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This study was prepared in December 2009 in cooperation between the Ministry of Finance, the Ministry of Education and the European Union. Knowing that MOF and MOE have implemented most of the recommendations of this study.

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Education Public Expenditure Tracking Survey (PETS)

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In collaboration with

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The views expressed in this report do not necessarily reflect the views of the European Commission.

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List of Abbreviations and Acronyms

| | |
|--------------|--|
| BoT | Board of Trustees |
| ECD | European Commission Delegation |
| EMIS | Educational Monitoring Information System |
| EPDF | Education Project Development Fund |
| EU | European Union |
| GAEB | General Authority for Educational Buildings |
| GDP | Gross Domestic Product |
| HR | Human Resources |
| IDSC | Information and Decision Support Centre |
| IT | Information Technology |
| LPC | Local Popular Council |
| MoE | Ministry of Education |
| MoED | Ministry of Economic Development |
| MoF | Ministry of Finance |
| MTEF | Medium Term Expenditure Framework |
| MuD | Mudiriah |
| NGO | Non-Governmental Organization |
| PEM | Public Expenditure Management |
| PER | Public Expenditure Review |
| PETS | Public Expenditure Tracking Survey |
| PFM | Public Finance Management |
| PSPU | Policies and Strategic Planning Unit |
| PTA | Pupil Teacher Association |
| TDC | Technology Development Centre |
| USAID | United States Agency for International Development |
| WEI | World Education Indicators |

I. Preface

The Public Expenditure Tracking Survey (PETS) project in Pre-University Education sector was initiated in the context of the increasing attention by the Government of Egypt (GoE) to the significance of this sector in Egypt, and the necessity to improve the efficiency and effectiveness of public expenditure in it. The project's methodology and implementation closely followed the relevant elements of the *National Strategic Plan of Pre-University Education Reform in Egypt, 2007/2012*. The strategy clearly emphasises amongst other things, the need for improving the quality of education through making the education expenditure more efficient and effective, as well as supporting the human resources development and efficiency through clear definition and allocation of responsibilities.

With education sector absorbing around 11% of the total State Budget, according to the statistics from the Ministry of Finance (MoF) for the fiscal year 2008/2009, these strategic objectives receive a fully justified emphasis in the policy context.

The PETS project was designed to contribute to the efforts for achieving the strategic objectives for the sector. The project seeks to enhance the understanding of the significance of resource inefficiencies in Pre-University Education, identify which locations and which students are most affected and provide the government with the basic information required to find appropriate solutions. The project's ToR clearly indicates the strong link between PETS as one of the crucial instruments, as a diagnostic tool with other reforms and measures necessary to modernise the Public Finance Management in Egypt. It is argued that by promoting improvements in the efficiency and impact of public funding, the PETS will help rationalising expenditures and therefore allowing for fiscal space. The PETS exercise is part of a wider set of measures aiming to improve Public Finance Management. Pre-University Education is the pilot sector for most of these initiatives, such as the Fiscal Decentralisation process and the forthcoming implementation of a sector Medium-Term Expenditure Framework (MTEF).

The project builds upon the Government's declared strategic objectives in the Pre-University Education sector as well as a number of earlier studies, especially by the World Bank (WB) and the United States Agency for International Development (USAID) in the fields of education and public finance reforms in Egypt. "The premise of the PETS is that delays in budget execution as well as weak systems of control with consequent scope for leakages and discretion in the allocation of resources, may adversely affect quality and efficiency of service delivery. According to the Public Expenditure Review a number of ratios are pointing to substantial waste and leakage in transfers from Finance to Education. Government resources earmarked for education flow within legally defined institutional frameworks often passing through several layers of government bureaucracy down to education service facilities, which are charged with responsibility of exercising the spending. Tracking the flow of resources through these strata to determine the bottlenecks and the actual and potential areas of resource waste has been recommended as a useful device for locating and describing bureaucratic capture and leakage of funds (Education Finance in Egypt - Part 1, Education Fiscal Profile for Egypt, USAID, Khaled Zakaria Amin: September 2006).

Despite the limitations of the data and the time constraint, the present PETS exercise proved a crucial and useful step in the right direction in shedding lights on required improvements in the relevant data, as well as main bottlenecks in the priority strategic areas such as effectiveness of expenditure and equity, as detailed below. The PETS also initiated the first applied analysis at a micro level (Schools and Education

Departments) for the sector concerned. Moreover, its highly participatory features sharing the findings at proper milestones with the main beneficiaries at the central and regional levels, through three conducted workshops, enriched the collective insights of the main stakeholders across the spectrum. The feed backs from the conducted workshops over the project's duration guided and enhanced the team's work.

II. Acknowledgements

The PETS team wishes to express their appreciation for the support and interest they received from the MoF and MoE as the main beneficiaries of the project, especially in arranging and assuring the extended participation of the officials from the Education Directorates and Departments and the schools at all three workshops held by the team. The genuine interest and insight of these participants were not only rewarding, but very inspiring, and enriched the understanding of the team, and guided their approach at each stage. The comments on the earlier draft of the present report were very helpful, so were the further clarifications received from the MoE in that context. The team wishes to extend their gratitude. The efforts of the survey implementing agency IDSC are duly appreciated.

A special note of thanks goes to the European Commission Delegation in Cairo for staying closely engaged, enthusiastic and within easy reach throughout.

The opinions expressed in this document are those of the team of experts alone and do not necessarily reflect those of the European Commission Delegation.

1. Executive Summary

PETS by definition is an instrument to track the public funding in order to enhance transparency, efficiency and effectiveness regarding the policy objectives of the expenditure concerned. In the process, PETS proves primarily a useful tool for diagnostic purposes, in terms of identifying the main bottlenecks in the existing system, inspiring to an optimised public funding management. While PETS itself is only an instrument in a broader context of Public Finance Management (PFM), its diagnosing abilities based on detailed data, offers invaluable opportunities for analysis at various layers, in terms of availability, consistency and quality of necessary information and data. These would be of considerable use in planning and execution of allocated resources towards targeted improvements, in this particular case, improvement in the access, quality and effectiveness of Pre-University Education sector in Egypt through more efficient use of the public expenditure in the sector. The PETS exercise applied a targeted participatory approach at various organisational levels involved in the sector, the Education Directorates (Mudiriahs) and Departments (Idaras) and school levels, including the teachers and the Board of Trustees (BoT). The methodology of this study combined top-down with bottom-up approach for validating data and information flow and placing particular emphasis on the flow of cash and in-kind transfers, human resources, clarity of responsibility at work place for planning, executing and reporting functions at various levels, reporting mechanisms, efficient resource allocation factors, quality of school facilities and equity dimension of the public expenditure in this sector.

The PETS exercise has made some essential contribution to some key issues that could be addressed in the broader context of PFM, including the on-going sector MTEF. Covering 6 Governorates, 24 Districts and 288 schools, the study collected the relevant data, through questionnaires and consulting documents from multiple levels, and intensive analysis and compared quantities (in value or in kind) that are transferred from the centre to the local levels. The exercise succeeded in identifying the key inconsistencies and the major areas of missing crucial data and information. It has also enhanced the understanding of the potential leakages and the prerequisites for measuring them, institutional and human resource bottlenecks and system inefficiencies in planning, allocating and executing of public funds at various levels. There are various gaps in the base line data, especially the data produced by the Education Monitoring and Information System (EMIS). Noticeable inconsistencies are pointed out between PETS results with EMIS and other sources from the lower entities, but also between those sources at various levels.

All of these are crucial outputs of a PETS exercise. A summary of the main findings in these regards follows below.

The budget structure in the Pre-University Education sector is fragmented, with several sources of cash and in-kind transfers between the various layers of budget entities and to the end users (schools). Educational Departments (Idaras) and Directorates (Mudiriahs) have some specific programmes with specific objectives. However, the budgeting process as a whole is still not linked to these programmes or to the strategic objectives. The sector MTEF initiated in 2009 is expected to improve these building blocks in the near future.

In addition to the current budget structure hurdles, there are difficulties in tracking the resources and the expenditure due to the combination of cash and in-kind transfers coupled with the lack of well-estimated unit prices for the in-kind transfers. Schools mainly prepare preliminary need assessments and requests related to the in-kind supplies. The fact that the schools in Egypt are receiving mainly in-kind resources from the Education Departments and Directorates makes the budgeting process at the school level quite weak. The

main financial sources of the school budgets come from the retained students' fees, cash advances¹ coming from the Educational Departments, the income generating activities run by the schools, and the contribution of the BoTs and civil society. The emerging picture indicates a large presence of private funding at the school level (material and financial resources). According to the PETS results, almost 77% of the schools budgets come from the retained students fees on average. However, there are irregularities and ambiguities regarding the retained fees.

Around 16% of the schools showed retained fees which were equal to the total fees collected, although by existing regulations on average approximately only 50% of the fees are to be retained at the school level. The data indicate that 12% of the schools retained more than the total fees they had collected.

Overall, shortage of cash resources seemed to be common amongst the sampled schools. Almost 72% of the surveyed schools adopted expenditure cut practices in fiscal year 2007/2008.

These findings, however, should not give the impression that education services in Egypt are mostly financed by students' fees and by the contributions of civil society organisations through the BoTs. According to the Constitution of Egypt, education is free for all. The Government of Egypt (GoE) finances teaching and non-teaching staff wages and salaries, school buildings and maintenance, educational materials, IT equipments and software, labs and libraries and textbooks.

The reporting and monitoring aspects are critical cross-cutting issues for a comprehensive Public Finance Management reform including an effective PETS exercise.

The MoE has only a manual accounting and reporting system. This has resulted in heavy workloads in accounting to record all transactions and to balance budgetary accounts; inaccurate monthly reporting because of the tight deadlines for reporting; increased likelihood of errors and an inability to prepare timely and accurate summary analyses and reports for the Ministry management.

There are considerable capacity limitations at the organisational levels all along the line especially regarding data and information collection, recording, analysis and reporting (from the MoE to the school levels), teachers' shortages and the short-termism applied in addressing the problem and inequitable distribution of resources, in terms of cash subsidies, school facilities and teaching material. A case in point, according to the data from the Technology Development Centre (TDC) 9,017 computers were allocated to the 6 sampled Education Directorates in 2007/2008, whilst in turn, only 1,129 computers were provided to the schools by the Education Directorates, meaning only 13% of what was allocated, according to the records kept. The tracking instrument confirmed the problems in the record keeping system, especially regarding the in-kind allocation.

Part of the neglect regarding the importance of information, reporting and monitoring system is due to the very structure of the budget decision making at the moment. The PETS results confirm the findings of the study carried out by the World Bank in 2005 'Budgets are prepared bottom-up, in response to a MoF- issued budget circular. It does not contain government priorities or hard budget ceilings for first line budget entities. There is generally no budget challenge function exercised as individual entity budgets are aggregated and reported to MoF and MoED who negotiate directly with educational entities and the MoE-affiliated service authorities entities, [which] erodes a sense of accountability for the performance of the planned work within the budgets established'.

¹ Cash advance is a mechanism in which a school receives a cash advance from the educational department to which it is affiliated. After exhausting the advance, the school should settle it and submit all relevant disbursement documents to the department.

Lack of information and its systematic flow exacerbates the uneven distribution of education resources. Regarding instructional material, only 63% of surveyed schools in Cairo had received what they had requested.

A large proportion of schools indicated that they had no idea about their allocated budget at the beginning of the school year and they had to manage from day to day.

Furthermore, a by and large un-targeted non-means-tested allocation of cash and in-kind subsidies result in maintaining or deepening the existing equity problems between and within the Governorates surveyed.

The PETS exercise provides a rather detailed overall view of the distribution of the material and financial resources across the sampled schools, as well as the distribution of teachers and instructional material. These all have significant bearings on the equity and quality of education issues, in line with the priorities of the National Strategy for Pre-University Education.

Regarding the equity issues, only around 60% of the sampled schools received IT equipment and some books for the library. Half of them were supplied with instructional materials and less than 40% with some furniture. Lab facilities were sent to less than 10% of the schools and school feeding programmes seemed to be limited. Around one fourth of the schools did not receive any in-kind supplies since July 2008. This ratio hikes to over 40% in Luxor.

As high as 23% of the sampled schools received less than the minimum cash subsidy (LE 150 for primary, LE 200 for preparatory and LE 250 for the secondary schools). Contribution from the community is generally low with the exception of Minia (13% of the schools budget). On average 75% of parents can afford paying fees with only 62% in Fayoum.

The average number of textbooks per student in Cairo is much higher compared to the other Education Directorates in the sample.

There are ambiguities regarding how the teachers have been counted; i.e. based on headcount or conversion to equivalent full time average per week, for those employed on temporary or short-term basis (per-class teachers). For instance, the four sampled Education Departments in Cairo declared a shortage of 1,335 teachers whilst the Education Directorate reported a shortage of 253 teachers, i.e. six times smaller (See Table 2, Annex F).

The present procedures regarding the teachers deployment and distribution which is based on the teachers' willingness to move, rather than the schools needs assessment, seem to a large extent explain the seemingly contradiction between having teachers shortages on the one hand and a low student to teachers ratios on the other hand. The new Teachers Cadre put in place is tackling some of the problems in terms of motivating relocation through incentives and better salaries, but the relocation mechanism and incentives remain to be addressed yet. (See Table 12, Annex F)

Hiring of contracted and per-class teachers as well as teaching by management staff is quite frequent in most of the surveyed schools, which could be the results of both the shortages and the teachers career path.

Regarding teaching resources, textbooks are received in time in most schools. Textbooks shortages were recorded in Minia and Fayoum (around 20% of the schools). Instructional material is also lacking, especially in Cairo (38%).

In terms of school maintenance, the survey found that there is a need to rebuild or maintain almost one third of the schools. Also there is the lack of furniture: half of the classrooms lack a chair and a desk for the teacher and there are not enough student desks in one school out of every ten on average.

Teacher shortages combined with a lack of classrooms/schools contribute to a high number of students per class, above 40 in most schools. The situation is particularly noticeable in primary schools, with an average of 47 pupils per class, reaching 56 students per class in Cairo and 52 in Minia. The national average ratio is 41 students per class.

This calls for closer coordination by the MoE with the Mudiriah to revisit the current system of estimating teachers' shortages and surpluses at the Idara and Mudiriah levels. The fact that the Pre-University Education system is experiencing teachers shortages in general while the students to teacher ratio is relatively low (on average there are 13 students per teacher in the sampled schools), indicates a problem in the teachers distribution and deployment mechanisms.

There is an overall lack of clear definition or awareness of responsibilities regarding data update, control, analysis and reporting at all levels surveyed and further confirmed at the workshops conducted by participants from those entities levels.

In the light of the contributions made by the PETS exercise and the lessons learnt, the report offers a set of recommendations, with the summary of main ones as the following:

- Bringing the planning, policy formulation and strategic objectives closer to the way the budget for the sector is currently prepared, decided and executed.
- Introducing proper accounting system and evaluation of the in-kind transfers by way of using unit prices that reflect the relative weight of various qualities of the same items, as well as reflecting the real market price at the time;
- The in-kind transfers to be scaled down and gradually phased out in the Pre-University Education sector, towards cash transfers. This would facilitate the record keeping at all levels, and improve transparency.
- Improving the current monitoring system in a way that links the tasks and activities conducted at Idaras and Mudiriah with specific performance indicators set by the MoE. Selective, intensive, interactive training sessions to be provided in data comprehension, classification, storage and analysis and reporting at all levels of entities involved.
- Adopting means-tested methods for cash advances and in-kind transfers is an important step forward whereby the tracking of the expenditure and impact assessment can be linked to policy objectives related to equity and efficiency.
- Clarification of systematic channels and mechanisms is essential for regular flow of information and early warning systems for lapses in delivery of subsidies and / or delivery of services in the sector.

Annexes:

A set of comprehensive Annexes provides full information on the methodology, the series of workshops, the samples entities covered by the pilot and main surveys and the full set of the questionnaires used in the survey, amongst other things. There is a comprehensive set of supplementary tables and a Users' Guide too.

2. Diagnostics of Public Financing in Pre- University Education Sector

2.1 The Macro-Fiscal Analysis of Pre-University Education Sector

2.1.1. The analysis of macro-fiscal status of Pre-University Education sector mainly focuses on the fiscal structure of the education system, the budgeting process and allocation of public funds to the sector, the composition of the sector budget, and the institutional relationships within the sector regarding the financial management issues.

2.1.2. Budgeting process in Pre-University Education sector is very complicated and scattered. The sector budget is distributed amongst three components: the budget of the Ministry of Education (MoE); the budgets of Education Directorates (Mudiriah) at the Governorate level (29 Directorates) and the budgets of the services authorities affiliated to the sector. The latter are General Authority for Educational Buildings (GAEB), Education Improvement Fund, General Authority of Literacy and Adult Education, Education Development Projects Fund, Academy of Teacher Professional Development, National Centre for Educational Examination and Evaluation, National Centre for Educational Research and Development, and Service Fees Funds. Each of these entities is budgetary authority. This means that all these entities separately negotiate their own budgets with the Ministry of Finance (MoF).

2.1.3. The recurrent and investment budget allocations of the whole Pre-University sector are not integrated since they are negotiated and decided by two different central ministries which are MoF and MoE. Recurrent expenditure should be adjusted according to the development in education investments. This separation has drawbacks such as coordination issues between the two central agencies for control and spending, alignment problems with asset creation in the investment budget as well as long and medium-term operating and maintenance costs of these investments. This problem is deeper in the Pre-University Education sector since MoF and MoE work the sector's budget out through fragmented budget authorities (MoE, Education Directorates, GAEB and other service authorities) rather than negotiating the consolidated sector budget with the concerned minister (MoE).

2.1.4. The formulation of the operating budget does not apply a hard budget ceiling. The Macro Fiscal Policy Unit at MoF was established with the responsibility of undertaking medium-term macro-fiscal projections in July 2004 and became operational in January 2005. Since the financial year (FY) of 2005/2006, ten-year macro and fiscal forecasts have been prepared in line with the MoF's medium-term fiscal strategy of reducing the overall budgetary deficit of the government by 1% of GDP a year to bring the deficit down to 3% of GDP and to ensure medium-to-long term fiscal and debt sustainability. While the budget is prepared within a medium-term perspective, no forward estimates of macro or fiscal aggregates are provided to the MoE and the other budget authorities in the Pre-University Education Sectors (Educational Directorates) and affiliated service authorities at the central level).

2.1.5. As a result, the tradition is that MoE and the Pre-University Education sector budget authorities submit budget proposals whose total costs are often right above the overall expenditure budget of the MoF fiscal framework. The proposed operating budgets are therefore approved at significantly lower levels than what

was originally requested following bilateral negotiations between the MoF, MoE and the other Pre-University Education sector entities.

2.1.6. The MoE budget directly contributes to the educational process through financing textbooks, instructional materials, laboratories and information technology applications as reflected by Diagramme 1 in Most of the budget allocations spent on educational process are derived from the budgets of Education Directorates that include the salaries of teaching and non-teaching staff at the school level, teaching materials and students’ nutrition. The Education Directorate at the Governorate level uses Education Departments (Idaras) at the District level to distribute most of the in-kind materials to the schools. Education Directorates also allocate budgets to specific line items in Chapter 2 of the Education Department budget to support school budgets. Table 2.1 shows the economic structure of both the Education Directorate and the Department (Idara) budgets. It is noteworthy that the Education Directorate consolidates the budgets of all affiliated Departments in addition to the salaries and operating expenditure of the Education Directorate as a supervising entity.

