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## Tracking public expenditure and assessing service quality in **Early Childhood Development** in South Africa



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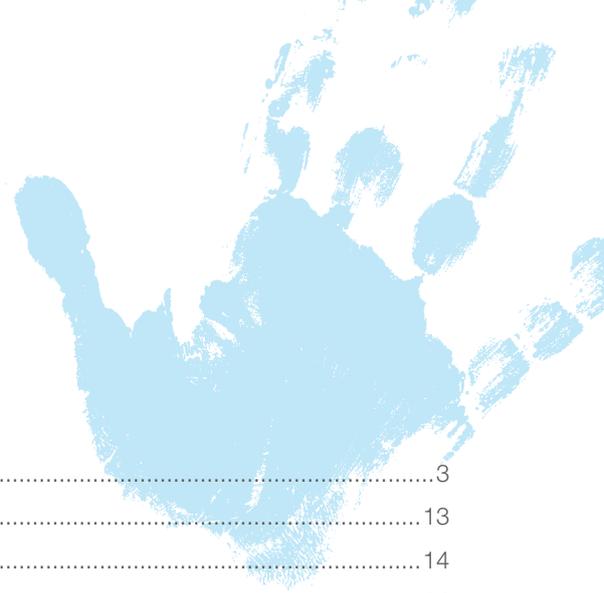
# Tracking public expenditure and assessing service quality in **Early Childhood Development** in South Africa



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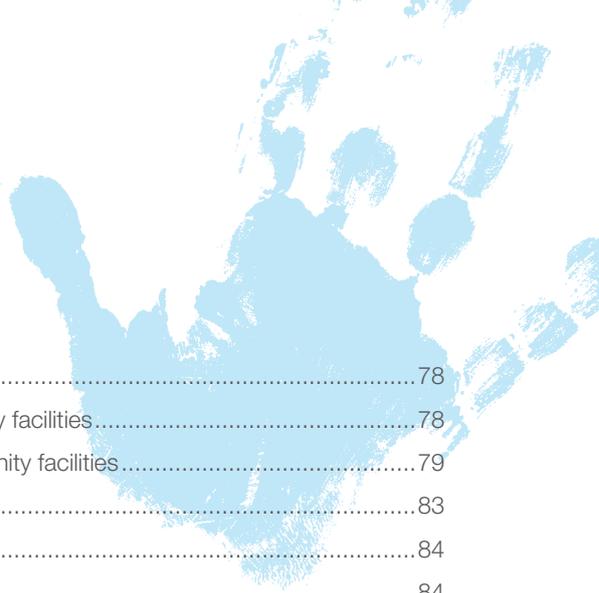


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# Executive Summary



## 1. Introduction

- Early Childhood Development (ECD) in South Africa has grown rapidly due to the rapid expansion of subsidies to this sector. The sector comprises pre-Grade R for children 0 to 4 years old and Grade R for children 5 to 6 years old.
- ECD subsidies take two major forms: subsidies by the Department of Education (DoE) of formal Grade R, mainly in public schools, and subsidies for community-based ECD facilities by the Department of Social Development (DSD). (The terms DoE and DSD were those in use when the study was undertaken; the names are used to include their provincial counterparts.)
- This document reports on a survey held in three provinces in more than 300 public schools offering Grade R, more than 300 community-based ECD facilities registered with the DSD, and 90 non-registered community-based ECD facilities. Separate questionnaires were designed for each. Province 1 is a rich province, Province 2 a moderately poor one and Province 3 a large and very poor province, thus the survey reflects the broad spectrum of experiences in ECD.
- The survey combined modules from a Public Expenditure Tracking Survey (PETS) and Quality of Service Delivery Survey (QSDS), to track whether public expenditure reaches the intended institutions and was applied in a manner that supported ECD.
- A conceptual framework was developed that allowed for both a conventional and a non-conventional potential diversion of funds in the South African institutional situation, where community-based facilities are private institutions being subsidized to offer ECD services, viz. that funds could be diverted to the principal or “owner” of community-based ECD organizations. Thus strategic behaviour by such an ECD facility, which would amount to “producer capture” of the benefits of the subsidies, would reduce the benefits going to children. Principals/owners of such facilities would, in such a situation, have an incentive to try to maximize funds flowing into the organization through subsidization, fees paid by parents and donations. They would have a similar incentive to minimize funds being spent on food, learning and teaching support material (LTSM), and salaries of other staff, in order to maximize their own salaries income or “owner’s profit”.

## 2. Description of situation in Grade R in public schools

- Grade R in public schools appears relatively well organized and many matters are well institutionalized, such as school governing bodies and financial reporting. However, as most schools did not have separate financial reporting (annual statements) that separated both the income for and the expenditure on Grade R from that on the rest of the school, the PETS framework could not be applied here.
- A modification of the conceptual framework used for community facilities to the situation in Grade R in public schools sees possible incentives for schools to use the additional resources derived from subsidization of Grade R children to cross-subsidize children in other grades. However, ECD practitioners are hardly used at all to teach in higher grades, and it appears that the low subsidies to Grade R compared to older children means that cross-subsidization is more often from other grades to Grade R.
- Practitioners/teachers are relatively experienced and have a fair level of ECD qualifications.

- Pupil-teacher ratios vary extensively. A large number of schools (98 in the sample) have teacher-people ratios in excess of 40 in Grade R. Class sizes of this magnitude are problematic and do not meet the needs of early childhood development.
- Salaries are more than twice as high for practitioners in Grade R in public schools paid through Persal (the public sector electronic salary system) than for practitioners directly paid by schools (school governing bodies). Within each of these categories, there are only minor differences in salary levels across the provinces. Thus the overall much lower salary level in Province 1 (where Grade R is least subsidized by the DoE as it has fewer poor schools) reflects that the province has far fewer of the more expensive teachers, i.e. those paid through Persal, thereby reducing average teacher cost. The fact that SGB teachers are only paid about 42% as much as their public sector counterparts paid through Persal raises the question whether public salary levels are inflated compared to market demand and supply and what teachers with similar characteristics need to be paid in order to attract them to ECD. Clearly, many people are willing to work in ECD facilities at far lower salaries, and such teachers do not appear less qualified than their Persal paid counterparts. Moreover, even those not paid through Persal earn almost twice what community-based ECD practitioners earn.

### 3. Description of situation in community-based ECD facilities

- Surprisingly, about 14% of registered community-based ECD facilities offer schooling for Grade R only; about 30% offer only pre-Grade R, with the rest offering both. Grade R is largely funded by DoE and pre-Grade R by DSD. In Province 1, in particular, almost all community-based facilities also offer Grade R.
- Staff numbers are large: weighted to provincial totals (albeit based on somewhat imperfect sampling frames), the three provinces employed some 8 000 practitioners and 7 500 support staff.
- The average enrolment in registered community-based ECD facilities is about 65, with no difference across provinces in facility size. Absenteeism is almost 20% and is at its highest in Province 1 and the richest quintiles. This would seem to indicate that such seemingly high absentee rates are not overwhelmingly the result of over-reporting of enrolment by facilities, as DSD subsidies are not as widespread in the richer province and quintiles. Nevertheless, exceedingly high absentee rates are relatively common: 44 facilities in the sample had absenteeism rates in excess of 40% and 18 even had rates of above 60%.
- There is considerable concern regarding strategic behaviour by owners/principals of community-based ECD facilities that receive DSD funding. Funding levels are based on the number of children registered on the DSD registration certificate of the facility in question. Examples from two large facilities with very high absenteeism rates relative to registration numbers illustrate that such strategic behaviour may carry high rewards: the implied excess monthly subsidy compared to just normal absenteeism rates is of the order of R27 600 per month and R9 500 per month respectively in these two facilities.
- Measures of management in registered community-based facilities did not present surprises. The majority of such facilities seem to be run as NGO-type organizations in which there is no dominant owner. The principal appears to play an important role in decision making. During investigation of administrative records, it was found that almost half of such registered community-based ECD organizations kept no petty cash book, which





immediately casts doubt on their financial management. (This issue will be addressed further in this report.)

- Responses of principals regarding the payment of fees indicate that almost all community-based ECD facilities impose fees. Half the facilities indicated that almost all children pay fees, and another one-third that more than half of children pay. Two-thirds indicated that no children were exempted from paying fees because they were too poor. Only in about one in five of these facilities are there lower fees for children who qualify for the DSD subsidies to facilities because they meet the means test criteria. In instances where there is no such exemption given, subsidies go equally to those children not subsidized; the only effect is to improve the financial situation of the facility. This may lead to improved benefits for all children attending the facility, or lead to lower fees, again to the benefit of all, or the subsidy could simply improve the financial situation of the owners/teachers.
- Monthly fees for 2009 were an average of R143 across the three provinces covered, ranging from R58 per month in the poorest quintile of facilities to R531 in the richest quintile. (Facilities were allocated to quintiles based on the name of the school closest to them; the fact that fees show the pattern found here is indication that the allocation was not highly inaccurate. Unfortunately, around one third of facilities could not be allocated in such a manner.)
- Practitioner salaries are generally quite low, at an average of R2 170 per month for non-principals and R3 063 per month for principals. Those few Grade R practitioners in public schools paid through Persal were paid about twice as much as practitioners paid by the facility, and for principals it was three times as much. A regression equation considering all qualifications captured shows a premium of almost R2 000 for those being paid through Persal, once all qualifications have been considered. This premium was about as large as the effect of fifteen years of additional experience. Education levels are fair, yet those few principals with low qualifications seem to be earning a large premium compared to their equally qualified counterparts.

#### 4. Finances of registered community-based ECD facilities

- Community-based ECD centres provided information on a variety of income sources and expenditures. However, the quality of this data was poor, despite special effort by the survey organization to collect further financial information from facilities where the initial fieldwork did not yield good information. Because respondents were mainly principals, or even owners of facilities, some responses may have been intentionally misleading.
- Out of the 318 registered community-based ECD facilities visited, only 221 kept annual financial statements. Only 141 facilities out of 182 who admitted receiving funds from DSD could provide information on how much they received in 2008; although almost all facilities charge fees, only 194 could provide information on income from fees. Only 105 facilities that kept financial records recorded any expenditure on groceries and only 114 on salaries.
- The large income items were DSD subsidies, school fees, other income sources and fundraising. Fees constituted about 43% of all income for those facilities for which financial information was available, with a low of 33% in Province 3 and a high of 50% in Province 1. In contrast, DSD subsidies (1% of all income) were particularly high as a proportion of total income in Province 3 (64%) and low in Province 1 (29%). Higher quintile facilities experienced a lower share of income from DSD subsidies and a greater share from fees.

This reflects the greater ability of more affluent facilities to raise fees, but also the fact that DSD subsidies are targeted at lower-income ECD facilities. Indeed, the total amount of subsidy per child was almost three times as high in quintile 1 as in quintile 5.

- The sector relies on a mixture of government grants and fees. As funding is fungible, there is no way to isolate and track the spending triggered by the government grants, i.e. determine whether subsidies or fees funded teacher salaries or food expenditure. But clearly, grants considerably reduced the outlays poor parents had to make and thereby made ECD much more affordable. Without them, many facilities in the bottom three quintiles may not have been able to continue offering these services.
- The dominant expenditure component was salaries, making up just over half (51%) of all expenditure, although this share was quite a lot lower in Province 3 at 31%. The expenditure per child on salaries was quite high in quintile 5 facilities, i.e. amongst the more affluent facilities, where it was above R4 000 per child. Food expenditure comprised about 15% of expenditure. Food expenditure per child varied less across the provinces and quintiles and was higher in the bottom three quintiles, probably because more affluent parents took greater responsibility for food provision. The “other” component of expenditure, more than a third of the total, had a high share in all quintiles and provinces. This item was not specified and potentially allows for expenditure diversion in the absence of detailed and precise bookkeeping.
- It is possible that principals could have arranged the books in such a manner that funds that they used for themselves were recorded under “food” or “other”. Yet even then, the scope for abuse was limited in most facilities. The average of less than R400 spent per child per year on food leaves little scope for diversion. “Other” expenditure is larger, but still quite small relative to salaries and its value is very small in most poor schools.
- The total income per child enrolled in all the registered ECD facilities surveyed was R2 243. In comparison, total expenditure per child was R2 657. This surprising “loss” of R414 is not what may have been expected within the context of the conceptual framework. Small facilities of this nature cannot make a continuous loss. The “loss” was particularly large in Province 1 and in quintile 5 facilities; even if this is inaccurate, it should not be a cause for concern from a PETS perspective, as these facilities depend least on public subsidies.
- However, most individual facilities had a fair match between income and expenditure. Many of the cases that deviated substantially from zero profit or loss did not receive any subsidies. Generally, scope for such deviation is small in facilities with low incomes and expenditures.
- Data on subsidies obtained from DSD were available for only 134 facilities. After matching with DSD data on subsidy flows and trimming of outliers, only 72 facilities remained. These included only recipients of DSD subsidies. For these facilities, the relationship between the information provided by the facilities and that provided by the DSD in the provinces concerned was quite good at the aggregate level. But the reduction in the sample due to incomplete information could also have introduced unknown biases.
- Larger discrepancies for individual facilities tended to cancel out; in aggregate, facilities reported slightly higher inflows of grants than what DSD data indicated. There is no evidence of systematic diversion of DSD grants before they reached the facilities they were intended for. It is possible that there were instances of such diversion, e.g. where data was missing and facilities were thus dropped from the sample, or where data was misleading.





- Missing information on grants received or transferred raises issues about the source of such errors. It may have derived from a combination of diversion of funds away from facilities, poor financial bookkeeping by facilities and deliberately misleading financial statements. This clearly needs prompt attention, even if there had been no large scale diversion of funds. Government should intervene by setting proper structures in place to ensure that funds are spent on the purposes for which they were intended.
- The problem in estimating fiscal incidence is to decide on the appropriate base population. Most methods give similar answers. The preferred method gives a concentration ratio of -0.219, a high negative value, reflecting extremely good targeting. Like the Gini coefficient, a lower concentration coefficient indicates greater equity. Such a negative value indicates that the poor are getting more than their share of subsidies. To put that in perspective, a South African study for 2006 found a value of -0.152 for all social spending, -0.128 for school education, -0.318 for social grants, -0.137 for health and +.070 for housing. Clearly, ECD subsidies of community-based facilities target the poorer segments of the population, both by providing them with grants and by attracting them into ECD.

## 5. The quality of facilities and services rendered

- The intention of providing ECD is to place children on a better educational trajectory. A poor quality programme is therefore an indirect “leakage” of expenditure.
- As the visit was pre-announced, the survey probably observed a best case scenario. But it is possible to tell that a fair amount of lesson planning and development activities were taking place. Almost all public schools and registered community facilities reported having a daily programme (99% and 95% respectively), but fewer (81%) of unregistered community facilities did. In community-based facilities only just over half of the programmes (58% for registered and 52% for unregistered facilities) differentiated between programmes for younger and for older children. Facilities without a more tailored daily schedule for Grade R probably do not meet all Grade R requirements. In fact, 29% of registered community facilities did not have a daily programme that distinguished different age groups and 41% did not present a clearly differentiated Grade R programme to children older than 4 years. Even fewer of the non-registered facilities made specific provision for Grade R.
- Fieldworkers actually observed lesson plans in 89% of public, 71% of community and 55% of unregistered facilities. However, as facilities were forewarned about the survey, this may have induced better than usual adherence to requirements.
- Most facilities with a daily programme have scheduled play, eating and resting times. Language development activities (e.g. story time, language games, reading of picture story books, rhymes and singing) and creative activities (drawing, painting, perception games, puzzles, fantasy play, etc.) were also common at public schools and registered community facilities. Purposeful large motor development (e.g. activities involving balls, wheel toys, climbing, etc.) and fine motor development activities (peg boards, cutting) were less common.
- Fieldworkers reviewed some Grade R learner portfolios at all facility types. More than half of unregistered facilities, 76% of registered community facilities and 88% of public schools had examples of assessed portfolios. Drawing and colouring activities were most common, while cutting, gluing and painting activities were found only at 80%–90%

of public schools, 68%–78% of registered and 43%–47% of unregistered community facilities. Availability of scissors, paint and glue determined whether such activities were included in learning programmes. Children in public schools were more likely to have access to these resources. Public school programmes were also more likely to include pre-math activities (e.g. number concepts, shapes, patterns) or pre-writing activities. This may reflect availability of worksheets and the degree to which the teacher/practitioner was aware that these should be included in the programme.

- A programme quality index was developed based on programme assessments, observed activities and learner portfolios. Since the curriculum requires that the same programme must be delivered to Grade R children in schools and in community facilities, the same index items were used to assess all three subsectors. Based on not very strict criteria, only 45% of public school programmes were rated as “good quality”, as against 29% for registered and 11% for unregistered community facilities (it is significant that these unregistered facilities were delivering a good quality service without government support). More programmes in public schools in Province 3 (29%) were rated as poor compared to Province 2 (12%) and Province 1 (1%). The same provincial patterns applied across all three subsectors. Programme quality was better in wealthier schools.
- About 27% of school-based classes, 20% of registered community-based and 7% of unregistered community-based facilities had more than 40 children per classroom, a very high rate for young children. This compares to a norm that has been set at 30 per class for Grade R and 20 per class for pre-Grade R. When actual attendance rather than enrolment was considered, these excessive class sizes were slightly reduced but still problematic.
- Almost all public schools (91%) had electricity, while 21% of registered community facilities and 27% of unregistered facilities did not. Only about half of schools and registered facilities and slightly fewer unregistered facilities reported having piped water inside the building. Around 50%–60% of facilities had flush toilets. Pit latrines were found at 41% of public schools, 35% at registered and 28% at unregistered community facilities. Some unregistered facilities had no toilet facilities at all. Almost three-quarters of public schools complied with the standard of one toilet per 20 children, more than in either community facilities (63%) or unregistered facilities (57%). Many public schools did not have separate toilet facilities for younger children.
- An infrastructure index based on the combination of all infrastructure items found particularly large infrastructure deficiencies in Province 3 schools. Interprovincial differences were a stronger predictor of infrastructure quality than the subsector.
- Most public schools (71%) provided food through the National School Nutrition Programme (NSNP). The NSNP also reaches 29% of registered community-based facilities, particularly in Provinces 2 and 3. At these registered facilities, nutrition was mostly provided through the facility (41%) or through lunchboxes sent from home (28%). More than three quarters of unregistered facilities provided food out of their own funding; about a third indicated that parents sent baby formula or lunchboxes to school.
- Children in community-based facilities were particularly vulnerable to malnutrition if they came from poor households and if facilities did not provide good nutrition. DSD should consider clearer guidelines about using subsidies for food for children.
- Programmes depend to a large degree upon learning and teaching support material (LTSM). Surprisingly, even some public schools did not have tables and chairs for children; 39% of public schools lacked a blackboard and 32% a reading corner; outside





equipment (wheel toys, jungle gym, swings) was even less common at public schools than at registered community facilities. The same applied to books, magazines and puzzles. Crayons were available in most facilities, yet oddly, paper was unavailable in 35–50% of classes. Paint, scissors and glue were available in more than 70% of public schools and registered community facilities and about half of unregistered facilities. Training scissors to teach children how to cut were available in only a third of all classes.

- An index was developed that combined information on the availability of various LTSM. When a facility's LTSM was rated as "good", this did not imply that all desired LTSM was available, only that LTSM provision was better than most other facilities. Similar items were used across public, registered and unregistered community-based facilities. Surprisingly, more of the registered community programmes than public schools had good LTSM, fit for specifically pre-school children. This is because outside equipment like jungle gyms, swings and indoor equipment like a fantasy corner, puzzles, cars and dolls were more often found in community-based facilities that target play more directly as part of the teaching and learning programme. About 10% of unregistered facilities also had good quality LTSM. A higher proportion of public Grade R classes in Province 3 (69%) is rated as having poor LTSM, compared to Province 2 (33%) and Province 1 (4.1%). Generally, poorer facilities had lower scores on the LTSM index.
- There is a strong correlation between the quality of LTSM and programme quality. This does not suggest a causal link, but merely that these factors co-occur. It is likely that poverty and management quality are the underlying factors that influence both programme quality and the quality of resources available to children. A similar pattern holds for LTSM: better LTSM co-occurs with better ECD programmes.

## 5. Analysis and conclusions

- Broadly speaking, the survey presents a relatively encouraging picture of the sector. Overall quality of services appears to be moderate, as reflected in teacher-pupil ratios, training and experience of staff members, planning of classroom activities and programme quality. However, several ECD facilities have limited space and poor infrastructure, they receive inadequate community support, there are issues around adequacy of nutrition, and few facilities put enough effort into development of children.
- Unregistered facilities more often provide low quality services and often have inadequate infrastructure and unsafe classrooms. Reasons provided for not applying for registration were that they had just started recently, that they did not qualify (usually due to poor infrastructure) or even that they did not know about the grants and registration. The picture that emerges is of young, small and struggling organizations. If this was largely a refuge for money-hungry entrepreneurs one would expect high pupil-teacher ratios and high principal salaries, but the opposite is the case. Teacher-pupil ratios hover in the mid-teens, lower than for registered community facilities and public schools. The growth of such unregistered ECD facilities is inhibited by poor infrastructure and a lack of adequate demand for such services by poor people who cannot afford unsubsidized services.
- The flow of funds to registered community-based ECD facilities has expanded greatly in recent years. Furthermore, there are limited controls in place by the DSD to ensure appropriate behaviour by service providers, and weak bookkeeping is endemic in ECD organizations. In such circumstances, one would expect large scale opportunistic behaviour. Variables to capture opportunistic behaviour were constructed and their association with measures of programme quality tested. Such measures included high absentee rates

(which could imply manipulated enrolment rates), excessive schools fees, “excess” principal salary (40% higher than their opportunity cost), “excess” income (income exceeding expenditure), and “missing” information on grant receipt. Measures were also created for competent management and transparency, such as the presence of a petty cash book and completed child progress reports, and an index of self-help.

- There were some significant correlations and overlaps between these markers, but correlations were generally low and overlaps were not much greater than would have been expected in the absence of correlations. It was impossible to confidently identify any cases of opportunistic behaviour or dishonest practices. It is probably best to attribute the patterns observed to low signal to noise ratios in the markers and thus to remain somewhat agnostic about these categorizations. There are some weak indications of possible opportunistic behaviour, but more investigation and preferably site audits would be needed to confirm this. Given the informal nature of transactions in this sphere, even an audit may miss some forms of opportunism, such as siphoning off of community funds that are paid in cash without any paper trail (e.g. receipts to parents or community donors). The survey, though, provides little direct evidence of large scale and systematic financial abuse of the subsidy system.
- There are at least two possible reasons for the lack of correlation between poor financial management or possible dishonesty and service quality. It could be that providing a basic good quality service is not expensive and that the premium relating to delivering a quality service is thus relatively low. Alternatively, providing a very poor quality service could be observed by parents and they may have sufficient choices available to take their child to another facility. Further studies, perhaps including focus groups with parents, may yield more on this.
- Four possible explanations are offered for the relatively muted evidence of misbehaviour in this subsector, given the apparent opportunities for it: (i) Due to the relatively recent development of this sector, some loopholes in the system may not yet have been detected and exploited. (ii) Accountability to fee-paying parents puts pressure on service providers to provide a service perceived by parents to be of good quality and at relatively low cost. (iii) Funds flowing to these facilities are relatively meagre, considering the cost of providing the service. Additional funds raised by school fees or other means would give more scope, but also bring involvement of parents with an interest in keeping fees low while demanding a good service. (iv) Because recipients of DSD funds need such funds to keep their concerns going and they usually know what subsidies they qualify for, DSD is under greater pressure to disburse funds. This rule-based situation and the dependence of private organizations on the public funds is quite different from many other PETS where public expenditure is tracked from higher administrative levels to public schools.
- The small margins, private service providers, relative transparency in the value of the transfer, and accountability to parents therefore all play a role in keeping the system on track. South Africa’s rule-based direct funding of personnel in schools, including Grade R, mitigates against diversion of funds, whilst the rule-based subsidies to registered community-based facilities may have successfully kept diversion of funds in check.
- There are nevertheless possibilities of abuse and its extent is likely to grow over time. It is important to retain the strengths of the present system (e.g. accountability to parents) and put mechanisms in place to improve the present system as it grows. It is vital to tighten and improve regulatory controls before the loopholes in the system are widely exploited by opportunists within ECD facilities or even within the DSD itself.





- Also, there is clearly room for improvement in service delivery, given the demonstrated importance of ECD in providing a solid foundation for children's education. ECD principals at community-based facilities cite lack of resources and specifically insufficient classrooms, play grounds and toilet facilities, issues surrounding the security of children, lack of funding, shortages of qualified teachers and training, the lack of involvement of parents, and the poor and disadvantaged backgrounds of children as problems. Many of these items are most appropriately and effectively provided at the local level and ideally by the municipality.

## 6. Recommendations

- The final chapter provides recommendations based on the survey and other information about policy options and issues. In this chapter, background is given to some of the recommendations. They are also listed below. Most recommendations are directed at the DSD. Where the DoE is also involved, an asterisk (\*) after the recommendation number will indicate this.
- Recommendation 1\*: After the extremely rapid expansion of ECD in recent years, more emphasis is now needed on dealing with the quality of delivery and improving monitoring of services and finances.
- Recommendation 2\*: Government must continue to complement private community-based provision and offer public provision in schools.
- Recommendation 3: DSD should monitor bookkeeping and disqualify ECD organizations who consistently fail to keep proper financial records from receiving subsidies. However, this should only occur after having given these facilities all the necessary support to allow them to implement such financial bookkeeping.
- Recommendation 4\*: DoE and DSD should develop a financial management training module for ECD organizations and encourage participation in this to nurture such capacity within ECD organizations.
- Recommendation 5: DSD in all provinces should provide an earmarked part of their funding to ECD organizations for the cost of contracting someone to draw up financial statements, on condition that such statements meet minimum requirements.
- Recommendation 6\*: The requirement that public schools should keep separate accounts for Grade R and post-Grade R should be abolished. The focus should rather be on monitoring the quality of services, infrastructure, LTSM and nutrition for Grade R in order to ensure that the funds flowing to public schools to fund Grade R have the required effect.
- Recommendation 7: Formal community oversight mechanisms in community-based facilities (e.g. SGB meetings, annual reports, financial statements) should be encouraged and expanded.
- Recommendation 8: To ensure accountability, it is crucial that current parents should dominate in the composition of management boards of community-based facilities. It is therefore recommended that the DSD make this compulsory for registered community-based ECD facilities.
- Recommendation 9: To ensure accountability to parents, fees for registered community-based ECD facilities should be retained even for the poorest facilities. Any state attempts to increase support for such children should take the form of increases in the value of child support grants rather than fully comprehensive support to ECD facilities.

- Recommendation 10\*: Regular audits must be undertaken to ensure that enrolment numbers used to determine subsidies are not inflated.
- Recommendation 11: The practice of some provinces to use actual numbers of children present rather than enrolment to determine subsidies is impossible to implement properly with the limited staff at their disposal and should be discontinued.
- Recommendation 12: Thorough auditing within provincial DSD departments of subsidies flowing to community-based ECD facilities must be implemented to prevent large scale abuse.
- Recommendation 13: DSD should encourage community facilities to strengthen ties with and seek more support from potential donors, particularly those located close by.
- Recommendation 14: DSD should encourage both parental and community support of ECD facilities, inter alia through awareness campaigns in the wider community of the importance of ECD.
- Recommendation 15: DSD should appoint more specialist staff to deal specifically with ECD. This requires both staff knowledgeable about ECD (social workers or auxiliary social workers) as well as administrative and financial staff. Attention needs to be paid also to organizational capacity so that additional and present staff can be utilized better to obtain the required impact in terms of capacity.
- Recommendation 16\*: It is generally better to fund schools or facilities and allow them to hire staff than to appoint more personnel on Pearsal.
- Recommendation 17\*: Training of ECD practitioners should continue, but selection of trainees should take account of the length of their involvement in the sector and give preference to those more likely to remain in this sector.
- Recommendation 18\*: All efforts should be made to ensure minimum acceptable levels of LTSM in ECD facilities of all sorts. In community-based facilities in particular, this may require monitoring to ensure that some funds are applied to give children appropriate LTSM or even earmarking of parts of the subsidy for this purpose, while in public schools greater attention may need to be focused on the needs of young children within institutions dominated by older children.
- Recommendation 19\*: The toy library that is effectively used in some provinces should be expanded by DSD and can also be investigated for Grade R in public schools.
- Recommendation 20\*: Provision of toys should be highly encouraged to further child development. One option is for DSD to purchase such toys directly and transfer them to ECD facilities. However, capacity constraints in provincial DSD departments may make this unfeasible. Earmarking too suffers from the same limitation, so if earmarking part of subsidies for the purchase of appropriate educational toys from provider lists is considered, monitoring may be required to ensure that such toys are used in the facility (rather than trying to monitor the spending). Announcing to parents that such toys have been funded in a particular year would allow them to assist in monitoring and ensuring accountability.
- Recommendation 21\*: Public schools need to pay more attention to the specific needs of Grade R children. DoE should prescribe certain criteria to be met for children in this age group, and also encourage greater spending on LTSM and educational toys for Grade R.
- Recommendation 22: National government should make a greater effort at improving public infrastructure in poorer areas.





- Recommendation 23\*: Infrastructure provision should be prioritized for schools and facilities where children are cared for. Local municipalities should thus also be approached to give priority to such infrastructure.
- Recommendation 24: Nutrition can be supported either by expanding the School Nutrition Programme to ECD facilities, which seems impractical at present, or by earmarking part of the subsidies to facilities for the specific provision of specified foods. This initiative should then also be communicated to parents, so as to allow them to again play a monitoring role.
- Recommendation 25: Earmarking of subsidies should be limited to only a few spending categories (e.g. toys, food, LTSM, and drawing up annual financial statements on a once-a-year basis). Earmarking everything and then failing to monitor has little purpose. Thus, rather than earmarking, parents should be informed as to what they can expect of an ECD facility and what the minimum is that they should demand, given the levels of subsidies to such institutions. This will assist them in holding ECD facilities accountable and to some extent obviate the need for earmarking. Even where earmarking occurs, it is often better to monitor the physical presence of what the funds should buy rather than the actual expenditure.
- Recommendation 26\*: Further research is needed on ECD. Four immediate priorities would be: (i) focus groups to understand the role and attitude of parents and communities; (ii) case studies of specific facilities and audits of subsamples; (iii) case studies of child development and learning in community-based ECD facilities; and (iv) a survey of the quality of education in Grade R, given the limited attention this survey could devote to programme quality in terms of preparation for school.
- Recommendation 27: The system of targeting subsidies to children through a means test should be continued. Although most facilities do not then exempt such children from paying fees, the effect is nevertheless equitable, as the incidence analysis has shown. The benefits of these subsidies extend to those not meeting the means test in the same facilities, but generally few children in facilities for the poor are not themselves relatively poor, and monitoring a forced exemption policy would be extremely difficult and also reduce the accountability to parents that paying fees bring.





# Chapter 1: Introduction

## 1.1 Motivation for and nature of the study

The South African government has invested a great deal in Early Childhood Development (ECD) in the last few years and enrolment in ECD programmes has increased rapidly. Government support for ECD has taken mainly two forms: (i) expansion of Grade R mainly in public schools, funded by the Department of Education (DOE); and (ii) subsidies by the Department of Social Development (DSD) to private community-based ECD facilities serving mainly children too young for Grade R.

