of total government expenditure ranges from 3.9% (South Sudan) to 33.4% (Ghana)<sup>2</sup>. In 2000, the Dakar framework called for governments and donors to increase their financial commitments to education. Specifically, the Education for All (EFA) High Level Steering Committee indicated that 15% to 20% of annual budgets should be dedicated to education. As a result, many countries have raised their spending on education. Between 1999 and 2012, 38 countries increased their expenditure on education by more than 1% of national income (GMR 2015). Over the same period, the average education share of government spending in Sub-Saharan Africa increased from 14.8% to 18.4% (GMR2015). Still, although enrollment increased dramatically after Dakar, expenditure did not keep pace with enrollment everywhere, leading spending per pupil to fall in some countries. In Niger for example, it decreased from US\$207 to US\$120 over the decade.

Private expenditure on education is also a significant source of education financing in low-income countries. Insufficient resources and lack of institutional capacity has resulted in the “de-facto privatization” of basic education, with government schools resorting to fees to cover operating costs, shifting the financing burden to households. In DRC and Senegal for example, this creates barriers for the vulnerable and marginalized groups, resulting in non-attendance and dropout (CREATE 2011<sup>3</sup>, DRC AfriMAP Report 2010 and Senegal AfriMAP Report 2010).

However, due to the weak capacity to conduct household surveys and the lack of a standardized methodology for measuring household spending on education (Pole de Dakar 2012), data on private spending is far less available than for public spending. This results in incomplete policy analyses of education systems, especially in developing countries where households often finance education directly. UIS reports that private primary schools account for approximately 20% in most of low and lower-middle income countries, which is probably an underestimate (Dahal and Nguyen 2014, Tooley and Dixon 2005).

### Government and Private Provision of Education in Developing Countries

A key development contributing to global progress towards Education for All over the past decade has been the growth of private education in developing countries (Tooley 2005; Tooley and Dixon 2007). Low-

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<sup>2</sup> [World Bank Database](#). Retrieved July 2014. Data for 2012 is only available for 45 countries and ranges from 6.7% (Georgia) to 31% (Thailand).

<sup>3</sup> Akyeampong K. (2011), (Re)Assessing the Impact of School Capitation Grants on Educational Access in Ghana, CREATE PATHWAYS TO ACCESS, Research Monograph No.71



cost private schools (LCPS) have entered the market to provide education to children from disadvantaged areas. In South Asia and Sub-Saharan Africa, 15% of students (500 million children) attend private institutions. Wodon (2013) finds that for a sample of 16 countries in Sub-Saharan Africa, the average market share for private schools is 25% (10-15% for secular private schools, 10-15% for faith-inspired private schools). In urban India, 61% of the total increase in primary school enrolment from 1986 to 1993 was attributed to the private sector. Up to 70% of students in Delhi attend low-cost private schools, with comparably high estimates across the border in Punjab, Pakistan (official statistics<sup>4</sup>). Even in rural areas, over 28% of Indian children and 23% of Pakistani students attend private schools (Pratham 2013, ASER Pakistan 2013).

Although government education is ostensibly free at the primary (and in some cases secondary) level in many low- and middle-income countries, an increasing number of low-income households choose non-state education services as either a complement (in the form of additional instruction or tutoring) or a direct alternative to public education. There are several reasons for this. First, even in tuition-free government schools, households generally cover many non-tuition, or 'hidden' costs. These include school supplies and previously mentioned ancillary fees (school lunch, transportation, etc. – see Box 1). Second, in rural and peri-urban areas, access to government schools is often limited. Third, while the quality of private education varies substantially, in many instances government institutions are marred by a perception of low quality, or a negative reputation based on aspects like teacher absenteeism. In addition, private school attendance connotes higher social status (Joshi 2014, Schneider et al. 2006).

Choice of provider is influenced by a range of considerations including school facilities, religious reasons, and proximity to home; cost is a major determinant (Carneiro et al. 2013). Private education also provides families with the opportunity to educate their children under a curricular philosophy or religion of choice (Heyneman et al. 2011). Wodon (2013) finds that households accessing private schools tend to be more satisfied with the quality of education than those that access public school. While payment may help parents to feel more assured of educational quality and education access has expanded with the emergence of low-cost private schools, the effect of increasing access through low-cost provision on equity in education is an open question. Empirical evidence on this topic is scarce, and a central purpose of this study is to build the evidence base on private schooling and accessibility in resource-constrained settings.

### **Household Expenditure on Education**

While governments remain the largest source of education financing globally, the share of private expenditure on education varies greatly across countries. Among 50 low-, middle- and high-income countries in all regions with data for 2009-2012, household education spending accounted on average for 31% of total education expenditures. In almost 25% of the countries studied, households spent more than governments on education (GMR 2015).

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<sup>4</sup> Retrieved from : <http://www.affordable-learning.com/the-fund.html#sthash.4BeyQg0j.dpbs>

<b>Box 1: Types of Education Expenditures (adapted from Pole de Dakar 2012).</b>	
<b>Types of Education Expenditures</b>	
<b>Monetary Costs</b>	
School fees:	
<ul style="list-style-type: none"> <li>• Registration fees</li> <li>• Tuition fees</li> <li>• Examination fees</li> <li>• Teachers' salary fees</li> <li>• Parents' association fees</li> <li>• Other enrollment-associated fees</li> </ul>	
School supplies:	
<ul style="list-style-type: none"> <li>• Uniforms and sports clothes</li> <li>• Textbooks</li> <li>• Writing materials and supplies</li> <li>• Other compulsory supplies</li> </ul>	
Ancillary services:	
<ul style="list-style-type: none"> <li>• Boarding fees</li> <li>• Cafeteria/meal fees</li> <li>• Transportation</li> <li>• Tutoring/private coaching</li> <li>• Additional/special classes</li> <li>• Students' fieldtrips / excursions</li> </ul>	
<b>Non-Monetary Costs</b>	
Opportunity costs:	
<ul style="list-style-type: none"> <li>• Parents' time, labor, income</li> <li>• Students' time, labor, income</li> </ul>	

In general, the poorer a country the greater is the share of education financing by households. Households account for 49% of total education expenditure in low-income countries, versus 13% in high-income countries (GMR 2015). Based on survey data from 15 African countries, Foko et al. (2012) show that household expenditure is typically equivalent to about half of recurrent public current expenditure but varies widely by country (sometimes even exceeding government expenditures) - from 13% in Niger to 141% in Sierra Leone. Especially in Sierra Leone and Cameroon, where household education expenditure far exceeds that of the government, households carry considerable responsibility in maintaining education systems. Furthermore, in these 15 countries, education expenditure typically accounts for 4.2% of household budgets, and can be especially burdensome for the poorest households. Interestingly, the study found a very narrow difference between the education expenditure shares of the lowest (4.3%) and the highest income quintile (5.6%). Regardless of income bracket, parents prioritized education.

Household expenditures purchase a range of goods and services associated with education, which may or may not be compulsory at a given school. Household expenditure on education falls into two broad categories: monetary costs and non-monetary costs (*detailed in Box 1*). While formal school fees average about 50% of total household spending on education in African countries (Pole de Dakar 2012), the breakdown of household expenditure on education varies significantly by country. For example, in



Tanzania, school fees account for nearly three-quarters of household education spending, whereas in Cote d'Ivoire school fees and school supplies each account for two-fifths of household education spending.

In some countries, including Ghana, tuition fees have been abolished (World Bank 2009), but household expenditure on education remains high because of non-tuition fees and compulsory learning materials. On top of this, there is a growing shadow education system in many developing countries (UNESCO 2009), in which households enlist private tutoring, further straining budgets to overcome deficiencies in formal education provision. Additionally, household spending may vary greatly depending on macroeconomic factors. During economic recessions, households are likely to under-invest in education (Pole de Dakar 2012). Changes in government policy are also a driver of expenditure. For example, household spending on education is likely to surge when governments abolish school fees. This can be explained by social interactions and how households respond differently to a policy, based on their relative wealth. Children from poorer households who could not previously afford tuition can now go to school. Consequently, their peers from wealthier households exit government schools and join private schools (Bold et al., 2011).

A study of household costs of education in twelve countries<sup>5</sup> in Africa shows that school fees account for more than half of household spending on education and school supply fees account for one-third (Pole de Dakar 2012). Overall, wealthier households spend a larger share of education expenditure on school fees, likely due to the higher rate at which wealthier households enroll children in private education. Conversely, poorer households spend more on school supplies, a required expense at many government schools and affordable private schools. Households may also pay out more on education if they perceive the quality of infrastructure and teaching to be inadequate in less expensive schools. If the education infrastructure is perceived to be of good quality, households feel less compelled to incur compensatory education expenses (Tilak 2002). Household expenditure on education is also significantly correlated with the education level of the head of household, and families with more educated women are more likely to invest in education than those without (Huy 2012, Tilak 2002).

Education expenditure tends to increase as students rise through levels of education, since more specialized teachers and pedagogical materials are required. On average, household education spending is five times higher at the lower secondary level than the primary level (Pole de Dakar 2012). Although primary education is less expensive per pupil than post-primary education, it consumes the majority of household education expenditure in low-income countries (75% in the sample of 15 countries studies in Pole de Dakar 2012). This suggests that the costs of post-primary education are prohibitive for many families.

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<sup>5</sup> Benin, Burkina Faso, Cote d'Ivoire, Gabon, Madagascar, Mali, Mauritania, Niger, Malawi, Rwanda, Sierra Leone, and Tanzania



### III. Background on Education in Ghana

#### Education Finance in Ghana

Ghana's efforts to improve education date back to Kwame Nkrumah's call for fee-free compulsory primary and lower secondary education in 1960, just three years after independence. Since then, a number of critical developments have unfolded in Ghana's education sector. The Education Act of 1961 granted responsibility for expanding primary education to local education authorities (Akyeampong 2010). A wave of education reforms in 1987, guided by World Bank recommendations, restructured Ghanaian education, combining primary school with three years of junior secondary school to form "basic education," followed by three years of senior secondary school. Under the Free and Compulsory Universal Basic Education Act (FCUBE) of 1995, the Ghana Education Service (GES) allowed Parent Teacher Associations to levy fees for school development activities so long as they sought approval from local policymakers, such as District Education Oversight Committees (CREATE 2011). This created a loophole for the local approval of indirect fees. Indeed between 1991/2 and 1998/99, expenses for primary and JHS increased by 77.3% per household. Between 1998/99 and 2005/06, average household expenditure again increased by 42.7% (Boakye-Yiadom).