Table 2. 1. The Structure of the State Budget

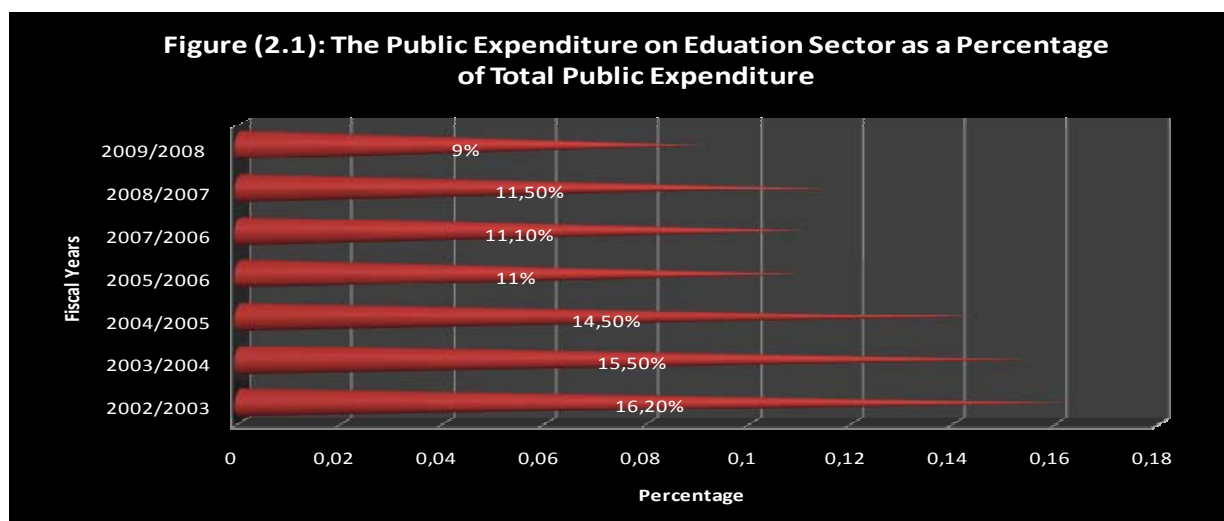
| Uses | | Resources | |
|---------|--|-----------|--|
| Chapter | Title | Chapter | Title |
| 1 | Employees Wages and Compensations | 1 | Taxes |
| 2 | Goods and Services Purchases | 2 | Grants |
| 3 | Interest | 3 | Other Current revenues |
| 4 | Subsidy, grants, and Social Privileges | | |
| 5 | Other Current Expenditures | | |
| 6 | Non-Financial Assets Purchases (Investments) | | |
| 7 | Financial Assets Acquisition (Local and Foreign) | | |
| 8 | Loans Repayment (Local and Foreign) | 4 | Proceeds from Lending and Financial Assets Sales |
| | | 5 | Borrowing |

Source: State Budget Law (53/1973)

2.1.7. Schools have access to these allocations through cash advances mechanism in which a school receives a cash advance from the Education Department to which it is affiliated. After exhausting the advance, the school should settle it and submit all relevant disbursement documents to the department. Schools can apply for more than one cash advance payment during the same school year. The Financial and Administrative Director at the Department level is responsible for approving and operating these advances whilst the Technical Director at the Governorate level is responsible for the way in which these advances are disbursed. Field visits to schools carried out during the PETS exercise show that the cash advances range from LE150 to LE 250 according to the schools’ educational level. The majority of schools receive one advance per school year. School management staff interviewed during these visits seemed to have little or no information about whether they are entitled to request other advances or not. However, according to the comments from the Ministry of Finance (MoF), there is a stipulation for making more than one request per school year. This area according to the team interviews lacks transparency and systematic information.

Schools can also receive in-kind and cash contributions from civil society organisations and BoTs whether they are at the school or at the Education Department level.

The composition and structure of the budgeting and expenditure systems of Pre-University Education sector becomes more complicated concerning sectoral or functional classification of budget. According to the MoF's chart of accounts, expenditure on education includes both pre-university and university education. It is considered as one of the largest social expenditures in Egypt. Expenditure on education includes the expenditures of the Ministries of Education and Higher Education, the expenditures of Education Directorates and Departments at the Governorate and District levels, the expenditure on Al-Azhar Pre-University schools, the expenditures on public universities and the University of Al-Azhar and the expenditures on the general authorities affiliated to the two ministries. Expenditure on education as a percentage of total expenditure has declined starting from fiscal year 2005/2006 as reflected in Figure 2.1. This decline is mainly due to the following reasons:



- (1) The government's decision to include the amount of indirect subsidy to petroleum products in the state's general budget as of fiscal year 2005/2006 which led to a considerable increase in the total public expenditure. This, in turn, resulted in a decrease in the relative share of other expenditure components.
- (2) Expenditure on Al-Azhar Pre-University Education was considered a component of education sector expenditure. Starting from fiscal year 2005/2006, this component has been reallocated to be part of the expenditure on youth, culture, and religious affairs. It is noteworthy that expenditure on Al-Azhar Pre-University Education in fiscal year 2008/2009 accounted for almost LE 3.9 billion representing around 14% of the expenditure on Pre-University Public Education.

2.1.8. Between the two fiscal years 2007/2008 and 2008/2009, public expenditure on Pre-University Education increased by almost 20% from almost LE 23 billion to LE 27.5 billion. It is also specified that the expenditure on public Pre-University Education (MoE, Education Directorates and Departments as well as Education Service Authorities) as percentage of the education sector expenditure (Pre-University and University) recorded 74% in the fiscal year 2007/2008 and 77% in the fiscal year 2008/2009.

2.1.9. Table 2.2 shows the distribution of Pre-University expenditure on major education entities and line items based on the 2008/2009 budget. The table shows that Education Directorates receive almost 81% of the Pre-University allocation compared to almost 11% by the MoE and 6% by GAEB. Around 58% of the investment expenditure is implemented by GAEB compared to 24% implemented by the MoE. The Education Directorates' wages and salaries account for almost 94% of the Pre-University Education sector's total wages and salaries, compared to 6% allocated to the wages and salaries of the MoE and the other public entities in the sector.

Table 2. 2. The Distribution of Pre-University Expenditure on Major Line Items (2008/2009 Budget)

| Budget Items and Components | Wages and Salaries | Purchase Goods and Services | Other Recurrent | Investment | Total Expenditure |
|--|--------------------|-----------------------------|-----------------|------------|-------------------|
| Total Pre-University Education (in LE thousands) | 22,730,135 | 2,668,899 | 200,985 | 1,948,781 | 27,548,800 |
| Ministry of Education (% of total) | 4.726% | 52.223% | 27.320% | 24.130% | 10.865% |
| All Directorates (Mudiriahs) (% of total) | 93.995% | 36.697% | 6.170% | 0.000% | 81.155% |
| General Authority of Education Buildings (GAEB) (% of total) | 0.607% | 10.042% | 11.040% | 58.360% | 5.682% |
| Other Education Service Authorities and Funds (% of total) | 0.672% | 1.039% | 55.470% | 17.510% | 2.298% |

Source: Data obtained from the MoF

2.1.10. The fact that the Pre-University Education sector is a labour-intensive sector explains the considerable budget share given to wages and salaries at the Directorate level. This budget share covers the wages of the teachers and non-teaching staff at the schools and at Education Departments and Directorates. Given the fact that there is a teaching to non-teaching staff ratio in public, the Pre-University Education in Egypt is almost 1:1, this trend of expenditure on salaries and wages over time may not necessarily lead to improving the quality of education process itself.

2.1.11. GAEB was established in the early 1990s after a strong earthquake that damaged a considerable number of schools at the time. The logic behind establishing GAEB was to create an administratively and financially independent body through which the government could avoid the routine complications at the MoE as well as those concerning the Directorate's procedures. As such, GAEB was set up as a rather temporary entity to deal with the immediate earthquake impact on school buildings. Over time, however, GAEB came to be taken as a non-temporary establishment, particularly as it became the first investor in the Pre-University Education sector as shown by Table 2. 2. It is responsible for constructing schools and the other educational buildings and providing long term assets like laboratories and art and music rooms' instruments. GAEB has a branch in each Governorate. It works through these branches to assess the needs of establishing new schools in all Governorates and to decide which schools are in need of major maintenance since minor maintenance are assigned to the schools and Education Departments. The work of GAEB can be criticised for at least two reasons: (1) the lack of coordination with main stakeholders like the MoE, Educational

Directorates, and affiliated Service Authorities; and (2) the apparent cost inefficiency; the private sector in Egypt builds schools using the same standards and codes like GAEB but at considerably lower costs. The fact that GAEB controls almost 58% of the sector's investment should not divert the attention from assessing the scale and quality of investments by the other entities in the sector, mainly the MoE and service authorities, which account for almost 42% of the sector's total public investment in the sector.

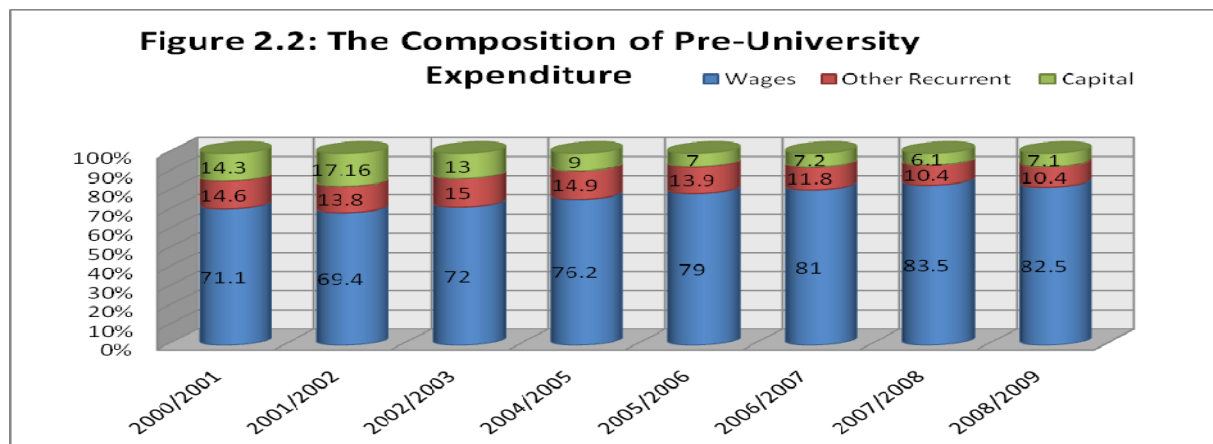
2.1.12. According to Table 2.3 the Pre-University Education budget was increased by almost 81% between the fiscal years 2000/2001 and 2007/2008, equivalent to an annual growth rate of 11.5% over that period. However taking into consideration the high inflation rate experienced in Egypt over the same period, the real value of this increase is considerably less. According to the statistics from the Ministry of Economic Development (MoED), the inflation rate averaged around 14% between the two fiscal years. The share of the Education Directorates expenditure of the total Pre-University expenditure averaged 75% through this time period, compared to 14% for the MoE and 11% for the education service authorities including GAEB.

Table 2. 3. The Composition of Pre-University Education Expenditure (From 2000/2001 to 2007/2008)

| Fiscal Years | | Total Expenditure (in LE million) | MoE | Education Directorates (Mudiriahs) | Education Service Authorities |
|--------------|---------------|-----------------------------------|-------|------------------------------------|-------------------------------|
| 2000/2001 | Final account | 12,670.8 | 16.4% | 70.6% | 13% |
| 2001/2002 | Final account | 14,359 | 14.5% | 69% | 16.4% |
| 2002/2003 | Final account | 15,662.4 | 14.5% | 70.4% | 15.1% |
| 2004/2005 | Final account | 17,789.3 | 14.9% | 75.6% | 9.5% |
| 2005/2006 | Final account | 18,609.9 | 14.2% | 77.7% | 8.1% |
| 2006/2007 | Final account | 19,788 | 12.4% | 82% | 5.6% |
| 2007/2008 | Final account | 22,994 | 10.8% | 81.2% | 8% |

Source: Egypt's Ministry of Finance Statistics

2.1.13. Figure 2.2 displays the composition of the Pre-University expenditure according to the economic classification (recurrent versus capital). The figure shows that over the period between fiscal years 2000/2001 and 2008/2009 wages and salaries have had the lion share (83.5% in 2007/2008 and 80.4% in 2008/2009). Over the same period capital expenditure ranged between 6% and 17% of the total Pre-University Education expenditure (10.5% on average).



2.2 The Public Finance Management and Reforms Landscape in the Pre-University Education Sector

The sector analysis provided by Section 2.1, focuses on the macro aspects of managing the funds of the Pre-University Education sector in Egypt. This section will focus on the micro level financial management of the sector. Budget preparation, planning, allocation and execution at the school, Education Department and Directorate are elaborated fully in this section of the study.

2.2.1. Budget Preparation

2.2.1.1. There is no doubt that the process of budget preparation requires valid and reliable data and measurable and clear objectives that the Education Departments and Directorates should be responsible for. The study finds that the current budgeting system in the Pre-University Education sector does not allow clear information regarding the distribution of expenditure line items among different educational levels (primary, preparatory and secondary). Although one can spend the amount of funds on the purchase of goods and services at the Education Department and Directorate levels, the only way to get a picture of the distribution of these funds across the different educational levels is to make certain assumptions for specific factors such as the number of students or the number of schools. It is also revealed by the study that although one can have quite good data on the figures of teaching and non-teaching staff of the MoE, data are not available on the teaching and non-teaching staff's total salaries classified by educational levels. The MoE is not responsible for preparing Chapter 1 of the budget (Wages and Salaries allocation). It is therefore the responsibility of the MoF and the Central Agency for Organisation and Administration (CAOA). Moreover, the major factor in determining the salary level until 2008 was seniority. Starting from the school year 2008/2009 other factors like teachers' academic and professional status have been added as a result of implementing the new Teachers Cadre system.² Lacking this type of basic data strongly hinders the efficiency of budgeting process in this sector.

² Different estimation exercises have been conducted to classify salaries by educational level using different assumptions. However, there are no official figures for these statistics. For example, MoE did this exercise in year 2007 to implement the UNESCO's Analysis and Projection Model (ANPRO) in Pre-University Education sector.

2.2.1.2. The Pre-University Education sector in Egypt is currently applying line-item budgeting rather than programme-based budgeting. Educational Departments and Directorates do not have specific programmes with specific objectives that the budget preparation can revolve around. At the same time, the MoE has just started introducing the Medium-term Expenditure Framework (MTEF) to the sector. This process still needs more time to mature. Until then lacking well-identified programmes at the Educational Department and Directorate levels, makes budgeting preparation process weak not strategically planned, not based on well-defined priorities and based only on historical incremental methods. However, it is noteworthy that the MoE is conducting the MTEF exercise that will complement its National Strategic Plan (2007/2012). This exercise will enable the MoE to make the required links between the strategic objectives and expenditure. It will also shed further lights on some of the questions raised by the PETS exercise.

2.2.1.3. The budgeting preparation process at the Educational Departments and Directorates lacks well-identified budgeting units. The system lacks the technical factors that link different budget line-items with specific budget units like number of schools, number of classes and number of students. Lacking this chart of budgeting units weakens the ability of financial staff at the Educational Departments and Directorates to properly prepare their budgets and to effectively negotiate these budgets at later stages either with the MoF or with the higher level educational entities.

2.2.1.4. The study shows that the budgeting process at the school level is quite basic. Schools mainly prepare preliminary need assessments with requests of in-kind resources and send these requests to the Education Department. The fact that the schools in Egypt are receiving mainly in-kind resources from the Educational Departments and Directorates makes the budgeting process at the school level very weak. However, it is important to mention that the MoE, through its decentralisation initiative which started last year in three Governorates (Ismailia, Fayoum and Luxor), is transferring funds to the Educational Departments to finance school improvement budgets. This initiative has provided good incentives to schools to start a realistic budgeting for the allocated funds. The reform programme adopted by the MoE and stated in its strategic plan focuses on the school as the main reform unit. School-based reform is one of the commonly used expressions in the Pre-University Education sector in Egypt. One aspect of school-based reform scheme is to give some financial independence and discretion to school administration. Lacking coherent and efficient budgeting process at the school level may do serious harm to the MoE's reform plans. Budgeting at the school level also matters as a pre-requisite of transforming the Pre-University Education system towards a cash-based system rather than being based on in-kind transfers as is the case currently. This transformation is reflected in the recommendations of the present report.

2.2.1.5. The MoE has a classification of the Educational Departments in Egypt. This classification assigns Educational Departments to three categories A, B and C. The categories differ in terms of their organisational charts and workload. The study finds that this classification has nothing to do with the budgeting process. All Departments go through the same phases and procedures and negotiate on the same line items using the same methodology.

2.2.1.6. The study finds that the established norm in the education sector is that the Departments and Directorates receive budget allocations that are less than their budget requests. Furthermore, the Education Directorates and Departments tend to submit budget requests that are unrealistic and not planned according to clear objectives and financial estimates. Most Education Departments and Directorates submit an initial budget request that exceeds the final account of the previous year budget by almost 30% on average but they often receive a real increase ranging only from 3% to 6%.

2.2.1.7. Tables 2.4 and 2.5 display the main sources of the school budgets that are the retained students' fees, cash advances³ coming from the Educational Departments, the income-generating activities run by the schools and the contribution of the BoTs and civil society. The tables show that almost 77% of the schools budgets are received by the retained students' fees on average. It is noteworthy that schools are allowed to retain just 45% of the total fees they collect and the rest are to be transferred to the Mudiriah and Idara levels.⁴ The second source is the income-generating activities with almost 13% of the total. Cash advances received by the Educational Departments ranked as the third source of cash in the school budgets in the fiscal year 2007/2008. The preparatory schools benefited considerably from this source compared to the other types of schools. This can be explained by the low capacity of these schools in collecting fees and in mobilising income-generating activities. Community contributions, including by the BoTs, accounted for almost 4% of the school budgets. The tables show that the relative advantage of the sources other than retained students' fees varied among the surveyed schools. The study also shows that almost 35% of the surveyed schools in the six Governorates reported receiving in-kind and cash resources from the BoTs. The highest percentages of schools that received these resources were in Cairo and Ismailia, 48% and 53% respectively while the lowest percentage was reported in Luxor (almost 25%).

Table 2. 4. School Budget Sources in Fiscal Year 2007/2008, by Educational Level

| | Cash advances | Retained Fees | BoT, Community | Income generating activities | Total |
|----------------------------|---------------|---------------|----------------|------------------------------|-------|
| Primary | 2.3 | 86.4 | 2.5 | 8.8 | 100.0 |
| Preparatory | 12.7 | 71.0 | 2.3 | 13.9 | 100.0 |
| General secondary | 2.1 | 48.8 | 23.4 | 25.8 | 100.0 |
| Technical secondary | 11.6 | 72.4 | 1.1 | 14.9 | 100.0 |

Source: PETS School Survey

2.2.1.8. The survey results indicate that secondary schools rely on income-generating activities and community contributions more than the other educational levels. The results also reflect that schools in Cairo received more funds from income-generating activities compared to the other surveyed Governorates while Fayoum's schools mainly depended on the retained students' fees in the fiscal year 2007/2008. The fact that Cairo has a big share of technical schools explains its ability to mobilise substantial amounts of funds from income-generating activities. Minia has a very active and dynamic civil society compared to the other Governorates in the sample. This clarifies its ability to receive sizeable contributions.⁵ Findings suggested by Tables 2.4 and 2.5 should not give the impression that education services in Egypt are mostly financed by students' fees and the contributions of civil society organisations through the BoTs. According to the Constitution of Egypt education is free for all. The Government of Egypt (GoE) finances teaching and non-teaching staff wages and salaries, school buildings and maintenance, educational materials, IT equipments and software, labs and libraries and textbooks. Collections from students' fees partially finance student

³ Cash advances is a mechanism in which a school receives a cash advance from the educational department to which it is affiliated. After exhausting the advance, the school should settle it and submit all relevant disbursement documents to the department.

⁴ It is noteworthy that MoE has started increasing the percentage of retained fees at the school level in three governorates (Fayoum, Ismailia and Luxor) to be 85% since school year 2008/2009. This movement will increase school budgets and would increase the school budget's dependence on the students' fees.

⁵ Minia has been exposed to a large number of international donors' initiatives and programs over the last two decades. This positively affects the activity of civil society in this governorate.

activities at schools, specially social and sporting activities. At the same time, students who can not afford the fees for one reason or another should not be subject to any discrimination at schools according to the MoE's decrees and regulations.

Table 2. 5. School Budget Sources in Fiscal Year 2007/2008, by Governorate

| | Cash advances | Retained Fees | BoT, Community | Income generating activities | Total |
|-----------------|---------------|---------------|----------------|------------------------------|-------|
| Cairo | 3.8 | 64.1 | 2.3 | 29.8 | 100.0 |
| Dakahlia | 6.7 | 84.1 | 3.4 | 5.8 | 100.0 |
| Ismailia | 21.9 | 65.7 | 1.4 | 11.0 | 100.0 |
| Fayoum | 4.0 | 94.2 | 0.1 | 1.7 | 100.0 |
| Minia | 3.8 | 79.3 | 14.2 | 2.6 | 100.0 |
| Luxor | 8.0 | 86.0 | 3.3 | 2.7 | 100.0 |
| Average | 6.8 | 76.3 | 4.1 | 12.8 | 100.0 |

Source: PETS School Survey.

2.2.1.9. Table 2.6 shows that almost 56% of the school surveyed reported that the resources received by them in the fiscal year 2007/2008 actually matched their needs compared to almost 41% reported that the resources received were less than their needs. Only 3.5% of schools surveyed reported that they received more resources than they needed in year 2007/2008. The table also shows that the Governorates differed regarding the adequacy of the resources received by their schools. The surveyed schools reaction covered both cash, received by the above-mentioned four sources, and in-kind resources. The table shows that the issue of resources inadequacy was more acute in Cairo and Minia compared to the other surveyed Governorates.

Table 2. 6. Did the Resources Received by Schools in 2007/2008 Match their Needs?

| | Cairo | Dakahlia | Ismailia | Fayoum | Minia | Luxor | Total |
|------------------|-------|----------|----------|--------|-------|-------|-------|
| Yes | 33.3 | 57.4 | 76.6 | 57.8 | 50.0 | 59.6 | 55.7 |
| No / more | 8.3 | 4.3 | 4.3 | 4.4 | 0.0 | 0.0 | 3.5 |
| No / less | 58.3 | 38.3 | 19.1 | 37.8 | 50.0 | 40.4 | 40.8 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

Source: PETS School survey.

2.2.2. Budget Planning and Allocation

2.2.2.1. There is no doubt that the availability of budget ceilings is a main prerequisite for any level of budget planning and proper allocations. Budget ceilings are not available for all education sector levels and entities. For example, the MoE, its affiliated service authorities and the Educational Directorates do not have agreed upon budget ceilings. The Macro-Fiscal unit at the MoF prepares allocations estimates for the major sectors and service authorities with considerable budgets. However, these estimates are not shared with the service sectors including education. The lack of sector budget consolidation, as mentioned before, decreases any interest to share these ceilings with the other entities from the MoF's point of view. The purpose of preparing

these estimates is still focused on improving the state budget management more than improving the budgeting process itself.