It has now become important to take stock of progress, to assess the efficiency and equity of public expenditures in the sector and to evaluate the quality of services offered to children. This study was undertaken to get a better understanding of quality of service delivery in ECD and of whether funds allocated to ECD actually support ECD. Multilevel administrative transfers and supervision create possibilities of variance in service quality, leakage of resources, and differences in the benefits effectively reaching children across provinces, districts, municipalities and facility types.

Public Expenditure Tracking Surveys (known as PETS) are designed to observe diversion of fiscal spending in moving funds from higher levels of government through multiple administrative layers to the point of service delivery.<sup>1</sup> PETS requires matching financial information obtained from a survey of specific institutions to fiscal data on the allocation of resources to these same institutions, in order to measure leakage of funds away from the purposes these were originally intended for. This requires both good fiscal data and a survey that accurately captures spending at the level of the institutions surveyed.

UNICEF, the Department of Social Development, the Department of Education and the National Treasury commissioned the survey reported on here in ECD facilities in three provinces. Province 1 is a richer province, Province 2 a moderately poor one and Province 3 a large and very poor province, thus the survey reflects the broad spectrum of experiences in ECD. Given the multiplicity of institutional contexts, funding structures and oversight mechanisms in different parts of the ECD sector, the survey comprised three separate samples, each with its own different questionnaire, focused on Grade R in public schools, registered community-based ECD facilities and unregistered community-based ECD centres. It can thus in essence be seen as three linked surveys. Questionnaires were designed by a team from the University of Stellenbosch, led by the principal author in cooperation with the technical steering committee<sup>2</sup> and the survey team. As has now become common, the facility survey contained elements of both a Quality of Service Delivery Survey (QSDS) and a PETS, so as to track and measure resources, their use and transfers at different levels of the administrative structure, and to allow an analysis of the types and quality of services offered. The survey was fielded by Citizen Surveys, a data collection company and fiscal data was obtained from the three provinces and the National Treasury by UNICEF.

1 Reinikka, Ritva & Jakob Svensson. 2005. Fighting Corruption to Improve Schooling: Evidence from a Newspaper Campaign in Uganda. *Journal of the European Economic Association* 3 (2-3): 259–267; Reinikka, R., & Svensson, J. 2004. Local capture: Evidence from a central government transfer program in Uganda. *Quarterly Journal of Economics* 119 (2), 679–705. Das, Jishnu, Stefan Dercon, James Habyarimana and Pramila Krishnan. 2005. Teacher shocks and student learning: evidence from Zambia. World Bank Policy Research Working Paper No. 3602; World Bank, Washington, D.C; World Bank. 2004. Papua New Guinea: Public Expenditures and Service Delivery. World Bank, Washington, D.C.

2 Comprising UNICEF, the Department of Social Development (DSD), Department of Education (DoE) and National Treasury (NT).

## 1.2 Background to ECD in South Africa

ECD has come to be regarded as critical for establishing the foundation for academic success in schools for children from disadvantaged backgrounds. The White Paper on Early Childhood Education of 2001 pointed out that “(c)hildren raised in poor families are most at risk of infant death, low birth-weight, stunted growth, poor adjustment to school, increased repetition and school dropout.”<sup>3</sup> The challenge was seen as “increasing access to Early Childhood Development (ECD) programmes, particularly for poor children, and to improve the quality of these programmes.” This led government to expand ECD through funding both Grade R, mainly in public schools for children aged 5 or 6, and through subsidizing provision of community-based care centres for children aged 0 to 4 year. The former is funded by the Department of Education, the latter by the Department of Social Development. The intention at the time was to provide universal participation in formal Grade R programmes by 2010, with three-quarters of participants being subsidized by the state,<sup>4</sup> as ECD is seen as “a public good whose benefits spill over from individual parents to society as a whole”.<sup>5</sup>

Expanding ECD required increased funding by the DSD and DoE. Spending within provincial Departments of Education on Grade R rose from R377 million in 2003/04 to a budgeted R983 million in 2007/08 and a budgeted (projected) R1 253 million in 2009/10.<sup>6</sup> The Department of Social Development registers all ECD facilities meeting certain quality criteria where more than six children are cared for away from their parents. DSD is responsible for the provision of subsidies to children from poor households at such facilities. In 2006/07, government paid a per diem subsidy for 314 912 children in 5 531 registered facilities, amounting to a total of R350 million.<sup>7</sup>

Conventional PETS have a limited applicability to ordinary public school education in South Africa due to the fact that most school spending takes the form of salaries that are paid directly at the provincial level. The situation in community-based centres for ECD is different and potentially makes PETS an important instrument to determine what is happening to the funds spent for ECD. Funding is obtained from both public and private sources (including parent contributions or fees, which vary widely), there is limited monitoring by the authorities, particularly in some remote areas, and standards of care vary widely. Unlike conventional PETS, however, funds are transferred not to *public* institutions (e.g. schools) but to *private* institutions (ECD centres) which deliver subsidized services.

Initial evidence showed that there was reason for serious concern about the quality of the services offered by ECD facilities.<sup>8</sup> As community-based centres often operate from private

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3 Department of Education. 2001. Education White Paper 5: *Meeting the Challenge of Early Childhood Development in South Africa*. Pretoria: Executive Summary.

4 Department of Education. 2001. Education White Paper 5: *Meeting the Challenge of Early Childhood Development in South Africa*. Pretoria: par.1.4.3.

5 Department of Education. 2001. Education White Paper 5: *Meeting the Challenge of Early Childhood Development in South Africa*. Pretoria: par. 3.1.4.

6 National Treasury. 2008. *Inter-Governmental Fiscal Review 2007*. Pretoria: 21, Table 2.12.

7 National Treasury. 2008. *Inter-Governmental Fiscal Review 2007*. Pretoria: 59–60.

8 A National ECD pilot project launched in 1997, before large scale subsidization of ECD, found that only “about a quarter of community-based facilities were offering high quality education”. (Department of Education. 2001. Education White Paper 5: *Meeting the Challenge of Early Childhood Development in South Africa*. Pretoria: par. 3.2.10).





premises, including private homes, such concerns relate to basic health conditions, sanitation, nutrition (feeding), safety of buildings, security, as well as the quality of teaching/support.

Although ECD is rapidly growing, its exact size is uncertain. Table 1 contains information on those engaged in pre-primary education based on an analysis of the recent National Income Dynamics Survey (NIDS). The relatively small size of this survey limits the accuracy of estimates for smaller cohorts and at provincial level. This information is drawn from a parallel research project undertaken for the Presidency and funded by the European Union by one of the authors of this report that has been released as a Stellenbosch Economic Working Paper.<sup>9</sup> This working paper discusses in some detail the latest information about the reach and growth of ECD at both Grade R and pre-Grade R level. This includes Grade R, pre-primary (other than Grade R), day care, and day mothers or *gogos*. The aggregate picture that emerges is that Grade R has now been extended to about 566 000 children (or 55% of the population aged 5) in school-based and community-based facilities; that pre-primary and crèches (which broadly coincide with the registered community-based ECD facilities) together cover around 1.4 million children or 28% of the 0–4 cohort; and that day mothers are also an important category, looking after almost 1.0 million pre-school children, an issue that policy still needs to address. The three provinces differ in major ways: Grade R in Province 3 appears to have achieved extremely high levels of coverage (about 96% versus 57% in Province 1 and 52% in Province 2); but in contrast, Province 3 has low coverage in pre-primary facilities of the 0–4 cohort (at only 26%, versus 32% in Province 1 and 37% in Province 2). Perhaps to compensate, there seems to be a very large presence of day mothers/*gogos* in Province 3. These may coincide to some extent with the unregistered ECD facilities encountered in this survey.

**Table 1. ECD by type and province as estimated from NIDS, 2008**

	Age 0–4	Age 5	Grade R	Pre-primary	Crèche	Day mother/ <i>gogo</i>	Grade R	Pre-primary	Pre- primary + crèche	Pre- primary + crèche + day mother/ <i>gogo</i>
Western Cape	470 379	93 871	53 952	26 915	123 233	81 196	57%	6%	32%	49%
Eastern Cape	728 543	137 669	125 625	48 879	94 764	123 286	91%	7%	20%	37%
Northern Cape	115 416	21 903	9 876	7 949	18 054	9 717	45%	7%	23%	31%
Free State	246 289	48 556	23 615	20 308	94 444	46 878	49%	8%	47%	66%
KwaZulu-Natal	1 192 238	232 987	82 920	60 953	137 515	79 385	36%	5%	17%	23%
Northwest	319 091	87 486	45 585	26 273	92 468	56 241	52%	8%	37%	55%
Gauteng	954 384	190 257	65 732	59 907	313 154	182 812	35%	6%	39%	58%
Mpumalanga	338 819	92 312	40 886	20 328	106 859	96 295	44%	6%	38%	66%
Limpopo	570 793	122 835	118 259	48 135	87 548	228 526	96%	8%	24%	64%
Quintile 1	1 412 110	277 313	151 592	93 916	236 165	271 901	55%	7%	23%	43%
Quintile 2	1 330 954	236 351	134 326	51 221	228 681	276 412	57%	4%	21%	42%
Quintile 3	922 352	229 223	118 069	69 050	202 979	156 958	52%	7%	29%	47%
Quintile 4	647 738	130 253	70 669	40 002	181 185	102 159	54%	6%	34%	50%
Quintile 5	622 798	154 736	91 794	65 458	219 029	96 906	59%	11%	46%	61%
SA	4 935 952	1 027 876	566 450	319 647	1 068 039	904 336	55%	6%	28%	46%

<sup>9</sup> Gustafsson, Martin. 2010. *Policy note on pre-primary schooling: An empirical contribution to the 2009 Medium Term Strategic Framework*. Working Paper 05/2010. Stellenbosch University, Department of Economics.

The fiscal flows to ECD can be summarized as follows:

- DSD subsidizes largely pre-Grade R in community schools if the facility meets the criteria for registration and children are poor.
- DoE subsidizes Grade R mainly in public schools but in some cases also in community facilities. Its subsidies often take the form of appointment of teachers in such Grade R classes in either of these types of facilities. Funds are allocated from provincial level. Official policy is that funding of Grade R facilities attached to public schools should be linked to the national norms and standards for school funding and that Grade R children should receive 70% of the Grade 1 allocation per capita. This also implies that poorer schools would receive more resources per capita for Grade R, as this also applies to Grade R according to the norms and standards. In practice, though, the 70% criterion has not yet been achieved. In 2003, spending per child in Grade R was on average only about half of the criterion, i.e. about 35% of funding levels for Grade 1 children.<sup>10</sup> Funds for Grade R flow to schools in a number of ways. Sometimes schools have certain posts funded through the PERSAL system instead of receiving funds. The DoE also sometimes buys and delivers LTSM to schools from funds allocated to the school but never transferred.

### 1.3 Objectives, research questions and conceptual framework

This study was a first attempt to come to grips with the magnitude, scope, quality and resources in ECD, and particularly to understand whether public resources reach the intended beneficiaries (i.e. children) and are used effectively to achieve the intended objective, viz. the early development of children so as to provide an improved foundation for their learning once these children enter the formal school system. It also allowed an analysis of the fiscal incidence of spending on ECD, i.e. whether public spending on ECD was reaching those most in need of it.

The study required the design and appropriate modification of internationally accepted methodologies for public expenditure tracking and assessing quality of service delivery, within the context of the South African ECD sector. The institutional system for funding ECD is quite complex. Firstly, responsibility is divided between DoE and DSD. Secondly, the constitution stipulates that both education and welfare are mainly provincial responsibilities, thus funds are actually allocated at the provincial level. National government can influence funding at provincial level to some extent, but mainly through the proportion of fiscal resources that flow to provinces as conditional grants. Provinces may generally decide how much of the funds they receive from national level through the equitable share system is to be allocated to ECD or to any other purpose within its responsibilities. Furthermore, some provinces have delegated some responsibility to their own district structures (though at the administrative level only – this is not a separate layer of political decision making) to act on their behalf in allocating funds to ECD.

This institutional complexity is increased by the fact that many Grade R children attend Grade R facilities in community-based institutions, despite the White Paper's expressed aim of accommodating 90% of such children at public schools; in 2003, only 41% of all Grade



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<sup>10</sup> Department of Education. 2006. *2005 Education Investment Review*. pp.114–5.



R children were in public schools.<sup>11</sup> In community facilities, Grade R children are sometimes in classes shared with younger children (ages 0 to 4). In addition, there are a small number of pre-Grade R children also accommodated in public schools. This institutional complexity makes public expenditure tracking in ECD facilities extremely difficult. To complicate matters further, provinces have different approaches to funding, levels of support, payment systems, monitoring and provision of learning materials.

As indicated, PETS is concerned with tracking public expenditure through multiple administrative and political layers. Such studies were famously started in Uganda,<sup>12</sup> where extensive siphoning off of funds occurred in the physical and decision-making process, with a large proportion of these funds being diverted to other purposes. Thus there was considerable deviation from the spending pattern intended by the central decision makers, as funds were diverted through the multiple layers to other applications. Diversion of funds does not necessarily imply corruption, but could also result from discretion in the political and administrative process to divert funds to other purposes (including perhaps other public expenditure purposes, such as provision of water, etc). The important point, however, is that the intention of the decision makers at central level was not converted into actual patterns of expenditure, as a result of this diversion of funds.

A PETS of South African ECD must also track diversion of funds. In South Africa, such flows cannot be tracked from the national level: constitutionally, the national DoE and DSD do not have the power to allocate specific amounts to specific schools or even to ECD as a whole. These allocation decisions are taken at the provincial level. Funding is not “tagged” at the national level but only at the provincial level (or in Province 3 even at the district level) to go to specific schools. There is also the well-known phenomenon whereby funds provisionally “allocated” at the national level through the provincial funding formula to provinces for a specified purpose are reallocated by the provincial governments, who have budgetary discretion except over earmarked funds. However, there can be no question of “leakage” in the PETS sense of the word before the constitutionally set decision making has taken place, viz. at provincial level.

An important additional question of relevance for tracking the flow of funds to the intended beneficiaries is: Who really benefits from expenditure on ECD? Are the beneficiaries the children, or the principals (“owners”) of community schools who receive the subsidy? Put differently, are the subsidies really converted into services benefiting children or are benefits captured by service providers (“producers”)? This is an important question that also underlies attempts to move from calculating fiscal incidence to benefit incidence. However, where funds are transferred to private providers, as in South Africa’s community-based ECD centres, this is even more pertinent and therefore requires special attention: PETS do not usually track money to providers of services. Additional interesting questions regarding tracking of public expenditure to ECD are: How much improvement do subsidies bring in terms of ECD? Do subsidies prepare children better for subsequent learning at school? How much do the poor benefit from the funds flowing to ECD from government?

As indicated above, a large proportion of funds allocated to South African public schools take the form of salaries paid at the provincial level, leaving only a small actual transfer of funds to points of service delivery (schools). This means that the capturing or diversion of

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<sup>11</sup> Department of Education. 2006. *2005 Education Investment Review*. p.115,

<sup>12</sup> An overview is provided in Reinikka, Ritva & Svensson, Jakob. 2006. *Using Micro-Surveys to Measure and Explain Corruption*. *World Development* 34(2): February: 359–370.

such physical transfers is less likely in South African schools than in some other countries (though it does not prevent other forms of financial abuse). Also, decisions on the allocation of funds are taken at provincial level and cannot be changed at lower levels of decision making, so apart from corrupt practices, local discretion cannot really cause any siphoning off of funds. This even applies in Province 3 where district officials have some discretion about which facilities receive support and the decision has thereafter to be legitimated by provincial political decision making, thus there is no diversion of funds after provincial allocations have been made. In cases of corruption, PETS cannot substitute for a forensic audit of spending. Surveys administered by a large number of field workers are a blunt instrument for pinpointing specific instances of abuse, but can be employed to get an overview of the financial situation. They can provide an overview of physical financial flows; assist in determining how these are diverted, if this occurs on a large enough scale to be detected in a survey; help to point out where this may be taking place; and identify possible improvements to ensure that level allocations through the political process are actually observed in practice at lower levels of decision making and administration.

Thus the PETS framework was adjusted to the South African ECD process. Figure 1 presents a conceptual framework of how diversion of subsidies to ECD community facilities may occur. This framework assumes that service providers may exhibit strategic behaviour (opportunism) in order to capture more of the benefits of fiscal spending, with the consequence that children (the intended beneficiaries) would benefit less. This can occur, for instance, where service providers (“principals”) allocate themselves relatively large salaries (or “profits”) from the funds received from government, leaving less funds to be spent to benefit children in other ways such as food, LTSM or other requirements.

From the perspective of tracking public expenditure, the major flow of interest is that from province to community facilities. Flow A can be seen as the financial allocation to the ECD site. In addition to funds from provinces, community schools can also receive money from households (parent contributions or fees) as well as donors. Donor support can be in money or in kind (Flow F).

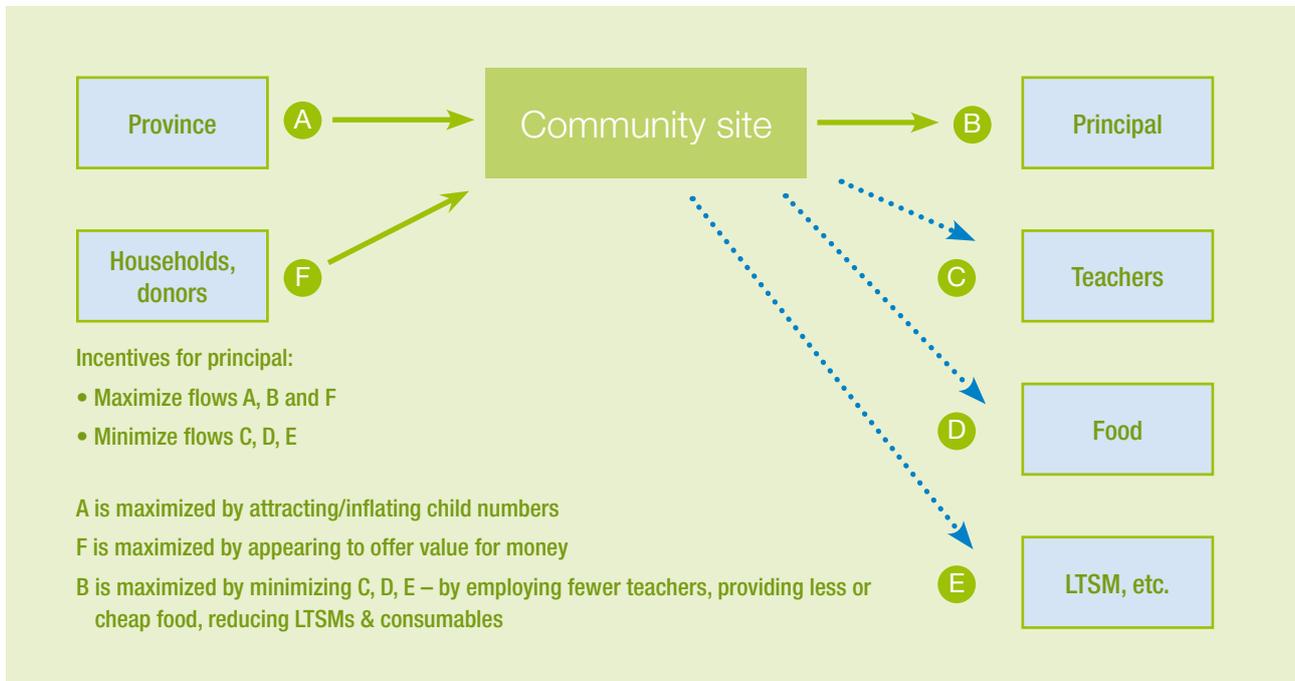
It is useful to identify four types of spending by community schools or facilities. Flow B is concerned with the flow of resources to the principal or “owner”, an issue which will be returned to later. Furthermore, community facilities usually have a teacher/ECD practitioner other than the owner, indicated by Flow C; they spend money on food and drink, indicated by Flow D; and they spend money on things such as LTSM (Flow E). A PETS should be concerned with the resources bought by the money that flows from government as well as by the resources that flow into community schools from other sources. The issue thus is the sizes of Flows C, D and E; in other words: how much potential resources are purchased in order to meet the needs of the children in ECD schools, in addition to the owner’s labour input that Flow B represents. One can see the incentive for the principal as maximizing Flows A, B and F and minimizing Flows C, D and E. For the principal, Flow B should be as large as possible, which depends to a large extent on the other flows in the system. Flow A is maximized by attracting or inflating child numbers; Flow F is maximized by appearing to offer value for money. Given these revenue sources, Flow B is maximized by minimizing Flows C, D and E, i.e. by employing fewer staff, providing less or cheaper food, reducing LTSM and consumables, etc.

PETS must therefore track payments to other caregivers, payments for food quality and food volume, and payments for LTSM and consumables in the teaching process. “Owner profit” could be seen as what remains after all other payments have been made, minus the





Figure 1. A conceptual framework for PETS in a community-based ECD facility



salary the “owner” would have received if he or she was employed by someone else. This is a measure of “leakage” (funds diverted from providing better care). Minimizing spending on other staff reduces the attention to the needs of children and thus the quality of care. A measure of care giving services provided is the child-teacher ratio; a measure of diversion of funds would be excessive principal salary relative to the opportunity cost of the principal’s labour (what he or she could have earned working for someone else, given his or her level of education and experience).

It is important in a study of this kind to identify factors that reduce or minimize the diversion of funds within the school. Crucial in this regard is parent pressure, especially through school governing bodies that function to maintain quality through the fact that both fees and subsidies depend on parents sending their children to attend a particular ECD facility, thus giving parents potentially strong power through the threat of exit (withdrawing their children).

This conceptual framework informed the analysis of the fiscal data in Chapter 4. At the outset, it is useful to report that no direct evidence of large scale strategic behaviour by service providers, or capturing of benefits by producers, was detected. (The term “producer capture” in this report refers to a situation where producers/ECD facilities find ways of capturing the benefits of subsidies that were really intended to benefit children and their parents.) However, this may be in part because data problems limited the detection of certain strategic behaviour, as will be elaborated on when discussing data problems regarding fiscal flows and financial data (incomes and expenditures) of community facilities and schools. Nor does the analysis exclude the possibility that some diversion of funds from the intended purposes took place at political and administrative levels before the fiscal transfers that were tracked took place. PETS only measured the receipt of resources by a sample of ECD facilities against the actual fiscal spending that provinces reported for those particular facilities.

Regarding PETS for Grade R in public schools, another potential leakage may be the siphoning off of Grade R funds and personnel to other grades in such schools. One can consider a similar schematic presentation as that illustrated in Figure 1. Apart from the resources received from the province, from households and from donors, there are also potentially resources flowing into Grade R from the rest of the school itself, or resources flowing out of Grade R to other parts of the school, such as money allocated for Grade R that is used to subsidize cleaning services or LTSM in other parts of the school. There may be no clear means of detecting this, because in practice the Grade R budgets are not separated from that of the rest of the school.

Allocations from the DoE to Grade R largely take three forms: personnel spending paid through Persal; direct provision of LTSM to schools by provinces; and other funds in the form of direct subsidies that flow to the schools. These funds are in practice not satisfactorily separated from the rest of school funds. Overheads, cleaning services, maintenance, etc. can seldom be separated in the budget. The difficulty thus is to obtain data on the application of Grade R funds for Grade R needs.

Quality of care must be measured against public expectations of ECD. This may take a number of forms, but is quite difficult to measure. Some parents may be quite satisfied with only rudimentary care, while government and society expect much more from the ECD, namely that it should be an investment in child development. It is useful to think of quality of service delivery in terms of a hierarchy of child care needs:

- Meeting basic physical needs, e.g. safety, nutrition, health, comfort, space.
- Keeping children occupied even without stimulation, e.g. reading and playing.
- Creating a nurturing and stimulating environment for child development, in terms of developing the child's full potential.

Unlike the age group 0–4 years, in Grade R it is possible to observe coverage of the syllabus without having to use specialized fieldworkers, evidence of the work plan, workbooks, portfolios, etc., so quality of provision is a little easier to measure.

## 1.4 Sample strategy and design

In structuring the report, a major challenge was to create an easily digestible and clear core argument amidst the institutional complexity described above. The inclusion of two distinct types of pre-school educational facilities has been one of the main headaches. As described above, public schools offering Grade R and community-based ECD facilities are in many ways difficult to compare, thus the decision to use different questionnaires. Moreover, the distinction within community-based facilities between the registered and unregistered facilities required yet another questionnaire. The focus of this study is mainly on the ECD centres in the communities because this is where there is arguably the most concern regarding the quality of services and also the greatest scope for the misuse of funds. However, the results of the survey of Grade R in public schools are also reported and where applicable, the public schools are used to contextualize and benchmark the resourcing and performance of community-based ECD centres. The recommendations also manifest this emphasis on the community-based facilities. The main exception is the discussion on the quality of teaching (Chapter 5) where the focus in some places is on Grade R in both public schools and community facilities, because there are clearer guidelines and standards relating to teaching Grade Rs while pre-Grade R lacks such standards and quality is not as readily observed.





The sampling frame received from UNICEF and the departments involved was used to determine the sample allocation among different strata and to draw a representative sample of Grade R in public schools and community-based ECD facilities. The three provinces were considered separately and a sample size of 200 was initially designed and drawn independently for each province, as it was not the intention to analyse the overall sample as a homogeneous group.<sup>13</sup> Each province was thus treated as an independent sample. It was designed as a multistage stratified sample. Within provinces, key stratification variables were district municipality, local municipality, Grade R in public schools and community-based ECD facilities. Further disaggregation was done using quintiles for Grade R in public schools and districts, and the distinction between subsidized and unsubsidized registered community-based facilities. Initially only quintile 1, quintile 2 and quintile 3 were sampled in Grade R in public schools as explicit strata (as discussed later, the sample was later expanded to all five quintiles), while district municipality and local municipality were further used as implicit strata. (Hence, each explicit stratum was ordered according to the implicit stratification variables before the sample was drawn to ensure the best possible representative sample.)

The sample of community-based ECD facilities had to be divided according to their registration and subsidy status. This was further subdivided into registered and subsidized, and registered but non-subsidized CD facilities in each of the three provinces. The sample sought also to be representative of all districts and municipalities within each province. For this reason the aforementioned two categories of community-based ECD facilities and district municipality were used as explicit stratification variables with local municipalities as implicit stratification. In Province 1, suburb was also included in the implicit stratification.

When stratum sizes differ substantially, proportional allocation can give rise to unnecessarily large samples from the large strata and very small (not adequately represented) samples from the small strata. Thus in some cases, a power allocation was used, a procedure appropriate for surveys where the stratum population sizes vary considerably and there is a need for precise estimates at each stratum level.

It was agreed that a sample of thirty unregistered and unsubsidized ECD facilities should be drawn per province. As there was no sampling frame for this subgroup, a convenience sampling strategy was used. The major subgroups were: district and local municipality for two provinces, while for another province it was district, district municipality, local municipality and suburb.

After the fieldwork was completed, weights were calculated according to the sample realization and to reflect the distribution of the target population.

The initial survey sample excluded the top two quintiles, as these are not supposed to receive subsidies. The steering committee later agreed that this would prevent an analysis of differences in quality of care between poorer and more affluent schools, thus the sampling issue had to be revisited. As many facilities had by that time already been informed of the impending survey, it was decided not to redraw the sample but to add an additional sample of Grade R schools in the top two quintiles, thus expanding the total sample somewhat, with resultant increases in field costs.

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<sup>13</sup> The selected provinces are significantly different in terms of their characteristics, sophistication and diversity of community-based ECD facilities and Grade R at public school facilities, and the sample frames were not compatible in their structure and coverage.

## 1.5 Structure of this report

Chapter 2 deals with a description of ECD facilities in public schools, as it came to the fore from the research process itself. Chapter 3 provides an equivalent description of registered community-based facilities.

The following chapter (Chapter 4) then looks at financial and fiscal flows, including the quality of fiscal data obtained from national departments and provinces, the poor quality of data obtained from facilities and schools, and the fact that most Grade R data was not recorded or could not be obtained separately from the rest of the grades in schools. The major part of the financial analysis concentrates on the registered community ECD facilities, an area of major concern both because of its rapid expansion but also because this is where the scope for financial abuse is the greatest.

Chapter 5 investigates the quality of service provided in schools and in community facilities, to determine whether such facilities really show concern for child development, or whether they simply offer convenient “babysitting” to free parents to do other things, such as going to work. Overall findings and conclusions are provided in Chapter 6. Chapter 7 provides the recommendations and some of them are briefly introduced. Among these is the urgent need for better control of the flow of funds to subsidized community facilities to prevent actual or potential strategic behaviour that amounts to “producer capture” of the benefits of ECD spending, i.e. where producers rather than consumers become the beneficiaries of the subsidization. There is also a similar need for better financial reporting by ECD facilities, including better bookkeeping. Service provision in such facilities should clearly also be better monitored. Currently the DSD is too grossly understaffed to undertake such a job on the scale required to ensure that the funds spent really benefit children. Finally, the conclusions and recommendations depart from the view that ECD implies creating opportunities for children to develop mentally, physically and emotionally and that it should not simply offer convenient babysitting facilities for parents. The generous expansion of funding for this sector in recent years is based on the premise that the service will contribute significantly to educational returns and it is thus paramount to ensure that the quality of the service provided is such that it does indeed offer clear educational benefits to the children attending. Without greater attention to children’s development, ECD will not meet the goals set for it, i.e. contributing to the early development of children and ensuring that they are consequently more successful in learning at school and better prepared for life.









# Chapter 2: Description of situation in Grade R in public schools

## 2.1 Introduction

This chapter provides a description of the situation in Grade R in public schools. Though this is the largest segment of ECD (early childhood development), it is also the part that is best known and best regulated. As these facilities are attached to public schools, a fair bit is known about them; for instance, they largely share the infrastructure characteristics of public schools, which have been well described and analysed over the years. As they are largely funded through the Department of Education (DoE) at provincial level, their funding structures are also well known. It is not so clear how the funds allocated to Grade R in public schools are used, but unfortunately this survey cannot throw much light on this issue, as almost all Grade R facilities in public schools could not separate the income and the expenditure side of their (Grade R) account from that of the school to which they were attached. Thus the results in this respect disclose relatively little new information regarding Grade R finances. Consequently, this chapter largely presents a summary of the situation in these schools as observed in the survey of Grade R facilities, focusing mostly on teachers and the pupil-teacher ratio.

## 2.2 Teachers in Grade R in public schools

The survey analysed 381 public schools containing Grade R classes in the three provinces concerned. Of these schools, 107 were in Province 1, 136 in Province 2 and 139 in Province 3. Table 2 shows that there were about 18 000 students in Grade R in these schools in 2009, being taught by 584 Grade R teachers. This gives an average pupil per teacher ratio of 31, which ranges from 28 in Province 1 to 36 in Province 3. Province 3 was also the only province experiencing a decline in Grade R children in these schools between 2008 and 2009. The average class size was slightly higher than the pupil-teacher ratio because of the fact that there were slightly fewer classrooms (559) than the 584 Grade R teachers (some teachers could in fact have been assistants, implying that fewer classrooms may have been required). Thus, the pupil-classroom ratio was just over 32, with a similar distribution across provinces as for pupils per teacher.