Responding in part to the rising costs of education, GES established the Capitation Grant Scheme (CGS) in 2005. CGS mandated fee-free provision of basic education in government schools regardless of socioeconomic status or location (CREATE Country Research Summary 1). This major policy reform initially prompted a surge in enrollment, which is widely attributed to the return of school-age and over-age children who could previously not afford education (CREATE Country Research Summary 16). Data from the Ministry of Education in Ghana (EMIS data) indicate that CGS led to a 17% increase in enrolment at basic schools (MOESS 2007). Yet a 2011 World Bank report suggests that, when limited learning and dropouts are accounted for, the net enrollment rate only increased by just over 2% (World Bank 2011). The experience of Ghana is consistent with widespread evidence across Sub-Saharan Africa that capitation grants initially produce sizeable expansion of enrolment, but do not adequately address the twin challenges of retention and completion (CREATE 2011). Between 1980 and 2008, enrollment more than doubled in absolute terms, but because the 5-17 age bracket grew by more than 50% during that period, the dropout rate improved only marginally (CREATE 2011). Moreover, while it increased access to education, CGS aggravated the quality challenge. Lack of preparation for rapidly rising enrolment combined with insufficient focus on quality inputs like trained teachers and adequate infrastructure, resulting in overcrowding, worsening education quality, stagnant dropout rates, and the imposition of indirect fees. Evidence suggests that heavy bureaucratic procedures may also limit CGS effectiveness (Center for Democratic Development 2010).

Despite government efforts and heavy investments in the education sector to achieve the Education for All goals, Ghana faces many challenges in the education sector. In 2014, 429,000 primary school aged children remained out-of-school, representing 11% of the age group (UNESCO Institute for Statistics database). Furthermore, 28% of primary school students drop out every year, and only 72% of students survive to the last year of primary school. Over-age enrollment remains another major challenge in Ghana, particularly among rural and urban poor, and is most acutely felt among families where parents are not

as well-educated. In 2009, roughly 29% of pupils were over-age at JHS level (CREATE Country Research Summary 2010). Data suggests that the greatest number of dropouts occur after Primary 5 and JHS2 (CREATE 2011). This is likely due to both higher post-primary fees and higher opportunity costs for older students. In part, these statistics reflect that, despite the abolition of fees in Ghana, the costs of education continue to be prohibitive to some households. A similar observation was made in the Kenyan context by Areba et al. (2013).

### **Government and Private Provision of Education in Ghana**

Government remains the main provider of education in Ghana, as 72% of students were enrolled in government schools and 28% were enrolled in private institutions in 2013 (GLSS6 Main Report). According to most recent surveys, students enrolled in vocational, technical or commercial training (34%) and kindergarten pupils (34%) are the ones who are more likely to attend private schools. In urban areas, the difference between private (41%) and government (59%) enrollment is smaller than in rural areas, where 86% attend government schools. In the fast-growing peri-urban areas outside Accra, as many as two-thirds of children are estimated to be enrolled in private schools (Tooley, 2012).

Trends in Ghana are consistent with the global ones described earlier, with an increasing proportion of the population relying on private schools. The limitations of CGS are at least partially responsible for the recent proliferation of low-cost private schools across Ghana, particularly in peri-urban areas where demand for alternatives to the government system is strongest. Between the 2006/7 and 2007/8 school years, the number of private primary schools in Ghana increased by 26%, compared to 9% growth in the number of government schools. In 2014, the World Bank reported that private primary schools account for 23% of the total in Ghana and almost a third of all basic schools (nursery through junior high school) in the country. While private schools were a luxury available only to the elite in the past, they are where the poor and working classes increasingly turn today for the education of their children. In 2010, an IFC-commissioned report estimated that LCPSs make up 40% of all private schools in Ghana (about 12% of all schools in the country).

### **Household Expenditure on Education in Ghana**

The average total household expenditure in urban areas (11,061GH¢) is about 1.5 times that of households living in rural localities (7,152GH¢) (GLSS6 Main Report). A typical household spends 459GH¢ (137USD<sup>6</sup>) per household member attending school per year. Expenditure on education accounts for 15% of total expenditure for urban households, and 11% of spending for rural households.

There is also a considerable disparity between populations living in Accra and outside. On average, the annual expenditure on education for a household in Accra is 1024GH¢, versus 521GH¢ in other urban areas. In rural areas, education spending ranges from 120GH¢ per year in the savannah to 291GH¢ per year in coastal regions. The mean annual per capita expenditure on education varies greatly by quintile. On average, per capita spending on education is 54GH¢ (corresponding to 9% of total expenses) for a

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<sup>6</sup> This report uses the USD – GH¢ conversion rate at time of data collection, 1 August 2014. 1USD = 3.35 GH¢; 1 GH¢ = .2985USD. On 1 August 2014, the GH¢ – CHF conversion rate was 1CHF = 3.7GH¢; 1GH¢ = .27CHF.



student coming from the lowest quintile and almost 14 times that - 742GH¢ (11.2% of total expenses) – for a student from the highest quintile (GLSS6 Main Report).

A study of the Mfantseman Municipality (Akaguri 2013) shows that non-tuition costs associated with government schools (e.g., uniforms, meals) constitute a large part of the budgets of poor households, and that low-fee private schools were still inaccessible to the poorest households. Sending children to either type of school presents a significant financial challenge for low-income households in Ghana. This study aims to fill evidence gaps on household costs of education in Kasoa, Ghana and how financial considerations influence school choice.

## IV. Methodology

This study assessed the household costs of education by gathering data from households and from schools. This section describes the study location, sample design, survey instruments, and limitations.

### Study location

The goal of this study was to compare the household education costs associated with enrollment in government and low-cost private schools in Ghana. With this goal in mind, the peri-urban region of Kasoa was selected as the study location for three reasons:

- Kasoa has a high concentration of private schools, yielding a large sample of households with children enrolled in private schools.
- Kasoa is one of several peri-urban areas outside of Accra in which the concentration of low-cost private schools is rapidly growing to meet demand as the population grows. The results of this study can therefore be used to generate hypotheses about household education costs not only in Kasoa but also more broadly.
- Kasoa is home to Omega Schools, a chain of over 30 low-cost private schools which has previously been evaluated by R4D, and has demonstrated an ability to produce higher learning outcomes than neighboring government and private schools.<sup>7</sup> Locating the study in Kasoa allows us to investigate the extent to which schools with evidence of relatively high performance like Omega Schools are affordable to the poorest households.

### Sample design

The household sample was drawn using a two-stage sampling design. In the first stage, 50 localities were randomly selected from a list of 100 localities within the Kasoa area provided by the Awutu-Senya-East District Assembly (see Annex C for the localities included in the sample).<sup>8</sup> In the second stage, households were selected. In each chosen locality, a sample of 20 households was drawn for a total of 1,000 households. Upon arriving in a locality, research teams followed a specific walking pattern to select households: each enumerator identified a central starting point in the locality and moved forwards and right, counting every structure on both the left and the right; every fifth structure was included in the

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<sup>7</sup> Educational Assessment and Research Centre (EARC) Ghana. “Research Comparing Omega Schools and Neighbouring Schools.” 2012. Unpublished.

<sup>8</sup> Due to rapid population growth in Kasoa, reliable locality-based population estimates are not available. As a result, probability proportional to size (PPS) could not be used when drawing the sample of localities within Kasoa.



household sample until 20 households were surveyed.<sup>9</sup> In order to meet the survey criteria, a household had to have at least one school-aged child and an adult respondent 18 years of age or older.

The school sample was developed after the household survey was completed. The CDD research team developed a list of schools identified during the household survey where children in sampled households were enrolled. 1,837 students ages 3 to 25 were identified in the survey and they attended over 150 schools, both inside and outside of Kasoa. Table 1 provides the number of students attending government and private schools inside and out of Kasoa.

**Table 1: School and Geographic Distribution**

Type of School Attended	Number of children	Percent of total	
Government schools within Kasoa	178	10%	11%
Government schools outside Kasoa	16	1%	
Private schools within Kasoa	1166	63%	89%
Private schools outside Kasoa	477	26%	
<b>Total</b>	<b>1837</b>	<b>100%</b>	

The school sample was originally designed to include 20 schools. The ratio of private to government school enrollment initially guided the selection of schools for the sample, leading to a sample of 18 private schools and 2 government schools. However, given the study’s aim to deeply investigate the comparative costs of private and government schools, the research team decided to increase the sample size to 30 schools and over-sample the government schools. The final sample included the 21 private schools with the greatest number of households reporting enrollment and 9 government schools. One of the private schools was an Omega School. All schools in the Omega chain have the same all-inclusive daily fee model, so only one school was included in the sample. It was selected randomly from a list of Omega Schools.

The private schools in the sample varied in the number of grades offered, from nursery to the third year of Junior High School (JHS3). The majority of government schools offered Kindergarten 1 (KG1) to JHS3; two of the government schools also had nursery; two only offer JHS.

In each of the 30 selected schools, the head teacher or “next in charge” that would be knowledgeable about school revenues and expenses was interviewed. As schools were reporting financial data, they were assured that the survey was confidential and no school would be named individually, with the exception of the Omega School which was of special interest to this study and agreed to be identified.

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<sup>9</sup> A household is defined as a group of people who presently eat from the same pot. It excludes domestic workers, persons currently living elsewhere for purposes of studies or work, and temporary visitors. When a compound has enclaves for domestic workers, each with his/her family is treated as a household. Similarly, in a multi-dwelling place such as blocks of flats, compounds with multiple spouses, or backyard dwellings for renters or relatives, each dwelling is treated as a separate household.





## Survey instruments

### *Survey instrument development*

The household and school surveys were developed in collaboration with CDD and drew from several existing survey instruments: the Innovations for Poverty Action (IPA) Ghana Early Childhood Development Scoping Study Questionnaire, the Ghana Household Living Standards Survey (GLSS5) Questionnaire, and the Progress out of Poverty Index as a reference for determining household wealth and relative economic status.

Consultations on the survey instruments were held with key education figures, including representatives from the Ghana Educational Service (GES); Ghana Statistical Service; the Institute of Statistical, Social and Economic Research at the University of Ghana; the Open Learning Exchange; Omega Schools; World Bank - Ghana; Department for International Development (DFID) - Ghana; and UNICEF - Ghana.