2.2.2.2. The fact that most of the cash resources at the school level are provided by students' fees, income-generating activities and the BoTs (non-governmental sources), these schools should be able to predict more and to plan their budgets ahead. However, the study shows that only 67% of the schools in the six surveyed Governorates knew their fund allocations from the Educational Departments (Idaras) in the fiscal year 2007/2008. Table 2.7 indicates that around 18% of the surveyed schools had no idea about their fund allocations for the same year. The table also refers that almost only 15% of the schools surveyed knew about their funds from the Educational Directorates (Mudirihs). However, according to the field work of the PETS team, even these low rates seems unrealistic and over-estimated because the Educational Departments and Directorates tend to have poor estimations of the collected students' fees and income generated from school activities. As a result, they avoid giving schools any estimate for their expected budgets in the future. Table 2.8 illustrates that around 40% of the general secondary schools did not know their fund allocations in the fiscal year 2007/2008.⁶

Table 2. 7. Did Schools Know about their Fund Allocations in Fiscal Year 2007/2008 by Governorate?

| | Cairo | Dakahlia | Ismailia | Fayoum | Minia | Luxor | Total |
|------------------------|-------|----------|----------|--------|-------|-------|-------|
| % Knew by Mud | 4.2 | 4.3 | 25.5 | 15.6 | 12.5 | 29.8 | 15.2 |
| % Knew by Idara | 66.7 | 87.2 | 66.0 | 55.6 | 79.2 | 44.7 | 66.7 |
| % did not know | 29.2 | 8.5 | 8.5 | 28.9 | 8.3 | 25.5 | 18.1 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

Source: PETS School Survey.

Table 2. 8. Did Schools Know about their Fund Allocations in Fiscal Year 2007/2008 by Educational Level

| | Primary | Preparatory | General secondary | Technical secondary | Total |
|------------------------|---------|-------------|-------------------|---------------------|-------|
| % Knew by Mud | 15.9 | 13.3 | 13.3 | 20.0 | 15.2 |
| % Knew by Idara | 68.2 | 67.8 | 46.7 | 65.0 | 66.7 |
| % Did not know | 15.9 | 18.9 | 40.0 | 15.0 | 18.1 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

Source: PETS School survey.

2.2.2.3. A considerable number of surveyed schools reported that they received extra funds from governmental and non-governmental sources. On average, one third of the schools surveyed received extra resources from these sources. Most of the schools reported their extra resources came from the Educational Department, the BoTs and community contributions as suggested by Table 2.9. However, the surveyed schools differ by educational level. According to the survey results, the schools reported receiving funds from the BoTs and community of around LE 148, 000 during the fiscal year 2007/2008. Almost 50% of these

⁶ It is noteworthy that the secondary schools account for just 15% of the study's school sample. This small share limits the team's ability to generalize the findings.

contributions went to general secondary schools as indicated by Table 2.10. The variation between the median and average contributions received by these schools reflects unequal distribution.

Table 2. 9. Sources of Schools' Extra Funding as Reported by the Surveyed Schools (%)⁷

| | Cairo | Dakahlia | Ismailia | Fayoum | Minia | Luxor | Total |
|----------------------|-------|----------|----------|--------|-------|-------|-------|
| MoE | 0.0 | 14.3 | 0.0 | 50.0 | 28.6 | 0.0 | 14.8 |
| Mudiriah | 0.0 | 14.3 | 100.0 | 0.0 | 28.6 | 0.0 | 14.8 |
| Idara | 14.3 | 42.9 | 0.0 | 100.0 | 57.1 | 66.7 | 44.4 |
| BoT | 57.1 | 57.1 | 100.0 | 0.0 | 0.0 | 33.3 | 37.0 |
| Community | 71.4 | 28.6 | 100.0 | 0.0 | 14.3 | 33.3 | 37.0 |
| Extra Classes | 14.3 | 28.6 | 0.0 | 0.0 | 0.0 | 0.0 | 11.1 |
| Others | 28.6 | 0.0 | 0.0 | 0.0 | 28.6 | 33.3 | 18.5 |

Source: PETS School Survey.

Table 2. 10. BoTs and Community Participation in the Surveyed Schools in Fiscal Year 2007/2008 (in LE)

| | Total contribution | Mean contribution per school | Median contribution per school |
|----------------------------|--------------------|------------------------------|--------------------------------|
| Primary | 41,262 | 1,375 | 476 |
| Preparatory | 24,322 | 1,280 | 720 |
| General secondary | 76,809 | 25,603 ⁸ | 3,300 |
| Technical secondary | 5,731 | 2,866 | 2,866 |
| Total | 148,124 | 2,743 | 714 |

Source: PETS School Survey.

2.2.2.4. The top-down flow of financial resources from the MoE, Educational Directorates (Mudiriahs) and Departments (Idaras) and the affiliated Service Authorities is supported by the students' fees that finance some school activities and operations. However, analysing the Ministerial Decree 261 of 2008 (which has to be renewed annually) concerning the students' fees distribution for school year 2008/2009, it shows that the school has full discretion on almost 45% of the total fees. Of course, this does not mean that the schools and the students do not benefit from the remaining share of the fees. However, this reflects the modest level of decentralisation in the system.

2.2.2.5. Tables 2.11 and 2.12 show that the share of retained fees in the surveyed schools amounted to 51% of the fees collected in the fiscal year 2007/2008. The variation between the retained share as stated in the Ministerial Decree and the share calculated from the data collected is partially explained by the fact that some schools receive voluntary contributions above the determined fees. These contributions come either from civil society organisations that are interested in paying fees on behalf of students or from the wealthy parents.

⁷ Totals add over 100%, since the schools surveyed have been given the freedom to select more than one source of extra funding.

⁸ This mean is sensitive to high contributions received by a handful number of schools. This partially explained the enormous variation with the median.

The tables also suggest that the variation in the collected fees between the fiscal years 2007/2008 and 2008/2009 was considerable and it differs among educational levels and amongst Governorates. While technical secondary and primary schools experienced an increase of almost 28% and 7%, respectively regarding collected fees between the two years, general secondary schools had an 8% decrease.⁹

2.2.2.6. In addition, the schools surveyed in the Governorates of Fayoum and Minia encountered substantial increase in their collected fees between the fiscal years 2007/2008 and 2008/2009. Collected fees by the schools in the Governorates of Dakahlia and Luxor experienced decreases between the same fiscal years. These variations complicate the process of school planning and budgeting, since they do not allow the schools to have a real and close estimate of the funds that they can mobilise during the following years.

Table 2. 11. School Fees Collection by Governorate in 2007/2008

| | Total fees collected in 2007/2008 | | | | Retained share of fees in 2007/2008 | | | |
|-----------------|-----------------------------------|---------------|---------------|--------------|-------------------------------------|--------------|--------------|------------|
| | Sum | Mean | Median | St. Error | Sum | Mean | Median | St. Error |
| Cairo | 1,436,747 | 29,932 | 23,075 | 4,577 | 735,551 | 15,324 | 9,032 | 2,322 |
| Dakahlia | 1,068,009 | 22,724 | 16,258 | 3,565 | 568,272 | 12,091 | 7,561 | 2,374 |
| Ismailia | 547,421 | 12,165 | 7,384 | 2,108 | 270,742 | 5,760 | 3,775 | 842 |
| Fayoum | 566,883 | 13,183 | 8,665 | 2,065 | 458,402 | 10,187 | 7,200 | 1,439 |
| Minia | 1,399,644 | 31,103 | 14,243 | 13,886 | 464,013 | 9,667 | 6,787 | 1,841 |
| Luxor | 586,811 | 12,757 | 6,478 | 2,975 | 238,746 | 5,080 | 2,489 | 1,643 |
| Total | 5,605,515 | 20,458 | 10,521 | 2,609 | 2,735,726 | 9,701 | 5,722 | 770 |

Source: PETS School Survey.

⁹ It is noteworthy that 28% of the schools show collected fees which are less or equal to what schools retained, especially in Fayoum (63%). This may be explained by the way in which school records its financial transactions when they get contributions above the fees or by the failure of the survey respondents to make a distinction between collected and retained fees.

Table 2. 12. School Fees Collection by Level in 2007/2008

| | Total fees collected in 2007/2008 | Total fees collected in 2008/2009 | Retained share of fees in 2007/2008 | % Change |
|---------------------|-----------------------------------|-----------------------------------|-------------------------------------|----------|
| Primary | 2,865,121 | 3,065,866 | 1,431,910 | 7.0% |
| Preparatory | 1,442,667 | 1,436,535 | 757,631 | -0.4% |
| General secondary | 415,921 | 381,204 | 160,292 | -8.4% |
| Technical secondary | 663,551 | 847,757 | 385,893 | 27.8% |

Source: PETS School Survey.

2.2.2.7. Cash advances received by the surveyed schools from the Educational Departments (Idaras) in the six Governorates ranged from 4% to 8% of the school budget in 2007/2008. The variations amongst the schools surveyed regarding the cash advances were remarkable. The large differences between the mean and the median cash advances per year per school, as suggested by Table 2.13, clearly reflect these variations. According to the survey, 23% of the schools received less than the formal minimum value of one cash advance (LE 150 for Primary, LE 200 for preparatory and LE 250 for secondary schools), 7% of the schools received the exact value, 60% of the schools received an allocation ranging from the exact value to LE 1000 while 10% of the schools received more than LE 1000.

Table 2. 13. Mean and Median of Cash Advances Received per School in 2007/2008 (in LE)

| Governorate | Mean | Median |
|-------------|-------|--------|
| Cairo | 1,326 | 490 |
| Dakahlia | 1,011 | 360 |
| Ismailia | 2,122 | 150 |
| Fayoum | 523 | 300 |
| Minia | 535 | 165 |
| Luxor | 495 | 361 |

Source: PETS School Survey.

2.2.2.8. The system of cash advances in the Pre-University Education sector in Egypt seems lacking solid rules and regulations. It is a very *ad-hoc* system. There are no clear criteria on which the Educational Departments (Idaras) decide on the allocations to schools within their jurisdictions. Educational Departments have almost no system to notify schools about their allocations from this source in advance. As a result, the schools cannot realistically count on this source while they plan for the following school years. At the same time, the cash advances system is not transparent. Schools have no access to the distribution of cash advances as decided by the relevant Departments. Moreover, schools sometimes avoid receiving more advances due to the administrative difficulties they are facing in settling these advances with the Education Department. It is noteworthy that the MoE in cooperation with the MoF have decided to increase the limit of cash advances to LE 3,000. This decision will partially ease some of these encountered difficulties as the schools will not need to take more than one cash advance per year, given the small cash advances they receive on average.

2.2.3. Budget Execution

2.2.3.1. The budget is executed through a network of MoF financial controllers and accountants. Law No. 53 of 1973 requires the presence of a representative of the MoF – the Financial Controller – in each of the spending units.¹⁰ The hierarchy is as follows: a Chief Financial Director is appointed to oversee the budgeting and financial management organisation at the Governorate level. Each Governorate is divided into areas and each area is headed by a Financial Controller. The Financial Controller oversees the accounting offices under his jurisdiction and performs pre-commitment and commitment controls. Accounting offices are organised by sector and each one services a number of cost centres in a District.¹¹ Each accounting office is headed by a Chief Accountant and Deputy Chief Accountants (approximately 10,000 in all) who also are MoF personnel; other accounting staff belongs to spending units. Financial Controllers are posted by the MoF to the spending unit and oversee the working of the above system.

2.2.3.2. At the commitment stage, the Financial Controller checks conformity with rules and records commitments made. At the payment stage, the Financial Controller approves the payment with the expenditure centre such as the MoE, Education Directorate or Department and the Pre-University Education sector service authorities. This system of financial control focuses on *ex-ante* compliance checks at the individual transaction level. There are substantial opportunities for the MoE to implement a modern internal audit function. It would assist in the rationalisation of financial inspectors previously described and would provide line management with important information on how well their internal controls are functioning.

2.2.3.3. The budget execution of the surveyed schools in the fiscal year 2007/2008 shows that these schools spent less than their allocated budgets in the Governorates of Cairo, Dakahlia, Ismailia and Fayoum. Minia and Luxor overspent in the same fiscal year by almost 42% and 12% respectively as suggested by Table 2.14. The reported surplus displayed by the table is basically explained by the fact that schools carry over balances from fiscal year to another. As a result, the available budget of specific year may exceed the collected fund in the same year. Table 2.15 mentions that surveyed primary and preparatory schools almost spent all their budgets in fiscal year 2007/2008. Both general and technical secondary schools reported surpluses in average in the same year. These results would be explained by the findings that secondary schools received more money from income-generating activities and the BoTs rather than primary and preparatory schools.¹²

¹⁰ There are around 4,000 spending units across the country and approximately 1,000 financial controllers are appointed by the Minister of Finance to oversee these units.

¹¹ For example, an education accounting office services all the schools in that district.

¹² See table 2.4 in this chapter.

Table 2. 14. School Budgets Surplus/Deficit per Governorate (2007/2008)

| | Budget (in LE) | Spent (in LE) | Deficit / Surplus (in LE) | Spent as % of Budget |
|-----------------|---------------------------|--------------------------|--------------------------------------|---------------------------------|
| Cairo | 1,148,227 | 936,488 | 211,739 | 81.6% |
| Dakahlia | 676,038 | 458,577 | 217,461 | 67.8% |
| Ismailia | 411,847 | 289,242 | 122,605 | 70.2% |
| Fayoum | 486,440 | 361,291 | 125,149 | 74.3% |
| Minia | 584,901 | 828,663 | -243,762 | 141.7% |
| Luxor | 277,731 | 310,785 | -33,054 | 111.9% |

Source: PETS School Survey.

Table 2. 15. School Budgets Surplus/Deficit per Educational Level (2007/2008)

| | Budget (in LE) | Spent (in LE) | Deficit / Surplus (in LE) | Spent as % of Budget |
|----------------------------|---------------------------|--------------------------|--|---------------------------------|
| Primary | 1,656,941 | 1,536,082 | 120,859 | 92.7% |
| Preparatory | 1,066,479 | 1,090,946 | -24,467 | 102.3% |
| General secondary | 328,727 | 218,770 | 109,957 | 66.6% |
| Technical secondary | 533,037 | 339,248 | 193,789 | 63.6% |

Source: PETS School Survey.

2.2.3.4. Tables 2.16 and 2.17 show that almost 72% of the surveyed schools adopted expenditure cut practices in fiscal year 2007/2008. Schools surveyed in Cairo and Dakahlia ranked first and second respectively regarding expenditure cut. Only 41% of the schools surveyed in the Governorate of Minia reported expenditure cut in the same year. Almost 88% of technical secondary schools practiced expenditure cut in fiscal year 2007/2008, compared to almost 70% of primary and preparatory schools and 60% of general secondary schools. These findings may explain the budget surpluses by technical secondary schools in the same year.

Table 2. 16. Share of Schools Experienced Expenditure Cut per Governorate (2007/2008)

| | Cairo | Dakahlia | Ismailia | Fayoum | Minia | Luxor | Total |
|---------------|--------------|-----------------|-----------------|---------------|--------------|--------------|--------------|
| No Cut | 4.8 | 18.2 | 50.0 | 26.7 | 58.8 | 25.0 | 28.4 |
| Cut | 95.2 | 81.8 | 50.0 | 73.3 | 41.2 | 75.0 | 71.6 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

Source: PETS School Survey.

Table 2. 17. Share of Schools Experienced Expenditure Cut per Educational Level (2007/2008)

| | Primary | Preparatory | General secondary | Technical secondary | Total |
|---------------|--------------|--------------|-------------------|---------------------|--------------|
| No Cut | 29.2 | 29.6 | 40.0 | 12.5 | 28.4 |
| Cut | 70.8 | 70.4 | 60.0 | 87.5 | 71.6 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

Source: PETS School Survey.

2.2.3.5. Tables 2.18 and 2.19 display the spending items that the surveyed schools extensively used to cut their expenditures in fiscal year 2007/2008. The tables show that the major line items exposed to spending cut were transportation, school activities and maintenance.

Table 2. 18. School Expenditure Items Experienced Cut per Governorate (2007/2008)

| Cut From | Cairo | Dakahlia | Ismailia | Fayoum | Minia | Luxor | Total |
|-------------------------------|-------|----------|----------|--------|-------|-------|-------|
| Transportation | 80.0 | 44.4 | 0.0 | 63.6 | 42.9 | 16.7 | 50.8 |
| Maintenance | 30.0 | 44.4 | 75.0 | 36.4 | 42.9 | 33.3 | 38.1 |
| Furniture | 20.0 | 11.1 | 25.0 | 0.0 | 14.3 | 0.0 | 11.1 |
| School activities | 20.0 | 55.6 | 50.0 | 36.4 | 14.3 | 75.0 | 39.7 |
| Instructional material | 10.0 | 11.1 | 50.0 | 0.0 | 28.6 | 8.3 | 12.7 |

Source: PETS School Survey.

Table 2. 19. School Expenditure Items Experienced Cut per Educational Level (2007/2008)

| Cut From | Primary | Preparatory | General secondary | Technical secondary | Total |
|-------------------------------|---------|-------------|-------------------|---------------------|-------|
| Transportation | 52.9 | 47.4 | 66.7 | 42.9 | 50.8 |
| Maintenance | 44.1 | 31.6 | 0.0 | 42.9 | 38.1 |
| Furniture | 8.8 | 10.5 | 0.0 | 28.6 | 11.1 |
| School activities | 38.2 | 47.4 | 33.3 | 28.6 | 39.7 |
| Instructional material | 11.8 | 5.3 | 0.0 | 42.9 | 12.7 |

Source: PETS School Survey.

2.2.3.6. The expenditure process at the school level is supervised by the financial and administrative direction at the educational department level. The budget at the school level is executed by the school secretary. Given the small budgets available to the schools, expenditure capacity is not an issue at this level. Also the fact that schools have their own bank accounts facilitates budget execution and the timing of payment. The process of budget execution at the Educational Departments and the Directorates levels is complicated. Each Department and Directorate has an accounting unit that is affiliated to the MoF. All financial transactions should be approved by this unit which becomes in many cases the main financial decision

maker. Officials at the Educational Departments and expenditures tend to be risk aversion. A considerable share of these officials avoids taking the full responsibility on financial decisions, although they are sufficiently empowered by the regulations. Instead they shift this responsibility to the accounting unit staff that is often conservative in financial decisions. This situation negatively affects the decision-making process.

2.2.4. Expenditure Quality and Information System

2.2.4.1. The current classification of public expenditures over unified line items, according to the State Budget Law in Egypt, reflects the nature of the State budget as mainly a monitoring tool, rather than a strategic planning tool for resource allocation. Such budget is concerned primarily with controlling the different elements of expenditure whether in terms of consistency with the nature and type of expenditure or abiding by expenditure limits as stated in the budget. This budgeting system does not provide financial data at school or different educational stages levels in a manner sufficient to provide different indices that can be used in future planning and budgeting for the Pre-University Education. The system does not allow clear information regarding the distribution of expenditure line items among different educational levels (primary, preparatory, and secondary). It also does not give specific classification for the expenditures related to students such as school feed and textbooks and those related to schools mainly non-salaries operating costs.

2.2.4.2. Revisiting the system of accountability within the Pre-University Education sector is the core prerequisite to improve the quality of expenditure and to increase the value for money in education. Accountability relationships are complex and overlapping in the education sector. The matrix-like organisational and control structures were quite evident in the World Bank review of the education sector's financial management and accountability structures at both headquarters and Governorate levels. There were numerous examples of overlapping and duplicative mandates. For example at the MoE headquarters unit a statistical unit collects student data from the Government's Central Agency for Public Mobilisation and Statistics (CAPMAS), affiliated to the MoED and uses them as the basis for its computerised operational information system, which is nearing implementation. In parallel, GAEB also collects similar information from the CAPMAS, applies "adjustments" and uses this data in the forecasting of future demands for classrooms. Meanwhile, the MoED collects the same data and prepares its own forecasts of facilities requirements which often do not match those prepared by GAEB or the MoE.¹³

2.2.4.3. Effective communication between the MoE and the Education Directorates and MoE and the Pre-University Education sector service authorities regarding the budgeting and expenditure policies is very limited. The fact that there is no consolidated budget of the sector, contributes to this phenomenon. Until recently, the lack of MTEF for the system diminished the incentive of any potential communication. With the ongoing sector MTEF, this situation would be improved. The interviews conducted by the PETS team members, show that most of the communication between the sector's entities revolves around educational rather than financial affairs.

2.2.4.4. Like most of line ministries in Egypt MoE has a manual accounting and reporting system. This has resulted in heavy workloads in accounting to record all transactions and to balance budgetary accounts, inaccurate monthly reporting because of the tight deadlines for reporting, increased likelihood of errors and an inability to prepare timely and accurate summary analyses and reports for ministry management. The MoF is implementing a Public Sector Budget (PSB) project to use Oracle Government enterprise software, based at the MoF computing centre, for automated processing of all government transactions. This will positively

¹³ The World Bank, Arab Republic of Egypt, Education Sector Consolidated Institutional Financial Management Capacity Assessment, 2006.

contribute to the expenditure quality in the Pre-University Education sector. It will also provide updated data on the sector budget execution in a way allows decision makers to reallocate resources in an efficient way.