**Table 2. Summary: Schools/classes/teachers/children per province**

Province	Total number of schools	Total Grade R classes	Total Grade R teachers	Grade R children 2008	Grade R children 2009
Province 1	107	193	195	5 211	5 428
Province 2	136	195	215	6 078	6 339
Province 3	139	171	174	6 309	6 235
All	382	559	584	17 598	18 002

Only 5 out of the 584 teachers were male. Clearly, this is predominately a female-dominated occupation. A very small proportion of the teachers encountered in Grade R, 15 in all, were principals, and another 16 were heads of departments. The rest were simply ECD teachers/practitioners. The average age of teachers in ECD (Table 3) is just over 43 years, ranging from just under 40 years in Province 1 to 44 years in Province 2 and 46 years in Province 3. Teachers tend to be concentrated within the age group 40–50 where 26% of the teachers find themselves, and the age group 50–60, containing another 35%. In contrast, those between 20 and 30 were only 4% of the total. Teachers in Province 3 have greater experience of teaching at the same school, on average more than 12 years, as against 8 years for the

three provinces combined. ECD experience between the three provinces also differs a little with the average being just over 11 years. This reflects a relatively mature teaching staff in such facilities, but also that many have substantial experience in teaching the early grades.

**Table 3. Average age/years at same facility/ECD experience per province**

Province	Total number of teachers	Age	Years at the same facility	Years of ECD experience
Province 1	196	39.65	7.06	11.72
Province 2	215	44.39	5.34	13.01
Province 3	173	46.37	12.45	9.61
All	584	43.39	8.03	11.57

Approximately 5.8% of teachers were absent on the day of the survey: those off sick made up 2.7% of the total; those on leave 1.71%; those away on private business 0.68%; those involved in training 0.34%; and those absent for other reasons another 0.34%. This means that teachers are absent on average at least one day per month during the course of the school year. There are minor differences in absentee rates across the provinces for those teachers for whom such information was available: 4.1% in Province 1, 7.0% in Province 2 and 6.4% in Province 3.

While 61% of Grade R teachers indicated that they had achieved matric (completed high school), a full 32% indicated that they had done N1, N2 or N3, qualifications that are usually for technical training. It appears that respondents confused this with the National Qualifications Framework (NQF) levels, within which ECD training is classified. ECD Level 1 is on NQF level 1 and is approximately equivalent to Grade 9; ECD Level 4 on NQF Level 4, taken to be approximately Grade 12 (Matric); ECD Level 5 on NQF Level 5, and is taken to be approximately Matric +1 year. This confusion unfortunately reduces the value of the question on highest school qualifications. Those who had other qualifications of a lesser nature, i.e. only some high school, made up about 6% of the sample of teachers interviewed, a figure which is still higher than expected.

**Table 4. Summary of high school qualifications of teachers per province**

Province	Some high school	Matric	N1/N2/N3	All teachers
Province 1	15	116	61	196
Province 2	11	145	58	215
Province 3	8	98	68	174
All	34	359	187	585
%	5.8%	61.4%	32.0%	100%

With regard to ECD qualifications, the situation is quite different.<sup>14</sup> Altogether 230 Grade R teachers in public schools had achieved a diploma level, 63 a university degree, 62 a post-graduate diploma and 19 graduate degrees. However, a relatively small percentage of teachers had achieved any other ECD qualification (though it is possible that the university-based qualifications could have been in the field of ECD).



<sup>14</sup> Note that multiple responses were possible here, i.e. each teacher could indicate more than one qualification that she achieved.



**Table 5. Summary of teacher post-school qualifications**

Province	Short Courses on ECD	ECD Cert. Level 1	ECD Cert. Level 4	ECD Cert. Level 5	Other ECD Unspecified Cert.	Diploma	Post Graduate Diploma	University Degree	Hons/Masters/PhD
Province 1	20	18	38	70	11	46	11	17	4
Province 2	12	6	22	12	16	88	27	29	12
Province 3	13	7	19	4	7	96	24	17	3
All	45	31	79	86	34	230	62	63	19

Turning now to salaries, there are large salary differences between teachers in the different provinces. While Grade R teachers in Province 1 on average received only R5 347, those in Province 2 received R8 553 and those in Province 3 R9 524. This salary deficit in Province 1 arose largely from the fact that fewer Grade R teachers in that province were paid directly by the state. Many Grade R teachers in Province 1 are not paid and funded by the Department of Education, but rather from contributions by parents through the school governing body. They usually receive far lower salaries than those employed at the official public sector salary rates. Salaries of those paid through the public sector salary system (Persal) are on average R 10 611 per month, whereas those paid but not paid through Persal (i.e. direct payments to teachers) receive less than half of that amount at R 4 503. Within each of these categories, there are only minor differences in salary levels across the provinces. Thus the overall much lower salary level in Province 1 results simply from the fact that the province has far fewer of the more expensive teachers, i.e. those paid through Persal, thereby reducing average teacher cost. The fact that SGB teachers are only paid about 42% as much as their public sector counterparts paid through Persal raises the question whether public salary levels are inflated compared to market demand and supply and what similar teachers need to be paid in order to attract them to ECD: clearly, many people are willing to work in ECD facilities at far lower salaries, and such teachers do not appear less qualified than their Persal paid counterparts. Moreover, even those not paid through Persal earn almost twice what community-based ECD practitioners earn.

**Table 6. Grade R: Summary of salaries by source of funds**

Province	Paid through Persal		Paid from state subsidy		Paid by SGB		Paid from state subsidy and school funds		Total	
	Number	Average salary	Number	Average salary	Number	Average	Number	Average salary	Number	Average salary
Province 1	30	R10 863	12	R5 325	120	R4 426	34	R3 738	196	R5 347
Province 2	134	R10 665	12	R6 243	62	R4 674	4	R4 870	212	R8 553
Province 3	144	R10 508	12	R6 251	15	R3 133	1	R3 000	172	R9 524
All	308	R10 611	36	R5 940	197	R4 404	39	R3 832	580	R7 757

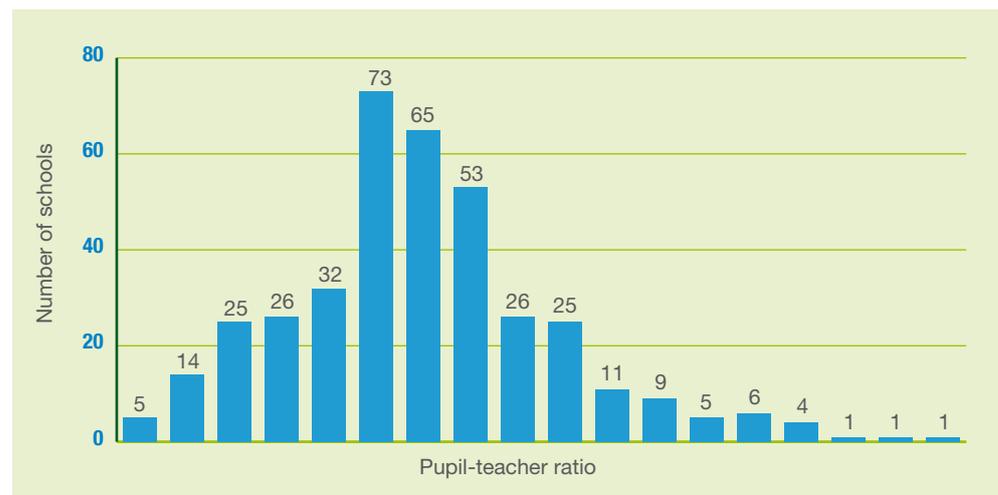
Salary differentials across the quintiles are not all that large. In the bottom quintile, average salaries are R7 774, whereas they are at their highest in the second quintile at R8 675 and in the second richest at their lowest at R6 273. This quintile of schools is perhaps the one that is most under-resourced in terms of Grade R, as incomes are too high to receive support from the DoE, but parent incomes are generally too low to afford high salaries to be paid to teachers from the SGB funds.

A question raised in the conceptual framework in Chapter 1 was whether teachers allocated to Grade R are being diverted on a large scale to other grades, i.e. whether the subsidies for Grade R are used to cross-subsidize other grades. An analysis of teaching hours shows that this is indeed not the case: Grade R teachers indicated that 92% of their time is spent teaching Grade R classes, 1% to teaching pre-Grade R and also 1% teaching higher grades, and 6% to administration. It appears that the funds devoted to Grade R, which are largely intended to pay for the salaries of Grade R teachers, achieve the goal of providing support to Grade R children.

### 2.3 Pupil-teacher ratio in Grade R in public schools

An analysis of pupil-teacher ratios is instructive. Figure 2 shows the distribution of such ratios from the lowest to the highest. A large number of schools (98) have teacher-people ratios in excess of 40 in Grade R, and altogether 216 schools (55%) have ratios in excess of 30, the norm usually set for Grade R. If one considers the needs of early childhood development, class sizes of this magnitude are problematic. At the other end of the spectrum, 70 schools had class sizes of less than 20, which is quite favourable given financial constraints. For instance, one relatively poor primary school in Province 3 had 54 children in Grade R, an increase of 14 on the previous year, but it already has 4 teachers allocated for Grade R. Another instance of a favourable teacher-pupil ratio is at a school of 37 children that has three teachers allocated to Grade R but has only one classroom available for teaching Grade R. Classroom availability is generally not a problem compared to the availability of teachers, though there are a few cases where the number of teachers exceeds the number of classrooms available for Grade R, indicating that class groups are often combined. For instance, a school with 73 Grade R children (an increase of 34 on last year) has three teachers, but only one classroom to accommodate all these children.

**Figure 2. Pupil-teacher ratios in Grade R in public schools**





## 2.4 Conclusion

Grade R facilities in public schools are as a rule more tightly managed than community-based facilities because of their links with schools and the Department of Education administration. Because of the relatively strong institutional framework in place (at least in comparison to the rest of the emergent ECD sector), one can view Grade R in public schools as a benchmark of where the community-based facilities may be heading. The following needs to be highlighted: *if there is a life cycle of ECD facilities, it is conceivable that the prototypical ECD organization will start off not being registered and then progress to registration and receiving a DSD grant. With experience and maturity, increasing professionalization, bureaucratization and formalization may come, which will bring them closer to the position where the school-based ECD facilities offering Grade R are now.*

In the school-linked ECD facilities, a poor quality programme and low quality infrastructure are the least likely of all the ECD subsectors, as Chapter 5 will show. Also, through its links with the public school sector, school governing bodies are better institutionalized, there is generally better management information available, and there is greater evidence of formal year plans to deal with the developmental needs of children. A reading of Chapters 2 and 3 of this report will emphasize some of the institutional and managerial differences between these two subsectors.

As expected, there are also advanced and more formalized financial management and mechanisms for community (parental) involvement.

The strength of Grade R in the public school system is that it builds on a well-established base, whatever its deficiencies. Thus, as Chapter 5 will show, the infrastructure is better in public schools, lesson plans are more often prepared, and the system of accountability to parents in the form of SGBs is better established. Also, the greater formalization means that the National School Nutrition Programme (NSNP) has been more evident here than in the other subsectors, with the effect that nutrition may generally be better for poor children attending Grade R in public schools.



# Chapter 3: Description of situation in community-based ECD facilities



## 3.1 Introduction

This chapter describes some of the results from the survey of community-based ECD facilities registered with the DSD, and reflects the distribution of facilities and some of the important general findings of the survey. The list on which this sample was based was obtained from DSD, thus the very few facilities that may have been registered with DoE but not DSD should not have been captured here. Issues related to financing are deferred to Chapter 4, and those relating to quality of infrastructure, LTSM and programmes to Chapter 5.

## 3.2 Funding, registration and basic description of registered community-based facilities

Altogether 85% of registered community-based ECD centres (271) do not share resources or their premises with primary schools, whereas 9% (28) share resources and 6% (19) premises but not financial links. Surprisingly, about 14% of registered community-based ECD facilities offer schooling for Grade R only (Table 7); about 30% offer only pre-Grade R, with the rest offering both. The funding pattern also reflects, as the next table shows, that Grade R facilities are largely supported by the DoE and pre-Grade R largely by the DSD. About a quarter of facilities are not funded by either institution.

**Table 7. Type of schooling offered in sampled facilities**

	Province 1	Province 2	Province 3	Total
Grade R only	2	3	26	41
Pre-Grade R only	6	35	58	99
Both Grade R as well as pre-Grade R	83	58	37	178
Total	101	96	121	318

**Table 8. Type of schooling and which government department funds the community facility**

	DSD	DoE	DSD & DoE	Neither	Total
Grade R only	3	34	2	2	41
Pre-Grade R only	55	4	14	26	99
Both Grade R & pre-Grade R	62	26	46	44	178
Total	120	64	62	72	318
% of total	37.7%	20.1%	19.5%	22.6%	100.0%

Table 9 shows that most registered community-based ECD facilities receive DSD funding, close to 60% if one includes both those receiving DSD funding only and those receiving both DSD and DoE funding. DoE funding is less common, but also quite substantial – close to 40% of facilities receive such funds from the DoE only or from both the DoE and the DSD. Only 20% of facilities receive no funding from either of these institutions. Province 1 seems to be more inclined to provide Grade R facilities in community facilities rather than in public schools, thus the DoE is generally more involved in community facilities in such facilities, whereas that is far less often the case either in Province 2 or Province 3. Province 2, in particular, seems to have very few Grade R classes that are subsidized by the DoE in community facilities. It is more common for the DSD to be involved in the lower quintiles of

the distribution, indicating that targeting of financial support to poorer communities indeed takes place. More than three-quarters of facilities in the bottom quintile of the distribution receive some support from the either or both of the two departments. On the other hand, the DoE appears more active in the higher quintiles of the distribution of registered community facilities, perhaps because Grade R is more often offered in public schools in the poorer part of the community rather than in community facilities. A far larger proportion (33%) of the few facilities sampled in the most affluent quintile (i.e. quintile 5) receives no funding from either of these departments, as against the 11% of the quintile 1 facilities not receiving any funding.

**Table 9. From which government department does this centre receive funding (subsidies or salaries)?**

	Province 1	Province 2	Province 3	Total	Quintile 1	Quintile 2	Quintile 3	Quintile 4	Quintile 5
DSD	14%	56%	51%	38%	56%	53%	36%	16%	11%
DoE	39%	6%	8%	20%	14%	6%	11%	45%	52%
DSD & DoE	26%	6%	24%	19%	19%	18%	25%	19%	4%
Neither	20%	31%	17%	23%	11%	24%	28%	19%	33%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%

Note: Some community facilities could not be allocated to quintiles.

Looking at the main language of Grade R children in community-based facilities,<sup>15</sup> facilities in Province 1 are dominated by Afrikaans (almost 50% of facilities with Grade R children), English about 25%, and Xhosa about 20%. In Province 2, Tswana was by far dominant with a majority share in 85% of facilities. In Province 3, the picture was more mixed with Sepedi children being the dominant group in many facilities followed by Afrikaans, Tonga and Venda. In 15 facilities, the language of teaching Grade R was not the same as the home language of the majority of the children. In 12 of these cases, the language of teaching was English even though that was not the dominant language of children in the school.

**Table 10. Facilities by main language of Grade R children in registered community-based facilities**

	Province 1	Province 2	Province 3	Total
Afrikaans	48	4	23	75
English	27		5	32
Pedi	1	1	60	62
Sotho	2	5	4	11
Tswana	1	86	2	89
Tsonga			15	15
Venda			11	11
Xhosa	22			22
Zulu			1	1
Total	101	96	121	318



<sup>15</sup> The focus falls on Grade R here as they are more likely to have a programme that formally deals with language.



**Table 11. Language of teaching Grade R differs from main home language in registered community-based facilities**

	English	SiSwati	Tsonga	Xhosa	Total
Afrikaans	2			1	3
Pedi		1			1
Sotho	5				5
Tswana	3		1		4
Tsonga	2				2
Total	12	1	1	1	15

According to the data, 184 children out of just under 19 400 in the sampled facilities (0.9%) had special educational needs (LSEN) or learning disabilities. That seems a relatively small number, but even that appears to be an exaggeration of the number of such children in ordinary community facilities: out of 48 facilities who mentioned that they had such children, 3 facilities had large numbers (25, 27 and 34 respectively), while none of the other facilities had more than 10. Thus some of these facilities in the sample may cater mainly for LSEN.

In only 15 of the 318 facilities were there no bank accounts, and in only 7 cases were these accounts in the name of a person, whether the owner or someone else.

**Table 12. Who are the signatories to the bank account? (more than one response possible)**

Signatories	Percentage
Principal/head	47.5%
Other teachers	13.0%
Member of management committee/governing body	74.1%
Parent	6.6%
Other	11.6%

**Table 13. Staff employed (weighted to provincial totals)**

	ECD teachers/practitioners	Administrative & support staff	Volunteers	Hours worked by volunteers per week
Province 1	2 324	2 148	460	4 501
Province 2	1 349	1 052	321	4 255
Province 3	4 466	4 313	2 330	12 728
Total	(8 139)	(7 513)	(3 111)	(21 484)

Note: National totals using weights are likely to be wrong, given that the interprovincial weighting could not be correctly done due to the absence of comparable lists to use in the sampling frame.

Exactly 40% of the 120 facilities involving volunteers pay them. This may contribute to some confusion as to the term “volunteers”.

Table 14 shows when institutions receiving funding from the DSD registered with the DSD. Province 1 appears to have a longer history of such registrations, with almost 20% of facilities having registered before 1995. A far smaller proportion of Province 1 facilities receive such funding than in other provinces. The next table shows how many years passed between registration and successful funding applications with the DSD. Altogether 75% of community

facilities experienced only a relatively short delay of no more than two years between registration and successful funding of application. About two thirds of facilities receiving funding from the DoE only got their certificate of registration after 2000.

**Table 14. Year institution registered with DSD, for those receiving DSD funding**

	Province 1	Province 2	Province 3	Total
Before 1995	143	37	139	319
	19.25%	7.12%	7.30%	10.07%
1995–2000	86	123	366	575
	11.57%	23.65%	19.21%	18.15%
2001–2005	126	55	549	730
	16.96%	10.58%	28.82%	23.04%
Since 2006	40	98	266	404
	5.38%	18.85%	13.96%	12.75%
Not applicable	348	207	585	1 140
	46.84%	39.81%	30.71%	35.98%
<b>Total</b>	<b>743</b>	<b>520</b>	<b>1 905</b>	<b>3 168</b>
	100.00%	100.00%	100.00%	100.00%

**Table 15. Years between registration and successful funding application with DOSD**

	Frequency	Percentage	Cumulative percentage
1	52	28.6	57.1
2	34	18.7	75.8
3	13	7.1	83.0
4	7	3.9	86.8
5	6	3.3	90.1
6	4	2.2	92.3
7	4	2.2	94.5
8	2	1.1	95.6
9	2	1.1	96.7
10	2	1.1	97.8
More than 10	4	2.2	100
<b>Total</b>	<b>182</b>	<b>100</b>	





**Table 16. Year in which DSD certificate of registration was issued to facility**

Q18	Frequency	Percent	Cumulative percentage
1978	1	0.6	0.6
1983	1	0.6	1.2
1986	1	0.6	1.7
1990	1	0.6	2.3
1992	1	0.6	2.9
1993	2	1.2	4.1
1994	5	2.9	6.9
1995	3	1.7	8.7
1996	6	3.5	12.1
1997	6	3.5	15.6
1998	12	6.9	22.5
1999	6	3.5	26.0
2000	10	5.8	31.8
2001	8	4.6	36.4
2002	7	4.1	40.5
2003	22	12.7	53.2
2004	7	4.1	57.2
2005	13	7.5	64.7
2006	13	7.5	72.3
2007	22	12.7	85.0
2008	17	9.8	94.8
2009	9	5.2	100
Total	173	100	

The following table shows how difficult community facilities found it applying for DSD funding. A large proportion in Province 3 and poorer facilities generally found it a little more difficult to apply successfully. For example, some applicants mentioned that they did not know the procedures or that they were asked for documentation they found difficult to provide, such as parents' pay slips. Other difficulties mentioned were transport problems to get to departmental facilities, or problems leaving the facility to apply. In contrast, some who found it easy to get funding pointed to assistance by social workers or the DSD office. There is an almost equal distribution between those finding it difficult and those finding it less difficult to successfully apply for DoE funding, with all provinces having quite similar responses.

**Table 17. Proportion of registered community-based ECD facilities finding it difficult to apply for DSD or DoE funding**

	Province 1	Province 2	Province 3	Total
DSD funding	68.0%	66.7%	78.7%	74.9%
DoE funding	53.8%	49.1%	55.6%	54.5%

### 3.3 Enrolment and absenteeism in registered community-based facilities

The mean number of children on registration certificates per facility was between 53 and 61 in Province 1, 59 in Province 2 and 49 in Province 3, reflecting that Province 3 has somewhat smaller facilities. Quintile 1 facilities tend to be smaller in terms of the number of children on the registration certificates, while quintile 3 (65) tends to have quite large facilities.

**Table 18. Mean number of children specified on DSD registration certificate per facility**

	Average number of children per facility
Province 1	61.0
Province 2	58.7
Province 3	49.3
Total	53.0
Quintile 1	43.6
Quintile 2	58.9
Quintile 3	65.1
Quintile 4	55.1
Quintile 5	52.7

A full 90% of facilities visited had an attendance register that was also filled in correctly. The next table shows the number of children enrolled and how many were actually present on the register. For 2009, there were a total of 19 374 children enrolled in the 318 facilities, of whom only 15 571 were present on the register, implying an absenteeism rate of 19.6%.<sup>16</sup> On average, 13 children were absent in each of the facilities on the day of the survey. Province 2 had a lower absenteeism rate (15.5%) than the other provinces and Province 1 an exceedingly high rate of 23.2%. The weighted data shows similar results. Reasons for absenteeism were not recorded.

<sup>16</sup> This excludes the 12 cases where the register was not observed or where the register was not filled in for the survey day, and the six schools where the children reported present exceeded the children enrolled; in one case this difference was substantial, implying inaccuracy with the recording of this information.





**Table 19. Enrolment and absenteeism**

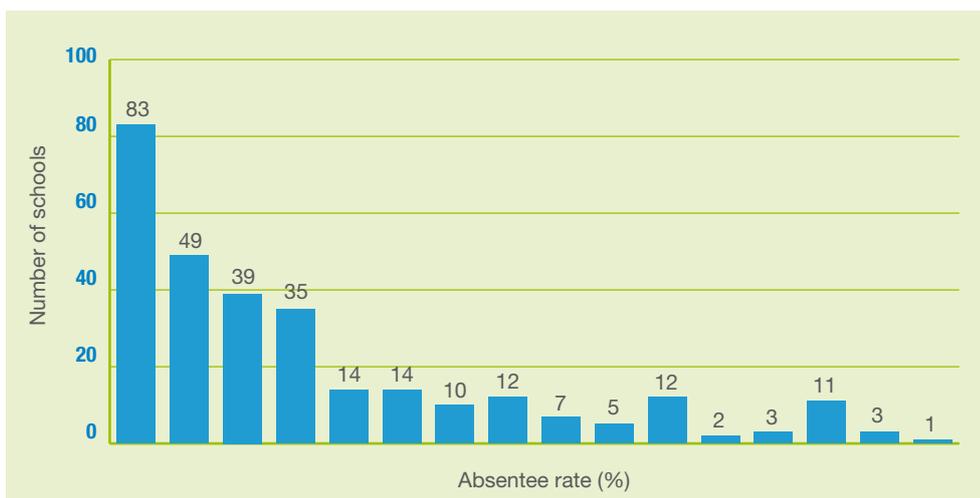
	Enrolled 2008	Enrolled 2009	Present 2009	% absent 2009
Province 1	63.3	65.0	50.0	23.2%
Province 2	57.8	61.7	52.1	15.5%
Province 3	63.3	66.7	54.4	18.5%
<b>Total</b>	<b>61.8</b>	<b>64.6</b>	<b>51.9</b>	<b>19.6%</b>
Quintile 1	53.1	56.3	49.4	12.3%
Quintile 2	62.1	63.7	53.3	16.2%
Quintile 3	62.2	66.2	52.1	21.4%
Quintile 4	71.0	72.6	55.0	24.3%
Quintile 5	62.3	62.0	46.0	25.9%

Note: Unweighted data. This excludes the following: 12 cases where the register could not be shown indicates that only one of these facilities did not have a register (in the other 11 cases, it was just not filled in for the survey day), and six cases where the number of children present exceeded children enrolled. Though the differences were in five cases 4 children or fewer, one school reported that 30 had enrolled, but that 69 were present.

The quintile information does not cover all the facilities; 101 ECD facilities did not give enough information to match them to a school with quintile information to obtain a proxy of their socio-economic status.

Figure 3 below shows that facilities with high rates of absenteeism are quite common: altogether 44 facilities had absenteeism rates in excess of 40% and 18 even had rates of above 60%.

**Figure 3. Facilities by rate of absenteeism on day of survey, 2009**



It is here where there is cause for considerable concern regarding strategic behaviour by owners/principals of community-based ECD facilities that receive funding from government. Funding is largely based on the number of children registered on the DSD registration certificate of the facility in question. The table below illustrates examples from two facilities with large numbers of children registered.

**Table 20. Recorded “absenteeism” as possible opportunistic behaviour in two large facilities**

	Facility A	Facility B
Recorded absentee rate compared to number on DSD register	70.5%	26.4%
Implied excess monthly DSD subsidy if numbers present are 90% of actual active enrolment	R27 600	R9 500

Note: The assumption for the scenario was that 10% was a “normal” rate of absenteeism; anything above that was assumed to be children who were not really registered and regularly attending. Taking actual attendance then as 90%, the “expected” registration can be calculated. Applying that number as a ratio of the DSD registrations, the implied subsidy surplus can be calculated.

If this absenteeism rate is the normal state of affairs, Facility A is receiving funding for almost four times as many children as appeared to be “actively enrolled”, assuming a “normal” absentee rate of about 10%. Thus, a massive excess subsidy of R27 600 per month that can be seen as a “profit” is available for the facility; this can be used to increase salaries or bonuses. Effectively, funds for a large number of children are spent on that facility, but do not reach children outside that facility, if used for children at all. Though less severe, the same situation applies in principle in Facility B; there the excess subsidy is R9 500. In a situation where the normal salary of an ECD practitioner appears to be only a little more than R2 000 per month, these are massive windfall gains that can be achieved by managing to register large numbers of children on the DSD registration certificate.

Looking only at those facilities that receive DSD subsidies, some 25 are receiving more than twice the subsidy one would expect on the basis of the children actually attending. Opportunistic behaviour, whereby facilities artificially inflate the numbers of children registered even though these children may not attend school regularly, is clearly encouraged by the way the system operates. The longer such a system is in place, the better participants will learn how to play the system. Thus it is crucial that the DSD at the provincial levels should be aware of such misbehaviour and act accordingly. Good control systems are required to avoid such behaviour from occurring.

The next table is not exactly comparable with the earlier one, as it uses a combination of more detailed questioning on enrolment by age group. Overall absenteeism appears to be slightly lower from this table than from the earlier one dealing with enrolment and absenteeism. What is apparent from this table, however, is that the pattern of absenteeism does not differ greatly between Grade R and pre-Grade R in these community-based facilities.





**Table 21. Enrolment and attendance by age grouping**

	Province 1	Province 2	Province 3	Total
<b>Pre-Grade R (ages 0–4):</b>				
Enrolled in 2008	3 691	3 299	4 476	11 466
Enrolled in 2009	3 800	3 904	5 128	12 832
Increase in enrolment	3.0%	18.3%	14.6%	11.9%
Present on day of survey	3 070	3 023	4 096	10 189
% Absenteeism	-19.2%	-22.6%	-20.1%	-20.6%
<b>Grade R (ages 5–6):</b>				
Enrolled in 2008	3 625	1 708	1 200	6 533
Enrolled in 2009	3 897	1 766	1 057	6 720
Increase in enrolment	7.50%	3.40%	-11.92%	2.86%
Present on day of survey	3 010	1 474	938	5 422
% absenteeism, Grade R	-22.8%	-16.5%	-11.3%	-19.3%
<b>Ages unknown:</b>				
Enrolled 2008	799	398	47	1 244
Enrolled 2009	701	308	40	1 049
Increase in enrolment	-12.3%	-22.6%	-14.9%	-15.7%
Present on day of survey	636	169	155	960
% absenteeism	-9.3%	-45.1%	287.5%	-8.5%
<b>Total all age groups:</b>				
Total enrolled 2008	8 115	5 405	5 723	19 243
Total enrolled 2009	8 398	5 978	6 225	20 601
Increase in enrolment	3.5%	10.6%	8.8%	7.1%
Present on day of survey	6 716	4 666	5 189	16 571
% absenteeism	-20.0%	-21.9%	-16.6%	-19.6%

Yet one cannot on the basis of the relatively high absentee rates conclude that all or even most of it is based on manipulation of numbers in order to maximize subsidies. As Table 19 shows, absenteeism is highest in Province 1, and also in the richest quintiles which are generally not receiving subsidies. It should be remembered that parents are far more likely to withdraw children this young from attending schools for other reasons, such as when parents have leave or there is a special occasion. The absenteeism rates recorded here may not be greatly excessive for this age group.

The observed discrepancy between attendance and enrolment affects the de facto pupil-teacher ratios. Pupil-teacher ratios calculated using children in attendance are not excessive in most facilities, particularly given the very tight financial constraints that most of them operate under. The average ratio is 21.0 children present per practitioner. While the picture is on aggregate a positive one, there are concerns around high pupil-teacher ratios for some centres: 7% of such facilities containing fewer than 10% of children, have more than 40 children per teacher, and 18% of facilities containing 18% of children exceed even the Grade R norm of 30 (while the norm for pre-Grade R is 20). Such high ratios are a problem, especially considering that some the children are very young and need more physical care. In extremes, high pupil-teacher ratios can be regarded as unsafe. For instance, one facility reported having one teacher caring for 115 children and another two teachers caring for 189 children.

According to respondents, only 184 children in the 318 sampled facilities had special education needs or learning disabilities. That seems a relatively small number, but even that appears to be exaggerated because three facilities mentioned large numbers of children with such needs (25, 27 and 34 respectively). As the other 45 facilities mentioned as having children with such needs each did not contain more than ten such children, it may be that these three facilities largely cater for such children.

### 3.4 Measures of management in registered community-based facilities

Questions on management committees or governing bodies did not elicit particularly interesting or surprising results. In most cases, such committees or governing bodies were reported to function well; in only 3% of cases were no such bodies present. Looking at membership of management committees or school governing bodies as set out in Table 23, it is clear that Province 1 has a somewhat different membership arrangement, with principals serving on management committees in 85% of facilities, versus only 56% in Province 2 and 49% in Province 3. In Province 3, teachers other than the principal are somewhat less represented than in the other two provinces at 44% versus about 50%. There is no clear pattern of other participation on management committees; non-teaching staff makes up the largest single category of this “other” group. In 85% of all facilities, a minute book for the management or school governing body was observed, although this ratio was only 74% in Province 1 versus a very high 92% in Province 3. The proportion without such a minute book was also highest in Province 1 at almost 9%. A similar pattern applies to AGMs of SGBs, with Province 1 at almost 8% recording the highest proportion of “no” responses.