After these consultations, CDD developed pilot survey instruments and held two focus groups discussions to inform the refinement of the instruments. Each focus group consisted of 10 to 12 respondents (one group of teachers/administrators and a second of parents). CDD also ran a pilot in order to test the English and local language versions of the survey instrument. Extensive enumerator training was conducted.

### *Survey content*

The household survey was very comprehensive and asked about each member of the household. While the focus was on school-age children who had not yet finished senior high school (SHS), the survey also collected data on youth not attending school and the economic activities of each household member over the age of 25. The complete survey took just under an hour to complete. The survey consisted of the following sections:

- Informed Consent & Introduction
- Section 1: Household Roster
- Section 2: General Education Knowledge
- Section 3: General School Attitudes
- Section 4: Student-Age Module
- Section 5: Education Costs
- Section 6: Education Household Expenditures
- Section 7: Non-School Going Age Module
- Section 8: Economic status

The school survey was also very comprehensive. It sought to understand the basic characteristics of the school as well as collect detailed data about its operations and costs. One section of the survey was sent in advance of the in-person interview with the head teacher as it contained detailed questions that would be difficult to collect on the spot. The survey consisted of the following sections:

- Background and Methodology
- Section 1. Basic School Profile
- Section 2. Student and Teacher Attendance
- Section 3. School Revenue
- Section 4. School Revenue: Student Payments
- Section 5a. School Operating Costs - *Sent Ahead of Time*
- Section 5b. School Operating Costs - *Asked at time of Interview*
- Section 6. PTA /SMC and Administration
- Section 7. Quality & Cost Effectiveness
- Section 8. Classroom Observation

The household and school surveys were respectively conducted in June/July and October 2014.



## Limitations

It is important to note that the Kasoa area is not representative of the entire country. Kasoa is a fast-growing peri-urban area that exhibits unique characteristics perhaps not applicable to other urban or rural areas, or perhaps even other peri-urban centers. Potentially unique characteristics include the density of private schools and scarcity of government institutions, household size, economic profile, and social value placed on education, among others.

Households and schools both struggle to keep adequate financial records. Parents are not able to clearly or consistently describe the costs of their children's education. Many reasons could contribute to this lack of awareness. First, children in a given household can attend different schools – each with their own rates and fees. Second, the survey respondent was not always the head of household, and possibly not directly engaged in paying for education and making education decisions. Third, because of the hidden and extra costs, it is difficult to maintain an accurate ledger. Approximation of education as a percentage of income or expenditure was also a challenge because many families are informally employed or have variable sources of income. In some cases, more positively, households were able to be precise in reporting school fees because they had fee slips with a full breakdown of charges given by the school. It is also possible in some cases that respondents misunderstood questions to do with monthly spending and instead provided annual estimates; monthly spending may not in retrospect have been the best question to ask, given lumpiness in school spending and also given the proximity of the household survey to the start of a new school year.

Schools have similar obstacles to accurate accounting. While some institutions were simply reluctant to provide financial details, others were willing but simply not able to define their expenses. In some cases accounting was handled by external parties while, for others, head teachers required the approval of school proprietors to provide information. The school authorities in most cases calculated costs at the time of the interview in order to determine the total costs for the academic year under consideration. They typically had books for recording school fees but other revenues and costs incurred were not recorded. Records for expenditures such as feeding were not maintained; these gaps were in spite of head teachers acknowledging that feeding fees were one of the major reasons for student absenteeism.

The length and complexity of both survey instruments was also a challenge. Respondents often did not realize the amount of time such a survey would take. For the school survey, enumerators often had to visit the same school several times to complete the survey and/or often had to allow the survey to be interrupted while school administrators dealt with other pressing issues. A further complication was its timing - the school year was delayed due to the Ebola virus, delaying also the school survey; once the survey did start, it was often difficult for respondents to be available for interview with other pressures on them at the start of the school year.



## V. Contextual Overview: Kasoa

This section reviews the basic landscape and population trends in Kasoa, Ghana, showcasing also the demographics of the households (such as average family size, educational enrollment, and income) and schools (such as size, grades offered and teacher numbers) in the survey.

### **Kasoa**

Kasoa, also known as Oduponkpehe, is the administrative capital of the Awutu-Senya-East District, which is carved out of the old Awutu Senya District in the Central Region of Ghana. It is located on the Accra-Cape Coast Road, approximately 17 miles southwest of the capital, Accra. The total population of the Central region in 2012 was 2.34 million, about 9% of the Ghanaian total, distributed in 612,000 households, with an average household size of 3.8, below the national average of 4.0.<sup>10</sup> Males comprise 48.3% of the population, females 51.7%. The national population is young, with 39.4% under the age of 15, 52.4% under the age of 25, and only 4.8% above age 65. Males represent 69.5% of household heads; average household-head age is 45.1.

Like other peri-urban areas of the Greater Accra region, Kasoa's population has grown rapidly in recent decades. The 2010 census recorded a total population of 195,306 for the old Awutu Senya District<sup>11</sup> and 69,383 for Kasoa. Assuming a 10-15 percent increase since because of rapid urbanization, the total population of Kasoa by the 2014 survey was likely between 76,000-80,000<sup>12</sup>. Population figures for sub-localities or communities within Kasoa are not, however, available in the 2010 census report.<sup>13</sup>

The national average literacy rate for the population aged 11 and above was 40.6%, higher for males (50%) than females (32.7%). Within the Central region, literacy rates for both sexes are higher in the urban areas. In the Central region, 70.7% of females have at least some schooling compared to 89.6% of males.

### **Household Demographics**

#### *Household Survey Characteristics*

One thousand households participated in an extensive survey. To participate, households had to have at least one member between the ages of 3 and 25 who had not yet completed Senior High School; the survey identified 1836 such youth; the samples included students to age 25 to ensure representation of over-age learners.

Survey respondents were 74% female and 26% male, though males were more cited as the head of household (61%, similar to the 70% GLSS 6 findings for Ghana as a whole). Fifty percent of female respondents cited that their spouse was the head of the household. Many survey respondents reported having attended school but did not verify the highest completed grade. Of those specifying a grade of completion, the head of household most often was cited as having completed JHS 3. About 8% of male and 19% of female heads of household were reported as not having attended school at all.

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<sup>10</sup> Ghana Living Standards Survey 6 (GLSS6), published in 2014, covering 2012/13.

<sup>11</sup> Note: Figures are from Ghana 2010 Population and Housing Census.

<sup>12</sup> Such an increase is consistent with GLSS6, which provides information to compare 2010 with 2012/13.

<sup>13</sup> Note: This could be provided by the Census office but will take some time because we will need to go through the official bureaucracy.

The average household (defined as the number of people who permanently share a common source of food and/or income) contained 3.9 members, with about 2.2 school-age members. Household size ranged from 2 to 10 persons, with about 90% of the sample living in a 5-person or less household.

**Table 2: Survey Respondents and Key Demographic Indicators**

Sample Characteristic		Sample Result	
<b>Household Characteristic</b>	Sample Size	1,000 households	
	Survey Respondents	Male 26%	Female 74%
	Survey Respondent is also Head of Household	Male 25%	Female 35%
	Average members per household	3.9	
	Average school-age members per household	2.2	
	Total number of children aged 0-25	2195	
	<b>School-Age Youth (3-25) Characteristic</b>	Children aged 3-25, not yet completed Senior High School (SHS)	1836
Percentage enrolled in school		88%	
Percentage in primary school (grades 1 – 6)		52%	
Percentage of households reporting private school attendance		83%	
Percentage of households reporting government school attendance		16%	
Nursery school to primary 6, percentage of students attending private schools		87%	
JHS and SHS, percentage of students attending private schools		66%	

The average income level reported in the sample was 682GH¢ (204USD)<sup>14</sup> per month. The 20<sup>th</sup>, 50<sup>th</sup> and 80<sup>th</sup> percentiles report monthly incomes of 250GH¢ and 500GH¢. According to the GLSS6, the annual average household income across Ghana is GH¢16,645 and GH¢12,004 in the Central Region where Kasoa is located. These estimates seem somewhat higher than the reported averages in this survey, for which the annual average income per household was GH¢8,184. Variation in methodology and sample could account for some of these differences; the GLSS6 covered the entire Central region whereas this survey only looked at the smaller town of Kasoa.

Petty trading accounted for nearly 50% of the economic activity in the sample. Around 10% of survey respondents were engaged in construction activities such as masonry or carpentry, and only 4% in farming, consistent with the GLSS 6 finding for the Central region that just 6.6% are engaged in agriculture, the majority having other wage-earning employment.

<sup>14</sup> This report uses the USD – GH¢ conversion rate at time of data collection, 1 August 2014. 1USD = 3.35 GH¢; 1 GH¢ = .2985USD. On 1 August 2014, the GH¢ – CHF conversion rate was 1CHF = 3.7GH¢; 1GH¢ = .27CHF.

### Households' Economic Position

The survey included both reported household income and household facilities (structure and amenities) to estimate economic position. Respondents had difficulty accurately assessing their income or the income of others contributing to the household, such as a spouse. As a result, this survey uses an adapted version of the Progress out of Poverty Index (PPI) to estimate the household's economic position. The original PPI aligns household score (0-100) to a percentage likelihood that the household lives above or below a certain income, such as the commonly cited world poverty level of \$1.25/day.

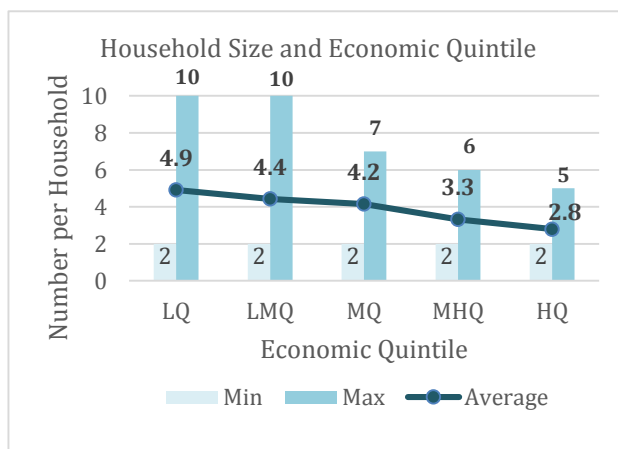
**Table 3: Economic Quintile by Adapted PPI Score**

Economic Quintile	Number of Households	PPI Score Range
Lowest Quintile (LQ)	191	21-46
Lower-Middle Quintile (LMQ)	136	47-52
Middle Quintile (MQ)	271	53-57
Higher-Middle Quintile (HMQ)	201	58-62
Highest Quintile (HQ)	201	63-78

While the PPI is developed for each country, the questions were further refined in collaboration with CDD, the data partner agency in Ghana, to fit the context of Kasoa. Respondents were asked a series of questions about their economic status, probing for information and assigning point-values to what type of dwelling, ownership status, or plumbing and electricity facilities were present in the household. The sample scores ranged from a low of 21 to a high of 78 points; households scoring at the high end have more amenities or own their dwellings and are therefore estimated to be in the higher economic quintile. Economic quintiles were then established by looking at the ordered score values of the 200<sup>th</sup>, 400<sup>th</sup>, 600<sup>th</sup>, and 800<sup>th</sup> households. PPI values as they correspond to economic quintiles were amended so as to be exclusive (i.e. one score does not appear in two groups; see Table 3). The largest number of respondents are in the middle quintile.