2.2.4.5. The cost and finance team at Policy and Strategic Unit (PSPU) at the MoE devised a short-term solution to the current limitations in strategic budget planning. They used the line item budget and some education input variables like number of students, teachers, and teaching and non-teaching staff to estimate an educational strategy-based budget for the Pre-University Education sector. The estimated budget provides data at each education stage level for planners and decision makers at the MoE and its stakeholders. The efforts exerted in restructuring the Pre-University Education budget have been based on the methodology provided by Analysis and Projection Model (ANPRO model). The cost and finance team used the 2004/2005 final accounts and 2005/2006 budget of Pre-University Education sector to reclassify the sector's expenditures to three groups.¹⁴

2.2.4.6. Using the same methodology and through obtaining recent financial dataset from the MoF, the PETS team repeated the exercise using 2008/2009 final budget figures. The results of the new analysis are illustrated in Table 2.20. A comparison between the results of the initial exercise with the replicated one shows that the recurrent expenditure per student increased by almost 41% (from LE 1,206 to LE 1,708) between the two fiscal years of 2005/2006 and 2008/2009. The only source of such increase is the increase of total wages and salaries as a result of applying the new cadre system on teaching staff. However, the comparison clearly shows that the allocations to student-related expenditures and school-related expenditures, as identified above, decreased between the fiscal years 2005/2006 and 2008/2009 by 5% and 34% respectively. Given the fact that the Government announced an inflation rate of almost 22% during the fiscal year 2008/2009, expenditure on non-wage operating activities has been dramatically affected. This, in turn, could have a negative impact on the sector's performance since this type of expenditure is correlated with the educational process itself and its quality. This analysis suggests that the increase in teaching staff salaries could be the expense of the education quality.

¹⁴ For more information about this exercise:
Mohamed El-Shawi and Khaled Amin, Egypt's Education National Strategy 2007/2008 – 2011/2012: Cost and Finance, June 2007.

Table 2. 20. The Distribution of Pre-university Recurrent Expenditure on Educational Levels (Based on the Budget of FY 2008/2009)

| Educational Level | Wages (in LE million) | % | Student-related expenditures (in LE million) | % | School – related Operation expenditures (in LE million) | % | Total Recurrent expenditure (in LE million) | Recurrent Expenditure per Student in LE |
|------------------------|-----------------------|----------------|--|----------------|---|----------------|---|---|
| Pre-primary | 417.61 | 1.85% | 6.66 | 0.44% | 28.55 | 2.49% | 452.83 | 833.21 |
| Primary | 10,388.10 | 46.09% | 737.56 | 48.50% | 548.50 | 47.83% | 11,674.16 | 1,382.09 |
| One classroom schools | 96.25 | 0.43% | 0.00 | 0.00% | 5.31 | 0.46% | 101.56 | 1,450.03 |
| Preparatory | 5,340.87 | 23.70% | 398.76 | 26.22% | 265.62 | 23.16% | 6,005.24 | 1,605.63 |
| General secondary | 2,399.64 | 10.65% | 171.30 | 11.26% | 117.54 | 10.25% | 2,688.48 | 3,661.17 |
| Industrial secondary | 2,185.94 | 9.70% | 74.23 | 4.88% | 96.95 | 8.45% | 2,357.12 | 3,553.01 |
| Agricultural secondary | 409.46 | 1.82% | 29.50 | 1.94% | 19.92 | 1.74% | 458.88 | 3,716.16 |
| Commercial secondary | 1,574.20 | 6.98% | 75.18 | 4.94% | 55.78 | 4.86% | 1,705.16 | 4,313.63 |
| Special education | 166.39 | 0.74% | 27.60 | 1.81% | 8.63 | 0.75% | 202.62 | 5,447.61 |
| Total | 22,538.00 | 100.00% | 1,520.80 | 100.00% | 1,146.80 | 100.00% | 25,205.60 | 1,708.38 |

Source: Ministry of Finance Statistics and PETS Team Calculations

2.2.5. Decentralisation and MTEF

2.2.5.1. The GoE is in the process of decentralisation by "deconcentration". Successful service delivery for poor people can emerge with a high degree of success from institutional relationships in which the actors are accountable to each other. Effective decentralisation therefore, assumes downward accountability of policy makers to citizens. Only when governments both at central and local level, are held accountable a sustainable and successful decentralisation can be made possible with a positive impact on the poor.¹⁵ PETS can be a useful way to check whether the accountability is working in the Pre-University Education sector in Egypt. But the accountability needs to revolve around more basic building blocks, such as stated budget amounts that are transferred, clearer transfer procedures, more parental accountability around a real school budget, etc. PETS can then be used to find out whether those things are helping. In that sense, PETS does

¹⁵ Jutting et al. (2004). In Crawford, Gordon and Christof Hartmann (eds.). Decentralization in Africa: A Pathway out of Poverty and Conflict?, Amsterdam University Press

help enhance accountability. In moving to more accountability is useful to do some of the things that PETS exercises assume such as stating more clearly the intended amounts of transfers in a transparent manner.

2.2.5.2. MoE has recognised that increasing the quality of its education service delivery will depend on greater decentralisation, greater powers for the Educational Departments (Idaras) and school administration. The ministry also realised that there is a need to coordinate recurrent and investment budget through the MTEF for the Pre-University Education sector. The MoE has developed a strategic plan for the sector. The plan is developed around 12 priority programmes and related main actions. The plan has introduced a performance framework with targets at objectives (outcomes) and output level. The plan is already costed but it is not clearly linked to budget resources.

2.2.5.3. The MTEF team members conclude that capacity for multi-year strategic planning is high as proved by the quality content of the Ministry's Strategic Plan for 2007/2012. Yet, the degree of operational planning is quite limited. Operational plans are detailed plans that spell out all the actions in an operation, determine start and end dates for each action and assess human, financial and physical resources required for each. Good operational planning is a key factor of absorptive capacity. The absence of operational plans means that neither the time required for project implementation nor the costs of implementation are well calculated. It results in unrealistic expectations, unrealistic budget plans and an inability to absorb allocated funds efficiently and in line with original intentions. The MTEF exercise should be conceived as a management tool by the MoE to define operational, costed plans by priority programs.

2.2.5.4. The information required to develop the performance framework of the MTEF exercise in terms of objectives, measures, performance indicators, annual targets within a horizon of three years can be based on the Analysis and Projection Model (ANPRO) model. However, more effort is needed to update the unit costs used in the model and to modify the modules of the scenarios to align it to the MTEF methodology of hard budget ceilings. Also, it is important to coordinate the MoE's MTEF exercises with the forecasts developed by the Macro-Fiscal unit at the MoF. The findings of PETS exercise will also help the MoE in designing and cost out the education reform programs that are included in the Pre-University Education sector. The exercise highlights many efficiency gaps in budget preparation and execution that should be considered to make the Pre-University Education strategy and the findings of the MTEF exercise more realistic and reflecting to the realities of operation at the school and educational departments and directorates levels.

2.2.5.5. The GoE has adopted a national strategy for decentralisation. The strategy seeks the completion of a clear mission: the need to reach a strong and effective local administration through a comprehensive identification of local administration roles and the coordination between those roles and roles of central bodies in order to achieve full and sustainable development, meet citizens' daily needs and enhance the provision of public services.

2.2.5.6. The decentralisation strategy is founded on the basis of re-structuring institutional relations between national and local levels and within the local level. The aim is to enhance roles and responsibilities of all local levels in a coherent fashion that would yield the best benefits and guarantee the best use of human and economic resources. However, this delegation of responsibilities management is most successful when carried out gradually and with the prerequisite of a robust and comprehensive overall system of budgetary system in place at the centre.

2.2.5.7. Consistent with the restructuring the local administration system in relation to these new roles, the Governor is regarded as the representative of the central level in observing the adherence of local institutions to public policies and national criteria. This would be implemented through the establishment of a

Governorate executive body to which service Directorates would gradually join. In the same sense, service Departments would join Districts and large city Diwans and would come under the leadership of the District chief executive, turning out to be one of the constituting bodies of the local administration structure at that level. Still, the elected Local Popular Council (LPC) chief would direct the developmental work of that institution so as to sustain popular and political aspects of development in local communities.

2.2.5.8. Decentralisation strategy in Egypt during the pilot phase between the fiscal years 2010/2011 and 2012/2013, will focus on three local units, the governorates of Fayoum and Ismailia and the city of Luxor, and three sectors, education, social solidarity and housing. The Pre-University Education sector is decided to be a priority sector for decentralisation for at least two reasons; the readiness of the sector compared to the other sector since it started the process in the fiscal year 2009/2010 and the considerable share of the sector from the Government expenditure at the local level (almost 60% in the fiscal year 2008/2009).

2.2.5.9. The MoE has decided to retain almost 85% of the students' fees at the school level starting from the school year 2008/2009 in the Governorates of Fayoum and Ismailia and the City of Luxor on the way to move towards decentralisation. This movement has been also supported by transferring allocations from the MoE's budget (around LE 8.6 million) to the schools in the same two Governorates and Luxor. Given the importance of these two actions, the equity issue amongst public students nation-wide becomes a crucial matter. In view of the above-mentioned considerable decrease in student-related and school-related recurrent expenditure, targeting just these three Governorates out of twenty nine would raise some equity issue. It is so, specially that the budget of the decentralisation scheme flows from the budget of the MoE that should serve all schools and students nation-wide not from the Directorate budget that should serve just schools and students within its jurisdiction. However, the fact that MoE is still piloting decentralisation should be considered while addressing the equity issue. Also, this initiative will temporarily provide the schools administration some degree of discretion in using the extra budget rather than transferring permanent authorities and responsibilities. However, the MoE initiative has been a very useful exercise to prepare the Education Departments at the District level and their affiliated schools to implement decentralisation. It also attracted the attention of the sector different entities towards the benefits that the Pre-University Education sector, would reap through decentralisation. Table 2.21 provides a brief analysis of the initiative

Table 2. 21 : Brief Analysis of MoE Decentralization Initiative

| Advantages | Obstacles |
|--|---|
| <ul style="list-style-type: none"> 85% of students' fees retained at the school level Designing and implementing funding formula Budgeting and planning at the school level Preparing department level for future exercises Promoting next-steps for decentralisation | <ul style="list-style-type: none"> • Lack of sustainability • No responsibilities or authorities have been transferred. • Equity issues (transferring MoE funds to just 3 Governorates)¹⁶ |

2.2.5.10. Working groups from the Ministry of Local Development (MoLD), MoE, and MoF are developing a design to pilot fiscal decentralisation in the Pre-University Education sector. The output of these working groups is not clear yet. However, there is a tendency to create a sub-account under the Pre-University

¹⁶ It is noteworthy that Fayoum is one of the poorest governorates according to the national statistics in Egypt.

Education sector budget for the decentralised functions and activities based on their estimated cost. The annual value of this sub-account will be distributed amongst Districts based on the planned funding formula, yet to be designed. The MoE should determine those functions and activities and a financial exercise to estimate their cost. This scenario requires consolidating the budget of the sector to be executed according to the sector strategies and policies developed by the MoE.

2.2.5.11. The proposed decentralisation programme would have a certain impact on the future MTEF process. At present, the budget preparation and negotiation is fragmented. With the adoption of decentralisation, a parallel consolidation process in the budget formulation and negotiation will revolve around the MoE, a basic requirement for the successful introduction of MTEF. The MoE will be in the position of planning and budgeting on behalf of all entities in the sector and in negotiation with local administration units. At the same time it is expected that implementing decentralisation in the Pre-University Education sector would positively help in solving the problems highlighted through the PETS exercise, especially those that are related to budget allocation and execution.

3. Findings of the Survey

The main findings of PETS exercise justify separate chapters, as below. The present chapter discusses specific findings related to the data and their sources for PETS and how they relate to the other main findings in the field of leakages, information and monitoring mechanism, HR constraints in the Pre-University Education sector, equity and bottlenecks. Chapters 4, 5 and 6 analyse in detail the main findings of PETS with regards to each one of these aspects.

3.1. General Characteristics of Data in the Sector

In Egypt, the state subsidies in Pre-University Education sector are not only in cash but also in kind. There is also a considerable proportion of contribution by the private sector at the school level in the form of cash (fees collected) and in-kind supplies (by the community, BoT, various NGOs). The presence of private contributions in a sector which is defined public in essence, makes the tracking of both the resources and the expenditure quite complicated. By definition, as pointed out earlier, PETS is to track public funding, hence, the private funding falls outside its sphere.

In general, the quality and the scope of the available baseline data are likely to be affected by the fact that the data for cash subsidy are spread over 2 Chapters, combining the in-kind supplies and cash advance payments.

Regarding the in-kind supply, they are captured but they could not be quantified due to the impossibility to obtain unit prices. Unit prices coming from the PETS Education Directorate survey are not sufficient. Indeed, they contain various items of supplies or same items with different qualities but they are not individually priced. For instance, student desks range from LE 90 to LE 395 and books from LE 7 to LE 28. The absence of unit costs makes it difficult to monitor the cost efficiency and to target equitable delivery.

In-kind allocations to the schools were collected for the school year 2007/2008. In addition, data were also collected through the tracking instrument aimed at tracing allocations in kind for the sampled units since July 2008. This included data from the selected Education Directorates to the selected Education Departments and then to the selected schools. But in both cases it was difficult to quantify or match the data due to weak reporting, unclear routing, the multiplicity of sources of public funding (the MoE, the Governorate as well as autonomous bodies such as GAEB and EPDF) and the significant share of the private sector's contribution. For example, in the field of IT equipment, more than a third of the computers and data show screens allocated to the schools in 2007/2008 come from private funding. The contribution of EPDF was also important and accounted for 20% of the data show screens and 8% of the computers received by the schools over 2007/2008. These have been elaborated further in the following sections of this report. Parts of the in-kind allocation, for instance, come from the Education Directorate to the Education Departments to reach the schools and part comes directly from the Education Department to the schools. Tracking of cash advance payments is not that straightforward either. It is often necessary to make some assumptions and stipulations.

3.2. Specific Relevance to PETS

These general characteristics make it rather complicated to carry out a standard PETS exercise. Apart from these general qualities about the education sector's finance data in Egypt, highlighted by the PETS survey the following sections provide a more specific feedback on the collected data.

Missing Data: key data are missing at both the Education Directorate and Department levels especially regarding the number of teachers¹⁷.

This was partly due to the survey period the PETS was conducted in May which coincides with the time of the exams in Egypt. The IDSC also reported that some Education Directorates and Education Departments, declared that they did not have time to prepare the data required. In some cases, the respondents did not fully understand the questions asked. Nevertheless, identifying these missing or incomplete data informs us of the way records are kept and processed, shedding light on the main bottlenecks.

3.3. Data Inconsistencies

Comparison of PETS data with external sources on the one hand, and between the various layers within the PETS itself on the other, provides some feedback on the record keeping system.

3.3.1. There were a number of inconsistencies between the data collected through the survey with those kept by the MoE. The following information gives an account of these incidences:

Textbooks: In Egypt textbooks are free for students and they cannot be re-used, i.e. they have duration of one year only. The number of textbooks sent to the schools in 2007/2008 recorded in the PETS Education Directorate survey does not match the figures provided by the MoE's Textbook Sector. Not taking into account Cairo Education Directorate since in Cairo the textbooks are directly sent to the Education

¹⁷ For instance, the number of senior teachers in preparatory and secondary schools is not provided in Dakahlia. At the Education Department level the numbers for supervisors and senior teachers are missing, as well as the number of senior teachers in preparatory and secondary schools in Fayoum. At the same Education Department, the amount of the cash advance is not provided and the in-kind allocations to the schools are only partly filled in.

Departments, 51.9 millions of textbooks were sent by the five Education Directorates surveyed. This figure is smaller than the one reported by the Textbook Sector (around 60.6 millions). For details, see Table 3.1 further below.

The gap is most probably due to the very small number of textbooks recorded in both Ismailia and Luxor Education Directorates (respectively 351, 485 and 27, 000 textbooks), which seem unrealistic compared to the number of students. At these two Education Directorates the ratio of textbooks per student is less than 2, whilst there is on average 21 to 25 textbooks per student at most other Education Directorates. These results are not confirmed by the school survey that shows that almost all the schools in Ismailia and Luxor had sufficient number of textbooks for the school year 2007/2008. These considerable discrepancies were discussed with the MoE and were also presented at the final Workshop, but no further clarifications or feedbacks were received.

In Fayoum the Education Directorate allocated more textbooks to the schools than what was received from the Textbook Sector. The difference of about 14% could be explained by the existence of surplus from the previous school year that was kept by the Education Directorate. This can be linked to the fact that transportation costs are paid by the receiving unit, i.e. the Education Directorate or the Education Department. In case of undistributed textbooks they tend to keep the textbooks rather than sending them back.

The opposite situation is found in Minia, where the difference between the two data sources is about 20%, meaning that the schools received 20% less textbooks than what was given to the Education Directorate. This is confirmed by the school survey; in Minia 25% of the schools did not have enough textbooks in 2007/2008.

The average number of textbooks per student in Cairo is very high compared to the remaining Education Directorates (around 32 textbooks per students). This could reflect above all a problem in the needs assessment method and / or capacity. It also highlights some issues concerning equity of resource distribution, further detailed in Section 6.3.

Table 3. 1. Number of Textbooks sent to the Schools in 2007/2008; Comparison between PETS Data and MoE/Textbooks Sector Data

| | Cairo* | Dakahlia | Ismailia | Fayoum | Minia | Luxor | Total |
|--|---------------|-----------------|-----------------|---------------|--------------|--------------|--------------|
| Total textbooks sent to the schools by the sampled Education Directorates (PETS Education Directorate Survey) (a) | NA | 21,344,855 | 351,485 | 14,283,899 | 15,853,034 | 27,000 | NA |
| Total textbooks sent by the MoE/Textbook Sector to the sampled Education Directorates (b) | 48,527,809 | 21,079,493 | 4,914,197 | 12,490,819 | 19,944,434 | 2,136,125 | 109,092,877 |
| Difference PETS – MoE/Textbook Sector (in %) | NA | 1.3 | -92.8 | 14.4 | -20.5 | -98.7 | NA |
| | | | | | | | |
| Total number of students in 2007/2008 (MoE/EMIS) (c) | 1,527,520 | 990,189 | 202,340 | 538,975 | 963,533 | 96,439 | 4,318,996 |
| | | | | | | | |
| Average number of textbooks per student in 2007/2008 | | | | | | | |
| Source PETS Education Directorate Survey (d=a/c) | | 21.6 | 1.7 | 26.5 | 16.5 | 0.3 | |
| Source MoE/Textbook Sector (e=b/c) | 31.8 | 21.3 | 24.3 | 23.2 | 20.7 | 22.2 | 25.3 |

* Cairo: textbooks are directly sent from the MoE/Textbook Sector to the Education Departments.

Comparison between PETS and EMIS data shows some discrepancies in the number of schools and teachers. The MoE Schools Survey was conducted at the beginning of the 2007/2008 school year whilst the PETS reflect the situation at the end of the 2007/2008 school year. Nevertheless, the differences between the two studies seem too important to be fully explained by the survey periods only.

It should be noted that inconsistencies between the two data sources cannot originate from the sample's size or composition since we are comparing data at the Education Directorate level emerging from the PETS and those coming from the EMIS for the selected Education Directorates. In both cases the data source is the Education Directorate and the source is exhaustive since it covers the whole Governorate. Besides, as mentioned earlier PETS sample is not necessarily a representative one at the national level due to its size, choice of priority of Governorates by the MoE and the severe time limitations partly due to its overlapping with the national examinations in Egypt at the time. The PETS sample being small, it offered the advantage of reducing the non-sampling errors that are most important in the case of PETS, as data are often in a highly disaggregated form and thus difficult to collect. A small sample also allowed a more in-depth analysis of the data within a very limited time frame.

The number of schools reported in the PETS, by the Education Directorate, is slightly higher than that coming from the EMIS for the 2007/2008 school year. As shown in Table 3.2, there are 67 more schools in the PETS (which amounts to around 1% of the schools), but the difference is larger in Fayoum (+ 6%).

Table 3. 2. Number of Schools in 2007/2008 – Comparison between PETS Data and MoE/EMIS Data

| | Cairo | Dakahlia | Ismailia | Fayoum | Minia | Luxor | Total |
|--|-------|----------|----------|--------|-------|-------|-------|
| Number of schools (PETS Education Directorate survey) | 1,611 | 2,210 | 567 | 920 | 1,546 | 240 | 7,094 |
| Number of schools (EMIS) | 1,605 | 2,191 | 576 | 867 | 1,549 | 239 | 7,027 |
| Difference (PETS - EMIS) | 6 | 19 | -9 | 53 | -3 | 1 | 67 |

As a consequence of the above discrepancy, the number of teachers does not match either. There are 27,655 more teachers according to the PETS Education Directorate survey, especially in Fayoum (+26%), Cairo (+17%) and Minia (13%).