**Table 22. Does management committee/governing body function well?**

	Province 1	Province 2	Province 3	Total
Functions well	81%	84%	94%	89%
Does not function well	13%	12%	5%	8%
No management committee/governing body	6%	4%	1%	3%
Total	100%	100%	100%	100%

**Table 23. Which of the following members sit on management committee/school governing body?**

	Province 1	Province 2	Province 3	Total
Principal	85%	56%	49%	58%
Teachers	52%	51%	44%	47%
Parents	86%	86%	93%	90%
Other	21%	5%	5%	9%





**Table 24. If management committee has “other members”, who are they?**

	Frequency (weighted)	Percent
Admin staff	4	4.49
Co-opted members ex-principal	8	8.99
Community	7	7.87
Founded member	10	11.24
NPO	5	5.62
Non-educator	4	4.49
Non-teaching member	10	11.24
Non-teaching staff	18	20.22
Non-professional staff & student	10	11.24
Non-teaching admin & cleaners	3	3.37
Treasurer	3	3.37
Two children	7	7.87
Total	89	100.00

Note: These are mainly non-teaching staff members (+/-55%).

**Table 25. Is there a minute book for management committee/school governing body?**

	Province 1	Province 2	Province 3	Total
Yes, and it was observed	73.9%	78.1%	92.1%	85.7%
Yes, but not available	17.5%	16.1%	5.8%	10.1%
No	8.6%	5.8%	2.1%	4.2%
Total	100%	100%	100%	100%

**Table 26. Was there a management committee/school governing body annual general meeting in past 12 months?**

	Province 1	Province 2	Province 3	Total
Yes, and minutes were observed	67.5%	66.3%	84.6%	77.8%
Yes, but minutes not available	24.6%	32.3%	11.0%	17.5%
No	7.9%	1.4%	4.4%	4.7%
Total	100%	100%	100%	100%

The question on who is the owner or who established the centre elicited interesting answers. Individuals were the dominant force with Province 1 at 47% and Province 2 at 43%, but only 22% of Province 3 centres mentioned individuals as owners or establishers. Faith-based or community-based organizations were more common in Province 3 at 74%, versus 57% in Province 2 and only 39% in Province 1. As can be seen, the individual who is the owner in more than 90% of the cases is also the principal. (Respondents were not clear whether to also indicate a principal as a teacher or ECD practitioner, where she fulfilled both the principal and the teacher/practitioner role.) Organizations who acted as owners were most often represented on the management board and were also signatories on the bank account and responsible for the day-to-day finances of the sector.

Decision-making appears to rest to a large extent with the management committee, judging by responses as to who has the most say in certain decisions (Table 27 below). (Note that some respondents provided multiple responses, so all responses should be considered relative to the maximum of 318.) Approving the budget is apparently largely the responsibility of the management committee or governing body, with almost three quarters of respondents stating that that is the case, while about a quarter of respondents stated the principal or head had the most say. A similar response was given regarding the question of who had the most say in relation to the setting of fees: almost three quarters held the management committee or governing body to be the major decision maker, and a quarter the principal or head. When it comes to the appointment of teachers, similar proportions hold, although the share of principals rises slightly. A similar picture also applies to maintenance work and the salaries of teachers.

It appears that the principal is generally a relatively powerful figure, but an owner who is principal not necessarily more so. Principals are probably also able to influence the management committee's decisions greatly and are in charge of the day-to-day finances. In the general absence of financial controls (vide the absence of petty cash books, though large amounts of foodstuffs have to be purchased on a regular basis), it is probable that a fair amount of leeway exists for the principal to influence much of what happens in the facilities and with the resources at the disposal of the school.

**Table 27. Who has most say in various decisions? (number of respondents selecting each/more than one response possible)**

Who has the most say in:	Principal	Owner	Other teachers	Management committee/governing body	All	Others (e.g. parents)
Approving the budget?	82	21	21	235	20	15
Setting school fees?	79	15	20	228	18	21
Appointing teachers?	99	20	3	228	9	13
Deciding on maintenance work?	115	21	14	208	7	10
Determining salaries?	85	25	4	226	8	25
What happens to funds remaining at year end?	74	19	11	240	14	13

When asked what happens to the remaining funds at the end of the year, most respondents indicated that the management committee had the major say in this. It should be noted, though, that most of the respondents were principals, therefore one could expect them to not want to give the impression that they had too large a say, even though their actual say in the day-to-day decision making may have been somewhat bigger than reflected in the responses. It is quite possible that such principals or heads of institutions have a very strong influence on the decisions made by the management committee. The question what happens to the remaining funds at the end of the year elicited three almost equally frequent responses, i.e. that there were often no funds left (in about 31% of cases), that all funds were spent on the centre or the children (30%), or that they reverted to the centre's general funds (32% of cases).





**Table 28. What happens to remaining funds at the end of year?**

	Frequency	Percent
No funds left	99	31.1%
All funds spent on centre/children	94	29.6%
Reverted to rest of centre's funds	102	32.1%
Used to compensate owner	6	1.9%
Other	17	5.4%
Total	318	100%

**Table 29. Who is the owner of/or who established centre?**

Q48	Province 1	Province 2	Province 3	Total
Individual	47.1%	43.3%	22.3%	31.6%
Organization (faith-based or community based)	39.4%	56.7%	74.4%	63.3%
Organization (other)	8.3%	0.0%	2.9%	3.7%
Other	5.1%	0.0%	0.4%	1.4%
Total	100%	100%	100%	100%

**Table 30. Responsibilities of individual who is owner**

Responsibilities	Percentage of (multiple) responses
Principal/head	90.7%
Teacher	58.8%
Chairperson/member of management board	51.4%
Signatory on bank account	65.4%
Other (all admin; manage the centre)	6.6%

**Table 31. Responsibilities of organization who is owner**

Responsibilities	Percentage of (multiple) responses
Chairperson/member of management board	76.7%
Signatory on bank account	60.5%
Manage day to day finance of centre	58.1%
Other (parents; manage problems of the centre)	4.3%

In 15 of the 380 facilities there were no banks accounts, and in only 7 of these cases were these accounts in the name of a person, either the owner or someone else. That indicates that the ECD organization as a body seems to be an important institution in the way in which funds are handled and that it is not simply a case of individuals being free to make decisions as they wish. In slightly less than half of the cases, principals or school heads were signatures to the bank accounts whereas 74% of facilities had members of the management committees or governing body as the signatories with more than one person often being responsible.

Altogether 114 facilities could provide no financial statement for 2008. The major reason mentioned by 75 facilities, was that they did not have such statements and did not consider

it necessary or were unable to generate such statements. Other reasons provided were that they did not have them to hand, or that the statements were still being prepared nine months after the financial year ended.

Questions were also asked to determine the availability of administrative records within the community facility. There seems to be a surprisingly good administrative infrastructure with 271 of the 380 facilities having application forms with parent contact details and 250 with Road to Health Certificates. The area in which the greatest absence of good administrative records was among 144 cases (almost half) where there was no case book/incident book/medicine book, 125 cases where there was no budget, 113 cases with no complete child progress reports, and 97 cases where there was no annual financial statement. These point to two apparent deficiencies within many facilities. The first is the poor financial management, as evident from the lack of a budget, financial statement and a petty cash book. The second deficiency was that facilities did not always show a clear interest in the development of the child, with almost 40% having no child progress reports and more than one third having no accident or incident book or medicine administration book.

**Table 32. Availability of certain administrative records**

	Observed	Some observed	Not observed	Total
Application forms (including parent contact details)	271	8	39	318
Road to Health Certificate	250	13	55	318
Accident/incident book/medicine administration book	202	10	106	318
Blank child progress report template	216	13	89	318
Completed child progress reports	190	15	113	318
Salary advice slips or book that staff sign for receipt of salary	224	8	86	318
Staff attendance register	256	9	53	318
Receipt book	281		37	318
Fees register	282		36	318
Petty cash book	174		144	318
Budget	193		125	318
Annual financial statement	221		97	318

On average, 2.7 ECD practitioners or teachers were employed in each of the community facilities visited, and 2.4 administrative and support staff. There were 0.8 volunteers per facility, reducing the load on some of the teachers a fair bit, as volunteers worked an average of almost 18 hours per week. However, in many cases volunteers were paid so it was not quite clear that the definition of volunteer was accurately used by the respondents.

### 3.5 Fees in registered community-based facilities

Only 14 out of the 318 facilities do not charge fees. This trend to almost universal fees holds across all the different quintiles and all the provinces. Thus, it appears that fees are a universal form of recouping some of the costs of providing ECD facilities to children. About half of facilities claim that almost all children paid all their fees, whereas another third said that more than half of the children paid all their fees. In about 1 out of 6 cases did the respondent claim that most children do not pay. When asked about exemption from fees, it appears that this is quite uncommon with only about 8% of facilities responding that this happened most of





the time or many times, less than a third admitting that this happened at all even if for a small number of children. Fees differ substantially across provinces and quintiles, with the average monthly fee in Province 1 being R309 in 2008 and about R343 in 2009, as opposed to R90 and R69 in Province 2, and R71 and R77 in Province 3. Looking at the 2008 fees which are a better reflection of the actual financial statements, one sees that the fees on average in quintile 1 facilities are R55 per month, whereas they rise to R494 per month in quintile 5 facilities. It appears from the responses that fees rose by 9.5% between 2008 and 2009 which was approximately in line with the inflation rate, which may suggest that fee figures obtained from the community facilities are relatively accurate. This applies to both 2008 and 2009. This is particularly interesting because the 2009 figures on the finances of facilities are in a fair mess, as will be seen later when the report turns to the fiscal data.

**Table 33. Are there fees?**

	Yes	No	Total	% charging fees
Province 1	98	3	101	97.0%
Province 2	91	5	96	94.8%
Province 3	115	6	121	95.0%
Total	304	14	318	95.6%
Quintile 1	59	5	64	92.2%
Quintile 2	33	1	34	97.1%
Quintile 3	57	4	61	93.4%
Quintile 4	30	1	31	96.8%
Quintile 5	27	0	27	100.0%
Total	206	11	217	94.9%

**Table 34. Which best describes how fees are paid?**

	Number of facilities	% of facilities
Almost all children pay all their fees	149	49.0%
More than half of children pay all their fees	99	32.6%
Most children do not pay	53	17.4%
Other	3	1.0%
No response	14	4.6%
Total	304	100.0%

Note: 14 facilities did not respond to this question.

Only in 61 facilities do children who receive a subsidy pay lower fees; in 242 facilities it has no effect on their fees relative to other children. This means that such subsidies go equally to those children not subsidized; the only effect is to improve the financial situation of the facility. This may lead to improved benefits for all children attending the facility to lower fees, or simply improvements to the situation of the owner/teachers.

**Table 35. What proportion of children is exempted from paying fees because they are too poor?**

Proportion exempted	Number of facilities	% of facilities
None	195	64.4%
A few	80	26.4%
Many	16	5.3%
Most	10	3.3%
All	2	0.7%
No response	15	5.0%
Total	303	100.0%

**Table 36. Monthly fees 2008 and 2009 (weighted)**

Province	2008	2009	% increase
Province 1	R 309	R 342	10.7%
Province 2	R 90	R 98	8.8%
Province 3	R 71	R 77	8.9%
Quintile 1	R 55	R 58	6.6%
Quintile 2	R 62	R 68	9.9%
Quintile 3	R 77	R 87	12.9%
Quintile 4	R 148	R 150	1.5%
Quintile 5	R 495	R 531	7.6%
Total	(R 131)	(R 143)	(9.5%)

Note: A large number of facilities are not allocated to quintiles. It is not possible to use the weights to generate totals across the three provinces, thus the totals are indicative only.

### 3.6 Practitioners and other staff in registered community-based facilities

The 36 hours per week that both principals and other practitioners indicated that they spent doing administration plus “teaching” Grade R and pre-Grade R far exceed total school hours. Principals report spending about 2½ hours more per week on administration than other practitioners. Even this is still not a lot, however, i.e. less than 1 hour per day.

Salaries of principals at R3 063 per month are quite low, but considerably better than the R2 172 received by the average practitioner, for a combined average of R2 385. It is noticeable that principals with lower levels of education have a great advantage on their counterparts with limited education; there clearly is a high premium to acting as a principal for someone with only primary education probably because such entrepreneurial activity is relatively lacking amongst the less educated. However, the gain from being a principal is reduced to about one-quarter for those with some high school education. (Note, though, that the small number of principals in lower education categories should make one wary of over-interpreting averages, as these may be greatly affected by outlier values.)





**Table 37. Numbers of ECD practitioners and average monthly salary levels according to highest school qualification**

	Number of practitioners			Average salaries			
	Principal	Other practitioners	Total	Principal	Other practitioners	Total	Principal's proportional advantage
Some primary	9	19	28	R2 085	R859	R1 253	143%
Full primary	15	44	59	R4 948	R1 472	R2 356	236%
Some high school	49	199	248	R1 794	R1 431	R1 503	25%
Matric	87	267	354	R3 720	R2 875	R3 082	29%
N1, N2, N3*	25	59	84	R2 482	R2 411	R2 432	3%
Total	185	590	775	R3 063	R2 170	R2 383	41%

\* As in Grade R, there was some confusion about N1, N2 and N3 qualifications. These are technical training courses that usually lead on to artisanal work. However, it appears that respondents confused this with the National Qualifications Framework (NQF) levels, within which ECD training is classified. ECD Level 1 is on NQF level 1 and is approximately equivalent to Grade 9; ECD Level 4 on NQF Level 4, taken to be approximately Grade 12 (Matric); ECD Level 5 on NQF Level 5, and is taken to be approximately Matric +1 year. This confusion slipped through, despite the pilot survey, and unfortunately reduces the value of the question on highest school qualifications.

**Table 38. Average salary of principal and other practitioners by whether salary was received through Persal**

Average of salary	Persal	Others	Total	Persal advantage
Principals	R7 163	R2 406	R3 079	198%
Other practitioners	R4 271	R2 045	R2 198	109%
Total	R5 464	R2 131	R2 423	156%

Note: Differences in the total between the tables are accounted for by missing values on data such as education level or the source of payment.

In general, staff members who are practitioners appear to be quite well qualified, especially when one considers how rapidly this sector has expanded in the past 8 years (Table 39). The experience of staff members is also quite respectable, again considering how rapidly this sector has expanded in the past 8 years. The mean experience in ECD of practitioners is 8.7 years, with two thirds having been involved more than 3 years, and a surprisingly high one third more than 10 years. Regression analysis reveals that qualifications after school are quite important for the salary earned: short courses in ECD or ECD certification level 1 bring minimal gains, but ECD certificate levels 4 and 5 bring greater gains and post-school qualifications by far the most. By far the most lucrative position is to have a postgraduate diploma which brings rewards of more than R5 000 compared to no qualifications beyond school. Though multiple responses were possible, most respondents provided only the highest qualification, particularly for post-school qualifications: only 50 out of 720 teachers gave more than one response. Thus coefficients on qualifications should generally be interpreted relative to having none of these qualifications. Compared to Province 3, even after controlling for teacher qualifications, Province 1 teachers are paid almost R1 000 per month more, and Province 2 teachers R300 less. ECD experience also brings gains of around R64 per month for every year of experience. After controlling for qualifications and province, there is a large gain of almost R2 000 per month for being paid through Persal. This is also highly correlated with having a diploma or postgraduate qualification. This is similar to the situation in Grade R

in public schools, where teachers formally employed by the DoE earn much more than their counterparts with similar qualifications doing similar work.

**Table 39. Post-school and ECD-related qualifications of practitioners in community-based ECD facilities, 2009**

	Number of practitioners	%
Short courses on ECD	110	15.3%
ECD Certificate Level 1	125	17.4%
ECD Certificate Level 4	141	19.6%
ECD Certificate Level 5	92	12.8%
Other ECD or unspecified certificate	54	7.5%
Diploma	48	6.7%
University degree	16	2.2%
Postgraduate diploma	28	3.9%
Postgraduate degree	4	0.6%

**Table 40. Regression of teacher salaries per month in registered community-based ECD facilities**

	Coefficient	t-values
Principal	82.3	-0.47
Years of ECD experience	64.872**	6.22
Province 1	983.5	5.72
Province 2	-319.7	-1.79
Short courses on ECD	121.0	-0.59
ECD Certificate Level 1	-7.0	-0.04
ECD Certificate Level 4	311.4	-1.59
ECD Certificate Level 5	540.3*	2.43
Other ECD or unspecified certificate	1379.7**	4.96
Diploma	2848.4**	9.23
University degree	2799.8**	5.77
Postgraduate diploma	5158.4**	13.31
Postgraduate degree	3043.0**	3.19
Paid through Persal	1995.8**	7.76
Constant	684.7**	4.00
Observations	718	
R-squared	0.54	

Absolute value of t-statistics in parentheses.

\* significant at 5%; \*\* significant at 1%.

Note: Though multiple responses were possible, most respondents interpreted this question as being asked to provide only their highest qualification, particularly for post-school qualifications.

Teacher absentee rates of about 7.7% are somewhat higher than in Grade R in public schools, on average 8.5% in Province 1, 7.0% in Province 2 and 7.4% in Province 3. The difference is to a large extent due to the effect of 2.5% of practitioners being away on training (as against 0.3% in Grade R in public schools), while 2.3% were off sick, 1.5% on leave and 0.8% on private business.





### 3.7 Conclusion on registered community-based facilities

The description above provides a broad overview of registered community-based ECD facilities. It is of particular importance to note that this is a fee-paying sector, and that the existence of subsidies usually does not mean that qualifying children (those who passed the means test) are exempted from paying fees. This means that the facility as a whole and all the children in it are the beneficiaries of such subsidies. At the same time, the fact that few children are exempted retains what later chapters will show to be a very great potential strength of community-based ECD facilities, i.e. there is accountability to parents.



# Chapter 4: Finances of registered community-based ECD facilities



## 4.1 Introduction

As part of the tracking of expenditure, questions were asked of respondents in all three sub-surveys (in registered as well as unregistered community-based facilities, and in public schools offering Grade R) regarding the incomes and expenditures of facilities for 2008 and 2009. This includes a full list of the subsidies they may have been received from the Department of Social Development (DSD) or the Department of Education (DoE).

This chapter deals with the flow of funds through the registered community-based ECD centres funded by the DSD or the DoE or that were at least registered by the DSD, even though they may not have been receiving any public funds. They are to be distinguished from the other set of community-based institutions surveyed, namely unregistered community-based facilities which were surveyed from a convenience sample based on a snowball technique, as there was no sampling frame (list) available to sample such facilities.

## 4.2 Financial information obtained from registered community-based facilities

Community-based ECD centres provided information on a variety of income sources as well as expenditure. However, the quality of this data was relatively poor. Information was sought for 2008, which would have been for the full calendar year, as well as 2009, in which case it would have been for a part of the year. In the case of the 2009 data, facilities had to indicate over what period they received such funding. However, the information provided in this regard was so weak and there were so many missing observations as to the period covered, that it was impossible to get a proper picture of the financial flows to and the expenditures by the ECD centres in communities in 2009. A decision was therefore taken to focus on the 2008 data and to confine most of the analysis to those facilities in which most data seemed to be available. The survey organization put special effort into collecting further financial information from facilities in cases where the financial information provided in the initial field-work appeared to be weak. For this effort, a number of graduate accountancy students were employed to call facilities to obtain additional information from them in cases where there were clear discrepancies or other data problems in the data. Despite this special effort, a large number of problems remain, as will be seen in the analysis that follows.

This is of particular concern as PETS is aimed at following financial flows through the government process to service delivery organizations at the grass-roots level, such as schools or community facilities. Often, the concern in such PETS studies is that funds may be diverted from the schools or community facilities for which they were intended. In this case, as was set out in the conceptual framework, there was also a concern that strategic behaviour by service providers, (whether schools or community facilities) would take the form of diverting funds from directly providing for children towards better enhancing their work conditions, salaries and other material gain for the producers, i.e. the principals and teachers of such facilities.

Because many respondents were the principals or even owners of such facilities, some responses may have been intentionally misleading in instances where such strategic behaviour may have taken place. It is difficult to determine the full extent of such strategic behaviour that may have taken place because of the nature of our data source, which was itself contaminated by the fact that the respondents were the potential beneficiaries of any such diversion of funds.

Out of the 318 registered community-based ECD facilities visited, only 221 said that they kept annual financial statements. As mentioned above, the information obtained from these

ECD facilities was in such a bad state that, at the end of the survey, the survey organization (Citizen Surveys) employed some graduate students in accountancy to attempt to obtain and work through the financial statements for 2008 to improve the capturing of financial information. Despite this, large information gaps remained. This is illustrated by the fact that only 141 facilities out of 182 who admitted receiving funds from the DSD could provide information on how much they received in 2008, and that, although almost all facilities charge fees, only 194 could provide information as to how much income they received from this source in 2008. On the expenditure side, only 105 of the facilities that kept financial records recorded any expenditure on groceries and only 114 on salaries.

Thus, to summarize, the data for public expenditure tracking was highly deficient. Financial statements of facilities are in a mess and make it extremely difficult to extract the appropriate information. Secondly, fieldworkers were not trained accountants and therefore could not deal with the level of detail required: they had been simply asked to report information on incomes and expenditures provided by ECD facilities. In addition, the reporting problems for 2009 were already mentioned, namely that the reporting period was not always clear, making comparisons invalid. Further, 2008 data received from the provincial Departments of Social Development usually referred to financial years, whereas data received from the facilities referred to calendar years. However, this would only explain a small part of the discrepancy, leading to a differential of only about 2%; this is therefore not a source of concern. More pertinent is that matching DSD figures and facilities was in fact quite difficult as it had to be done by facility name as there were no common numbers available that were used by both the facility and the departments concerned. Matching therefore largely had to be done manually; in a large number of cases where names were similar, it was uncertain whether the correct match could be found. Across the provinces there were a number of names that were quite common. For instance, there are a large number of ECD facilities called Khanyisa, some of them referred to as ECD, others as community facilities, day-care centres, etc. It was not always clear which was which.

Despite all these deficiencies and considering the data on face value, it would not appear as if such a great extent of strategic behaviour had been taking place in community facilities.

### 4.3 Income of registered community-based facilities

Facilities were asked to provide their total income, apart from the components of income. Surprisingly, the sum of the components and the total amount provided were often quite different. The mean income of facilities was around R4 400 per child per year, whereas the income obtained by adding all the components of income was only about R2 700 per child for the facilities in all three of the provinces covered. Similar pictures applied in the different provinces, although the discrepancy was particularly large in Province 1. This reflects a strange discrepancy that immediately raised issues about the quality of the financial data obtained from community ECD centres. The 28 facilities reporting that they share not only facilities but also financial resources with public facilities had great disparities between their incomes and expenditures; this arose from the fact that most of them reported on the income side only the income raised for ECD (largely through subsidies and fees), whereas their expenditures reflected that of the whole school, thus allowing no comparison. This is similar to the problem in public schools, where generally the Grade R finances could not be separated from those of the school with whom they formed part.





Regarding registered community-based facilities, the following sources of income were enquired about in the survey:

- Subsidies from the Department of Social Development
- Other funds from the Department of Social Development
- Subsidies from the Department of Education
- Other funds from the Department of Education
- School fees
- Municipal grants
- Donations to facilities by businesses or other institutions
- Own fundraising
- Other sources of income (up to three such sources provided for in survey)

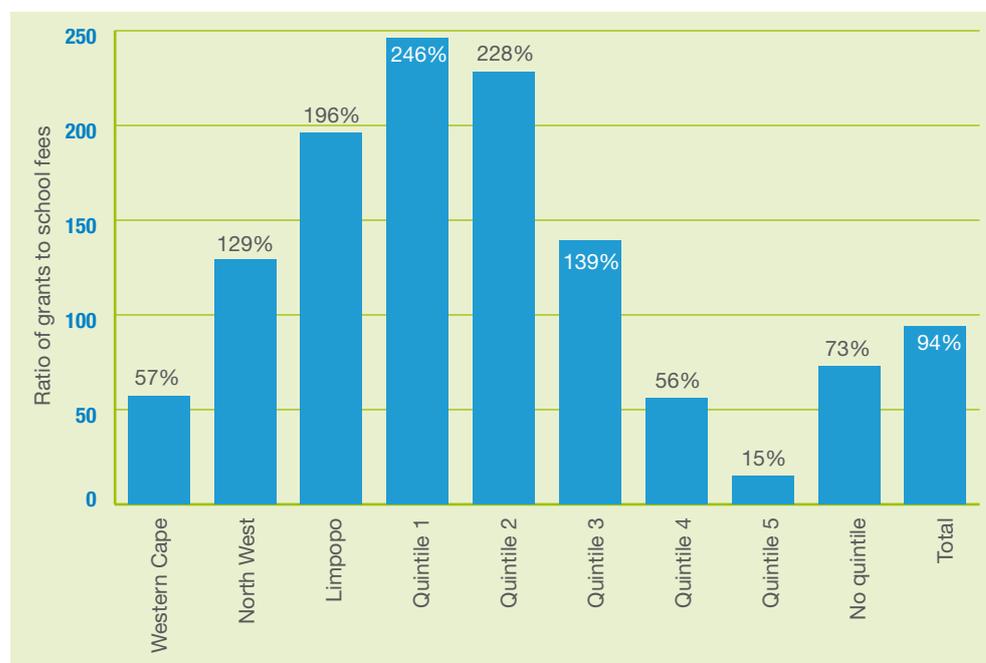
The fact that up to three other sources of income could be included means that all income sources should in principle have been captured in the data.

**Table 41. Sources of income in registered community-based ECD facilities, 2008 (income per enrolled child per year)**

	DSD subsidy	DoE subsidy	DoE other	DoE Persal payments	School fees	Donations	Fundraising	Other sources	Total
Province 1	R873	R30	R80	R41	R1 521	R46	R175	R342	R3 108
Province 2	R1 002	R0	R33	R2	R778	R21	R48	R93	R1 977
Province 3	R870	R0	R18	R20	R444	R19	R0	R14	R1 385
Quintile 1	R1 105	R0	R16	R16	R449	R1	R24	R67	R1 679
Quintile 2	R1 200	R22	R36	R10	R527	R14	R32	R32	R1 872
Quintile 3	R921	R39	R62	R10	R664	R25	R62	R58	R1 841
Quintile 4	R822	R0	R89	R31	R1 459	R70	R248	R549	R3 267
Quintile 5	R472	R32	R0	R84	R3 202	R36	R200	R418	R4 444
No quintile	R793	R3	R61	R25	R1 090	R45	R76	R182	R2 275
<b>Total</b>	<b>R907</b>	<b>R12</b>	<b>R47</b>	<b>R25</b>	<b>R962</b>	<b>R31</b>	<b>R85</b>	<b>R173</b>	<b>R2 243</b>
Province 1	28.1%	1.0%	2.6%	1.3%	48.9%	1.5%	5.6%	11.0%	100.0%
Province 2	50.7%	0.0%	1.7%	0.1%	39.4%	1.0%	2.4%	4.7%	100.0%
Province 3	62.8%	0.0%	1.3%	1.4%	32.1%	1.3%	0.0%	1.0%	100.0%
Quintile 1	65.8%	0.0%	1.0%	1.0%	26.7%	0.1%	1.4%	4.0%	100.0%
Quintile 2	64.1%	1.2%	1.9%	0.6%	28.1%	0.7%	1.7%	1.7%	100.0%
Quintile 3	50.0%	2.1%	3.4%	0.6%	36.1%	1.3%	3.4%	3.1%	100.0%
Quintile 4	25.2%	0.0%	2.7%	0.9%	44.7%	2.1%	7.6%	16.8%	100.0%
Quintile 5	10.6%	0.7%	0.0%	1.9%	72.0%	0.8%	4.5%	9.4%	100.0%
No quintile	34.8%	0.1%	2.7%	1.1%	47.9%	2.0%	3.3%	8.0%	100.0%
<b>Total</b>	<b>40.5%</b>	<b>0.5%</b>	<b>2.1%</b>	<b>1.1%</b>	<b>42.9%</b>	<b>1.4%</b>	<b>3.8%</b>	<b>7.7%</b>	<b>100.0%</b>

Table 41, reflecting incomes per enrolled child, as well as the similar table on expenditures, was obtained after some trimming of the data. Trimming entails ignoring extreme values of the data for the purposes of summarizing the data, e.g. in determining averages. In this case, it was decided to trim the data by excluding the 5% of facilities with the highest value on each of the components of income, as well as the 5% of facilities with the lowest value, which

**Figure 4. Ratio between DSD subsidies received and fees paid in registered community-based ECD facilities**



was usually zero. This was done for each of the components separately and the average for that component was then calculated, both nationally and for the different provinces and quintiles of the distribution.<sup>17</sup> It should be noted that the figures here reflect averages across all facilities, thus, for instance, the amounts per child received from subsidies were across all facilities whether they received such grants or not, and across all children, whether they were subsidized or not.

Two of the income components were zero after trimming the 5% highest values, and were thus left out of this table. These were the “other expenditures” by the Department of Social Development, and municipal grants – hardly any facilities received either of these income sources. An additional component had to be added however: facilities do not consider their income in kind from the salaries paid by the DoE as part of their salary expenditure, nor do they consider that such subsidies are part of the total subsidies they receive. This was consequently included in this table as an income source, and in Table 42 (on expenditure) it is captured as separate salary expenditure. The large income items were DSD subsidies, school fees, other sources of income and fundraising. Fees constituted about 43% of all income in the three provinces for those facilities for which financial information was available, with a low of 33% in Province 3 and a high of 50% in Province 1. In contrast DSD subsidies, which constituted 41% of all income, were particularly high as a proportion of total income in Province 3 (63%) and low in Province 1 (29%). In higher quintiles there was a lower share of income from DSD subsidies and a greater share obtained from fees. This reflects the greater ability of more affluent facilities to raise fees, and also the fact that DSD subsidies are targeted at

<sup>17</sup> It needs to be kept in mind that this data is calculated from averages per child for each facility, i.e. facilities with greater enrolment did not receive a greater weight in determining overall incomes and expenditure. In the weighted results, which considered the school size, weighting was done according to the initial weights per province which, as indicated in the sampling description, could not be correctly weighted across provinces as well as no common sampling frame was available across the provinces.



lower-income ECD facilities. Indeed, the total amount of subsidy per child was almost three times as high in quintile 1 facilities as in quintile 5.<sup>18</sup>

The sector is reliant on a mixture of government grants and fees. As funding is fungible and there is no way to isolate and track the marginal spending triggered by the government grants (i.e. it is not possible to say whether subsidies or fees fund teacher salaries or food expenditure), it is useful to ask what proportion of revenues grants is represented. At the lower quintiles, there was a larger share of grants, while fees dominated entirely in the top quintiles where community-based ECD centres were often not eligible for grants. Figure 4 shows one way of expressing this ratio. It shows that the ratio of grants to fees declines from 246% in quintile 1 to 15% in quintile 5. This ratio is very high in Province 3, reflecting the fact that this province has expanded the provision of community-based ECD coverage to a large number of poor community facilities. The total ratio for these three provinces combined is close to 1:1, reflecting that these two income sources are similar in total magnitude across all the facilities combined, although ratios differ greatly across provinces. Although the top quintile experienced considerably smaller grants per child compared to the other quintiles, this ratio was also extensively affected by a sharp increase in fees received in these more affluent ECD facilities. But clearly, grants considerably reduced the outlays that poor parents had to make and thereby made ECD much more affordable. Assuming fees would have had to fully make up if grants fell away, the table above and the figure below indicate that fees would have had to increase more than threefold by more than R1 100 per child per year for parents in community facilities in the bottom two quintiles. Without these grants, many facilities in the bottom three quintiles may not have been able to continue offering these services.