This is not a nationally representative sample and its economic quintiles are likely different than those of the country as a whole. However, the sample size of 1,000 provides a suitable basis to examine patterns of economic position and educational choice.

**Figure 1: Household Size by PPI-Adapted Economic Quintile**



Economic quintiles correlate with household size and education patterns. As would be expected, there is an inverse relationship between household size and economic quintile; those in the lower quintile have larger families. Families in the highest quintile report an average 2.8 members compared to 4.9 in the highest quintile. For both male and female heads of household, there is a positive relationship between education level completed and economic position on the adapted PPI scale.

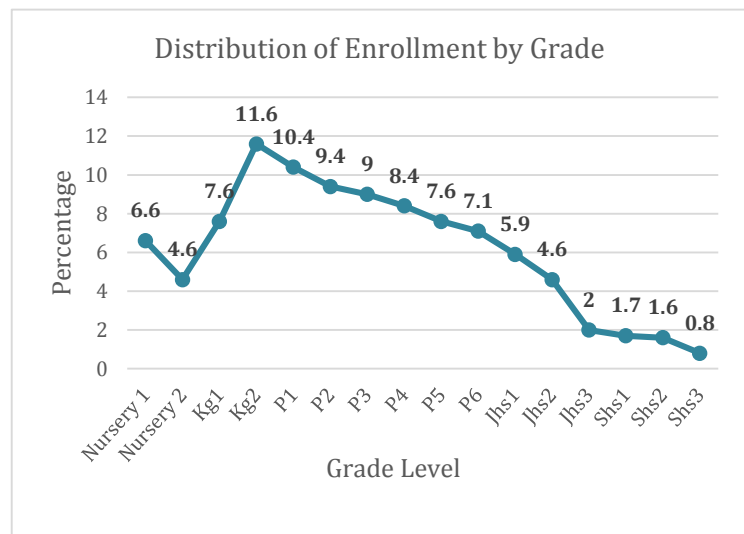
### Student Participation in Education

Of the school-age sample, 88% were enrolled in school. Enrollment rates may actually have been slightly higher as some guardians noted that children were only temporarily out of school as they awaited exam results and placement in secondary school. Reasons for children’s non-participation varied. Some respondents cited their inability to cover school fees while others said children were too young or not qualified for school.

Among those in school, the largest single grade or class was kindergarten two, the year before primary school, enrolling 11.6% of the sample. Half of the school-age population, just under 52%, was enrolled in basic or primary school, which includes grades one through six. Just over 12% of the sample was enrolled at the JHS level and only 4% at the Senior High School (SHS) level. Students may choose to leave school and enter the workforce before the final exams at the JHS 3 level that would be required for entry to SHS.

Households overwhelmingly reported that students were enrolled in a private school (83%). Sixteen percent (16%) reported that children in their households attended government schools. One percent of respondents were uncertain of the school classification. Private education is more common at the lower grades, with 87% of students from Nursery to Primary 6 enrolled in such a setting. After primary school, students remained more likely to enroll in private than government facilities but the share in private declined to 66%.

**Figure 2: Distribution of School-Age Enrollment by Grade**



Over 200 schools were reported in the sample, 87.6% of which were private. While some students attended school outside of Kasoa, the majority were enrolled in Kasoa (59.4% private, 12.2% government). Within Kasoa, children attended 182 schools, 23 of which were government schools. Of the sample, 12.5% attended a private Omega School. There are at least 17 individual Omega schools in Kasoa, which were treated as a single unit as they are part of a chain of schools all charging the same all-inclusive fee.

### School Demographics

#### School Characteristics

Schools for the school-level survey were identified based on students’ reported attendance in the household survey. The study initially identified 20 schools, 18 private and 2 government, based on representation in the household survey. While indicative of enrollment patterns, such a low number of government schools would not allow a meaningful comparison of school costs. As a result, the study increased the number of schools to 30, surveying 21 private institutions and over-sampling to include 9 government ones.



Across these 30 schools there are both common and different characteristics between the private and the public ones (**Table 4**). For example, most schools of both types are open 43 weeks per year and students spend five days per week at school. Only three government schools reported having information and communication technology (ICT) materials in comparison to 17 private schools.

**Table 4: Government and Private School Characteristics**

	<b>Government</b>	<b>Private</b>
<b>Year established (average)</b>	Avg. 1999; range 1980 – 2009; 6 of 9 established post-2000	Avg. 2004; range 1993 – 2012; 16 of 21 established post-2000
<b>Grades served</b>	Only 2 serve Nursery – P6; 4 serve KG 1 – P6; 1 serves KG 1 – JHS 3; 2 serve only JHS	15 serve Nursery – P6; 6 additional also some level of JHS
<b>Operating weeks per year</b>	43	43
<b>Opening hours* (in hours, on average)</b>	7.3	8.1
<b>Time spent in school (in hours, on</b>	6.8	8.1
<b>Number of full-time teachers (average)</b>	21.2	22.5
<b>Number of children per full-time teacher</b>	26.3	22.5
<b>Average household income of students at school (reported by school)<sup>15</sup></b>	2 serve lowest quintile; 6 serve lower- middle quintile; 1 serves middle quintile	4 serve lowest quintile; 9 serve lower- middle quintile; 7 serve middle quintile; 1 upper-middle quintile
<b>ICT materials available in classrooms</b>	3 schools	17 schools
<b>* “Opening hours” refer to the time between opening and closing times.</b>		

<sup>15</sup> Quintiles here are based upon the schools’ relative calculation of economic position and not the methodology used to determine economic position in the household survey.

## VI. Findings

### Household Survey Findings

#### *Household Spending on Education*

*This section reviews findings from the household survey. Data is reported on costs of education, household education budget shares, and factors influencing school choice and perceived quality. Households' reported fees paid to government schools and private schools are compared, along the categories in Box 1 (chapter II).*

#### **Box 2: Summary of Household Findings**

- On average, private schools are 50% more expensive than government schools, but both typically have costly extra fees.
- Omega schools have almost closed the cost gap with government schools.
- Most of the variation in total costs for private schools stems from extra fees.
- The most commonly cited extra fees for both government and private schools were: meals, uniforms, textbooks, exam fees, mandatory extra classes, and parent teacher association contributions.
- Across income levels, households spend over a third of their income on education.
- Students from households in the lower income quintile are more likely to attend government schools.
- Teacher qualifications, school facilities, and educational outcomes are major determinants of perceived school quality but finances, quality of information, and accessibility ultimately determine school choice.

#### *How much does it cost to educate a child in Kasoa?*

The survey found considerable variation in the contribution of tuition fees, school supplies, and ancillary fees to household spending. School fees are almost always mandatory but can be composed of a set of different fees<sup>16</sup>, while school supplies and ancillary fees can fluctuate, and in some cases, are optional. As composition of total costs varies by school and grade level, the survey grouped the additional school fees, school supplies, and ancillary fees together as “extra fees.” Extra fees are broken down as much as possible by item. Tuition fees and extra fees are then summed to estimate the cost of education. The vast majority of students (80%) pay school fees termly (3 times per year). Just over 15% pay a daily fee, the majority of whom attend an Omega school. Monthly and annual school fees are rare (under 1% and 4% of students respectively).

The full sample yields data for 1623 students, some of whom live in Kasoa but attend school outside the area. For this larger sample, reported annual total fees were 1182GH¢ (353USD), 25% of which was tuition fees. For the 1158 students that attend school in Kasoa, the average total fees were slightly lower, 1147GH¢. Private school was found to be considerably more expensive than the government schools with

<sup>16</sup> School or tuition fees can include registration fees, tuition fees, examination fees, teachers' salary fees, parents' association fees, and other enrollment-associated fees. In the survey, respondents were asked about overall tuition costs and later asked to break down the various charges and additional fees. It is difficult to confidently separate what would be a mandatory enrollment fee from optional fees.





total fees of 1218GH¢ and 720GH¢ respectively. **Table 5 presents** the breakdown of tuition and extra fees for government and private schools.

**Table 5: Tuition and Extra Fees by Classification**

<i>Average Tuition and Extra Fees, 1,000 Household Sample</i>					
<i>In/Out Kasoa</i>	Classification	Number in sample (1623 total)	Average tuition fees (GH¢)	Average Extra Fees (GH¢)	Total Fees (GH¢)
<i>Kasoa</i>	Government	193	56	737	793
<i>Kasoa</i>	Private	965	315	903	1218
<i>Kasoa</i>	Private, Omega Only	203 of 965	344	312	656
<i>Non-Kasoa</i>	Private	465	344	924	1268

### *Tuition Fees*

#### *How do the school costs vary when considering tuition fees compared to extra fees?*

The majority of the students attending government schools are enrolled at the primary level, at which extra fees are significantly lower than they are for JHS. For government primary schools, tuition averaged 10GH¢, with total fees of 491GH¢ - significantly lower than overall average for government schools in Table 5. The vast majority of households reported that they did not pay tuition fees to government primary schools. Government JHS costs were similarly skewed towards extra fees, with only 54GH¢ of 912GH¢ paid for tuition (note that this sample size was only 26 students). Senior high schools appear to be extremely expensive, with tuition nearly 1400GH¢ and overall fees approaching 3,000GH¢, but the survey yielded only six observations at this level. The low number of students recorded in government JHS and SHS reflects low enrollment in public education beyond primary school, likely due to prohibitive cost. Private schools follow the same pattern of higher fees at higher levels of education.

Annual tuition fees are relatively consistent across private schools. Similar to for government institutions, extra fees account for much of the variation in total fees and it is not uncommon to see tuition account for only one-third of total annual schooling expenses. The approximate cost of one chain of private schools, Omega (designed as an all-inclusive, daily-fee model), is 656GH¢ per year, approximately half of which is tuition.