Table 3. 3. Number of Teachers (2007/2008) – Comparison between PETS Data and MoE/EMIS Data

| | Cairo | Dakahlia | Ismailia | Fayoum | Minia | Luxor | Total |
|--|--------|----------|----------|--------|--------|-------|---------|
| Number of teacher (PETS Education Directorate survey) | 82,586 | 67,647 | 11,328 | 27,246 | 39,062 | 4,898 | 232,767 |
| Number of teachers (EMIS) | 70,399 | 62,896 | 10,844 | 21,638 | 34,617 | 4,718 | 205,112 |
| Difference (PETS – EMIS) | 12,187 | 4,751 | 484 | 5,608 | 4,445 | 180 | 27,655 |

3.3.2. There are inconsistencies within the PETS between different layers (the Education Directorate, the Education Department and the schools) showing some weaknesses in the information flow, compilation and centralisation of data.

Information is not fully centralised or consolidated. For instance, in some Governorates the number of contracted¹⁸ teachers for the whole Education Directorate is smaller than the number of contracted teachers recorded in the four sampled Education Departments from the same Education Directorate. The same occurs with the number of per-class teachers (temporary). This may derive from the way the per-class teachers are managed; they are hired by the Education Department whilst the Education Directorate is in charge of the recruitment of contracted teachers. Nevertheless, the difference shows that the information is not centralised. This is one of the issues of a more general environment regarding information systems, processing and flow and their use for monitoring purposes, as discussed further in Chapter 4.

Another example concerns the needs/requirements expressed by the Education Directorate and Education Department in terms of teacher shortage that are not consistent with one another: The four sampled Education Departments in Cairo declared a shortage of 1, 335 teachers whilst the Education Directorate reported a shortage of 253 teachers, i.e. six times smaller (See Table 2, Annex F).

The problem of information processing is also found at the school level. There are some differences in the number of teachers reported in the school survey itself, between the main part of the school questionnaire and the Teachers Listing annexed to the school questionnaire. The teachers listing covers on average 85% of the teachers reported in the main questionnaire. Moreover, the number of per-class teachers is higher in the Teachers Listing compared to the main questionnaire by almost 13%. The per-class teachers are not covered by the EMIS, as the school survey only focuses on the permanent teachers. It is thus unclear how this category of staff is actually monitored and reported.

¹⁸ Contracted teachers and per-class teachers are both non-permanent teaching staff. Contracted teachers have full schedule from the beginning of school semester and the school administration deals with them as permanent staff. The administration can give them administrative responsibilities. Per- class teachers are specialized in one subject and just come to schools to deliver their classes. They do not have any obligation for administrative work.

Table 3. 4. Inconsistencies between the Number of Teachers Reported in the School Questionnaire and that Coming from the Teacher's Listing

| | Cairo | Dakahlia | Ismailia | Fayoum | Minia | Luxor |
|---|-------|----------|----------|--------|-------|-------|
| Number of permanent¹ teachers (main part of the school questionnaire) | 2,801 | 2,515 | 991 | 1,766 | 1,710 | 1,533 |
| Number of permanent¹ teachers (school teacher listing) | 2,486 | 1,695 | 876 | 1,506 | 1,605 | 1,415 |
| Number of per-class teachers (main part of the school questionnaire) | 4 | 2 | 231 | 65 | 113 | 58 |
| Number of per-class teachers (school teacher listing) | 36 | 37 | 191 | 114 | 115 | 43 |

Permanent teachers include permanent, seconded and contracted teachers.

Finally, there are also some inconsistencies between the survey results and the information provided by the World Bank (2005) whereby 95% of the salaries go under the Governorate not the MoE for instance. Regarding the regulations on fees retention, the World Bank results indicate an approximate 25% remaining at school level, not the average of 41% according to the MoE Decree and both in contrast to the Survey results of 51%. These discrepancies raise the question of whether the problem lies in the record keeping and reporting system, or in the unawareness of the Decree regarding the retention of the fees, or simply due to its inappropriate implementation.

3.3.3. PETS' principle in itself is to verify that data at various levels match. Inconsistencies in the data therefore reveal rather a lot on the record keeping system applied and its weaknesses.

- (1) Due to data gap between Education Directorates and Education Departments it was decided to limit the analysis to the Education Directorate and school levels. The information coming from the Education Departments files are used to mainly cover the issues relating to the formulation and execution of the budget.
- (2) There are some concerns regarding the quality of the data collected in the Fayoum Governorate, at both the Education Directorate and Department levels. Data regarding the number of textbooks are obviously wrong. The gap in terms of number of schools and teachers between EMIS and PETS is bigger than what is found in the remaining Governorates. A lot of information related to the number of teachers is missing in the Education Department in Fayoum, as well as the amount of the cash subsidy and the number of in-kind supplies allocated to the schools.

3.4. Contributions Made by the Present PETS Exercise

By using data, through questionnaires and consulting documents from multiple levels and intensive analysis rather than expanded coverage, the PETS exercise has compared quantities (in value or in-kind) that are transferred from the centre to the local levels and has identified the major areas of missing data and information, as well as the key inconsistencies. Both these are crucial outputs of a PETS exercise.

It has also enhanced the understanding of the potential leakages and the prerequisites for measuring them, institutional and human resource bottlenecks and system inefficiencies in planning, allocating and executing of Public Finance at various levels. Due to the nature and characteristics of Pre-University Finance in Egypt as described earlier in this section, the exercise could not verify the magnitude of the leakage, if indeed it does take place, but rather spotted various bottlenecks which should be removed in order to establish a clear verification of the leakages in the system. Most of these bottlenecks appear in the sphere of record keeping and information flow and reporting mechanisms and standards between and within the various levels of agencies involved as well as the Human Resource availability or skills in relation to these tasks. For that reason, and in the light of the feedback received at the Workshops as to the significance of this factor, the report had dedicated two separate chapters on these crucial issues.

The exercise also provides a fairly detailed overall view of the distribution of the material and financial resources across the sampled schools, as well as the distribution of teachers and their cost efficiency. These all have significant bearings on the equity and quality of education issues, in line with the priorities of the National Strategy for Pre-University Education Sector.

These are fully detailed further in the following chapters of the document.

3.5. Issues Related to Calculation of Leakages

The PETS defines the '*leakage of non-wage funds as the share of resources intended for but not received by the frontline service facility*'¹⁹. Based on that one could potentially calculate leakages for both , the in-kind supplies and for the cash advance. But as mentioned on several occasions in the report, in order to do this reliable number for key item of supplies and reliable unit prices are required. Neither of these two crucial pieces of information was available to PETS. It could be partly due to the quality and scope of the baseline data and partly due to the inadequate or inconsistent record keeping systems along the transfer line.

The information regarding textbooks was relatively more illuminating. Based on the baseline data provided by the Textbook Sector on the provision of textbooks to the selected Education Directorates as well as the results of the PETS, the ratio on the number of textbooks per student was calculated at various levels. Table 3.6 shows the difference being significant between the records kept by Textbook Sector, the Education Directorates, and the schools. These may not be entirely due to leakages, as they can be explained by the various bottlenecks already mentioned and summarized in chapter 7 of this report.

Finally, the PETS school survey informed us of the existence of in-kind contributions coming from private funding (donors, community, individuals), that cannot be fully assessed at the school level, since they follow the same routing system that the in-kind supplies allocated by the Government layers do. Notably it is unclear whether the schools know the actual origin of the supplies they received.

¹⁹ UNESCO - International Institute for Educational Planning 'Public Expenditure Tracking Survey', 2004.

Table 3. 5. Average ratios of number of textbooks per student in 2007/2008

| | Cairo | Dakahlia | Ismailia | Fayoum | Minia | Luxor | Total |
|---|-------|----------|----------|--------|-------|-------|-------|
| Source MoE/Textbook Sector | 31.8 | 21.3 | 24.3 | 23.2 | 20.7 | 22.2 | 25.3 |
| Source PETS Education Directorate Survey | NA | 21.6 | 1.7 | 26.5 | 16.5 | 0.3 | NA |
| Source PETS School Survey | 2.9 | 13.0 | 13.2 | 11.1 | 9.5 | 9.3 | 9.2 |

Coming to the cash advance, in the Education Directorate budget it is registered under Chapter 2 for Goods 'Operations costs', without any mention of the amount actually intended to the schools. The law related to the cash advance only sets a maximum amount per school: LE 1000 (Law 127 issued in 1981 items 34/35)".

4. Information, Reporting and Monitoring Mechanisms

Information and reporting issues are by no means the only important aspects to be addressed by the ongoing efforts to develop a reformed system in public administration in general and in Public Finance Management in particular. But it is a thematic element that cuts across all other relevant issues and hence requires a particular attention. In Chapter 3 where the characteristics of the existing data in the Pre-University Education sector are discussed, a number of specific examples are provided of how the shortcomings in the quality, mechanisms and flow of information currently compromise the accuracy, transparency and efficiency of the budgetary allocation and implementation. These are essential elements for tracking the public finance expenditure, to verify what funds were allocated to what objectives and whether or not they were spent accordingly, and where the problems are, in case of discrepancies.

The current structure of finance in the Pre-University Education sector has been fully detailed in Chapter 2 of the document. It illustrates the fragmented structure of decision making and the overall lack of connection between budgetary allocations and strategic objectives as well as the severe shortage of flow of timely and accurate information which can inform the decision makers and end users efficiently.

Part of the neglect regarding the importance of information, reporting and monitoring system is due to the very structure of the budget decision making at the moment. According to the study carried out by the World Bank in 2005: *'Budgets are prepared bottom-up, in response to a MoF-issued budget circular. It does not contain government priorities or hard budget ceilings for first line budget entities. There is generally no budget challenge function exercised as individual entity budgets are aggregated and reported to MoF and MOP, who negotiate directly with Administrative and Economic entities, usually without the sector ministry Diwan present. This erodes a sense of accountability for the performance of the planned work within the budgets established.'*

The present PETS exercise sheds further light on these by its deep analysis of the obtained data and information. What is most striking is that the importance of reporting and information flow is not fully grasped or appreciated by the decision makers and the implementing agencies apart from a mere accounting and book keeping tool. The modern concept and usage of information as a planning tool and a source of informed decision making in terms of monitoring the progress or pitfalls of the objectives and addressing the issues of policy effectiveness and cost efficiency and equity seems to be largely absent.

For instance, at the Education Directorate level, it is not required to produce any reports except for accounting/financial reporting to prepare the final accounts - without any element of strategic or planning assessment. Hence, no reports are produced for the “activities” carried out towards fulfilling the agreed targets, and like any other information required, it may be produced only on special request from the MoE. On more specific cases, the textbooks needs assessments are based on official enrolments and a projected estimate of the intake made by the Governorate. It is unclear whether the available stock (undistributed textbooks from previous school year) is taken into account. Moreover, the delivery to the schools is not systematically monitored due to the absence of a mechanism for feedback from the end of the line of the service delivery. Hence, the data for the printing targets and those delivered cannot be verified.

The PETS exercise indicates that 94% of the schools received the textbooks in time but the ratios of textbooks per student vary significantly across the sampled Governorates with huge inconsistency between the PETS and the MoE’s data. In Minia and Fayoum only 39 and in Ismailia only 36 schools had received the textbooks they had requested (out of the 48 schools sampled in each Governorate). The inequity and inconsistency can be largely explained by the lack of information not submitting the request properly, incapacity in needs assessment, poor record keeping, and irregular delivery of the textbooks or simply due to leakage.

A similar uneven picture appears also regarding instructional material whereby only 63% of the schools in Cairo had received what they had requested with Ismailia standing at 94% and Luxor at 96%. It again raises the question of the extent to which this is due to bottlenecks of information flow and appropriate reporting standards, and to what extent due to the loose links between planning, policy effectiveness and social dimensions of equity and quality enhancement.

The analysis provided by this study also highlights the importance of in-kind transfers between different educational levels in Egypt. These transfers include school furniture, lab tools and facilities, computers, IT applications and books. These transfers move from level to level but not in a well-identified or systematic sequence. For example, schools may receive specific in-kind items from the Education Departments and Education Directorates without any coordination between the two levels. In addition, BoTs and civil society organisations may directly support schools or indirectly through Education Departments and/or Directorates. All of these civil society options of supporting education resources are vital, but as they stand, they fall outside a proper tracking information system. There is, hence, even a more urgency for putting in place a comprehensive information mechanism to capture the non-publicly funding sources and transfers, in order to produce a more realistic context for more efficient and effective allocation of public resources in the sector.

The field work of the PETS team and the results of the survey suggest a high level of inefficiency in the system of registering and bookkeeping regarding the in-kind transfers. The registration only occurs at the level of the entity receiving the in-kind material not throughout the process. This creates huge inefficiencies and ambiguities in terms of the real value and the necessary measures for allocating the in-kind transfers with regards to proper needs assessment and equity of access.

Based on the school visits carried out by the PETS team at the early stages of the project, it was observed that records are fairly well kept at the school level for both cash and in-kind allocations. Cash flows are kept in the 'income book' (income and expenditure) by the school secretary. For in-kind allocations, the delivery receipts (blue) are kept by the 'store keeper'. However, neither of these books indicate the origins of the resources, whether the BoT, the fees, the cash advance, the private or public entities, etc.

A large proportion of schools indicated that they had no idea about their allocated budget at the beginning of the school year and hence they had to manage their affairs from day to day. Part of this issue may be explained by the lack of financial management information system (FMIS) at the central and major local budget agencies where currently a large part of the information is handled manually. This has severe implications on expenditure efficiency and equity issues.

One area of severe bottleneck identified by the PETS exercise concerns the lack of a clear definition of responsibilities all along the line. This was repeatedly brought up and confirmed at various interviews and consultations held by the PETS team. In particular, there seems to be serious lack of upgrading the information system, which is not affected only by the quantity of computers installed, as mostly upgrades in those equipments and the necessary training for using them are essential too.

Responsibilities and guidelines for the frequency of updating the information and upgrading the IT equipment as well as producing the necessary reports and its circulation are unclear. Furthermore it is not clear who should read, check, monitor and provide feedback on the information that is indeed collected and produced. A general approach of 'data for the sake of data' seems to prevail, with little incentive or capacity to translate data to useful and necessary information for strategic planning and monitoring purposes. It yet remains to establish a deeper comprehension that these are only tools towards a greater objective of preparing timely, relevant and useful information, which should then be channelled through regular mechanisms to provide answerability as well as information for monitoring and policy adjustments.

5. Institutional and HR Capacity

5.1. Human Resources: An Overview

Human Resource Development is one of the main priorities amongst the 12 priority programmes of the National Strategic Plan for the Pre-University Education, 2007/2012. It points out the importance of clearly defined responsibilities of the public servants in particular. The PETS exercise confirms how crucial this is for meeting the challenges ahead.

There is an overall lack of clear definition or awareness of responsibilities regarding data update, control and analysis, and reporting at all levels surveyed, as detailed in Chapter 4. The quantity, reflected in over sized staffing at most levels is often mistaken for quality. According to the World Bank, *'Each Education Directorate has an Education Directorate to administer all aspects of the delivery of education. Within this structure is a finance and administration section of approximately 200 staff. It includes units for financial supervision, budgets, accounting, human resources, procurement and inventory stores, and three administrative and support units. In addition, the MoF also has a financial controller, a chief accountant, and a deputy chief*

accountant at the Directorate to control all operations. This structure is replicated at the Education Department level, with staffing levels approximating those of the Education Directorate. Individual schools have a finance and inventory unit under the principal, who is head of education services. A financial staff of three serves the financial needs of each large school'. Despite the large number of employees in the education sector, there remain severe shortages in required skills at various levels.

The World Bank carried out a Study in 2006 (IFMCA) regarding the effectiveness of the MoE's budget formulation and execution process. It placed particular emphasis on assessing the capacity of the education sector with regards to financial management, including internal reporting and IT systems in place. These are deemed crucial for successful preparation and delivery of annual work programmes and achieving the defined development outcomes. The study identified specific sector capacity gaps and recommended measures to reduce the gaps.

The PETS exercise contributes to identifying areas in need of improvement by shedding specific light on the issue of teachers' distribution, cost efficiency and equity.

The data analysis provides some crucial information in terms of the salaries, the characteristics of the teachers, their distribution and the shortages. However the limitations in institutional capacity mentioned at various points throughout this report, reveal themselves here again. These are concerns mainly in the ambiguity of how the teachers have been counted, headcount, or conversion to equivalent full time average per week, for those employed on temporary or short term basis (per-class teachers). On occasions it seems that candidates for employment as teachers have been registered as actual staff, even if they turned out not to be offered the post and are not employed. These ambiguities and capacity limitations in proper record keeping and coherent reporting system are most likely to affect the real magnitudes of the results, especially the teacher's numbers and the payrolls²⁰.

Moreover the main measures for achievement by decision makers seem to remain the students enrolment figures (not the actual attendance), the average size of the classes and a relatively low ratio of the students per teacher. There is no particular indicator for assessing the impact on the quality of education as such. In a longer term perspective, the links between investment in education and the requirements of the labour market are the most crucial factor in any growing economy.

Another interesting result of the data analysis is that a proportion of the schools show un-executed budgets at the end of the school or financial year. Again, it is not clear whether it is due to having received surplus to their needs, weak capacity to their needs assessment, or simply inability to spend their funds due to other bottlenecks, such as unavailability of the products, lack of transport facilities, procedural delays, etc.

5.2. Human Resources for Pre-University Education Sector

The main findings of the human resources data indicate a rather high ratio of teachers per class, a relatively high ratio of non-teaching staff to teaching staff, and at the same time, shortages of teachers (especially in maths and science), as well as inadequacy of administrative capacity.

²⁰ These ambiguities have been confirmed and discussed during the PETS final workshop in Cairo, July 2009.

5.2.1. Teachers Positions

- (1) The share of teachers in charge of management activities ranges from 9% in Cairo to 36% in Luxor. This 'category' consists of the head master, the deputy headmaster and senior supervisor teachers.
- (2) Data collected at the Education Directorate level shows that there is not necessarily a headmaster in every school, while on average there is more than one deputy headmaster per school.
- (3) Ratios differ according to the sources (Education Directorate or school records), but in general the ratios of headmaster and deputy headmaster found in the school survey are lower than those coming from the Education Directorate source, with the exception of Minia. Moreover, whichever of the data sources we take, the highest ratio of headmaster + deputy headmaster per school is found to be in Luxor and the lowest one in Ismailia.
- (4) The teachers shortages may partly derive from the teachers' deployment process, the PETS found that deployment tends to rely more on the teachers availability and willingness to relocate rather than the school needs or a planning and incentive system to address a more equitable distribution of teachers.
- (5) The present issues related to the teachers deployment and distribution seem to a large extent to explain the seemingly contradiction between having teachers shortages on the one hand, and maintaining fairly low students to teacher ratios in many areas. The new 'Teachers Cadre' adopted in 2007 is tackling some of the problems in terms of motivating relocation through incentives and better salaries.

Table 5. 1. Ratio of Headmaster and Deputy Headmaster per School by Governorate (2007/2008)

| | Cairo | Dakahlia | Ismailia | Fayoum | Minia | Luxor | Total |
|--|-------|----------|----------|--------|-------|-------|-------|
| Ratio of headmaster per school (Education Directorate records) | 0.8 | 0.9 | 1 | 0.9 | 0.9 | 0.7 | 0.9 |
| Ratio of headmaster per school (school listing) | 0.8 | 0.5 | 0.5 | 0.8 | 0.4 | 1.2 | 0.8 |
| Ratio of deputy headmaster per school (Education Directorate records) | 2.6 | 2.9 | 1.7 | 2.3 | 0.3 | 3.1 | NA |
| Ratio of deputy headmaster per school (school listing) | 1.2 | 1.1 | 0.8 | 0.7 | 2.0 | 1.8 | NA |

Sources: PETS School Survey and Education Directorate Survey.

Table 5. 2. Ratios of various Teaching Staff by Governorate (2007/2008)

| | Cairo | Dakahlia | Ismailia | Fayoum | Minia | Luxor |
|---|-------|----------|----------|--------|-------|-------|
| Contracted teachers as % of total teachers | 4.9 | 2.7 | 7.0 | 24.0 | 14.8 | 13.3 |
| Per-class teachers as % of total teachers | 0.1 | 0.1 | 18.9 | 3.5 | 6.2 | 3.6 |
| % of teachers teaching over-time | 1.3 | 8.6 | 22.4 | 16.6 | 7.7 | 4.9 |
| % Headmaster & deputy headmaster who teach | 32% | 53% | 86% | 61% | 59% | 78% |

Source: PETS School Survey.

These data reveal that there is shortage of teachers in most Education Directorates, especially in primary education. This is partly due to the introduction of active learning methods and the teaching of new subjects, for which there are no sufficient supply of skilled teachers as yet. (See Table 12, Annex F). These results are in line with previous research work carried out by the MoE. The MoE estimated an overall teacher shortage of 70,899 teachers at the primary level in 2005/2006, mainly in Arabic, English and Mathematics subject matters.²¹ Solving the problem of teachers' shortage and uneven deployment is part of the priority programmes of the National Strategic Plan for Pre-University Education Reform in Egypt, 2007/2008 – 2011/2012. In order to overcome the situation some different options are used: hiring of contracted and per-class teachers, over-time work and teaching by management staff. Given that wages formed 71% - 82.5% of the public budget for the Pre-University Education over 2000/2009, the considerable teachers shortages indicate a highly poor planning capacity and high levels of cost-inefficiency. The apparent short-termism in the *ad hoc* way of addressing these fundamentally strategic issues further confirms this observation.