#### 4.4 Expenditure of registered community-based facilities

Turning now to expenditure, the analysis was undertaken in a similar manner. The following expenditure components were identified:

- Food
- LTSM (learner and teacher support material)
- Salaries
- Bonuses
- Rent
- A component “other”, which allowed for any expenditures outside these categories

The salary component paid through Persal also had to be added to the expenditure categories of the ECD facilities to get the full picture and to make expenditure comparable across facilities, whether they receive subsidies as transfers or in the form of salary payments of Grade R teachers through Persal. Interestingly, the “other” component was quite large at more than a third of the total. This item was not specified and was often simply determined by respondents as the difference between total expenditures and the other components mentioned. It thus potentially allows for much diversion of expenditure in the absence of

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<sup>18</sup> Here it should also be remembered that the allocation of ECD facilities to quintiles would not be perfect, as this was done simply by assuming that the ECD facility was in the same quintile of the distribution as the school closest to it. In addition, almost a third of facilities could not be placed into quintiles with the available information. In many of the tabulations, the no quintile groups appeared very similar to the average for all facilities, thus it appears that the failure to classify these schools does not influence the analysis greatly. Moreover, the fact that fees levied per child rose in a clear pattern across the quintiles is indication that the allocation was not highly inaccurate.

detailed and precise bookkeeping. Food expenditure comprised about 15% of expenditure. The dominant expenditure component was salaries, making up just over half (51%) of all expenditure, although this share was quite a lot lower in Province 3 at 31%. It is interesting that the expenditure per child on salaries was quite high in quintile 5 facilities, i.e. amongst the more affluent facilities, where it was above R4 000 per child. A similar, but somewhat smaller differential existed between Province 1 (almost R3 000 per child spent on salaries) and the other provinces with Province 3 (R445) making up the two extremes. Food expenditure per child varied less across the provinces and the quintiles, with the expenditure per child actually being higher in the bottom three quintiles than in the top two, probably because parents in more affluent facilities take greater responsibility for food provision. The “other” component of expenditure had a high share in all quintiles and provinces.

**Table 42. Expenditure categories in registered community-based ECD facilities, 2008 (expenditure per enrolled child per year)**

	Food	LTSM	Salaries (non-Persal)	Salaries paid through Persal	Bonus	Rent	Other	Total
Province 1	R229	R136	R 2 511	R41	R32	R30	R1 242	R4 221
Province 2	R480	R69	R760	R2	R9	R8	R474	R1 802
Province 3	R503	R34	R445	R20	R2	R2	R449	R1 455
Quintile 1	R505	R68	R788	R16	R7	R7	R732	R2 123
Quintile 2	R517	R40	R1 167	R10	R22	R6	R352	R2 114
Quintile 3	R406	R78	R1 004	R10	R0	R4	R637	R2 139
Quintile 4	R188	R102	R2 017	R31	R35	R44	R1 573	R3 988
Quintile 5	R160	R157	R4 172	R84	R39	R15	R1 512	R6 140
No quintile	R376	R94	R1 099	R25	R13	R19	R620	R2 247
<b>Total</b>	<b>R383</b>	<b>R85</b>	<b>R1 342</b>	<b>R25</b>	<b>R15</b>	<b>R14</b>	<b>R791</b>	<b>R2 657</b>
Province 1	5.4%	3.2%	59.5%	1.0%	0.7%	0.7%	29.4%	100.0%
Province 2	26.7%	3.8%	42.1%	0.1%	0.5%	0.4%	26.3%	100.0%
Province 3	34.6%	2.3%	30.6%	1.4%	0.1%	0.1%	30.9%	100.0%
Quintile 1	23.8%	3.2%	37.1%	0.8%	0.3%	0.3%	34.5%	100.0%
Quintile 2	24.4%	1.9%	55.2%	0.5%	1.1%	0.3%	16.7%	100.0%
Quintile 3	19.0%	3.6%	47.0%	0.5%	0.0%	0.2%	29.8%	100.0%
Quintile 4	4.7%	2.6%	50.6%	0.8%	0.9%	1.1%	39.4%	100.0%
Quintile 5	2.6%	2.6%	68.0%	1.4%	0.6%	0.2%	24.6%	100.0%
No quintile	16.7%	4.2%	48.9%	1.1%	0.6%	0.9%	27.6%	100.0%
<b>Total</b>	<b>14.4%</b>	<b>3.2%</b>	<b>50.5%</b>	<b>0.9%</b>	<b>0.6%</b>	<b>0.5%</b>	<b>29.8%</b>	<b>100.0%</b>

Because many respondents were the principals of such facilities, some responses may have been intentionally misleading to hide strategic behaviour. It is difficult to determine the full extent of such behaviour because of the nature of the data source, which was itself contaminated by the fact that the respondents were the potential beneficiaries of any such diversion of funds. This is of particular concern as PETS is aimed at following financial flows through the government process to service delivery organizations at the grass-roots level (schools or community facilities). The concern in such PETS studies is that funds may be diverted from the schools or community facilities for which they were intended. In this case, where privately run community facilities are the recipients of the subsidies, there was also a concern about possible strategic behaviour by service providers (schools or community facilities) as was set





out in the conceptual framework. Such behaviour could take the form of diversion of funds from application for the benefit of children towards better conditions, salaries and other material gain for producers, i.e. the principals and teachers of such facilities.

It is possible that one way in which such behaviour could be concealed was for principals to arrange the books in such a manner that funds that they used for themselves could have been recorded under “other” or “food”, categories that are difficult to verify in the absence of good financial bookkeeping. Yet even then, the scope for abuse was limited in most facilities. The average of less than R400 spent per child per year on food is exceedingly low and leaves little scope for diversion; even the approximately R500 per year spent in Province 3 and in the poorest quintile is quite small. “Other” expenditure is a little larger, but again much smaller than salaries.

#### 4.5 Comparing income and expenditure of registered community-based facilities

Comparing income and expenditure of registered community-based ECD facilities, the tables above show a surprising gap which one would not expect to occur in financial statements of this nature. The total facility income per child enrolled in all the registered facilities surveyed in the country was R2 243. In comparison, total expenditure per child was R2 657. This average gap of R414 by which expenditure exceeds income is inexplicable. The direction of this (an unexplained “loss” rather than an unexplained “surplus”) is also not in line with what one may have expected within the context of the conceptual framework. Greater insight is needed in the financial statements to understand why this gap occurs. One possibility would be that some DSD subsidies were under-reported but as will be seen in the next table, the extent to which that may have occurred could not have been of such a magnitude. Small facilities of this nature cannot on a continuous basis make a loss of this magnitude and keep functioning. A loss in any particular year is possible for those facilities that may have accumulated reserves, but this is likely to be a small number and would not be sustainable; there is also no reason to suspect that 2008 was a particularly bad year for the financing of ECD facilities, though it was the year in which the effects of the global recession started affecting South Africa. Further investigation shows that the “loss” was particularly large in Province 1 and in quintile 5 facilities (Figure 5).<sup>19</sup> In contrast to Province 1 and quintile 5, the other two provinces have a quite small deviation between income and expenditure, as Figure 5 shows. The larger deviations in Province 1 and the richer quintiles should not be a cause for concern from a PETS perspective, as these are the facilities less dependent on public resources; many of them are not subsidized at all.

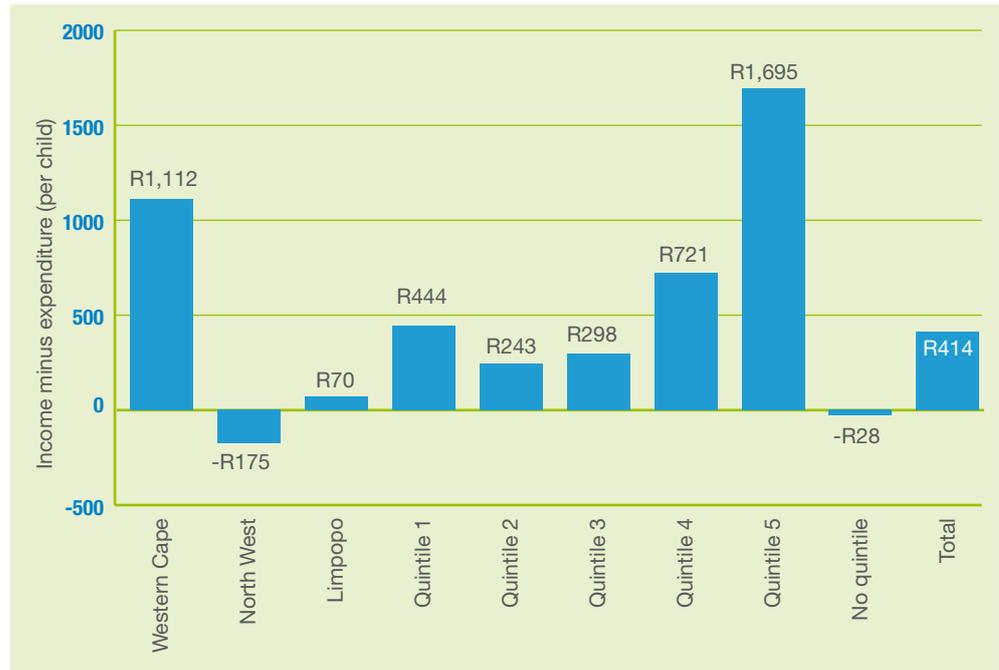
However, Figure 6 below shows for most facilities a fair match between income and expenditure, though there were a few cases that deviated substantially from the zero profit or loss line. Thus one of the indicators of the efficiency of spending that the conceptual framework referred to, “owner profit” after considering the opportunity cost of the owner’s time, does not yield any insights in this context given limited measured profit. Moreover, analysis of these cases shows that many of them did not receive any grants at all, thus the reason for the deviation did not lie in misreporting by these facilities or by the provincial authorities of the flows of grants. Cases of such deviation were fairly common across the spectrum and in all provinces, and for some provinces and quintiles they simply cancel out. Generally, however,

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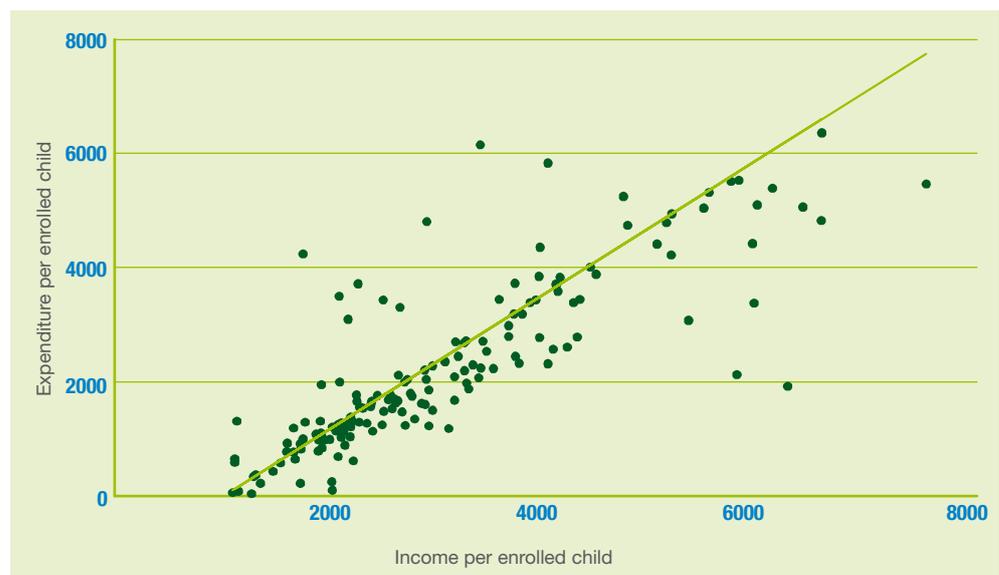
<sup>19</sup> This was even more the case before dropping those community-based facilities that reported they were financially attached to public primary schools.

the scope for such deviation is much smaller in facilities with low incomes and expenditures. This may be the major reason why the poor state of financial reporting leads to a large differential between expenditure and income in the richer provinces and deciles, even though such misreporting is more common.

**Figure 5. Excess of expenditure per enrolled child over income per enrolled child, 2008**



**Figure 6. A comparison of income and expenditure per enrolled child by facility in registered community-based ECD facilities, 2008**





## 4.6 Subsidies received from DSD by registered community-based facilities

The analysis now turns to subsidies obtained from the Department of Social Development. Table 43 below shows, for those facilities for which data was available, the amount of these subsidies. After facilities with links to public schools were dropped from the analysis and appropriate trimming of 5% was carried out, data was available for only 134 facilities that provided data on the subsidies they received from the DSD. Fiscal data on grants could be matched for only 139 facilities, excluding those attached to facilities. However, only 89 of these facilities overlapped. After trimming, there were even fewer facilities for which DSD data on the funding made available to facilities was available. A correlation for the 77 facilities in which both sets of data was available showed only a weak relationship between these two sets of data, with a correlation coefficient of 0.16, but once five outlier values were ignored, this correlation jumped to 0.61. The table below contains information only for those 72 facilities. For these 72 facilities, the relationship between the information provided by the facilities and that provided by the DSD in the provinces concerned was quite good at the aggregate level. It should be kept in mind that the facilities surveyed included here were all recipients of DSD subsidies; this in part explains the deviation of the mean income from subsidies compared to that in Table 41 which expressed the subsidies per child across all facilities. The reduction in the sample due to incomplete information could also have introduced unknown biases in Table 43, however.

**Table 43. Subsidy per enrolled child as reported by registered community-based facilities receiving subsidies versus actual subsidy as reported by DSD, 2008 (for 72 facilities)**

	Mean				Median			
	Survey	DSD	Ratio	Gap	Survey	DSD	Ratio	Gap
Province 1	R1 504	R1 588	94.7%	R85	R1 515	R1 634	92.8%	R118
Province 2	R1 656	R1 514	109.4%	-R143	R1 677	R1 679	99.9%	R2
Province 3	R1 052	R899	117.1%	-R153	R870	R818	106.4%	-R52
Quintile 1	R1 344	R1 099	122.3%	-R245	R1 293	R993	130.2%	-R300
Quintile 2	R1 460	R1 366	106.9%	-R94	R1 432	R1 091	131.2%	-R341
Quintile 3	R1 372	R1 410	97.3%	R38	R1 133	R1 315	86.2%	R182
Quintile 4	R1 230	R1 434	85.8%	R204	R1 294	R1 605	80.6%	R312
Quintile 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
No quintile	R1 378	R1 295	106.4%	-R83	R1 210	R1 306	92.6%	R 96
Total	R1 368	R1 288	106.3%	-R81	R1 322	R1 217	108.6%	-R105

Note: This information is based on only 72 facilities, for which both 2008 information from financial statements and fiscal information on resource flows were available, and after trimming extreme values (more than three standard deviations above the mean). It is therefore not strictly comparable to the information on all income sources provided above, which also includes some facilities not receiving subsidies. This figure for per capita grants therefore exceeds the per capita subsidy shown in the table on facility sources of income.

There were larger discrepancies for individual facilities, but these tended to cancel out and in aggregate, these facilities reported slightly higher inflows of grants than what the DSD data indicated. There thus does not appear to be evidence of systematic diversion of DSD grants before they reached the facilities they were intended for. It is possible that there were instances of such diversion, either cases for which data was not available and that therefore

meant such facilities were not part of the final subsample analysed below,<sup>20</sup> or possibly cases of individual facilities that were included in this sample but where the data was misleading. It would thus be unwise to ignore the possibility of corrupt or opportunistic behaviour. Yet the data analysed makes clear that if such behaviour occurred, it was of a relatively minor nature.

Missing information on grants received or transferred does raise issues about the source of such errors. If the problem lay in the financial statement of facilities, it could have been deliberate attempts to circumvent the school management body in not providing full information as to funds received. Alternatively, facilities may not have done proper bookkeeping because of incompetence in these matters. A sober reading of the situation is that it may have been a combination of all three potential sources of error, namely diversion of funds away from facilities, poor financial bookkeeping by facilities and deliberately misleading information being provided on the financial statements. This clearly needs prompt attention, even if there was no direct evidence of large scale diversion of funds. Large sums of public money are spent on community facilities in order to provide services to children and this money should be properly accounted for. Government should intervene by setting proper structures in place to ensure that funds are spent on the purposes for which they were intended. Moreover, the rapid expansion of ECD should first be moderated while the present system is consolidated. These conclusions are further strengthened by Chapter 5 which looks at child development in ECD facilities, where it is found that the quality of service provided to children is of quite variable quality.

## 4.7 Fiscal incidence

To determine the fiscal incidence of spending by the DSD on grants going to registered community-based facilities, one first needs to estimate the total amount of subsidies going to such facilities by quintile and the distribution of the potential beneficiaries. In this case, it was necessary to add across provinces, which could not be done with the weights that were available, as these only applied within provinces. In this case it is important as patterns of benefits differ across provinces. Thus re-weighting was done at the provincial level for this purpose only, using the data from NIDS on those in pre-Grade R pre-primary education and crèches.

Thus the procedure adopted here to arrive at a very tentative estimate of the incidence of ECD subsidies from the DSD in registered community-based facilities, is to take the figures provided by the facilities without questioning the individual responses too much, weight them up to provincial level, re-weight each province by its share of the pre-primary plus crèche population in NIDS (excluding Grade R), and then calculate from that a spending by quintile for those two-thirds of registered facilities who could be allocated to quintiles. The data is contained in Table 44 below and shows that the spending for ECD was very much biased towards the poorer quintiles.

The problem, though, is to decide what appropriate base population to include in determining the incidence. A first possibility is simply to show spending share relative to the share of the population in different quintiles in those in registered ECD facilities. This is a useful measure, as discussed below, but ignores potential beneficiaries.

One option is to simply assume the underlying population was of equal size in all the quintiles, as was the intention of the allocation into quintiles, but that is known to be inaccurate. That would thus give an exaggerated estimate of the targeting accuracy, as poorer quintiles



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<sup>20</sup> Outliers were analysed as well as was possible for this purpose to determine whether this was an issue before they were discarded for the analysis in the table.



tend to be larger. Yet another possibility is to take the full population of pre-Grade R age (0–4 years) for the three provinces concerned, though this distribution into quintiles is based on household income distribution and does not reflect the distribution in ECD facilities.

Another option is to reflect the spending relative to the population by quintile in facilities, assuming the school population and the potential ECD population share the same underlying socio-economic status. There are a few options here. Government Notice 869 of 2006 sets out the proportion of children to be allocated to quintiles in each province; a more recent notice has not yet been implemented. This can be used to derive either a national quintile distribution, or a distribution for the three provinces concerned, applying these proportions to the 0–4 year age group in each province. But that also assumes that the breakdown as given in the Government Notice has in fact been applied. As an alternative, it is possible to use the master list of schools which, though not quite complete, is relatively comprehensive to derive actual school numbers by quintiles. From all these quintile distributions, the proportions are calculated and shown in the table. These are used in order to calculate the concentration coefficients and show concentration curves.

**Table 44. Estimates of the distribution of DSD subsidies for ECD in registered facilities by quintile and the underlying distribution of potential beneficiaries, 2008**

	Quintile 1	Quintile 2	Quintile 3	Quintile 4	Quintile 5	SA	Concentration coefficient of subsidy expenditure
Total subsidy	28.6%	21.8%	31.6%	14.5%	3.5%	100%	N/A
Underlying population of potential beneficiaries							
Equal underlying population assumed	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	-0.229
% total ECD attendance in three provinces concerned	28.0%	17.2%	29.6%	15.1%	10.1%	100%	-0.076
0–4 years quintile share based on household income quintiles	28.6%	27.0%	18.7%	13.1%	12.6%	100%	-0.024
Schools numbers from master list/ snap 2008	25.2%	20.4%	25.6%	15.8%	13.2%	100%	-0.111
Implied school numbers from Government Notice	22.3%	16.8%	25.2%	19.1%	16.6%	100%	-0.196
Implied school numbers from Government Notice in the three provinces concerned	21.9%	15.7%	25.6%	19.3%	17.6%	100%	-0.214

The concentration coefficient measures how well spending is targeted. It is similar in nature to the Gini coefficient, which tends to 1 if there is extreme inequality and to zero when there is complete equality of incomes. It is indeed also possible to have better equality of public spending, to the extent that the poor can get more than their share of spending; in such a case the concentration coefficient is negative, as is indeed the case for all the estimates observed in the table. It is also reflected in all the concentration curves shown in Figure 7 largely

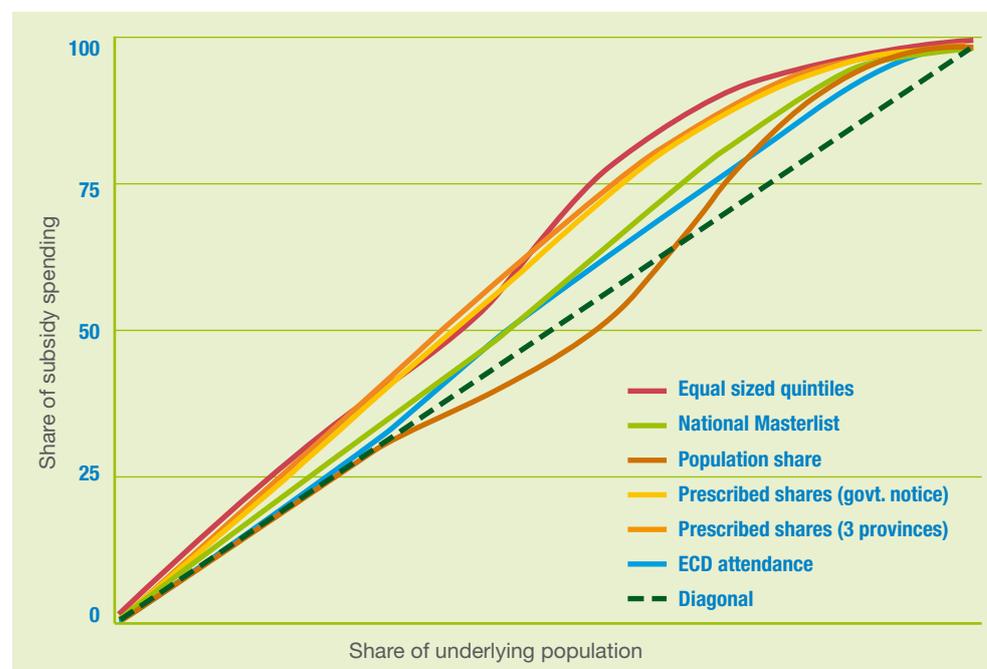
lying above the diagonal (the line of absolute equality), reflecting pro-poor targeting. The poorest 20% of the population cannot earn more than 20% of income, but they can indeed obtain more than 20% of the benefits of public spending.

The table shows that the concentration coefficients generally lie within a relatively narrow band. There are two exceptions. The first measure reflecting the least good targeting uses the underlying South African population as the comparator. However, the quintile distribution for this population was based on the distribution across household quintiles, which is a poor indicator of the distribution across ECD or even school quintiles.

The second measure that also appears less pro-poor is based on the actual number of children at school. That is indeed a valid measure, similar to one that Gustafsson and Patel have shown for schools.<sup>21</sup> However, it reflects only distribution of spending between those in facilities while neglecting the targeting that takes place by attracting more children from poor backgrounds into ECD facilities registered with and receiving subsidies from DSD, while the same may not apply to children of more affluent parents. Thus it reflects the distribution of spending for those in the system, but not who gets access to such facilities.

The other measures all show very high levels of targeting. The measure which seems most appropriate is the one using the quintile distribution by province as prescribed by the Government Notice referred to the three provinces concerned, and applying that to the age group 0–4 years from NIDS in these three provinces. This coefficient of -0.219 is a very high negative value, reflecting extremely good targeting. To put that in perspective, one can

**Figure 7. Concentration curves for DSD subsidies for ECD in registered community facilities by alternative assumptions about the underlying distribution of potential beneficiaries, 2008**

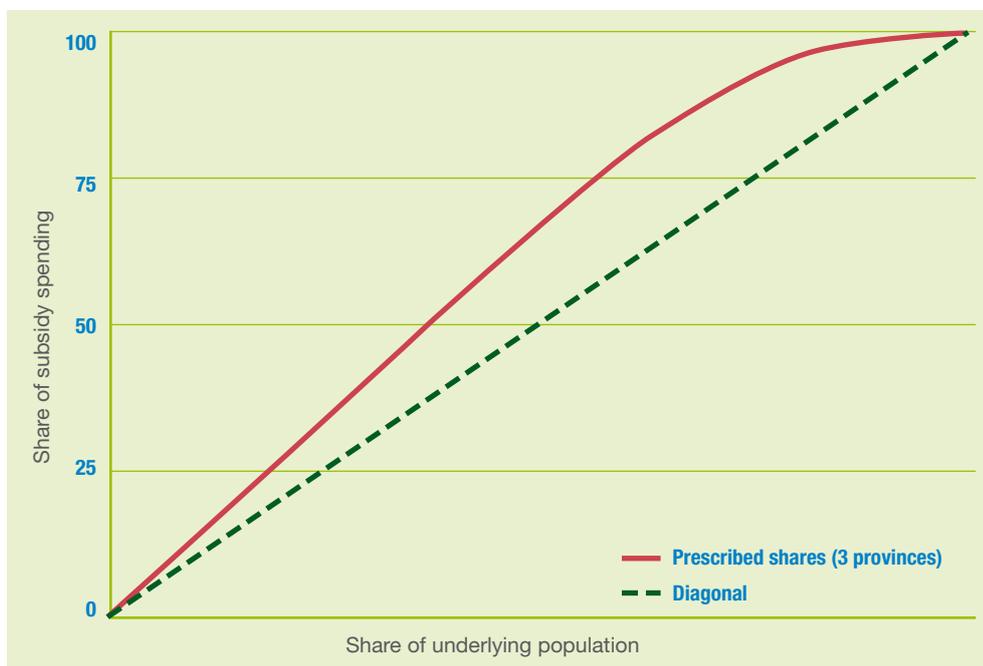


21 Gustafsson, M. and F. Patel. 2006. Undoing the apartheid legacy: Pro-poor spending shifts in the South African public school system. *Perspectives in Education* 24(2):65-77.



compare it to some of the figures found for South Africa in a 2006 study for the national treasury: for all social spending it was -0.152, for school education it was -0.128, for social grants (where the means tests apply) -0.318, for health -0.137 and for housing +.070.<sup>22</sup> Clearly, the system of supporting ECD through transfers to registered private ECD practitioners in communities has achieved one of its main aims, i.e. targeting the poorer segments of the population both by providing them with grants and by attracting them into ECD.

**Figure 8. Concentration curve of the distribution of DSD subsidies for ECD in registered facilities assuming the prescribed school quintile distribution for the three provinces as underlying distribution, 2008**



## 4.8 Conclusion

Despite the limitations of the financial data from registered community-based ECD facilities, this chapter could nevertheless provide important light on this subsector. Although there was no clear evidence of financial abuse, it was apparent that the opportunities for such abuse exist. It is thus important to return to this in Chapter 6 after the quality of infrastructure, LTSM and programmes in ECD facilities have been considered in Chapter 5, to investigate statistically whether there were patterns of behaviour that one could ascribe to possible financial opportunism.

<sup>22</sup> Van der Berg, Servaas. 2009. "Fiscal incidence of social spending in South Africa, 2006", Working Paper 10/2009, Stellenbosch University, Department of Economics.





# Chapter 5: The quality of facilities and services rendered

## 5.1 Introduction

If government investment in Grade R or pre-Grade R ECD programmes achieves only an environment where children are “looked after”, the intention of the expenditure – to provide early educational benefits that could place children on a trajectory that could eventually improve their overall quality of life – will not be achieved. A poor quality programme is therefore an indirect “leakage” of expenditure.

How can quality be observed? Given the difficulties with observing quality and the concerns regarding how observation will change the behaviour of teachers in the classrooms, this study opted for concentrating on information about infrastructure and LTSM, but more importantly from the daily programme and examples of work found in the learner portfolios of Grade R pupils (age group 5–6) who are observed in all three types of facilities sampled, although they are mainly concentrated in public schools.

Of course one should bear in mind that observation changes behaviour. Because the visit was pre-announced, what was observed in the field was probably a best case scenario and at least slightly more rosy than the usual reality. For this reason, the survey attempted to include many items that could be observed directly.

The chapter first looks at food and nutrition and then at infrastructure. This is followed by discussion on the availability of learning and teaching support materials (LTSM) in classrooms, before the chapter turns to the quality of the programmes offered. A programme quality index based on the combination of programme assessments, observed activities and learner portfolios offers an indirect approximation of programme delivery in the class. Since the curriculum requires that the same programme must be delivered to Grade R children in schools and community facilities, the same index items were used to assess all three subsectors.

## 5.2 Food and nutrition

The nutrition provided to children during their ECD years is a significant contributor to their healthy development. All facilities surveyed indicated that some form of nutrition was provided. Community-based ECD facilities, unregistered facilities and Grade R classes at public schools differ somewhat in the most common ways through which they ensured that the children eat while under their care (see Table 45).

The majority (71%) of public schools provided nutrition for Grade R children through the National School Nutrition Programme (NSNP) (see Table 45). The reported NSNP coverage in public schools was mostly pro-poor, as intended, although it was not as well targeted at schools in the very bottom quintile as at slightly less poor schools (see Table 46). About 74% of quintile 1 schools, 96% of quintile 2 schools and 86% of quintile 3 schools reported being covered by the NSNP. In Province 2 and Province 3, the greatest targeting was not at quintile 1 schools. The NSNP seems to have extended to almost a third of registered community-based facilities – particularly in Province 2 and Province 3 (Table 47). At registered community-based facilities, nutrition is most commonly provided through the centre (41%) or through lunchboxes sent from home (28%) (Table 45).

The source of the nutrition in unregistered community-based facilities provides an indication of who bears the costs of nutrition in the absence of any state provision. More than three quarters (79%) of unregistered community facilities provide nutrition out of their own funding,

and about a third of these centres indicate that parents send baby formula or a lunchbox to school (Table 45). The slightly higher proportion in unregistered facilities providing own food or milk may reflect the fact that such centres are less well funded.

**Table 45. Who provides food by type of facility**

	Public		Community		Unregistered	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Parents send lunchboxes from home	123	32.2%	89	28.0%	33	36.7%
Parents send milk/formula from home			44	13.8%	28	31.1%
Facility provides for it out of funds at its disposal	54	14.1%	131	41.2%	71	78.9%
School Nutrition Programme	272	71.2%	92	28.9%	N/A	N/A
Department of Health/clinic/hospital	3	0.8%	24	7.5%	N/A	N/A
Municipality/local government	5	1.3%	7	2.2%	N/A	N/A
Local business	7	1.8%	2	0.6%	0	0
Other	0	0	10	3.1%	4	4.4%

\*Unweighted totals reported.

\*Totals do not add up to 100% since multiple options may apply.

**Table 46. NSNP coverage by quintile for public schools in each sampled province**

Province		Quintile 1	Quintile 2	Quintile 3	Quintile 4	Quintile 5
Province 1	Number	61	33	83	112	57
	% of quintile	75.3%	68.8%	80.6%	57.1%	27.7%
Province 2	Number	105	85	167	2	0
	% of quintile	63.3%	80.2%	70.5%	14.3%	0.0%
Province 3	Number	647	662	465	90	8
	% of quintile	76.0%	100.0%	93.9%	100.0%	19.5%
Total	Number	813	780	715	204	65
	% of quintile	74.0%	95.6%	85.6%	68.0%	25.5%

\*Weighted totals reported.