### *Extra Fees*

#### *What extra fees do families report paying?*

In addition to tuition fees, households bear the burden of paying extra fees. These fees take a variety of forms, including exam fees, meals, transportation, classroom equipment, and extra classes.

For a sub-sample of 615 students with complete data, three-quarters report having to pay additional fees. Of the 466 students paying additional fees, 400 are enrolled in private schools and 66 in government schools. The most common expense was food and meals (reported by nearly 89% of additional fee-paying students. This was also the largest monetary expense for families, totaling 363GH¢ per year. School supplies such as textbooks and uniforms were cited about 75% of the time for respondents and cost



around 127GH¢ and 50GH¢ respectively. Exam fees<sup>17</sup> were also reported about 75% of the time and averaged 17GH¢ per year. Across both school types, transport fees were infrequently claimed (17% of respondents). For those that did pay for transportation, the average cost was high - between one to two GH¢ per day.

The six most commonly incurred fees are identical for government and private school students, although with differences in magnitude of costs<sup>18</sup>. In the sub-sample, the average value of extra fees paid by private school households exceeds that of government school attending households, 1123GH¢ compared to 814GH¢ (the overall average is 1074GH¢). While food is the most commonly reported item for both school types, fewer government students report paying for food but they claim higher costs (62% and 419GH¢ compared to 93% and 356GH¢). Textbooks (74%) and mandatory extra classes (61%) are cited at the same rate in both types of institutions but textbooks cost more at private schools (135GH¢ versus 78GH¢) and extra classes cost more at government schools (213GH¢ to 193GH¢). Fees for mandatory extra classes average roughly 1GH¢ per day. Development levies are more prevalent at government schools, while school trips and gifts to the teacher are more common at private schools. Government students' contributions to the Parent Teacher Association occur at a higher rate than at private schools, but at a lower cost. Private schools attendants are more likely to pay fees for admission, transportation, ICT equipment, stationery, toiletries, and school trips than their government school counterparts. **Table 6** lists fee categories and in which setting it is more commonly cited. Annex D has a complete table that lists fee prevalence and average amount for government and private institutions.

#### *How does education spending vary with households' economic status?*

The average monthly income in Kasoa is 682GH¢ for the sample. Total monthly household expenditure was reported to be 603GH¢ (180USD) on average. 40% of the sample spends more than 603GH¢, suggesting a low rate of saving for many households. The distribution of income in the sample appears to be highly skewed to the right, making comparisons among the first four income quintiles meaningless. Education expenditure as a proportion of both income and monthly expenditure is significantly higher for the bottom quintile than for the top quintile (see Figure 3). Invariably, over a third of monthly expenditure (42% for the bottom economic quintile, 35% for the top quintile) is devoted to education<sup>19</sup>.

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<sup>17</sup> Families at times choose to withhold students from exam periods when these additional fees would be due.

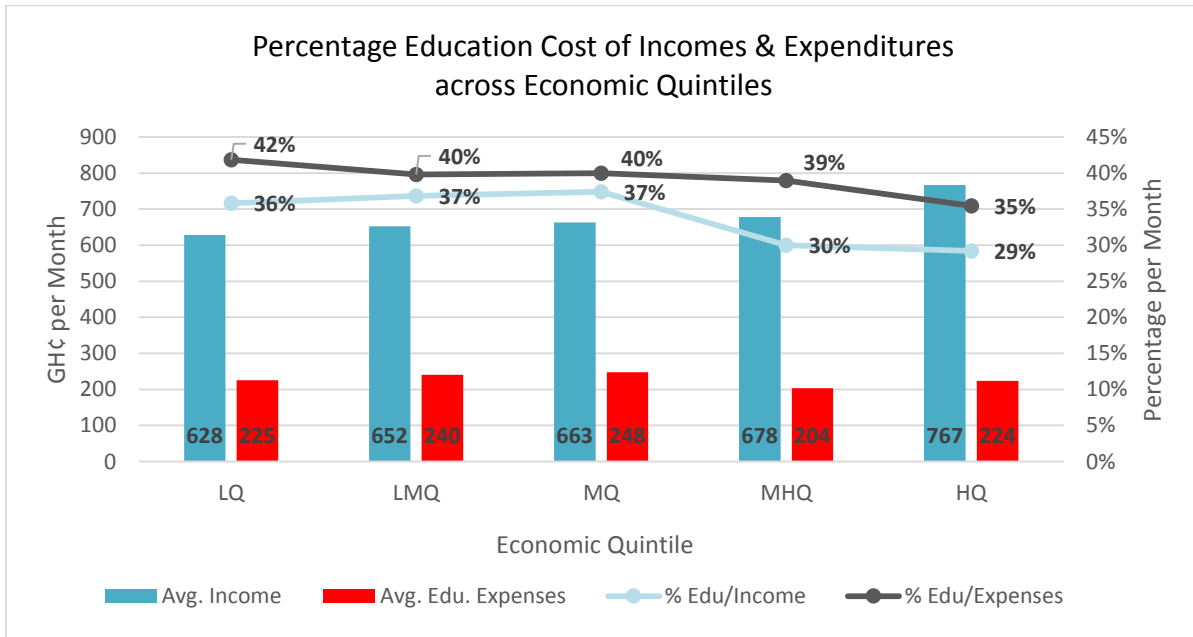
<sup>18</sup> For government students, the most prevalent extra fees are uniforms and sport clothes (88%), examination fees (82%), parent teacher association contributions (76%), textbooks (74%), food and snacks (62%) and mandatory extra classes (61%). For private students, the most prevalent extra fees are food and snacks (93%), followed by uniform and sport clothes (75%), textbooks (74%), exam fees (72%), and mandatory extra classes (61%), parent teacher association contributions (49%).

<sup>19</sup> This is a much higher percentage than Foko et al (2012) report for 15 African countries

**Table 6: Extra Fees by Government and Private Status (12 most commonly reported fees)**

Fee Category		Higher response in private		Higher response in Gov't		Same response percentage		Same cost	
		Lower cost	Higher cost	Lower cost	Higher cost	Private - Higher cost	Gov't - Higher cost	Private - Higher response	Gov't - Higher response
<b>Tuition (T), School Supplies (SS) or Ancillary Fees (A)</b>									
<b>A</b>	Food/meals/snacks	X							
<b>SS</b>	Uniform and sports			X					
<b>SS</b>	Text-books and school					X			
<b>T</b>	Examination Fees			X					
<b>SS</b>	Mandatory extra classes						X		
<b>T</b>	Contribution to parent/teacher association or equivalent			X					
<b>T</b>	Admission		X						
<b>A</b>	Monetary and non-monetary gifts to teacher		X						
<b>SS</b>	Toiletries (Vaseline, bath soap, toilet paper, tissues)		X						
<b>SS</b>	Stationery (crayons, message books, glue, scissors, flip files)							X	
<b>SS</b>	School reports								X
<b>A</b>	School trips/excursions		X						

**Figure 3: Percentage Education Cost of Incomes & Expenditures across Economic Quintiles**



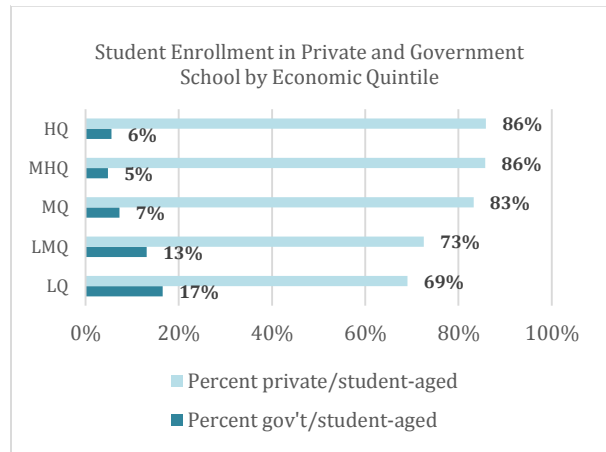
*How does economic status impact school enrollment and spending?*

Students attending government schools are more likely to come from households in the bottom income quintiles. Across the full sample, only 5-6% of students in the upper two quintiles attend government schools, compared to 17% in the lowest<sup>20</sup>. The percentage of children currently enrolled (in government or private school) is also higher in the upper economic quintiles, and some children may only be temporarily out-of-school as they await their exam scores and school placement results.

For children who are the second school-aged member of their household, the divide between government and private enrollment is even more pronounced. In the lowest quintile, 33% of children attend government school, versus 8% of students in the highest economic quintile. This suggests that families may be able to afford to send one school-aged member to private school but are more likely to rely on government schools for their younger siblings.

Households in the upper quintiles also spend more on education per child and have fewer children. For each child's education, those in the lowest quintile spent on average 843GH¢ per year, whereas those in the middle quintile spent 1079GH¢ and those in the highest quintile spent 1426GH¢. These amounts are calculated based on the individual child and school fee reports.

**Figure 4: Student Enrollment in Private and Government School by Economic Quintile**



*Households' Education Values and Choice*

*What value is placed on education?*

Education is seen as a priority for survey respondents. Participants demonstrated the value placed on education through their spending priorities as well as their comments and views. For 45% of respondents, food was the number one household spending priority; for 40% of respondents their first priority was education. Housing expenses such as utilities, land, and rent, as well as business investments also were noted, but by a much lower proportion of households. For 90% of households, education was listed as a top-three expenditure priority.

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*"Life without education is worthless"*  
 - Household survey participant

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Parents are willing to spend a large fraction of their income on educating their children because they see it as instilling social values and key to their children's futures. One participant stated, "Life without education is worthless". Sending children to school is the norm in the community and the majority of caregivers consider it one of their duties. Many insisted on the fact that education is the only path to a better future. To them, education will not only enable their children to get a valuable job and give them

<sup>20</sup> Percentages do not sum to 100 as in some cases school-age children are not currently enrolled in school.



independence, but also enable them to gain the community's respect and make informed life decisions ("Because if you are not educated, you will fall behind"; "Education is an eye opener"). Uneducated parents also value education because it provides opportunities that they were unable to avail ("Because I couldn't go, my child must go").

Education is a priority at all ages and for both sexes, but a challenge financially. Findings strongly suggest that households value all levels of education. 80% of respondents strongly agreed that if it were not for school fees (includes tuition and other expenses), most children would complete secondary school. More than 97% agreed that even if one does not get formal employment, it is important to complete primary school. Families do not appear to prefer one gender in stated preferences, with 90% in complete agreement that it is equally important for males and females to complete primary and secondary school. However, for households with limited means, parents do make a systematic choice on which child to send to school; nearly 90% claim they would prioritize the child with the greatest ability.