The World Bank points out that the 'growing and widespread use of contract teachers has been one way to address education budget shortfalls'.²² This is confirmed by the PETS. The survey found that both contacted and per-class teachers accounted for more than 25% of the teachers in Ismailia and Fayoum Education Directorates, while their share is close to 20% in Minia and Luxor.

The teaching by management staff is quite frequent in most of the surveyed schools; this is the result of both the shortages and the current teaching career path. As pointed out by the World Bank in the Education Sector Policy Note 2007, one of the reasons for the high proportion of administrative personnel seems to be that the limited number of grades in the pay and promotion scale restricts promotion possibilities and encourages senior teachers to take administrative positions. This translates into a quite high proportion of non-teaching staff within the schools. Based on the school survey, there is 1 non-teaching staff (administrative staff and workers) for each 3 to 4 teachers. It should be noted that this ratio (calculated at the school level) is lower than the national estimate that stood to 1.1 teaching staff per non-teaching staff in 2005/2006. The new 'Teachers Cadre' links skills and performance to the promotion process, and improves the financial and social

²¹ MoE: 'National Strategic Plan for Pre-University Education Reform in Egypt 2007/2008 – 2011/2012'.

²² The World Bank, Education Sector Policy Note 2007 'Improving Quality, Equality, and Efficiency in the Education Sector: Fostering a Competent Generation of Youth'.

status of teachers. The new cadre includes five promotion levels; one of the objectives is to incite part of the administrative staff to return to their teaching career. The new Teaching Career path is set out in Table 13, Annex F.

Table 5. 3. Ratio of Teacher to non-Teaching Staff by Governorate

| | Cairo | Dakahlia | Ismailia | Fayoum | Minia | Luxor |
|--|-------|----------|----------|--------|-------|-------|
| Teacher to non teaching staff ratio | 4.3 | 2.9 | 3.3 | 4.8 | 2.8 | 2.8 |

Source: PETS School Survey.

5.2.2. Teachers Characteristics

- (1) Almost half of the teachers are below 40 years of age.
- (2) The gender gap is limited with the exception of Fayoum that shows a parity index of 0.6, meaning there are six female teachers for every 10 male teachers. The level of education varies across the Education Directorates. Teachers are less educated in Dakahlia and Fayoum where around 40% have only a secondary school background. By contrast, two thirds of the teachers in Cairo had obtained a university degree.
- (3) Majority of the per-class teachers in the surveyed sample are female (69%), young people (71% below 30) and possess a university degree (72%).
- (4) The number of classes taught per week is on average 19 with 20 hours per week at primary and 16 at preparatory schools. The number of classes taught varies according to the teacher's position, whereby senior teachers work fewer hours than other teachers.
- (5) Half of the teachers taught three classes in 2007/2008, the ratio is smaller at primary school where the median is set to two classes.
- (6) Almost all (97%) of the teachers were paid according to the standards and in time (2007/2008).
- (7) The average pay across the surveyed six Education Directorates, net of any subsidies or over-time work stands at LE 302 per month. Allowances are paid to most teachers especially exam allowances. Marking allowances are given to almost 9 teachers out of ten in Cairo, Dakahlia and Fayoum but to only one third of the teachers in Luxor. On the contrary more than half of the teachers benefit from teaching incentives in Ismailia, Luxor and Minia. (Tables 14 and 15, Annex F).
- (8) A high proportion of the teachers indicated having supplementary incomes; 85% in Dakahlia, 90% in Fayoum, 79% in Cairo, 65% in Minia and 67.4% in Luxor. A lower proportion in poorer Education Directorates, where one might expect a bigger role and urgency for supplementary incomes, may be actually due to more limited job opportunities.

Table 5. 4. Number of Classes Per Week According to the Teachers' Position by Governorate

| | Cairo | Dakahlia | Ismailia | Fayoum | Minia | Luxor |
|-------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Expert Teacher | 9.9 | 13.9 | 15.2 | 14.7 | 22.5 | 14.6 |
| Senior Teacher A | 11.8 | 14.9 | 14.4 | 16.8 | 12.7 | 12.9 |
| Senior Teacher | 16.5 | 16.5 | 18.7 | 19.9 | 17.4 | 16.9 |
| Teacher | 17.2 | 17.3 | 20.4 | 20.6 | 18.4 | 19.8 |
| Total | 14.6 | 16.6 | 17.9 | 19.7 | 16.9 | 17.0 |

Source: PETS School Survey (Teachers listing).

5.3. Teaching Resources

- (1) Textbooks are provided by the MoE's Textbooks sector based on the needs assessment and requirements sent by the Education Directorates. The Textbooks sector produces the exact number of textbooks without adding any surplus. The Education Directorates are responsible for picking up the textbooks and for their delivery to the Education Departments. In turn the Education Departments are in charge of delivering the textbooks to the schools.

Textbooks are received in time by most schools. In Fayoum, Minia and Dakahlia fewer than 10% of the teachers declared having received the textbooks with a delay. Textbooks are provided in sufficient quantity at most schools, apart from the Education Directorate of Minia. The survey found that 25% of the schools in this Governorate did not have enough textbooks in 2007/2008.

- (2) The provision of instructional materials is managed by the Procurement Department under the Financial Affairs within the MoE. This is done through a tendering process covering the purchase and the delivery of supplies. The tender also includes lab facilities and computer labs. The needs assessment relies on an annual form sent to the schools.

The school survey showed that instructional materials are in shortage of supply. On average, almost 20% of the teachers said instructional materials are not available. The scale varied with Cairo (38%), Dakahlia (23%) and Fayoum (24%).

- (3) Furniture (chairs, desks, cupboards, etc.) is mainly allocated by the Education Directorate and by GAEB for the newly-built schools. The school survey revealed that half of the classrooms lacked a chair and a desk for the teacher with the ratio amounting to as high as 61% in Luxor. Similarly on average there are not enough student desks in one school out of each ten, with higher rates in Cairo, Ismailia and Minia.

5.4. School Facilities and Utilities

The results of the school survey in terms of facilities and utilities show there is a need to allocate more resources, especially regarding schools maintenance.

Most schools have permanent classrooms but there is a need to rebuild or maintain almost one third of the schools. The situation is quite pressing in Cairo with half of the schools in a poor state and to a lesser extent in Ismailia and Luxor. It should be noted that the largest schools are found in Cairo (on average with 19 classrooms per school, compared to only 11 classrooms in Luxor and Ismailia). Based on the sampled schools, half of the schools were established within the past 19 years. Schools in Cairo and Minia are slightly older; the median is 22 years, whilst in Luxor and Fayoum they were established later with the median of 15 years.

- A. In terms of facility, almost half of the schools do not have a staff room. There is no library in more than 10% of the schools, no computer lab in 13% of the schools and no science lab in 19% of the schools. Most of these schools are primary schools.
- B. Regarding utilities, electricity works in more than nine classrooms out of each ten. The main source of drinking water is piped water but water is not available all year round in nearly 10% of the schools in Minia, Luxor and Fayoum. There is on average 1.1 toilets per classroom but almost 20% of them need to be repaired.

For further details see Table 16, Annex F.

5.5. Expenditure, Planning and Management

- A. As pointed out earlier schools are not generally involved in the financial management process although they are public entities by and large and receive significant amounts of public funding. Currently, apart from managing the petty cash collected at the school level (retained fees and private contributions), all budgeting and execution controls are exercised at the Education Department and Education Directorate level. The concept of school-based management is only beginning to be tested in a number of schools, funded by USAID, the WB and other donors. The prerequisite for it though might be putting in place appropriate training, guidelines and facilities for monitoring and reporting.
- B. The tables below (5.5 and 5.6) illustrate the structure of the expenditure by the sampled schools. It corresponds to what was purchased by the schools themselves, and thus do not include the in-kind allocations. A relatively high proportion was spent on stationary and other staff salaries in contrast to teachers' training (although not a responsibility at the school level). The school maintenance standing at an average of 15.6% across all Education Directorates and an even higher average of 18.1 at all levels do not justify the still poor state of a great number of schools' basic facilities, as illustrated above. This may reflect a high degree of cost-inefficiency and expenditure ineffectiveness.

Table 5. 5 Composition of School Expenditure by Governorate (2007/2008)

| Spending Items | Cairo | Dakahlia | Ismailia | Fayoum | Minia | Luxor | Average |
|-----------------------------|--------------|-----------------|-----------------|---------------|--------------|--------------|----------------|
| Stationery | 10.9 | 5.7 | 10.6 | 10.0 | 15.8 | 3.9 | 10.6 |
| Furniture | 1.9 | 2.0 | 0.1 | 3.2 | 0.8 | 4.4 | 1.9 |
| Instruction material | 2.8 | 1.2 | 1.4 | 1.9 | 0.4 | 1.3 | 1.6 |
| IT equipment | 9.9 | 0.9 | 0.9 | 3.8 | 1.3 | 3.0 | 4.2 |
| Lab facilities | 2.2 | 0.1 | 1.0 | 1.8 | 1.7 | 1.9 | 1.6 |
| School maintenance | 17.1 | 16.1 | 30.7 | 19.1 | 7.9 | 13.3 | 15.7 |
| Books | 4.3 | 4.3 | 3.4 | 6.4 | 2.3 | 6.8 | 4.2 |
| School activities | 12.8 | 12.9 | 8.8 | 13.9 | 6.1 | 10.2 | 10.6 |
| Exam material | 9.0 | 10.0 | 10.6 | 12.6 | 7.4 | 3.8 | 8.8 |
| Utilities | 2.2 | 2.2 | 1.3 | 4.4 | 0.6 | 1.5 | 1.9 |
| Temporary teachers | 4.0 | 0.4 | 0.0 | 0.8 | 9.3 | 18.1 | 5.5 |
| Teachers' training | 0.0 | 0.4 | 0.0 | 0.6 | 0.0 | 1.6 | 0.3 |
| Teachers houses | 12.0 | 1.4 | 1.5 | 0.6 | 17.7 | 9.7 | 9.5 |
| Other staff salaries | 3.1 | 0.8 | 0.1 | 2.7 | 25.3 | 1.7 | 8.1 |
| Other | 8.0 | 41.5 | 29.7 | 18.2 | 3.7 | 18.6 | 15.9 |
| Total | 100.0 | 100.0 | 100.0 | 100.00 | 100.0 | 100.0 | 100.0 |

Sources: PETS School Survey.

Table 5. 6. Composition of School Expenditure by Education Level (2007/2008)

| Spending Items | Primary | Preparatory | General secondary | Technical secondary | Average |
|----------------------|--------------|--------------|-------------------|---------------------|--------------|
| Stationery | 6.8 | 15.1 | 18.1 | 8.3 | 12.1 |
| Furniture | 2.7 | 1.1 | 1.2 | 0.8 | 1.5 |
| Instruction material | 1.4 | 1.3 | 3.9 | 1.4 | 2.0 |
| IT equipment | 2.1 | 7.7 | 1.9 | 3.7 | 3.9 |
| Lab facilities | 1.9 | 0.4 | 6.6 | 0.8 | 2.4 |
| School maintenance | 14.6 | 14.5 | 26.0 | 17.6 | 18.2 |
| Books | 3.8 | 5.0 | 2.7 | 4.1 | 3.9 |
| School activities | 9.9 | 10.6 | 11.0 | 13.0 | 11.1 |
| Exam material | 6.9 | 10.5 | 3.4 | 15.4 | 9.1 |
| Utilities | 1.6 | 2.0 | 2.5 | 2.1 | 2.0 |
| Temporary teachers | 10.7 | 0.6 | 0.1 | 1.2 | 3.1 |
| Teachers' training | 0.5 | 0.1 | 0.0 | 0.0 | 0.2 |
| Teachers houses | 12.2 | 6.9 | 11.40 | 3.8 | 8.6 |
| Other staff salaries | 8.2 | 10.4 | 8.7 | 0.0 | 6.8 |
| Other | 16.6 | 13.8 | 2.5 | 27.7 | 15.2 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

Sources: PETS School Survey.

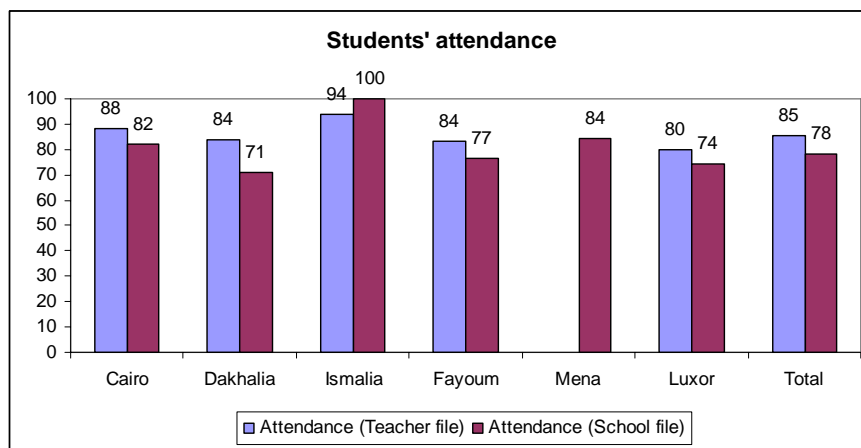
5. 6. Some Educational Indicators Regarding Quality

On average the students' attendance ranges from 78% to 85%. The survey period may have an impact on the results since the study was conducted at the end of the school year (May 2009). Attendance remains a problem in most of the surveyed Education Directorates, whatever the level of education. Attendance rates were calculated based on two sources. Firstly, based on the teachers declarations on the number of students who are regularly present in their classes compared to the number of enrolled students. Secondly, on the basis of the school records, the ratio is calculated as the number of students who were present at school

seven days before the day of the survey divided by the number of students enrolled in the second term of the school year 2008/2009.

The comparison of the two data sources shows that the teachers tend to declare higher attendance rates compared to the school records. The difference may be at least partly due to the formulation of the questions. Nevertheless, the two sources present a similar picture: attendance is lower in Luxor, Fayoum and Dakahlia. On the contrary, Ismailia records the best results. The problem is more acute in preparatory schools, where fewer than 7 students out of 10 were present at school a week before the survey, especially in Dakahlia (53%) and Cairo (60%).

Figure 5. 1. Students' Attendance Rate



Note: The rate could not be calculated based on the Teacher file in Minia Education Directorate due to some inconsistencies in the figures.

Source: PETS School and Teacher surveys.

Whilst the students per teacher ratio is on average 13, the students per class ratio is four times higher. Whichever of the data sources we take, the students per teacher ratio is low; standing at 13 in the PETS survey and at almost 19 in the EMIS. The figures coming from PETS school survey are generally smaller than those from the EMIS. This is due to the fact that the number of teachers reported in the PETS is higher. Variations across Education Directorates are limited. The lowest ratio is found in Dakahlia with 10 students per teacher compared to more than 15 in Fayoum and Minia. The number of students per teacher is also higher in primary schools (19 students per teacher) and preparatory schools (14 students per teacher).

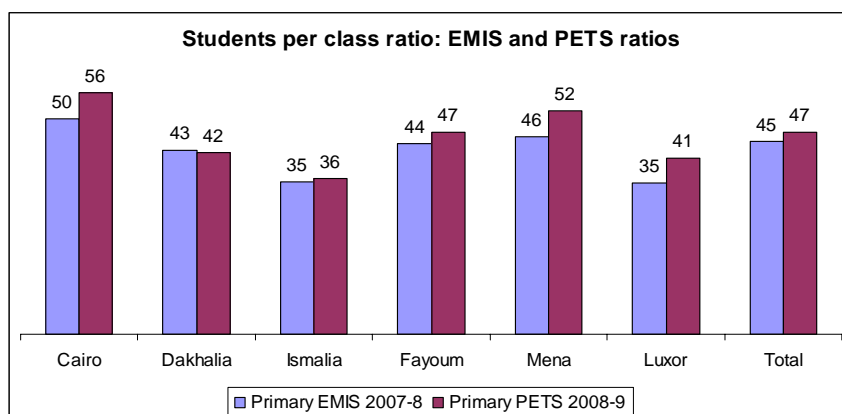
Table 5. 7. Students per Teacher Ratio: Comparison between PETS and EMIS Data (2007/2008)

| | Cairo | Dakahlia | Ismailia | Fayoum | Minia | Luxor | Total |
|-------------|-------|----------|----------|--------|-------|-------|-------|
| EMIS | 16.0 | 15.3 | 17.8 | 24.2 | 26.9 | 19.7 | 18.7 |
| PETS | 13.1 | 10.0 | 13.7 | 15.4 | 16.3 | 11.8 | 13.2 |

Source: PETS School survey and EMIS data for 2007/2008.

The students per class ratio are on average 42 students per class. Whilst the EMIS and PETS data do not cover the same time period, they provide similar results. EMIS data refer to the 2007/2008 school year, PETS data to the 2008/2009 period²³. This result is due to the teachers shortage mentioned before combined with the shortages in schools/classrooms. On average, one third of the schools work in shifts (i.e. less than full day). The lack of schools/classrooms appeared to be a major problem in Minia and Luxor, where the share of schools working in shifts is twice as high as the other surveyed Governorates. (See Table 17 in Annex F).

Figure 5. 2. Students per Class Ratio: Comparison between PETS and EMIS Data



There are more than 40 students per class in most Education Directorate. Only schools in Luxor and Ismailia stand below this ratio.

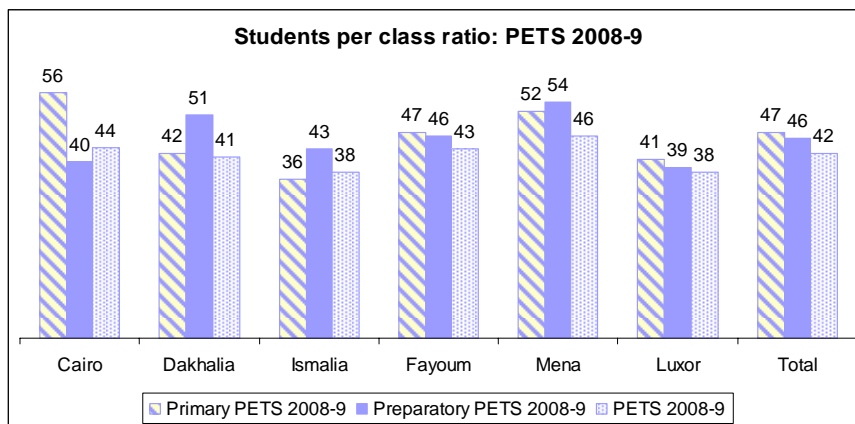
The largest number of students per class is found in Minia, Cairo and Fayoum.

Source: PETS School Surveys and MoE/EMIS 2007/2008.

The situation is particularly demanding in primary schools with an average of 47 pupils per class reaching 56 students per class in Cairo and 52 in Minia. In preparatory schools the lack of classes is more acute in Dakhalia and Minia with more than 50 students per class.

²³ The PETS school questionnaire collected the number of classes for the current school year (2008/2009). As a result, the students per class ratio was calculated for the current school year based on the number of students registered in second school term of the school year 2008/2009.

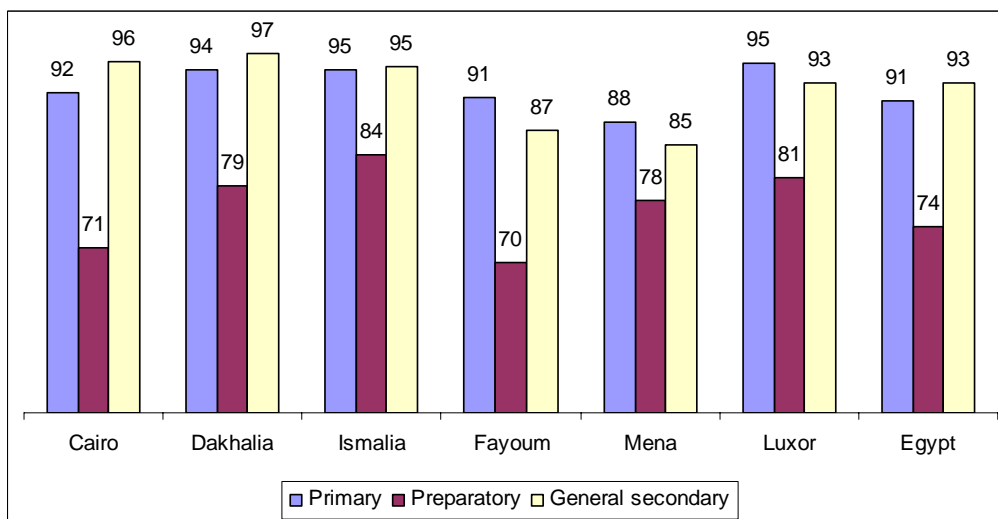
Figure 5. 3. Students per Class ratio based on the PETS: Primary, Preparatory and all Levels of Education



Source: PETS School Survey.

Pass rates at final examinations could not be obtained from the school records due to some inconsistencies in the data. The pass rates set out in the graph below come from the EMIS for the 2006/2007 school year. By and large, Minia, Fayoum and Cairo tend to record the lowest pass rates.

Figure 5. 4 : Pass Rates at Final Examination (2006/2007)



Source: EMIS 2006/0207.