**Table 47. NSNP coverage in registered community-based facilities in each sampled province**

		Province 1	Province 2	Province 3
No NSNP coverage mentioned	Number	764	353	1,239
	% within province	79.2%	63.8%	69.8%
NSNP coverage mentioned	Number	201	200	536
	% within province	20.8%	36.2%	30.2%

\*Weighted totals reported.

Poor children attending Grade R in public schools are likely to receive some nutrition through state funding (NSNP programme). In contrast, food for children in registered and subsidized community-based facilities is supposed to be funded mainly through a proportion of the grant made available by DSD. Children in community-based facilities and unregistered facilities are particularly vulnerable to malnutrition if they come from poor households in facilities that do not provide good nutrition. DSD should provide clearer guidelines about the extent to





which grants are intended to cover the cost of food for children and to also make this clear to parents, so as to ensure greater accountability.

The number of meals provided is a crude indicator of the quantity of nutrition. Compared to the public schools, children at community and unregistered facilities receive more meals. Most public schools (87%) provide one meal only, but most community and unregistered facilities provide two or more meals (see Table 48 below). This may be because such facilities are more closely attuned to the needs of younger children than are public schools, where Grade R is only one of many grades. About 59% of the community-based facilities reported providing three or more meals, whilst the corresponding percentage in unregistered facilities is only 47% (see Table 48). Possible effects of different school hours are however not considered here.

**Table 48. The number of meals provided from state funds (public, community and unregistered facilities)**

Number of meals	Public		Community		Unregistered	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
1	271	86.6%	42	16.9%	9	12.7%
2	29	9.3%	61	24.5%	29	40.8%
3	13	4.2%	82	32.9%	26	36.6%
4			64	25.7%	7	9.9%

\*Unweighted totals reported.

\* Note: School-based facilities are generally not open after school hours, and therefore it was not assessed whether they provide an afternoon snack after lunchtime.

At public schools that provide food out of own funds or where the national school nutrition project (NSNP)<sup>23</sup> is the main nutrition source, it is common for only one meal to be provided (see Table 49). Grade R classes at public quintiles 4 and 5 schools do seem to provide more meals (Table 50): about 49% of classes at quintile 5 schools and 32% of classes at quintile 4 schools provide two meals or more. Public schools in Province 1 more often provide two meals (see Table 51 – almost 41% of Province 1 public schools classes compared to only 6% or 7% in the other two provinces).

**Table 49. The number of meals provided from state funds (public, community and unregistered facilities)**

Number of meals	Public schools		Registered community-based facilities	
	Frequency	Percent	Frequency	Percent
1	266	86.6	35	16.7
2	28	9.1	50	23.9
3	13	4.2	69	33.0
4			55	26.3

\*Unweighted totals reported.

\* Note: School-based facilities are generally not open after school hours, and therefore it was not assessed whether they provide an afternoon snack after lunchtime

<sup>23</sup> This excludes facilities where parents, the Department of Health, local government or local businesses provide food.

**Table 50. The number of meals provided from state funds in public schools offering Grade R in different quintiles**

Number of meals		Quintile 1	Quintile 2	Quintile 3	Quintile 4	Quintile 5
1	Number	989	704	698	145	37
	% within quintile	91.6%	93.5%	93.1%	68.1%	50.7%
2	Number	61	42	38	51	21
	% within quintile	5.6%	5.6%	5.1%	23.9%	28.8%
3	Number	30	7	14	17	15
	% within quintile	2.8%	0.9%	1.9%	8.0%	20.5%

\*Weighted totals reported.

**Table 51. The number of meals provided from state funds in public schools offering Grade R in different provinces**

Number of meals		Province 1	Province 2	Province 3
1	Number	227	427	1,919
	% within province	60.5%	93.2%	94.2%
2	Number	112	19	83
	% within province	29.9%	4.1%	4.1%
3	Number	36	12	35
	% within province	9.6%	2.6%	1.7%

\*Weighted totals reported.

**Table 52. The number of state-funded meals provided in registered community facilities in different provinces**

Number of meals		Province 1	Province 2	Province 3
1	Number	128	71	83
	% within province	22.4%	16.9%	7.4%
2	Number	62	120	379
	% within province	10.8%	28.6%	33.7%
3	Number	142	195	313
	% within province	24.8%	46.5%	27.8%
4	Number	240	33	349
	% within province	42.0%	7.9%	31.0%

\*Weighted totals reported.

It can be assumed that the quantity and nutritional value of food presented for breakfast or lunch could differ significantly from what could be expected from a snack. Knowing which meals are prepared therefore provides a crude indication of the quality of nutrition provided. At the majority of registered community and unregistered community facilities, breakfast and lunch are provided. At public schools, it is most common for lunch to be provided (see Table 53). Registered community facilities are far more likely than unregistered facilities to provide a morning or afternoon snack. Drinks other than water are not commonly provided at school-based facilities (see Table 54). About 20–35% of registered and unregistered community facilities provide a breakfast or lunchtime drink other than water.





**Table 53. Which meals are provided? (public, registered community and unregistered community facilities)**

	Public		Community		Unregistered	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Breakfast provided	78	23.9	213	78.6	64	71.1
Morning snack provided	41	12.5	99	36.7	19	21.1
Lunch provided	249	76.1	218	80.7	64	71.1
Afternoon snack provided			136	50.4	26	28.9

\*Unweighted totals reported.

**Table 54. Which drinks are provided? (public, community and unregistered facilities)**

	Public		Community		Unregistered	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Breakfast drink provided	26	8.0	85	31.5	20	22.2
Morning snack-time drink provided	23	7.0	50	18.5	10	11.1
Lunchtime drink provided	48	14.7	89	33.0	31	34.4
Afternoon snack-time drink provided			62	23.0	10	11.1

\*Unweighted totals reported.

Given the constraints of the fieldwork, it was not possible to get a true sense of nutritional value of the meals provided to children on a regular basis. Checking whether food is provided in accordance with a menu provides an indication of whether meals are planned – possibly with a focus on the nutritional value – and the variety of food on the menu is a proxy for nutritional variety. Of course, it is widely known that menus are sometimes used as wall adornments rather than guides to nutrition, and for this reason the study checked whether the meal provided on the day of the fieldwork was in line with the menu.

The Department of Social Development recommends in its guidelines that ECD facilities provide meals in accordance with a set menu which must be sufficiently varied between days and contain a variety of the essential food groups. When a site does not have a menu at all, it is likely that there may be less focus on ensuring variety and balance in the diet.

Almost all of the public schools (90%) and registered community facilities (87%) had a weekly menu, but only 58% of the unregistered facilities had a menu. The public and community facilities' menus were mostly judged as sufficiently varied, but only 46% of the unregistered facilities' menus were rated as sufficiently varied. Most of the public and community facilities seemed to adhere to the menu.

## 5.3 Infrastructure

Facilities with inadequate or poor infrastructure present a health and safety risk to children attending ECD, so it is important to determine whether the learning environment meets basic criteria as set out by the DoE and DSD. The state and condition of infrastructure is also a proxy variable for the quality of ECD facility. Although programmatically sound ECD can be presented in a dilapidated building, an unsafe and impoverished learning environment often is associated with substandard ECD with limited development opportunities.

At public schools, the infrastructure for Grade R is part of the regular school infrastructure which is usually built and maintained by the provincial Education Department or the provincial Department of Public Works. As such, the funding for the infrastructure is indirect, and Grade R children should not be at any disadvantage compared to their older peers at public schools. At community-based facilities, the Department of Social Development does not regularly provide any funding for infrastructure investment and one may assume that the facilities have to make use of infrastructure developed from the site owners' own resources or through community resources (e.g. a church). The risk therefore exists that the infrastructure made available to children attending community-based facilities might be poorer when compared to school-based ECD, although the DSD does require an inspection from the Department of Health before approving a facility.

Some of the key performance measures generally used to measure the adequacy of infrastructure for the purposes of education are:

- Percentage of schools/facilities with more than 40 children per class<sup>24</sup>
- Percentage of schools/facilities with an adequate number of functional toilets
- Percentage of schools/facilities with a safe water supply
- Percentage of schools/facilities with electricity
- These and other infrastructure aspects were also investigated in the context of this study
- Learner-to-facility ratios

It is difficult to get a firm grasp on the extent of the space constraint problem from the survey. The Department of Health uses a criterion of 1.3m<sup>2</sup> per child before approving a room as fit for the purposes of day care, but it was not possible to measure the size of classes in this study (i.e. it was not practical to have fieldworkers measure the space) and it is plausible that the classrooms allocated to younger pupils may have been larger to allow for hosting more children. The national Department of Education stipulates that there should be no more than 40 children per classroom in a primary school and younger children would need more space. Yet about 27% of the school-based classes, 20% of the registered community-based facilities and 7% of the unregistered facilities had more than 40 children per classroom. This seems to suggest that the more formalized the ECD provider is, the easier it is to get a larger number of children to attend, but it may also suggest that the classrooms available at schools and registered community facilities are larger and allow for hosting more children. Unfortunately, there seems to be no support for the assumption that government-funded ECD would provide better regulation of the number of children per classroom. The number of children in a class may impact on the quality of teaching and learning since more children per class are likely to be more distractible, and it also poses a greater risk for the spread of communicable diseases.

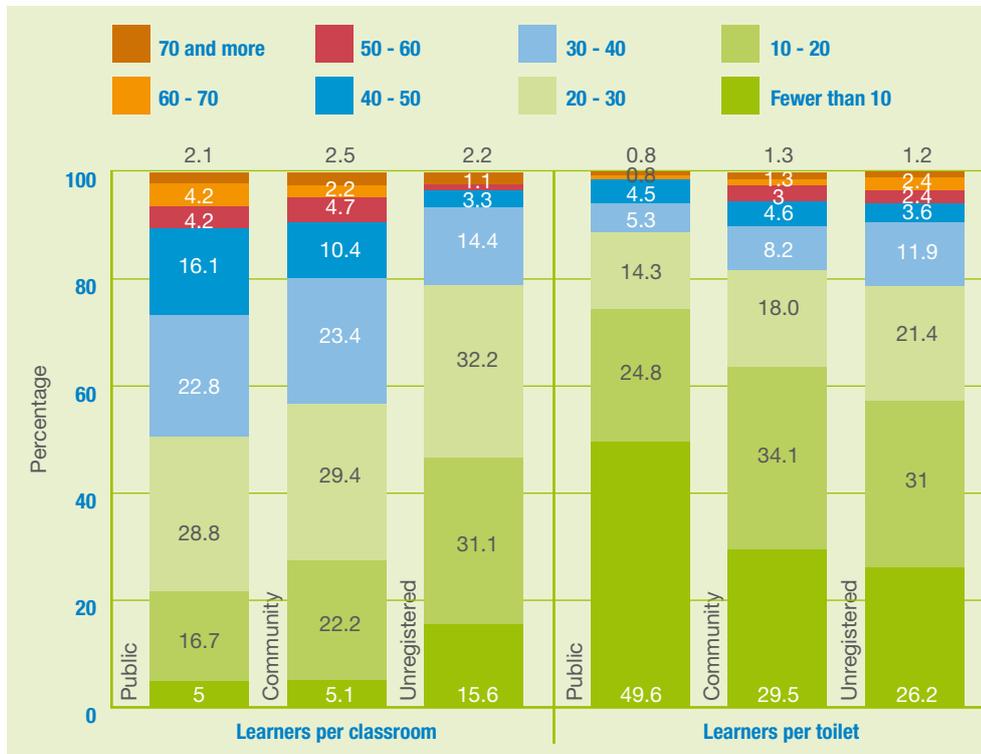
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<sup>24</sup> Note that this is considerably above the set norms of 30 children per class for Grade R and 20 for pre-Grade R.





**Figure 9. Learner-to-facility ratios in ECD in public schools and registered community and unregistered community facilities**



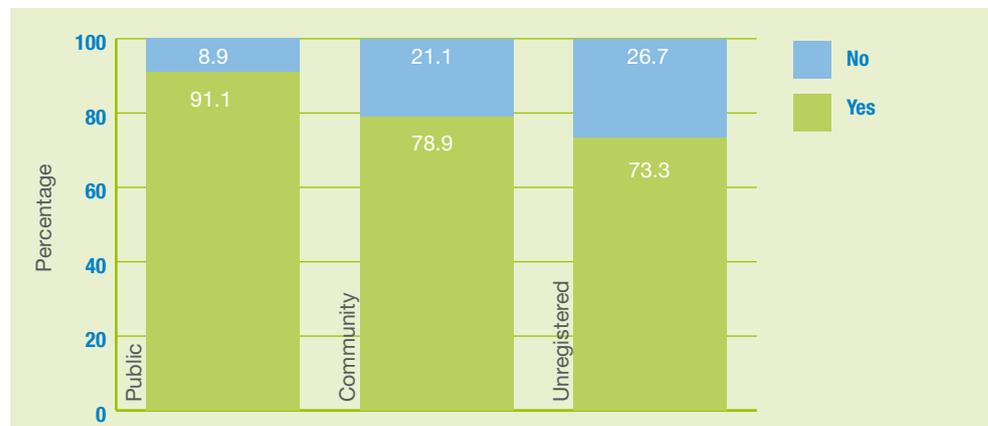
\*Unweighted totals used.

The Department of Education together with the Department of Water Affairs and Forestry (DWAF) are responsible for developing national school norms and standards regarding the number of required toilets, but historically each province uses its own benchmark which should be in line with the national building regulations and as per the local municipal requirements. Usually this benchmark is around 1.5 toilets per classroom or 1 toilet per 20 children. About 63% of community facilities and 57% of unregistered facilities comply with this standard, and although about 74% of the public schools comply, many of them do not have separate toilet facilities for Grade R children which means that the young children are potentially vulnerable to abuse by older children. It seems that the infrastructure challenges faced by Grade Rs are not any different from the infrastructure challenges experienced by public ordinary schools (see information below).

### Electricity, water and sanitation infrastructure

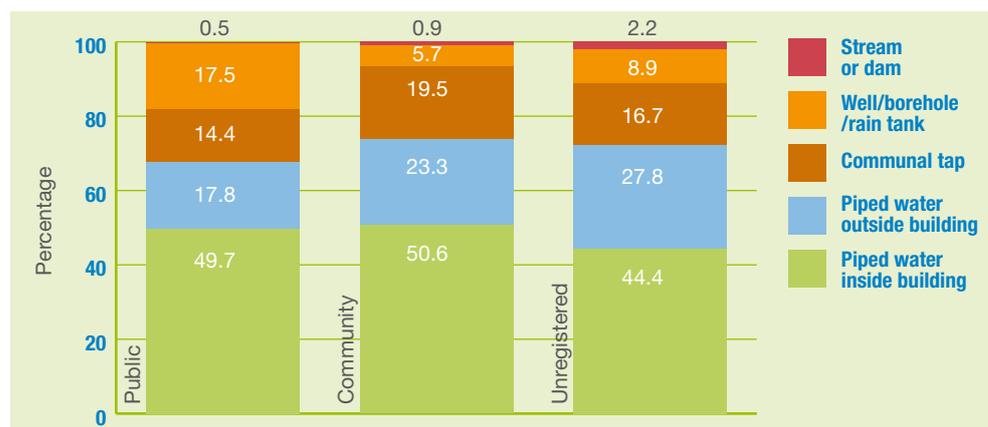
Almost all (91%) of public schools in the sample had electricity, but about 21% of community facilities and 27% of unregistered facilities reported that they did not have electricity on site. Only about half of the facilities had piped water inside the building and a substantial proportion of facilities in all three subsectors had to make do with a communal tap or stream/dam for water. Between 50% and 60% of facilities had flush toilets, but pit latrines were found at 41% of schools, 35% of registered community facilities and 28% of unregistered community facilities. About 10% of unregistered facilities made use of buckets, potties or had no toilet facilities for the children, a particularly troubling finding. Many public schools do not have separate toilet facilities for younger children.

Figure 10. Has the school/facility had electricity in the past 30 days?



\*Unweighted totals used.

Figure 11. Main water source at schools/facilities



\*Unweighted totals used.

Figure 12. Sanitation: main toilet type at schools/facilities



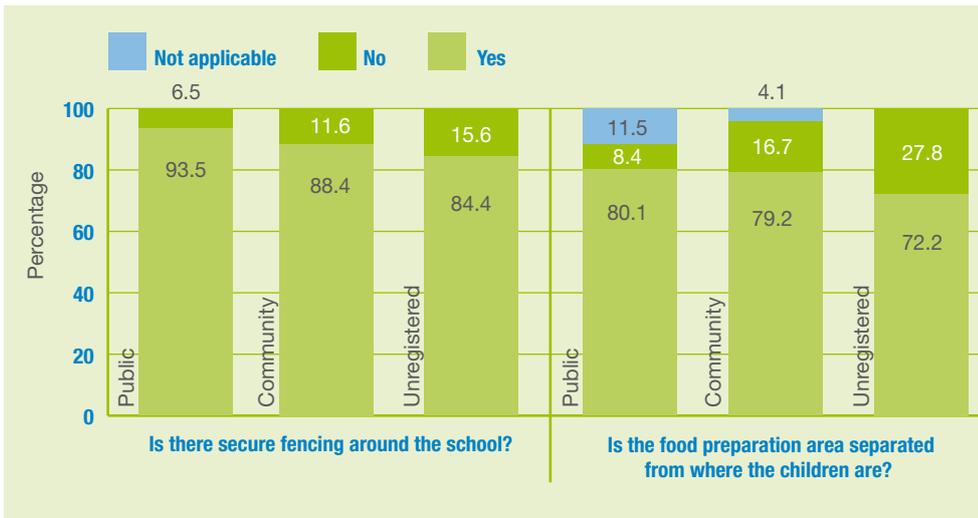
\*Unweighted totals used.





Safety concerns occurred more frequently at unregistered facilities – 16% of the unregistered facilities did not have secure fencing around the premises and in about 28% of the facilities, the food preparation area was not separated from the area where the children spent their time.

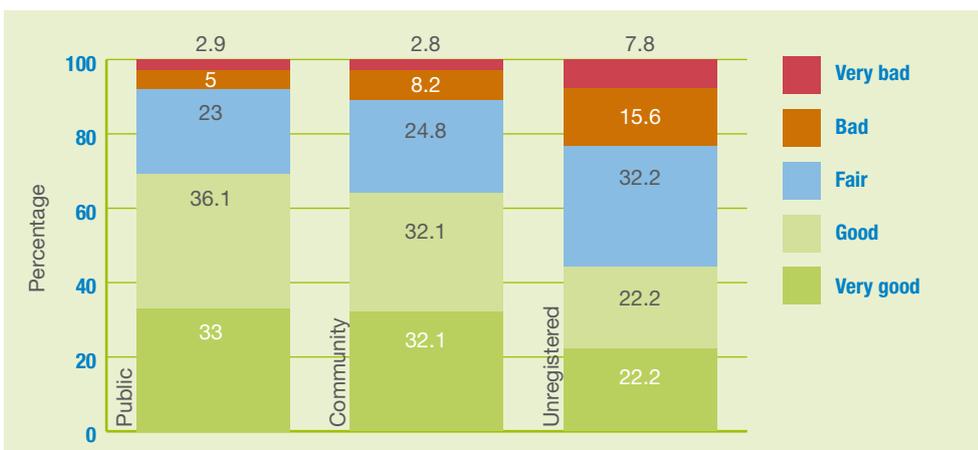
Figure 13. Safety aspects at schools/facilities



\*Unweighted totals used.

The condition of the buildings at public schools and community-based facilities was relatively comparable, but more of the unregistered facilities had buildings that were rated as being in a bad or very bad condition. This may explain why some of them remain unregistered, as they cannot meet infrastructure requirements.

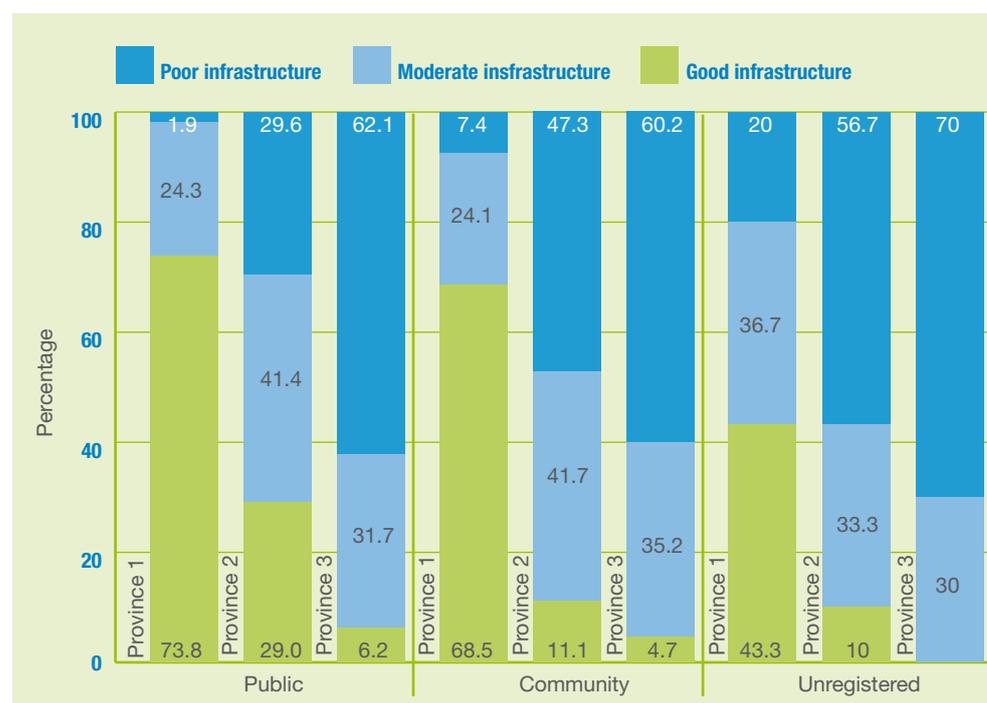
Figure 14. Condition of buildings



\*Unweighted totals used.

An infrastructure index was developed based on the combination of all infrastructure assessment items and allowed for the categorization of the facilities into three broad groups – Group 1 mostly had poor infrastructure, Group 2 had moderate infrastructure and Group 3 had good infrastructure. Infrastructure deficiencies were particularly worrying in Province 3 schools. In Province 1 about 74% of the public schools, 69% of the registered community facilities and 43% of the unregistered facilities had good infrastructure. This is in stark contrast to the results for the other two provinces: only 29% of the public facilities, 11% of the registered community facilities and 10% of the unregistered facilities in Province 2 had good infrastructure, and in Province 3, only 6% of the public schools, 5% of the registered community facilities and none of the unregistered community facilities had good infrastructure. Thus interprovincial differences seem to be a stronger predictor of the quality of infrastructure than the facility type. Improving infrastructure in Province 3 and also Province 2 clearly needs attention. Public schools should be the first priority, but improvement in the community facilities (both registered and unregistered) is highly desirable. Although registered community-based facilities are generally at a slight disadvantage when compared to public schools, they do seem to fare slightly better than unregistered facilities, although the latter are often unregistered precisely because they do not meet the requirements.

**Figure 15. Infrastructure quality by province and facility type**

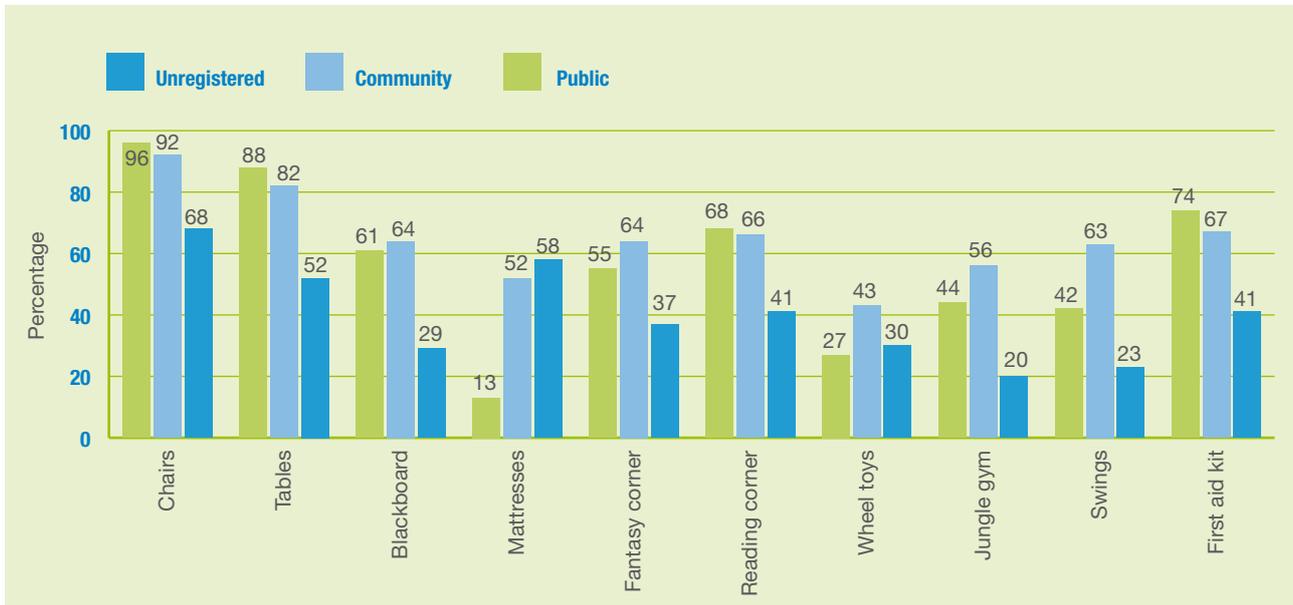


\*Weighted totals used.





Figure 16. Presence of various LTSM furniture and equipment by type of facility



## 5.4 Learning and teaching support materials

The programme implemented at a facility is to a large degree dependent upon the learning and teaching support materials available on site. Poor LTSM is indicative of a lower quality programme. Typical equipment required for ECD include chairs, tables and various indoor and outdoor toys, as well as a first aid kit. The figures below demonstrate the percentage of facilities that have access to various typical ECD class equipment and LTSM.

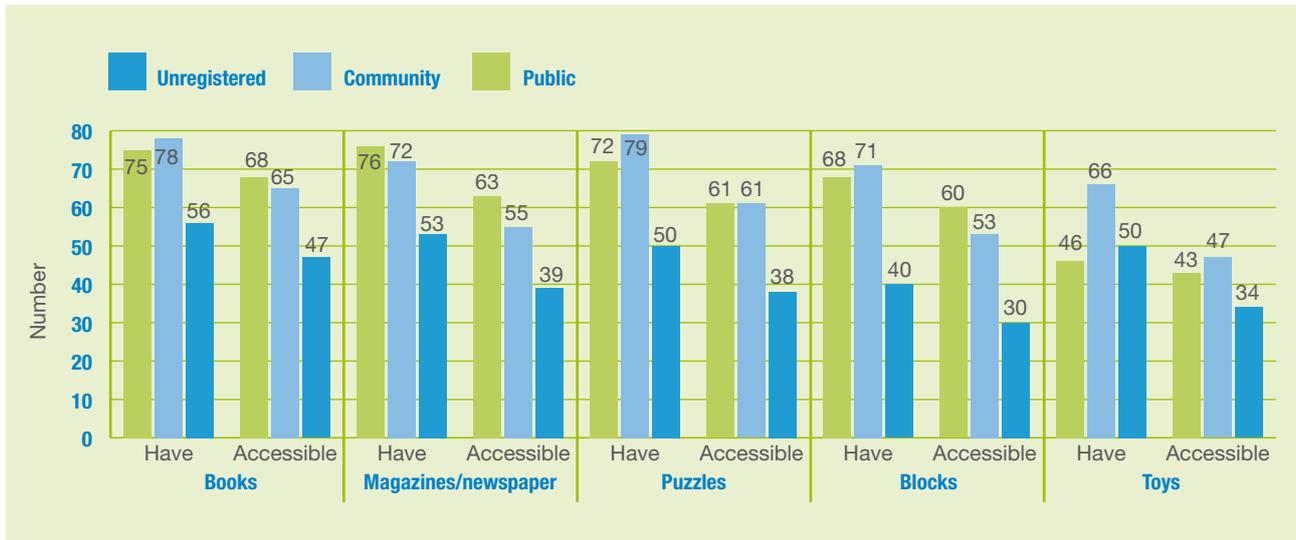
When compared to ECD in registered and unregistered community-based facilities, it is apparent that public school ECD classes were more likely to have the necessary LTSM. Surprisingly, however, even some public school classes did not have adequate tables and chairs for children to use, and the availability of a blackboard, reading corner and outside equipment was not a given at many facilities.

Books, magazines and puzzles were available in about 70–75% of public school classes, in 72–79% of registered community facilities and only in about 50–56% of unregistered community facilities. Play blocks were found in 68% of public schools, 71% of community facilities and in about 40% of unregistered facilities. Other toys were also found in about 46% of public schools, 66% of community facilities and in about 50% of unregistered facilities. If LTSM were available on site, they were generally being used by children too. (Where Figure 17 refers to resources being “accessible”, it is here understood to mean that the resources did not only exist at the facility but were actively used by children.)

Crayons seem to have been available in most classes in public and community (registered and unregistered) facilities, yet oddly paper seems unavailable in about 35–50% of classes. Paint, scissors and glue were generally available in more than 70% of community and public school facilities and in about half of unregistered facilities. Training scissors, used to teach children how to cut, were only available in about a third of all classes. These materials were

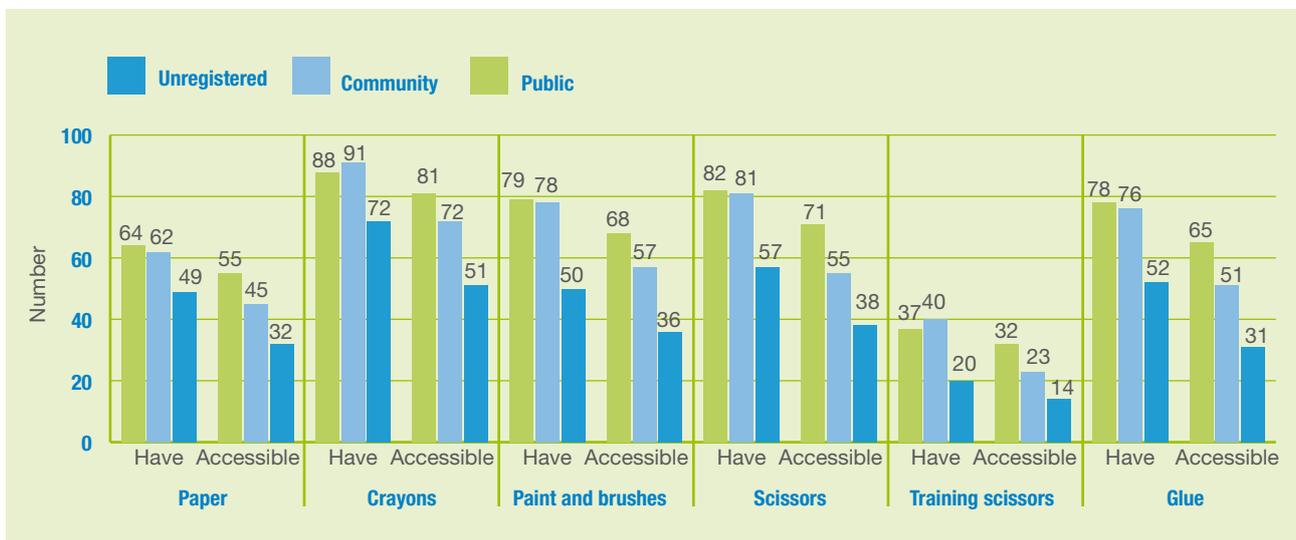
also generally accessible to children if they are on site – though it seems that teachers/practitioners keep glue and paint, in particular, packed away until it is used for an activity.