#### *How do respondents assess school quality?*

The survey revealed that teacher qualifications are a top determinant for assessing school quality. Quality is also judged by the schools' facilities and equipment, performance and results (e.g. BECE, competition scores) and their reputation for doing serious lessons. Participants identified deficits in those areas as markers of a poor quality school, along with large class sizes. However, nearly 20% of respondents were unsure of the reasons a school would be of poor quality. Very few participants noted other aspects of teacher engagement, such as teachers' attendance or motivation, as determinants of quality.

#### *What determines the school choice?*

Households' financial circumstances influence enrollment. Despite aspirations to equip children with the best possible education and to send their children to high-quality schools, caregivers face tradeoffs in deciding which schools children actually attend. For 30% of students living in Kasoa, a main reason for attending a particular school was financial – the selected school either had flexible or low fees, or offered a scholarship. Teacher or caregiver qualifications (15%) and proximity to house or workplace (13%) were the next most cited determinants. As noted above, school facilities (7%) influence school choice. The influence of school performance (5%) and serious lessons (5%) on school choice appears to be low, despite respondents' claims that these are important determinants of school quality (perhaps because financial considerations override other concerns).

Accessibility is a key factor in school choice. For the full sample, households reported that they knew about six nearby private schools on average, and more than 85% could list at least three within walking distance from their home. However, nearly 70% indicated that there was no government school nearby. Further evidence of the impact of financial cost and distance on school choice is demonstrated by asking caregivers why the child is not attending the best quality school. A third of participants manage to send their child to their top choice school, but 44% cite their top choice school as out of reach because it is too expensive. 12% are prevented from attending their top choice due to distance. In this sample, over three-quarters of children (78%) walk to school.

## School Survey Findings

This section reports findings from interviews conducted with head teachers in 30 schools in Kasoa. Of the visited schools, 21 are private and 9 are government schools. These schools were selected based on their representation in the household survey.

### Box 3: Summary of school survey findings

- Tuition fees for private schools and capitation grants for government schools are the main reported financial sources.
- Government schools have higher operating costs than private schools; a major component of government and private schools' costs is teachers' salaries.
- An average government schoolteacher is paid three times as much a private school teacher.
- The average teacher salary for JHS2 is 60% higher than for grade three (commensurate with the difference in tuition between the two grades).
- Private schools' tuition fees only account for 33% of the total cost of attendance.
- Truancy and dropout are mainly due to financial reasons, they are also often related to household income.
- Feeding fees are the primary reason enrolled children miss school; children are also more absent on market days.
- Tuition breaks and scholarships are highly variable and subjectively granted; students of large households are more likely to benefit from scholarships.

#### *What are the characteristics of the schools?*

As described in Section V, regardless of type, the vast majority of schools are open for five days a week, 43 weeks per year. Private school students spend about an hour more per day at school than those in the government system, (8 versus 7 hours on average). Nearly all of the government schools enroll children the two lowest economic quintiles. Just over half of private schools indicated that they enroll children from the lower-middle and lowest quintile. Private schools appear to be better equipped with resources such as ICT materials, although both government and private schools report having similar numbers of teachers and class sizes.

#### *Schools' Revenue and Operation Costs*

##### *What are schools' revenue sources?*

After Free Compulsory Universal Basic Education (fCUBE) launched in 1996, the government introduced the Capitation Grant Scheme (CGS) in 2005. Capitation grants are intended to cover government schools' operation costs and teachers' salaries to ensure free and compulsory education as guaranteed by the Ghanaian Constitution. Thus, these enrollment-based capitation grants are the main source of revenue for government schools. In contrast, school fees (tuition and extra fees) are the primary revenue source for private schools. In the survey, only rarely did schools report relying on other income sources. Only two private schools reported contributions from religious organizations and/or private donors. Similarly, one government school reported relying partly on private donors, and another receives part of its funding from non-governmental organizations (NGOs).

### How much does it cost to operate a school in Kasoa?

Data on total school operating costs are available for 25 of the 30 visited schools. One-third of the private schools visited operate as not-for-profit institutions, while the remaining schools are run on a for-profit basis. Only five for-profit schools reported actually making profit. Five of six government school head teachers reported having a balanced budget for that year; one indicated that the school incurred a loss in the 2013-2014 school year. 13 of the 25 schools with cost data spent more than the total amount budgeted for the school year. Of 19 private schools, 12 head teachers reported that expenses exceeded budgets whereas only one out of six government schools for which data is available exceeded its budget.

**Table 7: Average Teachers' Salaries in Private and Government Schools by Grade**

Levels	Private School Average Salary (GH¢)	Government School Average Salary (GH¢)
KG1	256 (141)	785 (409)
Primary 3	263 (153)	885 (245)
Primary 6	307 (182)	1025 (165)
JHS 3	426 (176)	1059 (184)

\*Standard deviations given in parentheses

\* Note: Means and standard deviations were calculated based on individuals and not on schools. In particular, if different teachers teaching the same grade receive different salaries within the same school, each salary level was taken into account in the calculation (i.e.: possibly 3 different wage levels in one school).

Government schools report higher operating costs than their private counterparts. Teachers' salaries are a core component of schools' operating costs, and based on the interviews, a government schoolteacher is paid three times as much as a private schoolteacher. This could be due to more stringent qualification requirements for government schoolteachers.

Some low-cost private schools may use the savings from lower teacher salaries to provide other services - textbooks, stationery, transportation, meals, etc. – while maintaining a low overall cost. One such model is the Omega chain, which charges an all-inclusive daily fee and extra items are perceived by parents as “free” (R4D 2013).

### How much do schools report charging?

15 out of the 21 private schools' head teachers reported that tuition fees increased over the past five years<sup>21</sup>, mainly due to the increasing cost of living and the need to raise teachers' salaries. For private schools, the average monthly tuition fee is 37GH¢ (11USD) but average monthly total fees are nearly three times that (110GH¢). Standard deviations are quite large for both figures. One private school doesn't charge tuition and caters to the poor (it does charge extra fees). On average, private schools' tuition only accounts for 33% of the total cost of attendance. Only four private schools claim that their tuition fees cover over 50% of total fees and only two claim that they cover more than 90%. Similarly, capitation grants do not cover all government school costs. According to four government schools' head teachers, additional fees were charged because the value of the capitation grant was lower than expected.

Eleven of the private schools that offer early primary through JHS confirm that their tuition rates increase as children progress to higher levels. In transitional grades 3, 6, and JHS3, students take the most

<sup>21</sup> Interviews were conducted in October 2014.

important exams. Between Primary 3 and JHS3 in private schools, there is on average a 60% increase in teachers' salaries, costs that are passed on to households through to tuition fees. This does not take into account additional costs (textbooks, calculators, etc.) In households where primary school fees are already a large burden, the likelihood of dropout due to financial constraints increases with grade.

**Table 8: Tuition and Extra Fees in Private and Government Schools**

Fee Category	Private schools	Government schools
Tuition fees	Tuition fees vary considerably across grades and across schools. For grades 1 to 3, tuition fees average 378GH¢ per year but vary between 117 to 1,080GH¢	Schools did not report any tuition fees (i.e.: 0 GH¢), all grades considered
Extra fees	The average monthly total fees are 110GH¢ with considerable variance	On average, schools reported extra fees of 15GH¢ per year, ranging from 3 to 46 GH¢ per year
Uniforms	Students typically pay for uniforms one a year, for an amount varying between 20 and 120GH¢	Only 1 school out of 9 requires fees for uniforms and school clothes for 10GH¢ per year
Textbooks	Less than 50% of the sample reported charging for textbooks. For those who do, the average textbooks cost is 93GH¢/year	Schools did not report any fee for textbooks
Exam Printing Fees	On average, exam-printing fees cost 16GH¢/year, ranging from 9 to 45 GH¢/year	More than 50% of the government schools sampled require exam-printing fees (average of 6GH¢/year, ranging from 0 to 18GH¢/year
Stationery	Only 4 schools report charging stationery fee	Schools do not require any fee for stationery
Transportation cost	Private schools charge on average 260GH¢ per year for transportation fees; most require 1GH¢ to be paid daily	Schools did not report any transportation fees/
Feeding fees	Schools typically (over 50%) charge 1GH¢ daily for school meals	Schools reported no school meals costs (i.e. they probably do not provide school meals)

#### *How do school fee reports compare to parents' reports?*

There is a large disparity between fees reported by schools and by households. While parents of government school students indicated that they pay extra fees, head teachers rarely mentioned charging parents. The only outstanding extra fee required is for exam printing; more than half of government schools in the sample report charging this fee (up to 18GH¢/year).

Private schools were found to charge similar amounts for transportation and feeding fees, but there is more disparity for textbooks and uniforms. Over 50% of the private schools charged 1GH¢ for school meals, paid daily; while fewer offer transportation, it is also reported to cost 1GH¢ per day.

Less than 50% of private school sample reported charging for textbooks. For those that do, the average textbooks cost is 93GH¢/year. Students typically pay for uniforms once a year, and schools report this fee to be between 20GH¢ and 120GH¢, with an average of 43GH¢.

#### *Do schools charge variable fees based on household ability to pay?*

11 of the 21 private schools indicated that they charge the same level of tuition fees to all students, 12 reported that they may offer scholarships to students that come from large households, and 15 said that they lower tuition fees for households with multiple children. Some schools indicated that tuition costs vary according to teachers' experience or more subjective factors (i.e. school fees may depend on whether





the school's proprietor knows the student's family.) Those schools that do offer scholarships may do so based on family size or financial need. Scholarships mostly cover tuition fees, while some may cover feeding fees as well.

The data suggest that the majority of households are two-child households and that household size and economic quintile are negatively correlated. Large households are likely to be the poorer ones. By exempting third or fourth siblings, schools may alleviate the financial burden on poor households. However, household responses suggest that sending more than one child to school is already a challenge for many families. Only two of nine government schools responded that they provide scholarships for students from fragile households (single parent households, very poor households, and orphans).

### *School Costs and Attendance*

#### *How do fees impact the attendance of enrolled children?*

In 25 out of the 30 schools visited, financial issues were reported as the main reason for absenteeism. Feeding fees in particular are the main reason why children miss school, according to head teachers. Only three of the 21 private schools interviewed reported that tuition fees cover school feeding. Illness (of children and their parents) was reported second. Transportation and weather conditions were also often cited as a reason for absenteeism.