PETS did not collect information on non-Egyptian teachers. According to the MoE, non-Egyptian teachers are engaged only in the private and language schools. Information about the new Teachers Cadre is captured in Table 13, Annex F.

6. Main Bottlenecks Highlighted by the Survey Data Analysis

6.1. *Weak Institutional Capacity*

This is most evident in identifying, recording and reporting important data and data analysis beyond mechanical data registration and the proper use of the information for planning and cost-efficient allocation / reallocation of resources. The missing data and inconsistencies between various layers detailed in earlier chapters as well as the lack of clarity in the routing and the unit price for the value of the in-kind have far-reaching implications on transparency, cost efficiency and equity issues as elaborated in Chapter 5 and further down in this chapter. Ultimately, these can have adverse effects on the quality of education and the proper responses to the demands of the labour market at the end of the line and in a strategic perspective.

The poor quality of data collection and registration is reflected even in the areas of seemingly most clearly regulated, such as the fees retention for instance.

To make a case in point, across the 6 sampled Governorates 16% of the schools showed retained fees which were equal to the total fees collected although by current regulations, on average only about 50% of the fees are to be retained at the school level. Furthermore, the data indicate that 12% of the schools retained more than the total fees they had collected in a given year which is even harder to explain, except by the possible rolling over some of the unregistered fees collected in an earlier period.

Although such private funding by definition falls outside PETS but given that on average the fees collected at the school level form nearly 77% of the total sources of funding, they are important enough to be correctly registered, with all the details of retention, expenditure and transfers to the higher layers (Idaras) and to be monitored for consistency. It will also be a crucial element in targeting subsidies to the areas with smaller capacity of fees collection, exemptions of fees, and reallocation of in-kind subsidies.

Unclearly defined responsibilities for data collection and analysis at all levels monitoring, reporting and regular flow of necessary information both ways (top-down and bottom up) count for a major part of the problems. In the specific context of this survey for instance, 16% of the total schools in the survey said they were not informed of the survey with 49% in Fayoum. Reporting mechanisms are crucial not only for PFM purposes at a more macro level or the Pre-University Education at a sector level, but also for consultative purposes with a broader stakeholder's participation.

Training of the personnel seems to be limited although it is one of the priority objectives of the National Strategy for the education sector. By way of example only half of the Education Department managers attended a short training for the leadership from the Leadership Institute.

6.2. *Teachers Shortages and Methods Applied to Resolve them*

As elaborated earlier in the present report there is a seemingly contradiction between the current shortage of teachers at most levels as revealed by the PETS survey and supporting the earlier findings by the MoE in this regard, on the one hand, and the relatively low average students per teacher ratio on the other. This can be mainly explained by rigidities in mobility of human resources between various parts of the country, and bottlenecks in deployment procedures. Currently there are new incentives in terms of rewards and better salaries within the new teacher's cadre programme, to motivate larger movements towards more needy

areas. However, the issue of relocation costs and compensations are yet to be addressed, formalised and implemented.

The existing picture indicates very uneven distribution of teachers, and therefore, education quality, across the sampled Governorates and Districts.

As detailed in Chapter 5 Minia, Ismailia and Fayoum reported important shortages especially at primary schools level. At all the 6 Governorates surveyed, there are a total of just under 28, 000 teachers short at all levels. In Minia shortages are particularly high around 14, 787 at all levels with 11, 736 of them at the primary level alone, according to the survey results. This means in Minia there is a shortage of 79% of the teachers required. The figures are 36.2% and 35% for Ismailia and Fayoum respectively. Luxor with 9% shortages fares better than all the Governorates in the sample.

These shortages seem to be covered by short-term temporary measures often proving to be costly, and ineffective, due to their temporary nature and lack of continuity in the teaching environment on the part of the teachers and students both.

Contracted (permanent) teachers form only 9.6% of the total teachers in Ismailia, 22.3% in Minia and 18.5% in Luxor for instance.

Per-class (temporary) teachers on the other hand form 0% of the total teachers in Fayoum, 19.5% in Ismailia, 23% in Minia and 25% in Luxor. The rest of the shortages are covered by over-time teaching or the filling in by the headmasters and deputy headmasters whose salaries are considerably higher than contract teachers. In Ismailia the over-time teachers covered 22% of the total teachers. The impact of these *ad hoc*, short-term solutions, resulting in considerable cost-inefficiencies on the poorer Governorates and districts could only be expected to be more damaging.

6.3. Equity Dimension

Equity is one of the main elements of better accessibility by the poorer income groups to vital social services such as education and health services. The PETS team interviews with the officials at the Education Department level indicated that most of the Education Departments staff had little or no clear and transparent criteria to distribute the cash-advance allocations on the schools located in their jurisdictions. There is no evidence that the worse-off schools receive more cash per head or per class than the better-off ones. The distribution process is based on schools' cash requests and the budget available at the Education Department level. This means that Educational Departments do not target specific schools. They implement a universal scheme. The administrative difficulties inherited in the system of requesting and settling advance cash payments often result in a relative advantage of the better-off schools compared to the worse-off schools, in terms of their actual needs (per-class ratios of teachers and/or students, the schools facilities, the difficulties in recruiting sufficient teaching staff, the urgency of basic maintenance, etc.).The situation is worse when it comes to in-kind transfers since schools receive these transfers not just from the Education Departments (the closest education level to schools), but from higher educational levels like Education Directorates, Educational Service Authorities, and MoE. The lack of transparent and clear targeting system has negative effects on the efficiency and equity of the Pre-University Education sector. A number of concrete aspects have been elaborated in Chapter 5 (especially in Sections 5.2 and 5.4), and further below in Chapter 6. The PETs team's findings support those of the World Bank's (2006).

The current practice of non-means tested (non-targeted) methods of cash advance and in-kind subsidies, coupled with teacher’s shortages, varied quality of school facilities, varied amounts of fees collected and / or retained, BoT contributions, un-monitored needs assessment for textbooks, all indicate a high degree of inequity in the current practice of planning and financing the Pre-University Education in Egypt.

The inequitable allocation in turn, re-emphasises the numerous capacity limitations – both at institutional and human resources levels, and the significance of proper flow of vital and accurate information throughout the system.

This section provides a detailed account of the in-kind allocation to shed further lights on these issues.

6.3.1. In-kind allocations to the Schools for the School Year 2007/2008.

Only around 60% of the schools received IT equipment and some books for the library with negligible variation across the 6 Governorates. Half of them were allocated instructional materials, and less than 40% concerned some furniture. Lab facilities were sent to less than 10% of the schools and school feeding programmes seemed to be limited.

There are some variations across the Governorates in the provision of instructional materials and furniture. In Dakahlia and Ismailia fewer than 32% of the schools received some furniture, compared to 56% in Minia. Similarly only 35% of the schools in Cairo received some instructional materials whilst the ratio is almost double in Fayoum. It is not clear if these are due to any targeting according to the performance, needs assessment, size of the school or just randomly allocated and randomly received. It is also difficult to quantify the value of the transfers due to lack of description of various types and lack of an average unit price, as mentioned earlier in the present report.

Table 6. 1. Subsidy in kind allocated to Schools by Location by Governorate (2007/2008)

| | Cairo | Dakahlia | Ismailia | Fayoum | Minia | Luxor | Total |
|-------------------------------------|-------|----------|----------|--------|-------|-------|-------|
| <i>% of schools having received</i> | | | | | | | |
| Furniture | 47.9 | 29.2 | 31.3 | 33.3 | 56.3 | 35.4 | 38.9 |
| IT equipment | 62.5 | 58.3 | 62.5 | 56.3 | 56.3 | 66.7 | 60.4 |
| Lab facilities | 12.5 | 0.0 | 25.0 | 6.3 | 12.5 | 2.1 | 9.7 |
| Instructional material | 35.4 | 58.3 | 47.9 | 62.5 | 52.1 | 43.8 | 50.0 |
| Books | 52.1 | 64.6 | 60.4 | 60.4 | 68.8 | 45.8 | 58.7 |
| Snacks | 0.0 | 2.1 | 0.0 | 2.1 | 2.1 | 2.1 | 1.4 |
| Other supplies | 0.0 | 0.0 | 6.3 | 0.0 | 4.2 | 4.2 | 2.4 |

Source: PETS School Survey.

When comparing the structure of the supplies sent by the different layers of Government the broad picture is quite consistent. Most Governorates and Idaras sent some furniture and IT equipment and around half of them sent some books and instructional materials. However, the proportion of schools having received the furniture is quite small standing at less than 40%. Again from the existing methods of book keeping and information flow it is not clear whether all schools were targeted to receive these in-kind supplies or only those 40% which have received them. Leakage, inconsistency of data, poor record keeping and lack of a system for overall monitoring all may have a role in explaining this low percentage of schools receiving the supplies.

Table 6. 2. Subsidy in kind Allocated to Schools by Item (2007/2008)

| | Governorate level (number) | District level (%) | School level (%) |
|-------------------------------|---------------------------------------|---------------------------|-----------------------------|
| Furniture | 5 | 87.5 | 38.9 |
| IT equipment | 5 | 91.7 | 60.4 |
| Lab facilities | 3 | 41.7 | 9.7 |
| Instructional material | 3 | 58.3 | 50.0 |
| Books | 4 | 62.5 | 58.7 |
| Snacks | 0 | 8.3 | 1.4 |
| Other supplies | 0 | 8.3 | 2.4 |

Source: PETS Governorate of Education, District of Education and School Surveys.

There are some discrepancies in the sources of the supplies between the Districts and the schools answers. Based on the District questionnaires and for a set of selected in-kind supplies the main source is the public budget. Such items were either provided by the MoE (computers, data screens and books) or by the Governorates (students' chairs and desks).

At the school level the picture is quite different. The share of furniture provided by GAEB is about 30%. The in-kind contributions from private sources (community, NGOs, donors) show a significant share for the IT equipment and the books.

Table 6. 3. Allocations in kind to the Schools of some Selected Items by Sources of Supply (2007/2008)

| Sources reported by the Districts | Number of items | Distribution of items per source | | | | | |
|-----------------------------------|-----------------|----------------------------------|----------------|------|------|-------|-------|
| | | MoE | Gov + District | GAEB | EPDF | Other | Total |
| Students chairs | 5,228 | | 99,3 | | | 0,7 | 100 |
| Students desks | 7,068 | 2,8 | 93,6 | 3,1 | | 0,5 | 100 |
| Computers | 2,782 | 79,0 | 17,4 | | 3,7 | | 100 |
| Data show | 489 | 79,3 | 18,6 | | 2,0 | | 100 |
| Books | 411,889 | 96,8 | 3,2 | | | | 100 |
| | | | | | | | |
| Sources reported by the schools | Number of items | Distribution of items per source | | | | | |
| | | MoE | Gov + District | GAEB | EPDF | Other | Total |
| Students chairs | 4,606 | 8.7 | 53.6 | 35.9 | 0.0 | 1.7 | 100 |
| Students desks | 8,761 | 5.8 | 56.3 | 34.2 | 0.0 | 3.7 | 100 |
| Computers | 1,331 | 24.3 | 22.5 | 6.4 | 8.1 | 38.7 | 100 |
| Data show | 113 | 19,5 | 22,1 | 5,3 | 19,5 | 33,6 | 100 |
| Books | 67,072 | 25.1 | 43.1 | 0.1 | 9.8 | 22.0 | 100 |

Source: PETS District of Education and School Surveys.

The discrepancies may originate from the weaknesses of the reporting system at both the Governorate and the District levels. This is even more complex due to the various sources of public funding: the MoE, the Governorate, as well as autonomous bodies such as GAEB or EPDF. In addition to that, the delivery/routing system to the schools is not clear: Some in-kind supplies are directly sent from the Governorates to the schools, others go from the MoE to the Districts and then to the schools, as pointed out in earlier chapters of the report. For instance GAEB is in charge of providing furniture to the newly-built schools but based on the survey results it seems that the Districts are not fully informed of the GAEB contributions. The same may occur with support provided by the community, NGOS and donors. All this, again and ultimately contribute to a rather less efficient, effective and equitable use of resources than is potentially possible.

6.3.2. In-kind allocations sent to the sampled schools since July 2008.

A tracking instrument was included in the PETS questionnaires with an objective of tracking the supplies sent from the sampled Governorates to the sampled Districts, and then to the sampled schools. The tracking instrument is thus confined to the sample only, i.e. from the 6 Governorates to the 24 Districts and then to the 288 schools.

Table 6. 4. Results of the Tracking Instruments for some Selected Items since July 2008

| | Governorate allocation (number)¹ | District allocation (number)² | Received by schools (number) |
|--------------------------|--|---|-------------------------------------|
| Students chairs | 4,376 | 1,798 | 1,181 |
| Students desks | 5,416 | 7,438 | 2,204 |
| Computers | 938 | 489 | 667 |
| Data show screens | 161 | 44 | 35 |
| Books | 3,700 | 39,153 | 28,377 |

Notes:

1. Cairo Governorate did not send any supplies

2. Data are not available for Abdin and New Zainab Districts.

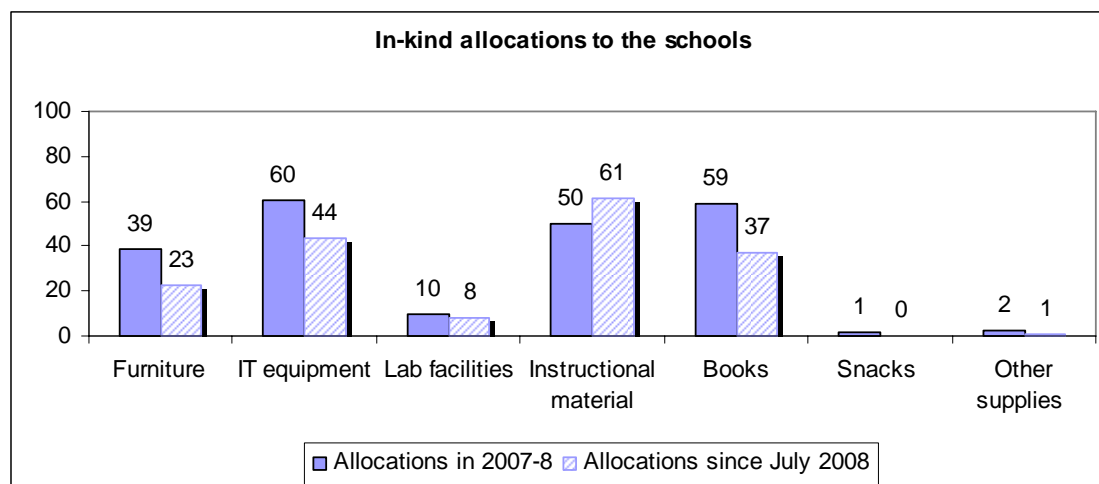
Source: PETS Governorate of Education, District of Education and School Surveys.

The tracking instrument confirmed the problems in the record keeping and routing systems. As shown in the table below the number of items sent by Governorates, the Districts and those received by the schools do not match:

1. The number of students desks allocated by the Districts is bigger than the Governorates allocation; this may be partly due to the fact that Cairo Governorate did not allocate any supplies to the Districts.
2. The number of students' chairs received by the schools is three times smaller than the Governorates allocation.
3. The number of data shows screens allocated by the Districts to the schools accounts for less than 33% of the Governorate allocation.

The tracking instrument also provides information on the variation of the schools receiving the items over time. By and large the schools received less supplies in 2008/2009 compared to the previous years. Around 25% of the schools did not receive any in-kind supplies since July 2008. This ratio hikes to over 40% in Luxor. Over the past school year the schools were provided with smaller quantities of furniture, IT equipment and books. Only the provision of instructional materials has increased but this *per se* does not necessarily indicate a better targeted allocation towards improving the quality of education. The question of the per-school allocation system and thus that of equity in the allocation system remains to be addressed yet.

Figure 6. 1. Comparison of the in-kind allocations to the schools in 2007/2008 and since July 2008



Source: PETS School Survey.

6.3.3. Advance Cash Subsidies

The inequity in cash advance subsidies are also mainly captured by the non-targeted method, meaning that it is applied in a uniform manner, as long as the schools apply for them and irrespective of their size, quality or the regional variations in income, employment and other social indicators. The strategic policy formulation is particularly impaired by poor quality of record keeping and reporting system again. Briefly, the picture below offers some of the main features. On average, the advance cash payments stand at only around 4%-8% of the school budget but reaches 22% in Ismailia. This in itself reflects the considerable role of the private funding still, as well as the variation in the capacity of private funding across the 6 Governorates. A higher share of cash subsidies in the total funding (and yet, not necessarily in sufficient amounts) in Ismailia implies a much lower share of fees and other private sources of funding in that Governorate. This issue is further elaborated below.

As high as 23% of the sampled schools received less than the minimum cash subsidy (LE 150 for Primary, LE 200 for Preparatory and LE 250 for the Secondary schools). On average 7% of the schools received only the minimum and 10% received more than the maximum of LE 1000 allowed by the current legislation. Some 60% of the schools received within the range of the minimum and the maximum.

The results show a big gap between the mean and median in Cairo, Dakahlia and Ismailia on the one hand, and the other three sampled Governorates, on the other. That in itself portrays an unequal distribution between the Governorates.

Furthermore the considerable gaps between the mean and median for the three Governorates of Cairo, Dakahlia and Ismailia also show a further inequality between the schools receiving the cash subsidies within each of those Governorates. (See slides 5 and 6, Expert II, Ms. Sophie Guillemin Workshop 3).

6.3.4. Decentralisation and MTEF

The PETS included two questions at the school level in this regard; one about the existence of a school feeding programme - even if for a short period - and the second about the way needs are estimated and by whom. The results showed that half of the schools had a school feeding programme including those for a short period. This result is quite high compared to the results of the 'Household Education Survey 2005/2006' (funded by USAID) showing that "14 percent of children received free meals at school and 6 percent received a free snack."

One third of the schools declared that they estimated the needs themselves.

6.3.5. Community Contribution and Participation

As pointed out in several places earlier in the report the sources of funding, both in cash and materially come from an un-identified pot of cash and in-kind supplies making it hard to carry out a standard PETS exercise in Egypt.

Below is a summary of the important features.

Income-generating activities are limited apart from Cairo at 30% and Ismailia at 11%. Contribution from the community is generally low too, with the exception of Minia (13%). On average 75% of parents can afford paying fees with only 62% in Fayoum. The average ratio of students who are not exempt and do not pay fees either is 13% with Fayoum at 25%. Furthermore in Fayoum only 15.6% are exempt and 82% pay according to ability.

This is rather consistent with the capacity or willingness of the community to assist the needy children according to the schools questionnaires. Fayoum shows a rate of 31% as compared with 64% in Dakahlia, 54% in Minia, 51% in Luxor and 45% in Ismailia. However there is little evidence that the exemption rate, the collection of fees and the supplementary income activities fall in to a well-planned strategic context of budget allocation.

7. Lessons Learnt

Although PETS is in principle a useful instrument in the context or on the assumption of presence of inconsistencies along the route of resource transfers, its contribution to shedding light on the issue of leakage and effectiveness varies according to a minimum level of consistency, formalisation of procedures and implementation, basic information and information flow, book-keeping and registration systems. Working with systems that have higher levels of informality or may be passing through transitions and reforms and lack the above-mentioned basic systems inevitably affect the PETS findings in regards to tracing and calculating the leakage in the system. Nonetheless it fulfils its function of producing information on the bottlenecks in the system of budgeting, expenditure routing, book-keeping, information flow and implementation of the budget rules and legislations in place.

There is no standard PETS report, *per se*, as ascertained by the World Bank²⁴. Various international experiences with PETS as a diagnostic instrument have come up with three main kinds of conclusions: (i) delays or predictability in funding, (ii) leakages, and (iii) Discretion in allocation of resources.

As elaborated in earlier chapter's calculation of leakage is not feasible at this stage mainly due to the lack of necessary reference points. However, the information and data allowed drawing important lessons regarding the system's bottlenecks and inefficiencies. The delays and predictability of funding is closely linked with the overall Public Finance Management issues including transparency of the budget priorities and execution. According to the current system it is unclear what is intended to reach the schools in the form of cash advances, and the schools do not seem to be systematically and fully aware of their entitlements or the procedures to request the cash advances. Although the schools are required to send their needs assessment, it is not clear who processes the information and how this assessment is done. This could be part of the more general issue of lack of clarity or specific responsibilities, criteria and procedures. In addition, the EMIS only partially reflects the situation, as for instance, the information about schools facilities is not compiled.

It is also important to note that PETS cannot always fully explain all the causes of the discrepancies, although it can spot the inconsistencies, as is the case with the present PETS. Explanations for inconsistencies are based on making certain assumptions, mainly regarding the quality, compilation and flow of information. The field work of the present PETS consisted of recording the data kept by the survey units. Given the established experience of the IDSC, the implementing agency, in survey conduct, the inconsistencies are not likely to be a problem of survey implementation but a real problem of record keeping at the surveyed units. Based on the above, it is strongly recommended to fully assess the MoE school survey and EMIS, as problems may be at various levels:

- The coverage: does the MoE survey actually cover all the schools and do all the schools answer the survey?
- The data collection: who is doing what along the chain? Do quality checks exist (missing data and their correction, data consistency over time, and at what level) and do the Education Directorates and Departments have the capacity (human resources, IT) to check and properly process the data? (The survey found that fewer than half of the Education Departments have a vehicle, and one third of them do not have a computer).
- The data entry: the discussions with the MoE informed the team that some Education Directorates send electronic files, when requested, to provide answers to their questionnaires, while others send questionnaires that are entered by the MoE Statistical unit. It is not clear if the questionnaires are systematically sent along with the electronic files, or whether there are any data checking at the MoE level, etc. Chapter 8 provides more specific recommendations related to these important prerequisites, amongst others.