Figure 17. Presence of books, magazines, puzzles, blocks and toys by type of facility



\*Unweighted percentages.

Figure 18. Presence of various other LTSM resources by type of facility



\*Unweighted percentages.

An LTSM index was developed based on the combination of items that assessed the availability of various LTSM in the class. Once again, the best items were selected and the facilities were categorized into three broad groups: Group 1 mostly had a poor LTSM, Group 2 had LTSM of moderate quality and Group 3 had good LTSM in place. It should be borne in mind that when a facility's LTSM was rated as "good", this does not imply that all of the desired LTSM was available. The site merely provided LTSM that was better than the majority of other





classes assessed in this study. Similar index items were used across public, registered and unregistered community-based facilities.

The graph below demonstrates that, surprisingly, more of the registered community programmes have a large variety of LTSM fit for specifically pre-school children available. This is because outside equipment like jungle gyms, swings and indoor equipment like a fantasy corner, puzzles, cars and dolls are more likely to be found in community-based facilities that target play more directly as part of the teaching and learning programme. A small percentage (i.e. about 10%) of unregistered facilities also had good quality LTSM in place.

**Figure 19. LTSM quality by type of facility**



\*Unweighted totals reported.

A higher proportion of public Grade R classes in Province 3 (69.3%) are rated as having poor LTSM as compared to Province 2 (33.1%) and Province 1 (4.1%). The mean index scores were found to differ statistically significantly ( $F = 1003, p < .0000$ ) with Province 1 performing best, and Province 3 performing poorest.

Statistically significant differences ( $F = 244, p < .000$ ) were also found in the LTSM index scores between the different quintiles. Overwhelmingly, LTSM was better in the least poor schools.

**Table 55. LTSM quality in public schools across provinces**

		Province 1	Province 2	Province 3	Total
Poor programme	Number	26	177	1,482	1,685
	%	4.1%	33.3%	69.3%	51.0%
Moderate programme	Number	239	255	575	1,069
	%	37.7%	48.0%	26.9%	32.4%
Good programme	Number	369	99	82	550
	%	58.2%	18.6%	3.8%	16.6%
Total	Number	634	531	2,139	3,304
	%	100.0%	100.0%	100.0%	100.0%

\*Weighted totals reported.

**Table 56. LTSM index in public schools by province and quintile**

	Average value of LTSM index	Number of schools (weighted)	Standard deviation
Province 1	84.61	634	13.41
Province 2	65.15	531	19.46
Province 3	46.77	2 139	20.59
Quintile 1	51.74	1 098	21.33
Quintile 2	46.92	816	24.27
Quintile 3	58.46	835	21.28
Quintile 4	71.92	300	21.28
Quintile 5	89.33	255	9.40
Total	56.98	3 304	24.38

\*Weighted totals reported.

A significantly higher proportion of community-based facilities offering Grade R in Province 3 (55%) and Province 2 (45%) were rated as having a poor quality LTSM as compared to Province 1 (6.3%). Far more of the registered community facilities in each province performed poorly in terms of LTSM quality as compared to the public Grade R facilities. The difference between provinces' average index score was found to be statistically highly significant: Province 1 facilities on average were rated better and Province 3 facilities weaker.

**Table 57. LTSM quality in registered community facilities across provinces**

		Province 1	Province 2	Province 3	Total
Poor programme	Number	61	248	974	1,283
	%	6.3%	44.9%	54.8%	39.0%
Moderate programme	Number	251	230	551	1,032
	%	26.0%	41.7%	31.0%	31.3%
Good programme	Number	653	74	251	978
	%	67.7%	13.4%	14.1%	29.7%
Total	Number	965	552	1,776	3,293
	%	100.0%	100.0%	100.0%	100.0%

\*Weighted totals reported.

**Table 58. LTSM quality index in registered community facilities across provinces**

Province	Average value of LTSM index	Number of schools (weighted)	Standard deviation
Province 1	85.2	965	17.01
Province 2	59.8	552	20.12
Province 3	54.9	1,775	24.32
Total		3,292	25.50

\*Weighted totals reported.

Almost all the observed unregistered facilities in Province 3 (93%), about three quarters of those in Province 2 (76%) and about a quarter of those in Province 1 (23%) were rated as having poor quality LTSM. The average LTSM index score differed statistically significantly across provinces, with Province 1 performing best and Province 3 worst.





**Table 59. LTSM quality in unregistered community facilities across provinces**

		Province 1	Province 2	Province 3	Total
Poor programme	Number	7	23	28	58
	% within province	23.3%	76.7%	93.3%	64.4%
Moderate programme	Number	15	7	1	23
	% within province	50.0%	23.3%	3.3%	25.6%
Good programme	Number	8	0	1	9
	% within province	26.7%	0.0%	3.3%	10.0%
Total	Number	30	30	30	90
	% within province	100.0%	100.0%	100.0%	100.0%

\*Based on unweighted totals.

**Table 60. LTSM quality index in unregistered facilities across provinces**

Province	Average value of LTSM index	Number of schools (weighted)	Standard deviation
Province 1	68.18	30	21.28
Province 2	37.73	30	23.27
Province 3	24.85	30	21.42
Total	43.59	90	28.41

There was a statistically significant correlation between the quality of infrastructure and of LTSM in the observed facilities. This suggested that poor infrastructure and poor LTSM were co-occurring. It is likely that poverty and resources in the school or facility were the underlying factors that influenced both the LTSM and the quality of infrastructure available to children.

## 5.5 Programme and activities

Facilities with inadequate or poor programmes detract from the overall cost-efficiency of the investment in ECD. If DoE and DSD spend money on Grade R programmes but get little more than an environment where children are “looked after”, the intention of the expenditure – to provide early educational benefits that place children on a trajectory that could eventually improve their overall quality of life – will not be achieved. A poor quality programme is therefore an indirect “leakage” point in the expenditure cycle.

The Department of Education’s National Curriculum Statement for the Foundation Phase indicates that children should be exposed to a variety of activities in Life Orientation, Mathematical Literacy and Language, and that the timetable should make provision for these different learning areas. Since it is a reception year, one would expect Grade R to have a more formal programme than other day care for younger children and that pre-math and pre-literacy activities will be included, together with adequate small motor and large motor development opportunities. The Department of Social Development has provided some guidelines about the programme to be implemented by day-care centres, and since many practitioners at community-based facilities have only received very limited if any training from the Education Department, it is possible that Grade R at many institutions just continues as an extension of the normal day care.

A great range of quality in the services that constitute “normal day care” may be expected. Some facilities may look after children without much concern for their cognitive and physical development, while other facilities may even have specialist services such as occupational

therapy available to supplement their formal programme which may include pre-math, pre-literacy and a variety of creative and physical development activities.

Due to the limited time spent at each of the facilities, it was not feasible to conduct a full observation of the programme and activities, but information from the daily programme and examples of work found in the learner portfolios provide some additional information to determine what kind of activities public, community and unregistered grade R classes are engaged in. The programme and activities are key indicators of the quality of teaching and learning at these facilities.

### Daily programme and lesson plans

Almost all public schools and registered community facilities reported having a daily programme, but a substantial percentage (19%) of unregistered community facilities did not. In community-based facilities where children of different ages are usually found, only just over half of the programmes (58% for registered community facilities and 52% for unregistered facilities) differentiated between the programme for younger children and older children. Although it is possible to present Grade R related content within the bounds of a basic daily programme which only generally outlines activity periods, play time and eating routine, it is unlikely that the full structure for Grade R as prescribed in the National Curriculum Statement would easily fit into this without some adjustments. It is therefore likely that those facilities where there is not a more tailored daily schedule for Grade R probably do not meet all the requirements set out for Grade R. In fact, 29% of the registered community facilities did not have a daily programme that distinguished by different age groups, and 41% did not present a clearly differentiated Grade R programme to children older than 5 years. Even fewer of the non-registered facilities seemed to make adequate provision for Grade R in their programmes.

Another possible indicator of whether activities are purposefully structured to attain learning outcomes as specified by the NCS is whether a lesson plan was available. In about 89% of public, 71% of community and 55% of unregistered facilities could the fieldworkers actually observe the lesson plan. (However, the fact that facilities were forewarned about the survey may have indicated better than usual adherence to requirements.)

**Table 61. Is there a formal daily programme/timetable/programme of activities indicating what happens at different times of the day/week?**

	Public		Community		Unregistered	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Yes, observed	364	95.3	267	84.0	65	72.2
Yes, but not observed	14	3.7	31	9.7	8	8.9
No	4	1.0	20	6.3	17	18.9

\*Unweighted totals reported.





**Table 62. Does this daily programme distinguish by different age groups?**

	Community		Unregistered	
	Frequency	Percent	Frequency	Percent
Yes, observed	184	57.9	47	52.2
Yes, but not observed	41	12.9	4	4.4
No	93	29.2	39	43.3

\*Unweighted totals reported.

Note: As Grade R in public schools covers only one age group, this question was not asked in such schools.

**Table 63. Does the centre provide a differentiated Grade R programme to children older than 5 years?**

	Public		Community		Unregistered	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Yes, observed	N/A	N/A	152	47.8	32	35.6
Yes, but not observed	N/A	N/A	35	11.0	8	8.9
No	N/A	N/A	131	41.2	50	55.6

\*Unweighted totals reported.

**Table 64. Do you have a lesson plan available for today's lesson?**

	Public		Community		Unregistered	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Yes, observed	339	88.7	225	70.8	49	54.4
Yes, but not observed	21	5.5	40	12.6	11	12.2
No	22	5.8	53	16.7	30	33.3

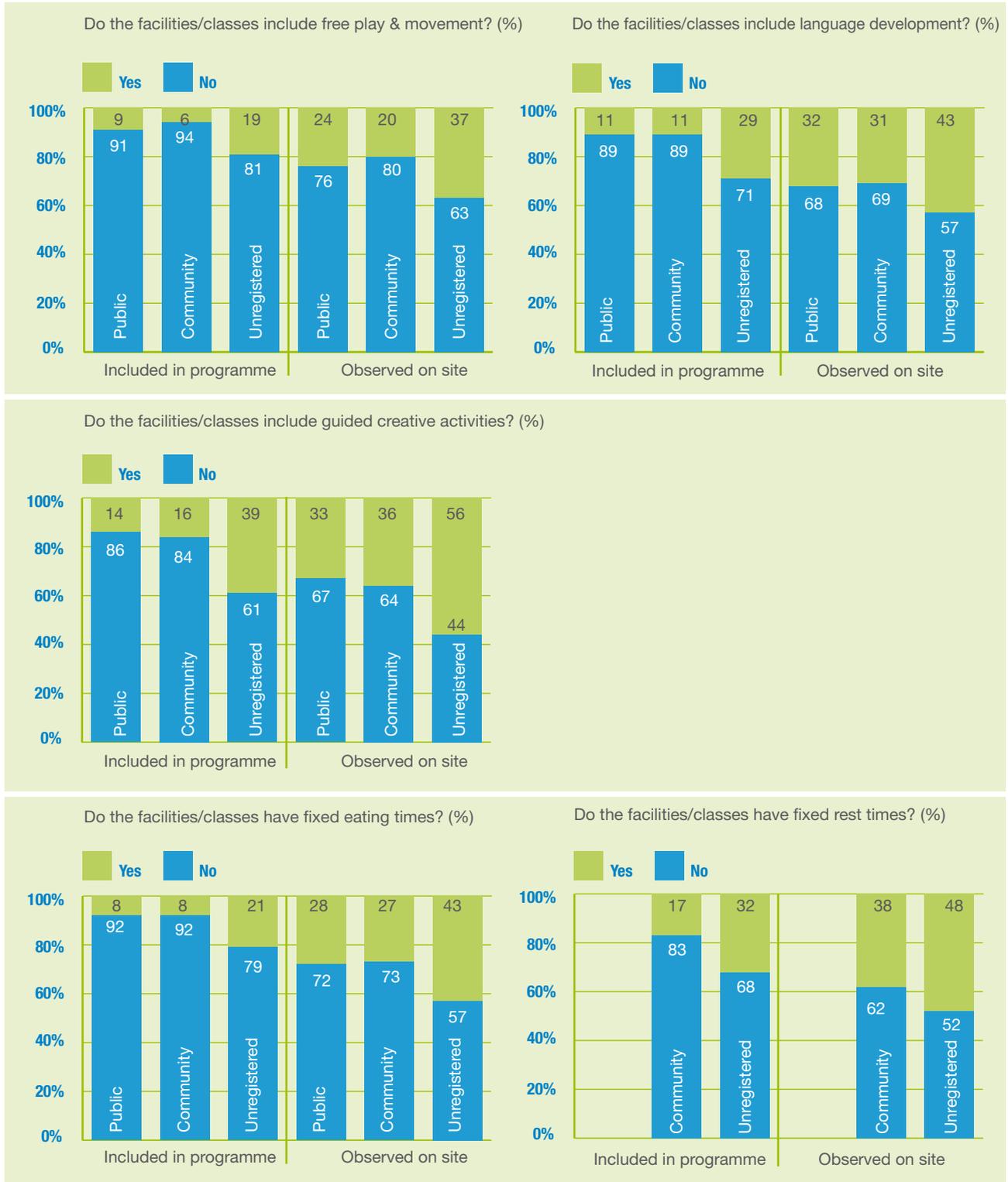
\*Unweighted totals reported.

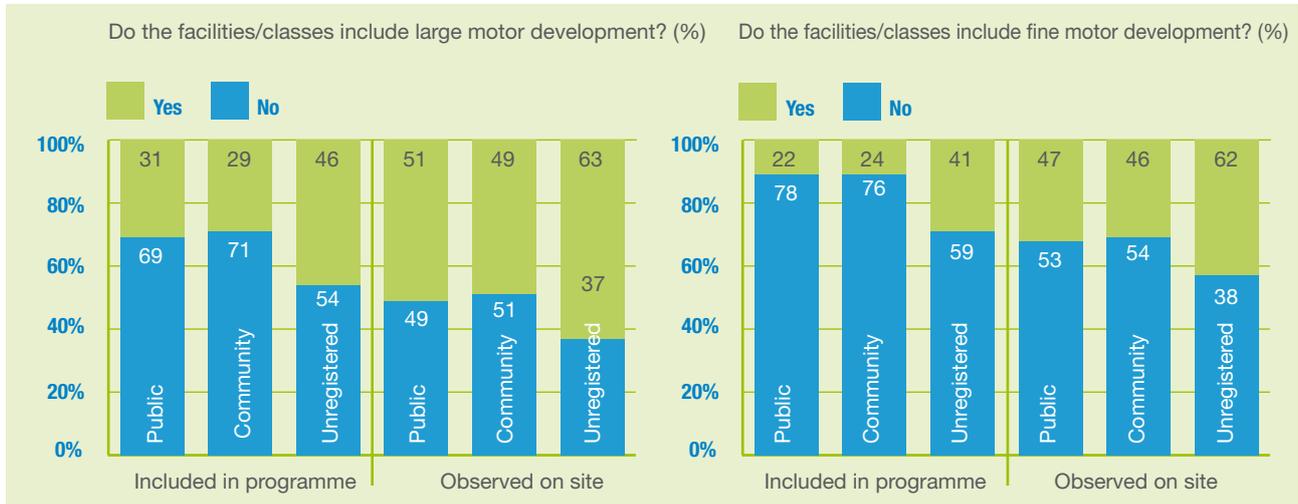
### Activities on the programme

Most facilities with a daily programme seem to have play times, eating times and resting times included on their daily schedule. Language development activities (e.g. story time, language games, reading of picture story books, rhymes and singing) and creative activities (drawing, painting, perception games, puzzles, fantasy play, etc.) also seem to be common aspects of the programme at public schools and registered community facilities. Purposeful large motor development (e.g. activities involving balls, wheel toys, climbing) and fine motor development (peg boards, cutting) activities are less common.

The fact that a large percentage of unregistered facilities did not have a structured programme in place demonstrates to some degree the importance of policy guidance on the programme. A large percentage of these facilities simply did not have a structured programme in place, or did not have a programme with any variety of activities in place.

Figure 20. The types of activities presented in Grade R facilities or classes





\*Unweighted totals reported.

### Examples of work contained in learner portfolios

The Department of Education requires that children keep a portfolio of evidence in class to allow teachers/practitioners to assess their progress. A portfolio is any collection of learner work that is kept in a book, file, box, etc. It is not uncommon for learner work to be displayed on the walls of the classroom, or to be sent home to parents, but it is a requirement that at least some examples of the learner work is kept in the portfolio.

During the fieldwork, fieldworkers reviewed a few learner portfolios to determine what kind of work was included, how much of it had been done and whether it had been assessed. Portfolios with a large variety of work and ample examples of each type of activity can be interpreted as evidence that the cognitive development of the child is a focus at the facility. If evidence was found that the teacher assessed the portfolio, it was an indicator of a more advanced focus on teaching and learning.

Drawing and colouring activities seem to be the most common, while examples of cutting, gluing and painting activities were found only at about 80–90% of public schools, 68–78% of registered community facilities and 43–47% of unregistered facilities. The availability of resources such as scissors, paint and glue appears to be the primary determinant of whether these activities are included in the learning programmes. Given the evidence presented earlier, it is perhaps unsurprising that a learner in a public school is more likely than a child at a community site to have access to such resources.

Similarly, public school programmes are more likely than community-based programmes to include pre-math activities (e.g. number concepts, shapes, patterns) or pre-writing activities. This may reflect the availability of worksheets and the degree to which the teacher/practitioner is aware that these should be included in the programme. Encouragingly, more than half of the practitioners at unregistered facilities, 76% at registered community facilities and 88% at public schools had examples of assessed portfolios in class.

Figure 21. Contents of learner portfolios



\*Unweighted totals reported.





### Programme quality index

A programme quality index was developed based on the combination of items that assessed the programme, observed activities and examples of work in the learner portfolios. These indicators are indirect approximations of what actually goes on in the class in terms of programme delivery. Once again the best items were selected and the facilities were categorized into three broad groups: Group 1 mostly had a poor quality programme, Group 2 had a programme of moderate quality and Group 3 had a good quality programme in place. It should be borne in mind that when a facility’s programme was rated as “good quality”, this does not imply that the programme is an example of “best practice” or that there is not room for improvement. The facility merely provides a programme that is better than the majority of other classes assessed in this study. Since the curriculum requires that the same programme must be delivered to Grade Rs in schools and community facilities, the same index items were used to assess all three categories of facilities. Therefore comparisons of the quality of programmes in schools, registered and unregistered community facilities were possible.

The graph below demonstrates that more of the public school programmes are rated as “good quality” when they are compared to registered and unregistered community-based facilities. It is interesting to note that some of the unregistered facilities are delivering a good quality service despite lacking the financial and technical support provided by being a registered and funded entity with either the Department of Education or the Department of Social Development.

Figure 22. Programme quality index



\*Unweighted totals reported.

A higher proportion of public Grade R classes in Province 3 (29%) are rated as having a poor quality programme as compared to Province 2 (11.7%) and Province 1 (1.1%). The mean index scores were found to differ statistically significantly ( $F=78.72$ ,  $p<.0090$ ) with Province 1 performing the best and Province 3 performing the poorest.

Statistically significant differences ( $F = 221$ ,  $p<.000$ ) were also found in the quality index scores between the different quintiles. With the exception of quintile 1 schools, the results seem to indicate that the programme quality was better in the least poor schools.

**Table 65. Programme quality in public schools across provinces**

		Province 1	Province 2	Province 3	Total
Poor programme	Number	7	62	617	686
	%	1.1%	11.7%	28.8%	20.8%
Moderate programme	Number	195	247	932	1 374
	%	30.8%	46.4%	43.6%	41.6%
Good programme	Number	432	223	590	1 245
	%	68.1%	41.9%	27.6%	37.7%
Total	Number	634	532	2 139	3 305
	%	100.0%	100.0%	100.0%	100.0%

\*Weighted totals reported.

**Table 66. Programme quality index in public schools across provinces and quintiles**

	Mean	N	Standard deviation
Province 1	94.1	634	5.98
Province 2	88.1	531	11.98
Province 3	82.7	2 139	13.79
Total	85.7	3 304	13.15
Quintile 1	85.2	1 098	11.98
Quintile 2	80.5	816	15.94
Quintile 3	87.0	835	12.34
Quintile 4	92.8	300	6.44
Quintile 5	92.4	255	8.33

\*Weighted totals reported.

A significantly higher proportion of community Grade R facilities in Province 3 (43%) and Province 2 (47%) are rated as having poor quality programmes as compared to Province 1 (11%). Far more of the community facilities in each province perform poorly in terms of programme quality as compared to the public Grade R classes. The difference between provinces' average index score was found to be statistically significant ( $F = 177.165$ ,  $p < .000$ ). Province 1 facilities on average were rated better and Province 3 facilities weaker.

**Table 67. Programme quality in registered community facilities across provinces**

		Province 1	Province 2	Province 3
Poor programme	Number	104	259	762
	%	10.8%	46.9%	42.9%
Moderate programme	Number	479	199	569
	%	49.6%	36.1%	32.1%
Good programme	Number	382	94	444
	%	39.6%	17.0%	25.0%
Total	Number	965	552	1 775
	%	100.0%	100.0%	100.0%

\*Weighted totals reported.





**Table 68. Programme quality index in registered community facilities across provinces**

	Mean	N	Standard deviation
Province 1	88.7	965	12.74
Province 2	75.8	552	17.54
Province 3	78.3	1 775	16.23
Total	80.9	3 292	16.34

\*Weighted totals reported.

About three quarters of the observed unregistered facilities in Province 3 (78%), slightly more than half of those in Province 2 (53%) and about a quarter of those in Province 1 (23.3%) are rated as having poor quality programmes. The average programme quality index score was found to differ statistically significantly ( $F=14.198$ ,  $p<.000$ ) with Province 1 performing best, and Province 3 performing poorest.

**Table 69. Programme quality in unregistered community facilities across provinces**

		Province 1	Province 2	Province 3
Poor programme	Number	7	16	23
	% within province	23.3%	53.3%	76.7%
Moderate programme	Number	14	13	7
	% within province	46.7%	43.3%	23.3%
Good programme	Number	9	1	0
	% within province	30.0%	3.3%	0.0%
Total	Number	30	30	30
	% within province	100.0%	100.0%	100.0%

\*Unweighted totals reported.

**Table 70. Programme quality index in unregistered community facilities across provinces**

	Mean	N	Standard deviation
Province 1	83.0	30	17.05
Province 2	68.2	30	19.0
Province 3	57.8	30	19.11
Total	69.7	90	20.96

**Table 71. LTSM and programme quality in public schools**

		Poor programme	Moderate programme	Good programme	Total
Poor LTSM	Number	43	69	29	141
	% within LTSM Index	30.50%	48.94%	20.57%	100%
	% within programme quality Index	78.18%	44.23%	16.96%	36.91%
Moderate LTSM	Number	11	60	73	144
	% within LTSM Index	7.64%	41.67%	50.69%	100%
	% within programme quality Index	20.00%	38.46%	42.69%	37.70%
Good LTSM	Number	1	27	69	97
	% within LTSM Index	1.03%	27.84%	71.13%	100%
	% within programme quality Index	1.82%	17.31%	40.35%	25.39%
Total	Number	55	156	171	382
	% within LTSM index	14.40%	40.84%	44.76%	100%
	% within programme quality Index	100%	100%	100%	100%

\*Based on unweighted totals.

About 1% of the public schools facilities with good LTSM presented a poor programme, and 17% of facilities with poor LTSM presented a good quality programme.

**Table 72. LTSM and programme quality in registered community facilities**

		Poor programme	Moderate programme	Good programme	Total
Poor LTSM	Number	68	27	7	102
	% within LTSM index	66.67%	26.47%	6.86%	100%
	% within programme quality index	69.39%	21.26%	7.53%	32.08%
Moderate LTSM	Number	26	49	29	104
	% within LTSM index	25.00%	47.12%	27.88%	100%
	% within programme quality Index	26.53%	38.58%	31.18%	32.70%
Good LTSM	Number	4	51	57	112
	% within LTSM index	3.57%	45.54%	50.89%	100%
	% within programme quality index	4.08%	40.16%	61.29%	35.22%
Total	Number	98	127	93	318
	% within LTSM index	30.82%	39.94%	29.25%	100%
	% within programme quality index	100%	100%	100%	100%

\*Based on unweighted totals.

About 4% of the community facilities with good LTSM presented a poor programme, and 7% of facilities with poor LTSM presented a good quality programme.





**Table 73. LTSM and programme quality in unregistered facilities**

		Poor programme	Moderate programme	Good programme	Total
Poor LTSM	Number	43	15	0	58
	% within LTSM index	74.14%	25.86%	0.00%	1
	% within programme quality index	93.48%	44.12%	0.00%	64.44%
Moderate LTSM	Number	3	13	7	23
	% within LTSM index	13.04%	56.52%	30.43%	1
	% within programme quality index	6.52%	38.24%	70.00%	25.56%
Good LTSM	Number	0	6	3	9
	% within LTSM index	0.00%	66.67%	33.33%	1
	% within programme quality index	0.00%	17.65%	30.00%	10.00%
Total	Number	46	34	10	90
	% within LTSM index	51.11%	37.78%	11.11%	100.00%
	% within programme quality index	100.00%	100.00%	100.00%	100.00%

\*Based on unweighted totals.

None of the unregistered facilities with good LTSM presented a poor programme, and none of these facilities with poor LTSM presented a good quality programme.

### Relationship between infrastructure and quality of programme

There seems to be a statistically significant relationship between the quality of infrastructure and quality of the programme in the observed facilities. This does not suggest that a poor programme can be causally attributed to poor infrastructure, but merely that these factors are co-occurring. It is likely that poverty or the quality of management in the school/site is the underlying factor that influences both the programme and the quality of infrastructure available to children.

**Table 74. Correlation between the infrastructure index and the programme quality index**

	Public	Community	Unregistered
Pearson correlation coefficient	0.442	0.513	0.525
Sig. (2-tailed)	0.000**	0.000**	0.000**
N	382	318	90

\*\*Statistically significant at the 0.01 level (2-tailed).

\*Based on unweighted totals.

There are, however, examples of facilities with good quality infrastructure but where the programmes are weak and of facilities where good quality programmes are being delivered despite the poor quality of the infrastructure.

**Table 75. Programme quality and quality of infrastructure in public schools**

		Poor infrastructure	Moderate infrastructure	Good infrastructure	Total
Poor programme	Number	39	13	3	
	% within infrastructure index	31.5%	10.2%	2.3%	
	% within programme index	70.9%	23.6%	5.5%	100.0%
Moderate programme	Number	53	57	46	
	% within infrastructure index	42.7%	44.9%	35.1%	
	% within programme index	34.0%	36.5%	29.5%	100.0%
Good programme	Number	32	57	82	
	% within infrastructure index	25.8%	44.9%	62.6%	
	% within programme index	18.7%	33.3%	48.0%	100.0%
Total	Number				
	% within infrastructure index	100.0%	100.0%	100.0%	100.0%
	% within programme index				100.0%

\*Based on unweighted totals.

About 2.3% of the public schools facilities with good infrastructure present a poor programme, and 26% of facilities with poor infrastructure present a good quality programme.

**Table 76. Programme quality and quality of infrastructure in registered community facilities**

	Programme Index	Poor infrastructure	Moderate infrastructure	Good infrastructure	Total
Poor programme	Number	58	32	8	
	% within infrastructure index	52.7%	30.5%	7.8%	
	% within programme index	59.2%	32.7%	8.2%	100.0%
Moderate programme	Number	35	40	52	
	% within infrastructure index	31.8%	38.1%	50.5%	
	% within programme index	27.6%	31.5%	40.9%	100.0%
Good programme	Number	17	33	43	
	% within infrastructure index	15.5%	31.4%	41.7%	
	% within programme index	18.3%	35.5%	46.2%	100.0%
Total	% within infrastructure index	100.0%	100.0%	100.0%	100.0%

\*Based on unweighted totals.

About 8% of the community facilities with good infrastructure present a poor programme, and 16% of facilities with poor infrastructure present a good quality programme.





**Table 77. Programme quality and quality of infrastructure in unregistered community facilities**

		Poor infrastructure	Moderate infrastructure	Good infrastructure	Total
Poor programme	Number	32	12	2	
	% within infrastructure index	72.7%	40.0%	12.5%	
	% within programme index	69.6%	26.1%	4.3%	100.0%
Moderate programme	Number	12	13	9	
	% within infrastructure index	27.3%	43.3%	56.3%	
	% within programme index	35.3%	38.2%	26.5%	100.0%
Good programme	Number	0	5	5	
	% within infrastructure index	0.0%	16.7%	31.3%	
	% within programme index	0.0%	50.0%	50.0%	100.0%
Total	% within infrastructure index	100.0%	100.0%	100.0%	100.0%

\*Based on unweighted totals.

About 4% of the unregistered facilities with good infrastructure present a poor programme, and none of these facilities with poor infrastructure present a good quality programme.

## 5.6 Some conclusions regarding programme quality

Overall one can conclude that the degree to which the Grade R curriculum and the anticipated quality of grade R programme reaches children in community-based and especially unregistered facilities is not what it should be. As access to ECD is improved, programme quality should also receive urgent attention – especially in those facilities where the poorest children are likely to gain access to ECD, viz. in community-based facilities.

The findings also seem to suggest that there is a relationship between being registered or not and the quality of the programme in community facilities. It is likely that facilities which do not have good quality programmes will find it more difficult to register with DSD, but the fact that a large portion of children do attend unregistered ECD programmes provides an argument for either enforcing the controls preventing the provision of day care to large numbers of children in unregistered facilities or to bring unregistered facilities within the sphere of influence of the DSD or DoE, so that they can provide the support and guidance that seem to co-occur with better quality programmes.

The complex relationship between quality of infrastructure and programmes on the one hand, and poverty and human capacity on the other hand, suggests that quality of ECD will not simply be fixed by providing more funding. A delicate balance must be struck between systemic aspects such as enforcement of registration with DSD or DoE, capacity building of ECD providers, support from districts, resource provision, and funding to ensure that the necessary support and control can be administered.





# Chapter 6: Analysis and conclusions

## 6.1 Introduction

The purpose of this study was largely to better understand how the government grants are contributing to the ECD sector, i.e. investigating what the grants are buying, whether there is evidence of funds being siphoned off, and what is required to generate quality services in this sector.

These questions have to some extent been dealt with in describing this subsector, but it also needs to be addressed in the recommendations. Due to its centrality in the policy discussion and the nature of the financial flows, as well as the information on finance obtained by the survey, the main focus throughout has been on the community-based ECD facilities. These facilities are arguably of most interest to policy makers and the public. This is where the bulk of the growth in the sector has occurred and this is also where the main concern lies: grants are flowing into the sector, but the centres are often young and there is not a strong regulatory framework in place to prevent abuse of the funds or exploitation of parents. This image is also supported by the survey findings. Along most dimensions the community-based ECD facilities are sandwiched between that of the unregistered facilities and the public school facilities – outperforming the former, but being outperformed by the latter.