Half of the interviewed head teachers mentioned that children are often absent on market days, especially students in third grade through JHS3. However, parents were said to be reluctant to admit that their children went to the market, and instead cite illness. This suggests that financial pressures are major drivers of repeated truancy.

In 17 schools, head teachers also reported that pupils are more often absent when they are from lower-middle and lowest quintile households. Financial constraints again surfaced as all 21 private schools' head teachers claimed that poorer households were continually behind on payments, negatively affecting schools' operation, management and ability to offer quality services. Late payments can also factor into teacher absenteeism.

#### *What is the link between school fees and dropout rates?*

On average, the dropout rate is 7.3% for private schools and 5.1% for government schools. According to 22 head teachers (private and government schools), lack of financial resources is the top reason students drop out of school. Relocation is also another main reason of dropout, cited by 21 head teachers.

## VII. Comparison of Household and School Analysis

*From the household and school surveys, there is a substantial amount of information on enrollment patterns and education costs within Kasoa. These data also allow for comparison between the supply and demand sides of the market for education.*

### *Parent-Reported and School-Reported Education Costs and Patterns*

#### *How do education costs compare between parent reports and school reports?*

Households and schools confirm there are significant extra fees contributing to the cost of education. It is interesting to look at the difference between what schools report charging and what households report paying. For private schools, the difference between average fees reported by households and the school ranges from -691GH¢ to +1433GH¢ (-206USD to +428USD). This highlights the lack of consistency and transparency in education costs.

Using a broad definition that classifies private schools whose total fees are under 80GH¢ per month as “low-cost private schools” in this sample, there is some evidence that traditional (and more expensive) private schools are more forthcoming about their fees. At the low-cost institutions, families claimed their fees exceeded the school-reported values by 442GH¢ per year on average, whereas at the higher-cost private schools the difference was only 185GH¢.

Comparing the parent-reported fees to the government schools’ reporting is even more striking. All households attending government schools reported total school fees exceeding the amount stated by the head teachers of those institutions. Three government schools suggested they have no fees at all – tuition or otherwise. Parents felt differently and reported total fees ranging from 462GH¢ to 736GH¢ for those schools. On average, because the stated schools’ fees from the head teachers were so small, government schools only reported 2% of their true costs. However, these numbers are based on a small sample size and it should be noted that parents reported costs such as transportation and school meals that the government school would not report and likely are paid to vendors outside of the school.

#### *What extra fees are reported by schools and parents?*

The types of fees that schools report also vary. The majority of government schools reported no extra fees across any category. Three of the schools report charging termly for student reports and the highest incidence of reported extra fees (5 schools) was for termly printing fees. This is in sharp contrast with parent reports. Over three-quarters of parents report paying for uniform and sports clothes, exam fees, textbooks and school supplies, and contribution to parent or teacher association. Over half cite mandatory extra classes as well as food.

At private institutions, schools appear to be more forthcoming with their non-tuition costs. The majority of schools (19 of 21) reports charging an admission or registration fee. However, admission fees may be viewed by households as part of the basic tuition fees, as only 44% of households note such charges. Virtually all private schools also charge school meal fees, and exam-printing fees are common (15 of 21). About half of the schools have transportation fees, mandatory extra classes, and uniform fees. Graduation and year-end parties (9 of 21) as well as textbooks (8 of 21) are common, whereas only one school reported charging fees for school trips. Parents do report absorbing these extra fees – 90% report paying



for food and meals, and 70% report paying for uniforms, exam fees and textbooks. Mandatory extra classes (which were not mentioned by schools) are also reported by 61% of parents.

#### *Do the reasons students miss or leave school align?*

As expected, household finances strongly impact school attendance. Parents reluctantly acknowledged that a reason for children's absence from school, either intermittently or for longer spans of time, was often due to financial pressure. While the most frequently cited reason for student absenteeism by households was bad weather (48%), the second most frequent was financial. About 40% claimed that students missed school because of their inability to pay the daily fees. Parents also denied that children partake in any wage-earning activities, such as trading or market activities. The head teachers, however, cited market days as when children were most absent. Teachers confirm that children often miss school because of inability to pay school fees, especially the daily feeding fees.

### **VIII. Conclusions and Policy and Research Implications**

This study's findings have important potential implications for Ghana's education policy and also point the way to further needed research.

#### **Main Findings**

1. School attendance in Kasoa is very high and mainly in private schools. 88% of all children go to school and 83% of all households have at least one child in private school. Parents in Kasoa value equally the education of girls and of boys.
2. Private schools cost households about 54% more per student than government ones. The average total household cost per student per year in a government school is 793GH¢ and 1218GH¢ in a private one.
3. Fees at both government and private schools increase with the level of the school, being lowest at primary school and highest at senior high school.
4. The main difference is because of different tuition costs, though other household costs are also greater at private schools. The difference is 259GH¢ for tuition costs (average formal tuition costs at government schools were 56GH¢/year, compared to 315GH¢ at private schools) and 166GH¢ for household costs other than tuition (737GH¢ in government schools and 903GH¢ in private ones).
5. Beyond tuition, the most common extra charges were for food, uniforms/sports clothes, textbooks, exam fees, mandatory extra classes and parent teacher associations. Food charges were more common and higher at private schools; extra class charges higher at government schools.
6. Government school heads cited the insufficiency of their capitation grants as one reason for these charges.
7. Neither government nor private schools disclosed all their household charges in the school survey when its results are compared to information from the household survey but private schools did disclose a higher proportion of these charges.
8. While this study has not explicitly calculated the total costs (household and public spending combined) per student per year, it must be the case that the private schools cost less per



student overall, once the large government spending through the Capitation Grant Scheme is also factored in.

9. As the household costs of government schools are cheaper than those of private ones, the proportion of students attending government schools is greatest in the lowest income quintile. Yet this is still very low by international standards, at only 17%.
10. The effect of higher per student costs at private schools becomes clearer for second and subsequent children in households. The more children in a poor household the greater the likelihood of some attending a government school; 33% of second children in the lowest quintile attend government school compared to only 6% in the highest.
11. There is only very limited evidence on why some children are not enrolled in school. For those 65 children for whom a reason is given, 83 percent cite “lack of money for tuition fees” as the reason. The main reason for dropout (and absenteeism) cited by head teachers at both government and private schools is lack of financial resources. For absenteeism this is most commonly associated with paying for food.
12. Even for those in school, costs largely determine which school students attend. 80% of households reported that their children would complete secondary school were it not for those schools’ fees. 44% noted that the best school was out of reach for them financially.
13. Over 90% of households rank education within their top three expenditure priorities.
14. The proportion of their income that all households spend on education is very high, ranging from 35% in the highest quintile to 42% in the lowest. These proportions are much higher than are generally reported in Africa (4-6% according to Foko et al) and in Ghana as a whole (15% for urban households and 11% rural ones, according to GLSS6). However, the percentage of children attending private school in Kasoa (83%) is much higher than is typical in Africa (20%) or in Ghana as a whole (28%).
15. The survey does not reveal enough information to conclusively determine if private schools are within reach of the very poorest, though this was found in another study in Mfantseman municipality (Akaguri 2013).
16. There are very few subsidy or scholarship measures for the very poorest. Government schools inconsistently offered discounts to poor families. The most common form of subsidy at private schools is a scholarship or fee rebate for the fourth child in a family. However few families in the Kasoa area have that many children. At both government and private schools, subsidies largely depended on the head teacher knowing the family and its needs and were generally not according to objective criteria. Parents generally seem unaware of any possible subsidies - these data come from the school survey; very few respondents in the household survey mentioned any type of subsidy.
17. The household cost gap between government and private schools is less at the JHS level than at the primary level; this is particularly true for the one chain of schools in the survey (Omega schools) where the chain may be able to realize economies of scale and reduce unit costs and hence charges.
18. Private schools generally have better physical facilities than government ones.
19. Private school teachers have generally fewer formal qualifications than government ones and are paid on average about one third of government teachers’ salaries.

20. Other than facilities, parents have very little information on which to base school choice, as little is available on either school outcomes or teacher quality; in general, however, parents assume that private schools are better than government ones.

### **Policy Implications**

If the findings in Kasoa are reasonably typical of peri-urban areas of Ghana as a whole, they have important implications for educational policymakers:

- The government may wish to eliminate as much as possible the household costs that are in effect compulsory at government schools, such as mandatory extra classes, examination fees, books and supplies, uniforms and sports clothes and parent-teacher association dues.
- The government may wish to consider subsidizing the participation of the very poorest in both government and private schools. More research is needed (see below) but it seems that the poorest households likely have difficulty enrolling and maintaining in school all their children. Mechanisms might include conditional cash transfers, vouchers, capitation grants and other means.
- Attention is needed to the household cost of food in schools, especially for the very poorest, and the government may wish to decide if or how to subsidize it where appropriate.
- The government may wish to consider public-private partnerships and even subsidizing the private sector to provide schooling in areas where it is unable to deliver it itself; this could be done using a capitation system as already happens for government schools.
- Since it appears that the total cost of a student place in a private school is lower than that in a government school, the government may also wish to consider adapting its own cost structure to the more efficient levels of the private sector or entering into more partnerships with the private sector to expand the education system.
- The government could be more transparent about the household costs of attending government schools and could consider regulating private schools so that they display all their household costs to prospective parents.
- Though not the subject of this study, it is clear that government regulation of the private sector is limited and largely in terms of giving permissions to operate. The regulatory framework may benefit from being adapted to also ensure the health and safety of students; the tracking of student attendance and learning outcomes and the provision of information to parents; the possible requirement that the private schools ensure that they have mechanisms to enroll the very poorest; and also to permit more collaboration between government and private schools.

### **Research Implications**

The following topics seem important for further research, in both Kasoa and in Ghana more generally:

- How representative the Kasoa results are for Ghana as a whole, in order that policy implications can be drawn more robustly.
- How schools present their fees and how additional costs are communicated to parents in both government and private settings.



- The impact of fee structure and payment systems on enrollment, payment rates, and retention. This includes variation in the interval of fee payment (daily, weekly, monthly, termly) and method of fee payment (mobile, voucher, cash).
- The relationship between food charges and attendance, especially at private schools.
- The quality of education provided by the government and private schools. Private schools may be meeting demand in areas such as Kasoa more effectively than government schools, but there is little conclusive evidence about the educational value of private schools (especially single school institutions as opposed to chains). There is also insufficient data on learning outcomes in government schools in the primary grades. Understanding the value of government versus private schools to households is not possible without more robust learning data.