Conducting PETS in Pre-University Education sector in Egypt highlights some further lessons that can be briefly pointed out below:

²⁴ "No standardised instrument – depends on perceived problems, and "plumbing" of public resource flows" (Public Expenditure Tracking and Service Delivery Surveys - WBI Learning Activity: Empirical Tools for Governance Analysis (June 18, 2002), Ritva Reinikka and Stuti Khemani DECRG, The World Bank)

- Weak links between Strategic Planning, priorities, formulation and execution of the Budget. The effective well-targeted allocation of physical resources particularly the textbooks and instructional materials is crucial for improving both the equity and quality of education. Although PETS is not about the allocation but execution of allocated resources it does address the strategic issues of efficiency, effectiveness and equity. These are the links between PETS functions and the overall Public Finance Management. Currently there is a considerable lack of evidence of the resource allocation towards those national strategic objectives. There are shortages of textbooks in some schools while there is evidence of over-supply and hence unused surpluses in others. The ratio of textbooks per students in the Education Directorate in Cairo is by far too high compared to other areas in the study and reflects a problem in the needs assessment, as well as unevenness in allocation of resources, resulting in inequity in the sector. Same applies to the current practice of un-targeted cash advances, or a mostly non means-tested fees collection. While the general perception is lack of resources in the sector, interestingly, the sample revealed that some schools had actually un-spent cash at the end of the school year. Some of these could be due to lack of proper recording, reporting or even capacity to fulfil the planned expenditure, as detailed earlier in this report. Some of the explanations and / or assumptions for unused cash indicated the unavailability of the required items or the inadequacy of the funds to afford the minimum, indivisible quantity, or the risk aversion against running out of cash. But the starting point is the proper link between the budget planning, both for short run and longer term, and the strategic objectives. Besides focusing on resources flows, PETS gives considerable attention to expenditure efficiencies and bottlenecks in the system. To address these issues PETS needs a reference point based on which PETS team can assess the efficiency and effectiveness of expenditure decisions at all educational levels. This reference point is often the strategy and its approved objectives, programmes, priorities and projects. The relationship between the strategy and programmes, on the one hand, and budget preparation and execution on the other, provide valuable and essential reference points to PETS. As far as efficient allocation of resources and effective implementation of the budget in the Pre-University sector are concerned, there is yet a considerable room for reforms and improvement.
- The current direction of the policy is towards decentralisation to delegate more management responsibilities to the service providers at the end of the line, i.e. the schools. However, this may only add to the present fragmentation of the budget preparation and execution system, if the overall Public Finance Management does not receive the necessary attention for crucial reforms, including proper system of consolidating the budget of the Per-University Education sector for the clear context of decentralisation process to take effect. These include some of the most important ongoing efforts in the field of introducing MTEF. According to the study analysis and the field work, it emerges that although the various education entities and levels in Egypt operate within the same laws and regulations, each Education Department and Directorate has its own system in implementing and sometimes interpreting these laws and regulations. For example, the study shows through the previous sections some significant differences amongst Education Departments regarding distributing cash advances and amongst the schools regarding requesting these advances and methods to settle them. At the same time, the study demonstrates differences amongst Education Directorates regarding the interpretation of Government Accounting laws and regulations specially for transferring funds between line items within the same Budget Chapter. Effective and useful decentralisation should start by formalising and consolidating the system before devolving and/or delegating resource management. Naturally, some financial and institutional arrangements may differ amongst Districts and Governorates. However, these

differences need to be formalised. The un-formalised differences amongst Education Departments and Directorates affect the efforts in assessing the effectiveness of resources flows and spotting the bottlenecks;

- Need for improved base line data. The PETS succeeded in highlighting some of the main issues given the existing constraints of the data coverage and quality. This includes the need to fully assess and improve the EMIS as mentioned before and to set up a monitoring system with emphasis on in-kind transfers that covers all education entities as the origins of such transfers, and not only the receiving point of the in-kind items. The present study has highlighted some noticeable inconsistencies between the reported in-kind materials received at the school level and the same materials reported as delivered by higher levels (Idara and Mudiriah). Most of these inconsistencies are likely to be due to lacking the information system along the process of registering the in-kind materials which would make it possible the flows of these materials among different institutional levels. As a result, it is difficult to identify and measure the gaps;
- Inadequate institutional and human resources capacity to fulfil the recording, monitoring and reporting tasks throughout the process and along all the layers. PETS exercise can only be useful if its findings can be utilised to improve cost-efficiency, expenditure effectiveness, equity and quality, as discussed in earlier chapters. A pre-requisite for all this is a proper monitoring and information system above all. The proposed monitoring system should link the tasks and activities conducted at Education Departments and Directorates with specific performance indicators set by the MoE. This monitoring system would ideally deal with the crucial problems such as identifying and reporting teacher's shortages and surpluses and the process of deployment and recruiting contracted teachers. An effective monitoring system should be able to provide accurate and updated information on the physical status of schools and education entities and to help in identifying areas for priority actions and interventions. This is not to say there should be a new agency, but rather, to improve the capacity within the existing structure to provide the strongly needed functions. The emphasis, therefore, is not on the need for a new body, but the strengthening of quality and flow and processing of crucial information through the provision of training at both the MoE and the decentralised Government levels. This would be more crucial in the light of the on-going decentralisation reforms.
- Unclearly defined responsibilities and channels for systematic financial reporting, without an overall body to monitor coherence and consistency of allocations and expenditures, as well as their correspondence to the strategic priorities. The fact that each Mudiriah and Idara has an accounting unit affiliated to the Ministry of Finance does not help in improving the financial management systems at these levels. The accounting units mainly focus on reporting to the MoF on budget execution from quantity and accounting perspectives rather than addressing the issues of expenditure efficiency and effectiveness. The interviews conducted by the PETS team at the Idara and Mudiriah levels indicated that most of these entities prefer to leave most of the financial decisions to the accounting units due to seemingly cumbersome procedures of negotiations with the MoE. At the same time, the study shows that most of the effort of the Financial Affairs Departments and Accounting Units is allocated to filling the MoF forms and templates which are initially designed to serve controlling and reporting purposes rather than expenditure efficiency and effectiveness purposes.

- Ambiguities resulting from combining the cash and in-kind transfers due to the unavailability of relevant unit prices for the physical items and therefore lack of precise information about the real value of subsidies. At the same time, there are no clear lines between the items that schools can or cannot use their cash to purchase, and hence does not render itself easily to PETS tracking tools. In many cases, schools purchase the same educational materials to complement the amounts received from the higher educational levels (Idara and/or Mudiriah). The current system of registering and book-keeping does not make clear distinction between the two sources. This further complicates PETS tracking;
- Similarly, the dominant share of the private financial contribution, in the form of school fees, (providing more than 70% of the cash resources at the school level, as indicated by PETS) and various private in-kind contributions makes it difficult to trace the flow of transfers. The retained share of the fees (itself not very clearly recorded across the sampled entities regarding how much is sent back by the schools and how much is received and at which higher levels) remains outside the public expenditure, at least at the school level (although the non-retained portion supposedly becomes part of the public revenue). Hence it is not subject to PETS exercise. Schools keep books regarding revenues from students' fees and how they spend them. The book-keeping process is rather poor in general, including at the school level, although they keep a record of in-kind and cash receipts, they do not indicate the source of these transfers, and they always tend to show balanced accounts for cash transfers. As a result, there is no reflection of the flow from level to level. This limits the role of PETS in examining this type of financial transactions. However, the proportion which, according to the regulations must be sent back to the higher levels (i.e. the MoE, Education Departments and Directorates, GAEB, Teachers Union, and the Medical Insurance system), as counter-flow is still quite considerable (currently at around 49%, being decreased to about 28%) and mostly becomes part of the public resources and hence need to be clearly and systematically documented.
- Based on the Education Departments records, the PETS found that certain in-kind supplies were mainly coming from the public budget. They were either provided by the MoE (computers, data show screens and books) or by the Education Directorates (students' chairs and desks). By contrast, the schools surveyed declared that a significant share of the in-kind supplies were provided by GAEB (furniture) or were actually coming from the private sources (IT equipment and the books). This poses once more the problem of data compilation and processing in addition to the problems of information sharing. There is evidence from both the field visits and the PETS results that most of the information is manually processed, the use of computers is limited within some MoE Departments (Textbook Sector, Procurement Department, etc), not to mention the Education Directorates and Departments. These findings further reflect a significant inconsistency amongst these entities regarding the methods used in distributing and recording the in-kind transfers.
- In the case of textbooks, there clearly seems to be a problem with needs assessment capacity and / or methods. The ratio of textbooks per students in Cairo is by far too high compared to the rest of the sampled entities. This once again raises the problem of data compilation and information processing, which are mostly manually processed across the sampled entities. At the same time, most of these public agencies are over-staffed, with unclear responsibilities, as mentioned earlier, and verified by the WB studies too. The above-mentioned findings and lessons by PETS reinforce the necessity for centralised and harmonised information and monitoring system as well as

improved access to information at all levels, and in both directions, top-down and from the service delivery points upwards.

8. Recommendations for the Next Steps

This chapter is divided into two sections. The first section emphasizes recommendations related to the financial and institutional governance of Pre-University Education sector in Egypt. These recommendations are formulated to deal with the financial efficiency and equity concerns discovered by implementing PETS. The second section provides recommendations on improving the quality of any possible future PETS in the sector based on the difficulties and data issues that faced the PETS team while conducting the exercise.

8.1. Pre-University Education Policy Reforms

These are by definition of a more policy nature and need to be taken up in the context of the overall reform strategies in the fields of the financial management, public administration, human resources development and upgrading the institutional set ups, along the priorities expressed in the National Strategy for the sector. These mainly consist of the following areas:

- Bringing the planning, policy formulation and strategic objectives closer to the way the budget for the sector is currently prepared, decided and executed. In this regard, supporting MTEF exercise and extending it to the Education Directorate level is highly recommended. However, what is more important and crucial is to extensively work with the MoF to reflect the results of the MTEF exercises at all levels in future budget allocations. The MoE should negotiate with the MoF the budget of the whole sector based on the MTEF that should be fully integrated with national standards and closer needs assessment of the Education Directorates and Departments;
- Need for improved and extended formalisation of the sector's administrative and financial transactions. The MoE should eliminate the inconsistencies amongst Education Directorates and Departments. Such differences in interpretation and implementation of the transfers amongst the Education Directorates and Departments are mainly determined by subjective and personalised criteria rather than objective and clear standards. In this regard, the MoE should invest in preparing proper rules, regulations, and manuals that govern the work of the whole sector's administration entities. The MoE should also put clear and transparent criteria and factors to be used for taking key decisions such as distributing in-kind resources and cash advances among schools and the Budget Chapter Two's allocations amongst Education Directorates and Departments;
- Progressive move by the MoE towards decentralising the function of school maintenance. GAEB should not be responsible for major maintenance, as it is currently the case. This function should be devolved to the Education Department level. At the same time, the MoE should decrease its share of the total sector's non-wages operating budget, mainly Chapter Two, through transferring more responsibilities and allocations from the MoE budget to the budgets of Education Directorates and Departments. The fact that considerable shares of the Pre-University Education sector's allocations for Chapters 2 and 6 are still under the MoE budget suggests a considerable room for more

decentralisation measures, provided that the entire budget system can first benefit from a more coherent strategic consolidation, along the lines carried out in their MTEF efforts;

- Reducing the scale of the in-kind transfers in the Pre-University Education sector. The system should rely mostly on cash transfers. This recommendation will give schools more discretion in spending on what they really need. At the same time, this will reduce the hassle and the high transaction cost associated with bidding, procurement, and distribution. Cash transfers will also help in dealing with equity issues, since the current system is very poor in tracking the in-kind transfers, as revealed by the PETS exercise, and in identifying the gaps between schools, Idaras and Mudiriah;
- The MoE in coordination with Mudiriah should revisit the current system of estimating teachers shortages (and surpluses, where applicable) at the Idara and Mudiriah levels. The fact that the Pre-University Education system is experiencing teacher's shortages in general while the students-teacher ratio is relatively low indicates a problem in teacher's distribution. The MoE should develop a bonus system that gives real incentives to teachers for mobility, a decision that has been frequently taken at the Idara and Mudiriah levels. The new Teachers Cadre tried to deal with the issue of teacher's shortage through inciting teachers currently in administrative positions to go back to teaching with some kind of incentives and better salary. However, the mobility incentives are still not addressed by the current rewarding system. Also, the decision of contracting teachers should be transferred to Idara level rather than Mudiriah level. This will improve the quality of such decisions in better targeting the real shortages and gaps. However, transferring the decisions and responsibilities to Idaras requires first to strengthen their capacities (HR, equipment, etc). Based on the PETS findings, around half of the managers of Idaras never had any training for their position, fewer than half of the Idaras have a vehicle, and one third of them do not have a computer;
- There is pressing need for improving the sector's current monitoring and control system in a way that links the tasks and activities conducted at Idaras and Mudiriah with specific performance indicators set by the MoE. This monitoring system should deal with the crucial problems associated with the issue of identifying and reporting teacher's shortages and surpluses and then the process of recruiting contracted teachers. This proposed monitoring system should also be able to provide accurate and updated information on the physical status of schools and educational entities and to suggest areas for priority actions and interventions. Data should be in a way centralised, and the responsibility should be given to the General Administration of Information and Computer (GAIC). In this regard, it is suggested to develop the current MoE's school survey questionnaire with the addition of school facilities data, these data are at the moment collected by GAEB, but their access is limited. Second, the data survey should cover IT equipment. The survey designed by PETS team should work as a proper base to develop these two proposed surveys. At the same time, capacities within the GAIC need to be strengthen. It is also suggested to conduct a full assessment of the current school survey developed by EMIS, from the data collection (coverage, data quality checking along the chain, data entry and processing) to the dissemination phase. There is a need to improve the Statistical Yearbook that is mainly a compilation of tables without any information on the way data are collected, the definition of the variables, and their potential limitations, making its use difficult for the end users. The quality of the data collected at the school, Mudiriah and Idara levels clearly highlighted serious gaps in information and data collection and management systems at all levels. Except for the distribution of students and the number of schools data and information, all other data related to access and education quality should be subject to considerable reforms;

- Enhance the role of Financial Affairs Departments at the Mudiriah and Idara levels by the MoE. The starting point should be the clear identification of the exact role of the MoF's Accounting Units working at these two levels. These departments should be trained on monitoring the budget execution and the efficiency and effectiveness of assigned expenditure. Skills like proper book-keeping and financial analysis should be developed amongst the staff of these departments. Heads of Mudiriahs and Idaras should stop requesting and receiving the financial data they need from MoF's Accounting Units, and instead, must empower their Financial Affairs Departments to perform their job descriptions. The role of Financial Affairs Departments should also be expanded to cover some internal audit functions to monitor the financial transactions, budget execution, and the achievement of the sector's financial targets and objectives. Currently, the MoF-affiliated Accounting Units perform financial control task from the government accounting perspective not from the perspective of financial management of the Pre-University Education sector;
- The Information available to decision-makers at the lower level is insufficient. Communication towards Idaras and schools should be more effective. For instance, based on the survey, schools are not fully informed that they can request extra cash advances in addition to the initial cash advance requests at the beginning of school year. The decree for the cash advance should also state the conditions and procedures for receiving extra money. The same situation exists for the in-kind transfers, whereby schools are not sure of their in-kind allocations for the next school years. Transparency and formality should be enhanced. Rules and regulations should be set in the first place and to be disseminated effectively to all concerned;
- PETS study supports the MoE's direction towards increasing the share of retained students' fees at the school level. At the same time, it recommends training at the school level on preparing proper budgets and conducting valid needs assessments;
- There is extensive need for selective, intensive, interactive training sessions in data comprehension, classification, storage and analysis and reporting at all levels of entities involved. At the central level of the MoE, these needs are most pressing, resulting in stretching the available skills too thinly across a range of un-identified responsibilities and objectives. This also includes clarifying systematic channels and mechanisms for regular flow of information and early warning systems for lapses in delivery of subsidies and / or delivery of services in the sector;
- Adopting means-tested methods for cash advances and in-kind transfers, whereby the tracking of the expenditure and impact assessment can be linked to policy objectives related to equity and efficiency. These reforms should be considered as initial steps, since the MoE has further steps towards transforming the system towards cash transfers rather than in-kind transfers, as well as securing more sustainable and stable financial resources to schools budgets;
- Introducing cost-efficiency concept in allocation and execution of resources. The issue of teachers shortages and the common method of short-term responses in practice have been fully detailed in the present report. Other cases in point relate to computer-aided instruction material subsidies which should correspond to their effectiveness in improving the quality of learning. It should also be justified on the basis of availability of teachers to use these IT equipments efficiently in the interest of quality and equity. Priority between training more teachers or supplying hardly used facilities to schools, sometimes at high maintenance costs too, has to be closely considered, and ideally at micro level, as within each District and Governorates there are also considerable variations in affordability and capacity;

- The scope of decision making at each educational level would need thorough clarifications, making it possible to have the top-down and bottom-up decision-making combined in the interest of all stakeholders concerned. In this regard, a comprehensive functional map for the Pre-University Education sector should be prepared. This map should clearly identify the major decisions in the sector and the levels which are responsible for taking these decisions. This will also support the MoE efforts on the decentralisation front. PETS exercise clearly shows that clear decisions tree is not clear in the minds of decision makers specially at the local level;
- Devising ways of inviting systematic participation in decision making at the school levels, particularly by the BoT, should be considered closely. This would provide the context of accurate and transparent information concerning the resources, the expenditures, the needs, as well as some basic indicators for quality assessment;
- Introducing proper accounting system and evaluation of the in-kind transfers by way of using unit prices that reflect the relative weight of various qualities of the same items, as well as reflecting the real market price at the time; and
- Putting in place a practical agenda for regular interaction between the main stakeholders, including the IDOs who are active in the fields of Public Finance and Public Administration Reforms in Egypt.

8.2. Improving Information System for Better Future PETS

Conducting PETS for the Pre-University Education sector in Egypt was not an easy task. Lack of formality, large share of in-kind transfers, top-down and bottom-up flows of resources, poor reporting and book-keeping systems are the major obstacles to conducting this exercise. The quality of the data and information collected by PETS did not allow the team to report on all planned aspects of PETS exercise. Although the data and information collected by PETS allowed the team to study and analyse the core and vital issues related to financial efficiency, budget planning and execution as well as educational equity, these data and information were too inconsistent and unqualified to draw accurate and numeric findings and conclusions about the financial leakage of the system. Chapter 4 and Section 8.1 above provide detailed suggestions of how these can be overcome. Further elaboration follows below. However, the PETS analysis provided by this report clearly indicates and addresses all the potential spots of this leakage.

In general, lack of efficient and reliable information system at the local and central levels is considered as a crucial issue that threatens MoE's agenda of reforms. The following steps are necessary to improve the quality of the data collection and management in the sector:

- Checking the accuracy of the data collected, and the data entered to the information system at the central and local levels; This is part the previous recommendation for a full assessment of the School Survey / EMIS
- Deepening the scope of the data collected by supplementary, qualitative information, rather than just focusing on quantitative indicators and measures;
- Preparing a simple glossary for the Information Departments at all levels. This glossary should provide simple and agreed definitions of the indicators and measures used in the system. The

glossary should also be supported by a manual of forms and templates to be used in collecting the data;

- Verifications groups should be set at the MoE to check the accuracy and reliability of data collected at all levels; and
- The MoE should invest in developing the data processing and management software's that are currently utilised in information sector.

8.2.1. Recommendations for Future PETS Exercises:

- An introductory random visit by the team of experts and the implementing agency to some of the Governorates to familiarise with the target groups at various levels of entities, prior to the sampling could benefit the mutual understanding and grasp of the exercise, its expected scope, and the potential gaps.
- Information provision and follow up steps for ensuring the availability of the target groups and required data should be improved. The MoE held a meeting with the selected Governorates representatives to inform them of the Pilot and Main Surveys, and also sent an official letter to each of the 6 selected ones. Despite this, some schools were not actually informed of the survey especially in Fayoum (49%) and Dakahlia (40%). A special task force should be charged with full time responsibility at the MOE to follow up by phone and fax with the selected Governorates, and to request written confirmation of all the schools having been informed and confirmed their availability.
- Adequate timeframe is required: "A full survey, from the planning stage to data analysis, involves a minimum of one year, and could take up to two. Adequate time should be further allotted for findings dissemination and policy reform discussions with recipient country government"²⁵.
- During the survey implementation the participation of the PETS team should be closer to the survey implementation in the field. "It is crucial that the core survey team closely supervise survey implementing teams in the field", to ensure quality control and coherence in the interpretation of questionnaires.

²⁵

"PETS-QSDS in Sub-Saharan Africa: a stocktaking study" Bernard Gauthier, 2006.