## 6.2 What are these funds buying?

Broadly speaking, the survey presents a relatively encouraging picture of the sector. The overall quality of services appears to be moderate, as reflected in teacher-pupil ratios, training and experience of staff members, planning of classroom activities and the quality of service delivery in terms of programme quality. However, these encouraging results need to be qualified. There are also reasons for concern: the survey shows that several ECD facilities have limited space and poor infrastructure; many complain of not receiving adequate community support; there also appears to be issues around the adequacy of the nutrition that children receive; and few community-based facilities really seem to put enough effort into the development of children.

Given the focus on expenditure tracking and understanding the value provided by this emergent sector, there was an initial concern that the decision not to register could have been an opportunistic attempt by some ECD practitioners to hide away from the probing eyes of government. However, the survey does not provide evidence to support such a theory of self-selection into this subsector. Indeed, unregistered facilities are more likely to provide low quality services and to have inadequate infrastructure and classrooms that are unsafe, as is evident from Chapter 5 of this report. But when asked why they have not registered or applied for registration, the predominant reasons provided were that they had just started recently, that they did not qualify (usually on grounds of poor infrastructure), or even that they did not know about the grant and the registration. The picture that emerges is not one of financial abundance and opportunism, but rather of young, small and struggling organizations. If this was largely a hiding place for money-hungry and dishonest entrepreneurs, one would expect high pupil-teacher ratios (to maximize revenues while minimizing teacher salaries) and high salaries for the principal or owner, but the opposite is the case. Teacher-pupil ratios hover in the mid-teens, which are very low compared to registered community facilities and public school. It appears that the growth of the unregistered ECD facilities is inhibited by poor infrastructure, poor quality and a lack of adequate demand for such services by poor people who cannot afford the full cost of such unsubsidized services.

### 6.3 Can opportunism explain financial outcomes and flows?

Though the earlier analysis of the finances by themselves did not find evidence of large scale opportunism, deeper analysis is required of the relationships between financial behaviour and quality. This survey provides a range of variables that can be used to build a profile of the organization and its behaviour. Such a constructed profile can assist in making inferences regarding the likelihood that an ECD site may be opportunistic or dishonest. To examine the more general hypothesis of hidden revenues and overpayment of principals, variables were constructed that could potentially capture such opportunistic behaviour, such as whether principal salaries seemed excessive, whether school fees seemed high, whether there was a large the gap between subsidies reported by the facility and that reportedly transferred by the DSD, or whether there was a large gap between students enrolled and those actually present. Correlations and overlaps between various proxies for opportunistic behaviour could point to possible opportunistic behaviour. Variables were investigated for any associations and also for possible association with the indices for the quality of ECD programmes and of the facility infrastructure. Although these two indices were indeed highly correlated (indicating association and probably not causality), their associations with the markers of opportunism or self-help were generally weak and did not seem to indicate any patterns.

The following variables were created for this analysis:

- A *programme quality index* was developed based on the combination of items that assessed the class programme, the observed activities and examples of work in the learner portfolios.
- An *infrastructure index* was developed based on the combination of all infrastructure assessment items and allowed for the categorization of the facilities into three broad groups – Group 1 mostly had poor infrastructure, Group 2 had moderate infrastructure and Group 3 had good infrastructure.
- “*Under-reporting*” of grants reflects the size of the discrepancy between grants that the ECD centre reported they received from the DSD and DSD reports of how much they gave to the centre. Cases where the centre reported receiving more than what the DSD said they gave were captured as zeros as this was not of interest.
- “*Excess*” income represents the difference between total income and expenditure, if income exceeded expenditure.
- “*Excess*” principal salary is a dummy variable, coded as 1 when the principal received a salary that exceeded the norm for an individual ECD practitioner with similar characteristics, as derived from a regression equation, by more than 40%.
- “*Excess*” school fees is a dummy variable, which is 1 when the school fees per child were more than double the mean of that quintile (the mean included *all* schools, including those with some missing other financial data). Because it was calculated with reference to quintiles, there were no estimates for schools that have not been allocated to a quintile.
- “*Discrepancy between official enrolment of children and attendance*” is the ratio of the number of children that the centre claimed to have on their books and the number of children that attended the centre on the day of the interview. Cases where the centre had fewer children on their books than the number that were in attendance were recoded as zeros.





- “Self-help” is a dummy variable set to 1 if a facility indicated that it received income both from donations and from fundraising.
- “No financial information” refers to organizations for which neither expenditure nor income data were available.

Table 78 shows the values of these variables by quintile of registered community-based ECD facilities. The F-tests indicate that the values of these variables were significantly different across the quintiles for the quality of the programme, the infrastructure index, under-reporting of grants, excess principal salary and excess school fees.

**Table 78. Quality and “opportunism” variables by quintile**

	Quality of programme	Infrastructure index	“Under-reporting” of grants	“Excess” income	“Excess” principal salary	“Excess” school fees	Discrepancy between registration and attendance	No financial information
Quintile 1	0.64	71.06	26 608	302.53	0.09	0.53	0.12	0.29
Quintile 2	0.62	64.45	16 751	237.22	0.00	0.48	0.09	0.33
Quintile 3	0.69	76.03	68 229	1797.46	0.13	0.54	0.11	0.41
Quintile 4	0.85	89.84	39 055	1510.72	0.22	0.43	0.11	0.18
Quintile 5	0.82	93.27	117 761	1104.53	0.22	0.60	0.09	0.20
No quintile information	0.72	76.60	43 250	747.30	0.06	0.00	0.09	0.35
Prob > F	0.00	0.00	0.00	0.58	0.02	0.00	0.99	0.25

Further tests reveal that discrepancies in the number of children present and enrolled have fewer significant relationships with the other variables in this “opportunism cluster”. There is no significant relationship with the measures of “excess” school fees, “excess” salary or “missing” grants, but there is a link with “excess” income. “Excess” income was positively and significantly related to several other “excesses”, including excessively high school fees (more than twice the norm<sup>25</sup> for the quintile) and excessively high principal salary (40% higher than the opportunity cost of a practitioner with similar characteristics). “Excess” income also has a significant and positive relationship with discrepancies in reported received grants versus DSD records (“under-reporting” of grant money) and discrepancies in reported enrolment and actual attendance on the day of the survey.

As expected, a strong correlation was observed between indicators of competent management/transparency and the measures of quality. The availability of a petty cash book and completed child progress reports appears to capture the important dimensions of management and transparency, producing correlations and overlaps that are sizeable and very significant. The pair of variables<sup>26</sup> has a significant and large positive relationship with the quality of the ECD programme and infrastructure.

The petty cash variable also correlates well with the proxies for opportunism and inaccurate bookkeeping. Specifically one observes positive and significant relationships with “excess”

25 The norm is here taken as the average for the quintile.

26 Defined so that the presence of these items measured as a 1 and the default defined as 0.

school fees and “excess” income.<sup>27</sup> Completed child progress reports do not correlate with this cluster of variables, but this is not entirely surprising given that service quality and opportunity appear to be unrelated.

**Table 79. Index for quality of programme by certain markers of “opportunism”**

	Self-help	Pupil-teacher ratio > 35	Financial information	“Excess” school fees	“Excess” principal salary	Petty cash book	Completed progress reports
Yes	0.88	0.65	0.61	0.68	0.74	0.76	0.81
No	0.68	0.72	0.75	0.72	0.71	0.63	0.53
Prob>F	0.00	0.08	0.00	0.14	0.47	0.00	0.00
Difference significant?	Yes, highly	Yes, highly	Yes, moderately	No	No	Yes, highly	Yes, highly

Note: The first row indicates the average quality index value in facilities where the marker identified in the column applies. The final row indicates whether the differences between the second and third rows are significant. Thus, for instance, the index of 0.88 that applies for those who practise self-help is significantly different from the 0.68 for those who do not.

Table 79 would seem to indicate that the quality of the programme is significantly higher for facilities with a self-help attitude, those with a petty cash book and those with completed progress reports; these relationships one would expect. Additionally, it is interesting to note that the index of quality has a positive association (albeit not as strong) with facilities lacking financial information and a strongly negative association with facilities with a pupil-teacher ratio in excess of 35.

The correlation coefficients between the programme quality index and various other indicators as described in the table below indicate that programme quality is significantly correlated with infrastructure quality (though one should not read this as a causal correlation, but rather simple association; they are likely to be influenced by similar behaviour and circumstances). However, programme quality does not appear to be correlated with any of the other continuous variables.

**Table 80. Correlation coefficients with quality of programme index**

	Index for quality of programme				
	Infrastructure index	Discrepancy between official enrolment of children and attendance	“Missing” grants	Pupil-teacher ratios	“Excess” income
Correlation coefficient	0.51	-0.12	0.08	-0.005	0.11
Significance	0.00	0.15	0.38	0.94	0.12

Further analysis did not yield any indication that there was a significant marker of financial opportunism that would explain some of the puzzles with the financial data described earlier, or with patterns of performance in the schools. The markers of opportunism created for this investigation yielded little.



<sup>27</sup> Organizations with petty cash books have a much lower missing grant average (almost 30% lower), but it falls just outside the boundaries of the 10% level of significance (Prob>F=0.15).



**Table 81. Correlation coefficients for various discrepancies and outliers**

	Discrepancy between registration and attendance	“Under-reporting” of grants	“Excess” income
Discrepancy between registration and attendance	1		
“Under-reporting” of grants	0.12	1	
	0.24		
“Excess” income	0.23	0.25	1
	0.01	0.01	

Note: Numbers in italics represent significance.

**Table 82. Cross-tabulation of community-based facilities by whether financial information exists and whether school fees are “excessive”**

		“Excess” school fee		
		No	Yes	Total
No financial information	No	156	41	197
		<i>128.4</i>	<i>68.6</i>	
	Yes	33	60	93
		<i>60.6</i>	<i>32.4</i>	
Total		189	101	290
Prob>F		0.00		

Note: Numbers in italics are the expected values under the assumption of no correlation.

There are some significant correlations and overlaps between these markers, but the correlations are relatively low and the overlaps not much higher than what would be expected if there were no correlations and it was not possible to confidently identify any cases of opportunistic behaviour or dishonest practices. It is probably best to attribute these patterns of low signal to noise ratios in the markers and thus to remain somewhat agnostic about these categorizations. There are some weak indications that all may not be in order in terms of opportunistic behaviour in all instances, but more investigation and preferably site audits would be needed to confirm this. Given the informal nature of transactions in this sphere, even an audit may miss some forms of opportunism, such as siphoning off of community funds that are paid in cash without any paper trail (e.g. receipts to parents or community donors). This survey, though, provides little direct evidence of large scale and systematic financial abuse of the subsidy system.

## 6.4 What breeds success and why is there so little misbehaviour?

The previous section indicated that poor financial management and possible dishonesty appear to be unrelated to the quality of the service provided. There are at least two possible reasons for the lack of correlation between these two dimensions of organizational life. It could be that providing a basic good quality service is not very expensive and that the premium relating to delivering a quality service is thus relatively low. Alternatively, it may be that providing a very poor quality service would be observed by parents and that they have sufficient choices available that they could take their child to another facility. It would be important to

investigate this further in future studies, perhaps with a number of focus groups with parents associated to these ECD centres.

The data indicates that the quality of the learning environment has a significant association with three other factors: teacher-pupil ratios below a critical benchmark (35 children per learner), the income quintile of the centre (those in higher quintiles have significantly higher quality indices) and a self-help attitude (represented by the presence of funding from donations and fundraising in the income statement). If the infrastructure index is added to this specification, the income quintiles and the self-help attitude no longer matter, which may suggest that higher income and higher motivation affect the quality of the teaching and support by providing assets, equipment and infrastructure for the ECD centre.

The flow of funds to registered community-based ECD facilities has expanded greatly in recent years. Furthermore, there are limited controls in place by the DSD to ensure appropriate behaviour by service providers, and weak bookkeeping is endemic in ECD organizations. In such circumstances, one would expect large scale opportunistic behaviour. This is in fact one of the reasons why this survey was commissioned.

What explains the relatively muted evidence of misbehaviour in this subsector, given the apparent opportunity for it? The following factors may play a role:

- Due to the relatively recent development and growth of this sector, some of the loopholes in the system may not yet have been detected and exploited.
- Accountability to fee-paying parents puts pressure on service providers to provide a service perceived by parents to be of relatively good quality and at relatively low cost to parents.
- The funds flowing to these facilities are relatively meagre, considering the cost of providing a service of this nature. For instance, if the average facility receives about R100 per child per month as a grant from the DSD, this would bring revenue of only R2 600 per month from grants per teacher based on the average teacher-pupil ratio. Considering the salary of teachers (almost that amount) and the need for other expenditures as well (e.g. on food), there is little scope for diverting funds to private use. The scope would be greater if all children in the school qualified for subsidy, in which case the subsidy should be closer to twice this amount. Additional funds raised by school fees or other means would give more scope, but also bring the involvement of parents with an interest in keeping fees low while demanding a good service. Overall, though, budgets are relatively tight.
- As the recipients of funds are private organizations dependent on such funds to keep their concerns going and they usually know what subsidy they qualify for, the transferring authorities (DSD) are under greater pressure to ensure that funds are disbursed to these facilities. This is quite different from many other PETS where public expenditure is tracked from higher administrative levels to public schools.

The small margins, private service providers, relative transparency in the value of the transfer, and accountability to parents thus all play a role in keeping the system on track (even though some parents may simply blindly assume that they are getting value for money). In an overview of PETS in education, Reinikka<sup>28</sup> also pointed out that in Zambia rules-based allocations appeared to reach the intended beneficiaries, while discretion-based allocations did not. South Africa's rule-based direct funding of personnel in schools (including Grade R) mitigate

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28 Reinikka, Ritva. 2004. *Public expenditure tracking surveys in education*. Unesco: International Institute for Educational Planning: 37.





against diversion of funds, whilst the rules-based subsidies to registered community-based facilities may have been relatively successful in keeping diversion of funds in check.

There are nevertheless possibilities of abuse and the extent of abuse is therefore likely to grow over time. It is important that the strengths of the present system (e.g. accountability to parents) be retained and that mechanisms be in place to improve the present system while it grows beyond its infancy.

## 6.5 Conclusion

Although the survey's findings have generally been positive, it would be imprudent to ignore the concerns that the research has identified. It is vital to tighten and improve regulatory controls before the loopholes in the system are widely exploited by opportunists within ECD facilities or even within the DSD itself. The survey has not identified evidence of large scale abuse of the system, but it has shown that such opportunities exist.

Also, while the general state of service delivery appears to be adequate, there is clearly room for improvement. Given the demonstrated importance of ECD in providing a solid foundation for children's education, it is vital to pursue such improvement. In this regard, the constraints and problems identified by ECD principals (at the community-based facilities) may be a good starting point. They cite lack of resources and specifically insufficient classrooms, play grounds and toilet facilities, issues surrounding the security of children, lack of funding, shortages of qualified teachers and training, the lack of involvement of parents, and the poor and disadvantaged backgrounds of children. While a small expansion of government funding (perhaps targeted towards learner support materials and meals) can be considered, the rest of the items on the list are most appropriately and most effectively provided at the local level and ideally by the community. While ECD principals report that the community may not be as involved as the ECD centre staff would like them to be and the financial data shows that only a small proportion of centres receive financial support from the community, this may not be the full picture. The sector appears to be making a positive difference in the lives of many children and that most centres are providing this service on a shoestring and with very little external funding. In the light of such conclusions, it is difficult to not be positive about the role of community, or if not more broadly valid, then at least particular members of the community. It is vital that government should be careful to complement and not to crowd out the initiative and efforts of eager and motivated community members.



# Chapter 7: Recommendations



## 7.1 Introduction

This chapter contains specific recommendations for policy. These are drawn from the survey itself, interaction with some of the role players, and experience in other sectors and countries. A short introduction serves to put some of the recommendations in context. Most recommendations are directed at the DSD. Where the DoE is also involved, an asterisk (\*) after the recommendation number will indicate this.

ECD has rightly been identified as a priority sector and has witnessed spectacular growth. Government's efforts have complemented that of private providers to turn the sector into an extremely large one, serving around 2½ million children, the bulk of whom are subsidized. While this growth was necessary and should continue, the emphasis should now shift to improving quality of provision and monitoring of finances and quality of services (food, infrastructure, LTSM and ECD programmes). Government efforts should continue to complement, not crowd out, private provision (in community-based facilities) while continuing also public provision (in schools), which means that the monitoring role of government is crucial in this next phase of growth of this sector.

*Recommendation 1\*:* Emphasis should now shift to be less on growth and more on dealing with the quality of delivery and improving monitoring of services and finances.

*Recommendation 2\*:* Government must continue to complement private community-based provision and offer public provision in schools; this emphasizes the monitoring role of government.

The main question for ECD facilities arising from the results of the survey is how to promote organizational effectiveness and a commitment to quality in this emergent sector, while continuing to avoid financial opportunism and improving controls over the flows of public funds.

What can be done to support the sector and to create an enabling environment for these organizations? Based on the evidence, a three-pronged strategy is proposed for dealing with community-based facilities: (i) ensuring some basic standard of record-keeping and financial management via government regulation and monitoring; (ii) promoting local-level quality control by removing any obstructions to community (parental) oversight; and (iii) encouraging struggling ECD centres with in-kind support and training.

## 7.2 Record-keeping and financial management

The survey showed that financial reporting in the community facilities was in a parlous state. Out of the 318 registered community-based ECD facilities visited, only 221 indicated that they kept annual financial statements. In many cases, these had still not been prepared nine months after the previous calendar year. Those that have been completed were often of little value for analysis or for planning.

There are indications that poor financial reporting may not be only a question of weak accounting skills, but also of motivation. Respondents in community-based facilities often said that they did not regard record-keeping as an important part of the running of the school. Consequently most facilities did not seem to have proper systems with the necessary controls in place. This should be a concern where institutions receive state subsidies, but it appears that DSD, whatever their formal policy, does not in practice insist on proper accounts. Yet Section 38 (1) (j) of Public Finance Management Act (PFMA) states that “before

transferring any funds ... to an entity within or outside government, [an accounting officer of a department] must obtain a written assurance from the entity that that entity implements effective, efficient and transparent financial management and internal control systems, or, if such written assurance is not or cannot be given, render the transfer of the funds subject to conditions and remedial measures requiring the entity to establish and implement effective, efficient and transparent financial management and internal control systems". From its side, DSD should thus insist on monitoring bookkeeping. Record-keeping (retaining receipts, compiling statements, petty cash book) and sound financial management principles (multiple signatories on bank account) may be the easiest type of management measures to observe and thus the best ones to police and regulate.

*Recommendation 3:* DSD should monitor bookkeeping and disqualify ECD organizations who consistently fail to keep proper financial records from receiving subsidies. However, this should only occur after having given such facilities all the necessary support to allow them to implement such financial bookkeeping.

Two options can be considered to assist ECD facilities with bookkeeping:

- Providing financial management training within the ECD training framework. This may be useful not only to deal with annual statements, but also to provide information that could be used for planning purposes. Cash flow is a great difficulty for many facilities, given the sometimes erratic nature of the arrival of grant transfers and parental contributions to school fees and the need to pay salaries, purchase food, LTSM and toys. Lack of proper flow planning contributes to children going hungry when the money for food runs out. Planning and budgeting are almost impossible where there are relatively large inflows of funds, but also large commitments in terms of salaries and other expenditures and no financial records.
- Alternatively, support could be contracted in via accounting firms. Qualified staff can then help ECD centres draw up annual statements. Such support can be subsidized via a government transfer or voucher.

*Recommendation 4\*:* DoE and DSD should develop a financial management module for ECD organizations and encourage participation in this to nurture such capacity within ECD organizations.

*Recommendation 5:* DSD in all provinces should provide an earmarked part of their funding to ECD organizations for the cost of contracting someone to draw up the financial statement, on condition that such statements meet minimum requirements.

Another surprise was the widespread lack of separate financial reporting of Grade R in public schools. This may be too onerous a requirement, as some spending is difficult to separate across Grade R and post-Grade R (e.g. cleaning services, spending on maintenance, some parts of infrastructure). There is likely to be cross-subsidization between Grade R and other grades in public schools, but given the volumes of the flows involved, it is usually more likely that other grades fund Grade R than the other way round.

*Recommendation 6\*:* The requirement that public schools should keep separate accounts for Grade R and post-Grade R should be abolished. The focus should rather be on monitoring the quality of services, infrastructure, LTSM and nutrition for Grade R in order to ensure that the funds flowing to public schools to fund Grade R have the required effect.





### 7.3 Community oversight

Community oversight has been shown to be a useful mechanism to monitor the quality of services in cases where quality is vital but complex to capture, quantify and verify. In many centres there is evidence of the presence of formal mechanisms of accountability and joint decision making such as SGB meetings, annual reports and financial statements. It is however always difficult to gauge how much decision-making power parents from the community really have and how much their opinions matter. Formal mechanisms for community feedback are neither a necessary nor a sufficient condition for community accountability, participation and involvement, yet they usually do little harm and can help to promote community involvement and monitoring by providing the raw material (e.g. transparency) and the opportunities (e.g. SGB meetings) for such interactions.

*Recommendation 7: Formal community oversight mechanisms in community-based facilities (e.g. SGB meetings, annual reports, financial statements) should be encouraged and expanded.*

*Recommendation 8: To ensure accountability, it is crucial that current parents should dominate in the composition of management boards of community-based facilities. It is therefore recommended that the DSD makes this compulsory for registered community-based ECD facilities.*

Much more important than such formal community oversight is the real accountability that comes from parental oversight regarding the services that they purchase. It would be difficult for the government to monitor critical dimensions of service delivery such as quality. It may be more feasible to set the sights a bit lower and concentrate on preventing ECD centres from siphoning off huge amounts of revenue allocated to the centre, while using accountability to parents as the mechanism to encourage service quality. Parental contributions should therefore remain a substantial part of the funding of ECD to ensure accountability to parents. DSD is simply not in a position to monitor ECD activities on the scale that these have now taken on.

*Recommendation 9: To ensure accountability to parents, fees for registered community-based ECD facilities should be retained even for the poorest facilities. Any state attempts to increase support for such children should take the form of increases in the value of child support grants rather than fully comprehensive support to ECD facilities.*

### 7.4 Monitoring absence

On the side of DSD, the single most important loophole in the system presently exists where large numbers of children can be enrolled in community-based ECD facilities, while in actual fact there are only a few attending. The survey showed a few cases where there were large numbers of children absent. As subsidies were awarded per child, there was an incentive to over-report the number of children enrolled with the centre. In fact, over-reporting enrolment should not be surprising – even some public primary schools do it, despite less incentive to do so and far better monitoring to detect it in public schools. There is a case for stronger controls and better regulation of the ECD sector, starting with enrolment numbers. This may also require some controls within the DSD provincial systems themselves. For instance, provincial staff may connive to register a “ghost” facility; as the PETS was focused on linking actual facilities found in the survey to fiscal data, this would not have revealed any such fiscal flows to nonexistent facilities.

*Recommendation 10\*:* Regular audits must be undertaken to ensure that enrolment numbers used to determine subsidies are not inflated.

*Recommendation 11:* The practice of some provinces to use actual numbers of children present rather than enrolment to determine subsidies is in practice impossible to implement properly with the limited staff at their disposal and should be discontinued.

*Recommendation 12:* Thorough auditing within provincial DSD departments of subsidies flowing to community-based ECD facilities must be implemented to prevent large scale abuse.

## 7.5 Community support

The data shows remarkably low levels of community financial support via donations and fundraising. These avenues may be important – and largely unexplored it seems – sources of revenue and in-kind support for this emerging sector. The survey indicates little grant funding and donations from churches, NGOs, businesses and the community. It is possible that these other sources of funding and support have been “crowded out” by government subsidies to assist and encourage ECD services. The survey shows, however, that such subsidies are not enough on their own.

Funding features prominently in the needs cited by the centres. Local private organizations and individuals may be the best and most appropriate sources of support to leverage for meeting these needs and addressing these concerns. Such benefactors often live nearby and in close association with these organizations and can thus observe and respond to the needs of a particular ECD centre. A higher proportion of donations and funding raised locally should improve local-level accountability and monitoring, and thereby strengthen the performance of these organizations.

*Recommendation 13:* DSD should encourage community facilities to strengthen ties with and seek more support from potential donors, particularly those located close by.

Another need that ECD facilities mention is parental support. This term is used very broadly, encompassing donations, moral support of staff, involvement in centre activities, or even commitment to children’s education.

In terms of community support, there is greater use of volunteers in community-based facilities than in public schools. Yet of those volunteers, 40% are said to be paid, raising the question whether they are really volunteers or perhaps just temporary paid assistance. In many communities experiencing large scale unemployment it should be possible to involve volunteers in assisting with ECD, both to relieve the duties of the principal and full-time staff and to expand child development activities.

*Recommendation 14:* DSD should encourage both parental and community support of ECD facilities, inter alia through awareness campaigns in the wider community of the importance of ECD.





## 7.6 Staff issues and organizational capacity

A number of issues relating to staff and organizational capacity require attention. More monitoring requires improved staffing levels at provincial level in both DoE and particularly DSD. The need for a greater staff complement in the DSD offices at provincial and national level to monitor and deal with subsidies to community-based ECD facilities is paramount. The expansion of the ECD programme requires a commensurate increase in staff levels to ensure that this process goes smoothly, that monitoring takes place, and that there is adequate communication with ECD organizations. At present, staff dealing with ECD mainly do so between their other responsibilities, with the consequence that financial controls are weak and there is great scope for abuse. This requires improved staffing levels at both central offices and for facility-level monitoring.

*Recommendation 15:* DSD should appoint more specialist staff to deal specifically with ECD. This requires both staff knowledgeable about ECD (social workers or auxiliary social workers) as well as administrative and financial staff. Attention needs to be paid also to organizational capacity so that additional and present staff can be utilized better to obtain the required impact in terms of capacity.

In ECD facilities, some more affluent (unsubsidized) schools and facilities obtained good staff at a fraction (less than half) the cost of similar staff paid through Persal. It is apparent that there are in many cases staff willing to work at lower salaries than the DoE norm, where they are paid through SGBs or community-based ECD facilities. More staff and other services could thus be afforded, implying lower class sizes and greater employment of ECD practitioners, if schools or facilities are given the resources and discretion to employ appropriate staff rather than appointments simply being made on Persal.

*Recommendation 16\*:* It is generally better to fund schools or facilities and allow them to hire staff than to appoint more personnel on Persal.

From the survey it appeared that the training of ECD practitioners was taking place on a large scale, commensurate with the growth of this sector. This should be strongly encouraged, despite possible reservations about the quality of training. There is anecdotal evidence that many practitioners attended the training simply for the stipends attached to it and that such training did not lead to better quality care for children once trainees returned to facilities. There is also much turnover of trained staff; many leave the sector within a short time of receiving training.

*Recommendation 17\*:* Training of ECD practitioners should continue, but selection of trainees should take account of the length of their involvement in the sector and give preference to those more likely to remain in this sector.

## 7.7 LTSM and educational toys

The survey shows that levels of provision of LTSM are surprisingly low, particularly in public schools where it is in fact sometimes less available even than in unregistered community-based ECD facilities. Budgets are dominated by staff costs and food and allow far too little scope for improving quality of educational provision. More attention needs to be given to LTSM, but this is often difficult when budgets are tight. In addition, few ECD facilities provide educational toys, confirming that the educational needs of children rather than more immediate needs are often ignored in a tight financial situation. It also may indicate that parental

pressure to make facilities accountable seems to work less well in this respect, perhaps because many parents have little understanding of what appropriate ECD involves. Only 25 community facilities indicated that they bought educational toys in 2008, an indication that many developmental needs of children are going unmet.

*Recommendation 18\**: All efforts should be made to ensure minimum acceptable levels of LTSM in ECD facilities of all sorts. In community-based facilities in particular, this may require monitoring to ensure that some funds are applied to give children appropriate LTSM or even earmarking parts of the subsidy for this purpose, while in public schools this may require greater attention to be given to the needs of young children within institutions dominated by older children.

*Recommendation 19\**: The system of toy libraries that is effectively used in some provinces should be expanded by DSD and can also be investigated for Grade R in public schools.

*Recommendation 20\**: Provision of toys should be highly encouraged to further child development. One option is for DSD to purchase such toys directly and transfer them to ECD facilities. However, capacity constraints in provincial DSD departments may make this unfeasible. Earmarking too suffers from the same limitation, so if earmarking part of subsidies for the purchase of appropriate educational toys from provider lists is considered, monitoring may be required to ensure that such toys are used in the facility (rather than trying to monitor the spending). Announcing to parents that such toys have been funded in a particular year would allow them to assist in monitoring and ensuring accountability

*Recommendation 21\**: Public schools need to pay more attention to the specific needs of Grade R children. DoE should prescribe certain criteria to be met for children of this age group, and should encourage greater spending on LTSM and educational toys for Grade R.

## 7.8 Infrastructure

Some ECD facilities (including public schools) have unacceptably bad infrastructure – this needs urgent attention at a national level. Poor infrastructure is particularly common and in some areas (notably large parts of Province 3) this is related to the overall lack of public infrastructural services. This needs attention, particularly in schools, but also in community-based activities. Where the services exist, DSD should consider support for infrastructure (but not new start-up facilities, lest this may become a shortcut to obtaining state-subsidized infrastructure).

*Recommendation 22\**: National government should make a greater effort at improving public infrastructure in poorer areas.

*Recommendation 23\**: Infrastructure provision should be prioritized for schools and facilities where children are cared for. Local municipalities should thus also be approached to give priority to such infrastructure.





## 7.9 Other issues

A few additional matters require attention:

*Recommendation 24:* Nutrition can be supported either by expanding the school nutrition programme to ECD facilities, which seems impractical at present, or by earmarking part of the subsidies to facilities for the specific provision of specified foods. This should then also be communicated to parents, so as to allow them to again play a monitoring role.

*Recommendation 25:* Earmarking of subsidies should be limited to only a few spending categories (e.g. toys, food, LTSM, and on a once-a-year basis, drawing up annual financial statements). Earmarking everything and then not monitoring it has little purpose. Thus, rather than earmarking, parents should be informed as to what they can expect of an ECD facility and what the minimum is that they should demand, given the levels of subsidies to such institutions. This will assist them in holding ECD facilities accountable and to some extent obviate the need for earmarking. Even where earmarking occurs, it is often better to monitor the physical presence of what the funds should buy rather than the actual expenditure.

*Recommendation 26\*:* Further research is needed on ECD. Four immediate priorities would be: (i) focus groups to understand the role and attitude of parents and communities; (ii) case studies of specific facilities, and audits of subsamples; (iii) case studies of child development and learning in community-based ECD facilities; and (iv) a survey of the quality of education in Grade R, given the limited attention this survey could devote to programme quality in terms of preparation for school.

*Recommendation 27:* The system of targeting subsidies to children through a means test should be continued. Although most facilities do not then exempt such children from paying fees, the effect is nevertheless equitable, as the incidence analysis has shown. The benefits of these subsidies extend to those not meeting the means test in the same facilities, but generally few children in facilities for the poor are not themselves relatively poor, and monitoring a forced exemption policy would be extremely difficult and also reduce the accountability to parents that fees bring.