Beyond these research needs to inform policy and practice in Ghana, the study also raises an interesting broader question about the definition of low cost private schools. Tooley (2013) suggests that schools charging under 10% of family income at the poverty threshold be classified as low-cost private schools (LCPS). This survey found that households on average have four members, including two school-age children. Assuming that the 20<sup>th</sup> percentile monthly income of 250GH¢ (75USD) is similar to the poverty line for Kasoa<sup>22</sup> a school would need to educate two children for under 300GH¢ per year (150GH¢ per student) to meet Tooley's definition of low-cost. According to data in this survey, none of the private schools meet that classification based on school-reported costs. When considering the household-reported costs, even government schools miss the mark.

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<sup>22</sup> The Ghana Living Standards Survey for 2005-2013 (GLSS 6) established a new poverty rate of 1314GH¢ (\$1.83) per adult per year and extreme poverty rate of 792.05GH¢ (\$1.10). The exchange rate at that time (January 2013) was 1 GH¢ = .53USD. This means that an average household would make 2628GH¢ at the poverty line and a low-cost private school would need to educate two children for under 262.8GH¢ per year or using a 9-month school year, about 15GH¢ per student per month (just under 11GH¢ per month on a 12-month basis).

## IX. Annexes

- A. Survey Instrument – *(Separate PDF)*
- B. Teacher Interview Guide – *(Separate PDF)*
- C. Household Localities Surveyed

**Table 9: Randomly sampled localities for the household survey**

No	Communities	No	Communities	No	Communities	No	Communities
1	Adade Farms	14	Joe Mens Zone B	27	Phobi Town	40	Kumbe
2	Peace Town	15	I.C.G.C.	28	Ofankor Hill	41	Down Town
3	Poultry Farm	16	European Town	29	Alawuba Kope	42	Teacher Block Factory
4	Step To Christ	17	S.D.A.	30	Santana City	43	Down Town Akweley
5	CP Last Top	18	Agyenkwa	31	Cedar Real Estate	44	Colomba Ashtown
6	Adinkanfo	19	Eye Lip	32	Togbee Emma Kope	45	Opeikuma
7	Pentecost	20	Abe Ase	33	Husunku Kope	46	Akweley General
8	Appiah Junction	21	Shalom City	34	Jamaica	47	Credit Union
9	Bishop	22	Estate Down	35	Obimpe Kope	48	India City
10	Macclla	23	Krispo City Top	36	Zakaria Kope	49	Ano Town
11	High Tension Villa	24	Adom City	37	Free Town	50	Akwele Top Town
12	Blue Kiosk	25	Opeikuma Junction	38	New Ofankor		
13	Ada Kope	26	Royal Street	39	Asempa Down		

**Table 10: Randomly sampled localities for replacement of the household survey**

No.	Communities
1	Agbeve New Town
2	Top Hill
3	Wingar



## D. Extra Fees Listed by School Type

**Table 11: Average Extra Fees by Fee Type**

<i>Fee Category</i>		<i>#Reponses (466 max possible)</i>	<i>% of Students in sample paying fee</i>	<i>Avg. Cost of Fee (GH¢) per year*</i>	
<i>Tuition (T), School</i>		<i>Tuition Fees</i>	352*	75.5%	353 (105USD)
		<i>Extra Fees (Total)</i>	464	99.6%	1074 (321USD)
<i>Supplies (SS)</i>		<b>Extra Fees Identified</b>			
<b>1</b>	A	Food/meals/snacks	414	88.8%	363
<b>2</b>	SS	Uniform and sports clothes	358	76.8%	50
<b>3</b>	SS	Text-books and school supplies	346	74.2%	127
<b>4</b>	T	Examination Fees	342	73.4%	17
<b>5</b>	SS	Mandatory extra classes	284	60.9%	196
<b>6</b>	T	Contribution to parent/teacher association or	247	53.0%	32
<b>7</b>	T	Admission	206	44.2%	75
<b>8</b>	A	Monetary and non-monetary gifts to teacher	191	41.0%	25
<b>9</b>	SS	Toiletries (Vaseline, bath soap, toilet paper,	131	28.1%	79
<b>10</b>	SS	Stationery (Crayons, message books, glue, scissors,	119	25.5%	27
<b>11</b>	SS	School reports	103	22.1%	17
<b>12</b>	A	School trips/excursions	94	20.2%	41
<b>13</b>	SS	ICT Fees	82	17.6%	27
<b>14</b>	A	Transportation to and from the school	79	17.0%	348
<b>15</b>	A	Graduation/end of year party fees	67	14.4%	14
<b>16</b>	SS	Development Levy	45	9.7%	16
<b>17</b>	SS	Sports Fees	42	9.0%	15
<b>18</b>	T	Medical Fees	26	5.6%	21
<b>19</b>	SS	Facility User Fees (e.g. desks, or other classroom	19	4.1%	57
<b>20</b>	A	Extra lessons or Tutoring outside of school	19	4.1%	173
<b>21</b>	SS	Culture Fees	12	2.6%	11
<b>22</b>	SS	Mattress/bedding/blanket	10	2.1%	57
<b>23</b>	T	End of month exam fees	10	2.1%	17
<b>24</b>	SS	Teacher motivation fees	10	2.1%	46
<b>25</b>	A	Games or toys requested by the school	7	1.5%	46
<b>26</b>		Other expenses 1	461	98.9%	44
<b>27</b>		Other expenses 2	165	35.4%	314
<b>28</b>		Other expenses 3	269	57.7%	280

\*Some students (6) attending gov't school reported paying tuition fees. If these values were removed, the average increases by 3GH¢. The 'other expenses' respondents reported incurring were not detailed.



**Table 12: Average Extra Fees by Fee Type, Private and Government Breakdown**

Fee Category	Private and Government			Private			Government		
	# Reponses (466 possible)	% of Students in sample paying	Avg. Cost of Fee (GHC)	# Reponses (400 possible)	% of Students in sample paying	Avg. Cost of Fee (GHC)	# Reponses (66 possible)	% of Students in sample paying	Avg. Cost of Fee (GHC)
<b>Tuition Fees</b>	352*	75.5%	<b>353</b>	346	87%	<b>356</b>	6*	9%	<b>14</b>
<b>Extra Fees (Total)</b>	464	99.6%	<b>1074</b>	398	100%	<b>1123</b>	66	100%	<b>814</b>
<b>Extra Fees Identified</b>									
1 Contribution to parent/teacher association or equivalent	247	53.0%	<b>32</b>	197	49%	<b>35</b>	50	76%	<b>17</b>
2 Uniform and sports clothes	358	76.8%	<b>50</b>	300	75%	<b>52</b>	58	88%	<b>39</b>
3 Text-books and school supplies	346	74.2%	<b>127</b>	297	74%	<b>135</b>	49	74%	<b>78</b>
4 Games or toys requested by the school	7	1.5%	<b>46</b>	7	2%	<b>46</b>	0	0%	<b>0</b>
5 Transportation to and from the school	79	17.0%	<b>348</b>	73	18%	<b>351</b>	6	9%	<b>311</b>
6 Food/meals/snacks	414	88.8%	<b>363</b>	373	93%	<b>356</b>	41	62%	<b>419</b>
7 Mattress/bedding/blanket	10	2.1%	<b>57</b>	8	2%	<b>18</b>	2	3%	<b>210</b>
8 Mandatory extra classes	284	60.9%	<b>196</b>	244	61%	<b>193</b>	40	61%	<b>213</b>
9 School trips/excursions	94	20.2%	<b>41</b>	89	22%	<b>42</b>	5	8%	<b>24</b>
10 School reports	103	22.1%	<b>17</b>	80	20%	<b>17</b>	23	35%	<b>16</b>
11 Sports Fees	42	9.0%	<b>15</b>	35	9%	<b>16</b>	7	11%	<b>8</b>
12 Culture Fees	12	2.6%	<b>11</b>	7	2%	<b>17</b>	5	8%	<b>3</b>
13 Examination Fees	342	73.4%	<b>17</b>	288	72%	<b>18</b>	54	82%	<b>14</b>
14 End of month exam fees	10	2.1%	<b>17</b>	8	2%	<b>15</b>	2	3%	<b>26</b>
15 ICT Fees	82	17.6%	<b>27</b>	75	19%	<b>28</b>	7	11%	<b>12</b>
16 Admission	206	44.2%	<b>75</b>	182	46%	<b>80</b>	24	36%	<b>38</b>
17 Medical Fees	26	5.6%	<b>21</b>	24	6%	<b>22</b>	2	3%	<b>9</b>
18 Facility User Fees (e.g. desks, or other classroom equipment)	19	4.1%	<b>57</b>	16	4%	<b>65</b>	3	5%	<b>15</b>
19 Toiletries (Vaseline, bath soap, toilet paper, tissues)	131	28.1%	<b>79</b>	125	31%	<b>81</b>	6	9%	<b>29</b>
20 Stationery (Crayons, message books, glue, scissors, flip files)	119	25.5%	<b>27</b>	107	27%	<b>27</b>	12	18%	<b>26</b>
21 Development Levy	45	9.7%	<b>16</b>	31	8%	<b>16</b>	14	21%	<b>17</b>
22 Graduation/end of year party fees	67	14.4%	<b>14</b>	63	16%	<b>14</b>	4	6%	<b>12</b>
23 Extra lessons or Tutoring outside of school	19	4.1%	<b>173</b>	16	4%	<b>174</b>	3	5%	<b>170</b>
24 Teacher motivation fees	10	2.1%	<b>46</b>	8	2%	<b>43</b>	2	3%	<b>58</b>
25 Monetary and non-monetary gifts to teacher	191	41.0%	<b>25</b>	169	42%	<b>26</b>	22	33%	<b>20</b>
26 Other expenses 1†	165	35.4%	<b>314</b>	144	36%	<b>332</b>	21	32%	<b>194</b>
27 Other expenses 2	269	57.7%	<b>280</b>	230	58%	<b>280</b>	39	59%	<b>208</b>
28 Other expenses 3	461	98.9%	<b>44</b>	397	99%	<b>45</b>	64	97%	<b>37</b>

\*6 students reported paying tuition fees; if those are removed from the "Government and Private" average, the tuition fee goes up by 3GHC.  
† Other expenses are a general category and were not defined by item.



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