Education Sector Support Programme in Nigeria (ESSPIN)

Assignment Report

Development of an Education Simulation Model for Lagos State

Report Number: LG 201

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JG Jigawa
KD Kaduna
KN Kano
KW Kwara
LG Lagos

Contents

Acronyms and Abbreviations

AOCOED	Adeniran Ogunsanya College of Education
CWIQ	Core Welfare Indicators Questionnaire
DPRS	Department for Planning, Research and Statistics
ECCD	Early Childhood Care and Development
EPSSim	Education Policy and Strategy Simulation
ESP	Education Sector Plan
ESSPIN	Education Sector Support Programme in Nigeria
FTI	Fast Track Initiative (for Education for All)
GER	Gross Enrolment Ratio
JSS	Junior Secondary School
LASPOLY	Lagos State Polytechnic
LASU	Lagos State University
LGA	Local Government Area
LGEA	Local Government Education Authority
MOCOPED	Michael Otedola College of Primary Education
MTSS	Medium-Term Sector Strategy
SAME	State Agency for Mass Education
SMOE	State Ministry of Education
SSS	Senior Secondary School
SUBEB	State Universal Basic Education Board
UNESCO	United Nations Educational, Scientific and Cultural Organization

Abstract

1. This report describes activities and results of a mission in Lagos state conducted in November-December 2009 for the purpose of developing a simulation model for the education system in that state. Four scenarios are discussed in detail for the benefit of policy discussions and clarification.

Executive Summary

2. This assignment was undertaken by two consultants, Jawaad Vohra and Mathias Rwehera, who worked in Lagos from 30 November through 12 December, 2009. They also gathered for a two-day session in Paris on 30 and 31 December to finalize the model.

3. Data gathering for the model was incomplete even though the templates had been sent five weeks earlier. To the end, data on Lagos state University and the state agency for Mass Education was never received.

4. A perennial problem in Lagos is the lack of any data on private schools even though that sector is catering for 50 to 90 percent of pupils according to the sub-levels. Making use of various sources including the 2006 CWIQ survey it has been possible to get a rough estimate of the size of the private sector in various levels. Additionally, a rain spot survey provided a basis to estimate the grade distribution and the flow rates in the private sector.

5. There is a serious issue of population figures in Lagos, an issue with tremendous consequences for the simulation process. Although the national authorities have published a total figure of 9,011,920 inhabitants issued from the 2006 general population census, Lagos authorities claim that the population of Lagos state was 18,181,402 inhabitants, more than the double of the federal source. The highly political issue is now in court and in the meantime there is no choice but to use the Lagos figure. The consequences of that choice are first a reduction of the share of the public sector compared to the private and second, a large increase in financial requirements of policy targets.

6. The consultants had continuous consultation meetings with the EPSSim team, a courtesy call to the Special Advisor to the Deputy-Governor in charge of basic education, a meeting for target identification and a final meeting to present the outline features of EPSSim.

7. Total Education expenditures (capital and recurrent) in Lagos in the base year of 2008 amounted to approximately 8 percent of total state income and an estimated 12.9 percent of LGAs income. Keeping educational resources at that level, the financial requirements for the achievement of the policy targets would amount to about 10 times the expected budget in 2012 and 15 times in 2015!

8. Three alternative scenarios have been developed combining resource increase and reduction of public share in basic education delivery, summarized in Chart 1 below.

9. Recommendations made to the Lagos EPSSim team include a deeper familiarization with the basic technicalities of the model and an engagement with the education policy makers to open a dialogue to reach a preferred scenario for long term policy targets.

10. There is also a need for ESSPIN more generally to review conditions and formats of EPSSim use in the MTSS exercise in all of the states. As it were, no state meets the conditions for a fully fledged use of the model for reasons of motivation, capacity and institutional settings. ESSPIN needs to take stock of that and adjust its intervention accordingly.

11. Jawaad is going to prepare a draft framework note on EPSSim and MTSS, for discussion by the concerned colleagues, by end February.

Introduction

12. ESSPIN builds upon previous technical assistance projects in education, including CUBE (Capacity for Universal Basic Education). It is under the CUBE programme—ended in 2008—that the three states of Kaduna, Kano and Kwara developed an education cost and finance simulation model, one based on the UNESCO-initiated and UN-shared EPSSim model. Jigawa State also secured their version of the model through UNICEF intervention in late 2008. Only Lagos of the ESSPIN supported States did not have a version of the model. Thus, in contrast to other ESSPIN states, Lagos did not have an option to use financial simulation in developing their MTSS plan. This consultancy was designed to bridge that gap.

13. Although Lagos State did not have a model of their own, a team of five staff from the state sector MDAs took part in a four-day training workshop on EPSSim in April 2009 and they took part in the exercise with variable intensity.

Purpose of the Consultancy

14. The overall objective of the consultation was to develop a genuine education cost and finance simulation model for Lagos State. The model was to be built to help the State to address the following fundamental questions:

(i) What trade-offs can be envisaged to reach the stated goal in a manner that is fiscally realistic and that accommodates other claims on public resources?
(ii) What structural policies should be adopted to ensure that student learning continues to improve while access to various levels of education continues to rise?
(iii) What specific targets and policies should be adopted to meet the challenges of gender inequality in relation to enrolment, retention, completion and learning outcomes in all levels of education?

Structure of the report

15. Under the Methodology and Main activities section, the report briefly describes the activities conducted while in Lagos, including key meetings, data gathering and discussions over the extremely difficult issue of population numbers. Work continued after the trip including a two-day gathering of Jawaad and Mathias in Paris on 30/31 December to finalize the job.

16. The alternative scenarios are discussed under the Findings section while advice for further uses of the model is provided under the Conclusions section. A short presentation document of the model was sent to the Team together with the EPSSim file itself and is reprinted in the annex.

Methodology and main activities

The EPSSim team

17. The core EPSSim team members consists of five officials:

    - Mrs. Joko Ojosipe-Ogundimu: Director Finance & Administration (SMOE)
    - Adekunle Onifade: Director PRS (SMOE)
    - Dele Agbebi: PRS (EMIS) (SMOE)
    - Adekoya: PRS (Budget officer) (SUBEB)
    - Hakeem Oluwo: EMIS (SUBEB)

    These officials attended the four-day training workshop that was organized in April 2009 in Kaduna as an introduction to EPSSim.

18. Given the imminent retirement of the Director PRS and also expressed interest by some districts, several people were added to the team and fully participated in the consultations:

    - Shobowale: DPRS (SUBEB)
    - Go Shodimu: Deputy Director PRS (SMOE)
    - Ogunmuyiwa: District 6
    - Bolaji Ajayi: District 4
    - Abolaji: District 3

Data gathering

19. Two consultants were assigned this job, namely Jawaad Vohra and Mathias Rwehera. They started collaborative work on this well in advance to agree on procedures, especially as far as data was concerned. Indeed, as effective a planning tool as it is, EPSSim is also highly demanding in terms of data. To prepare for the smooth conduct of the activity, early templates were sent to Lagos for the team to populate – middle of October, 2009.

20. With variable degrees of precision we received most of the data pertaining to the public sector for the school year 2008/09, especially from SUBEB. The major exceptions were Lagos State University. The establishment was closed at the time of the visit for reasons of a big strike in which the highest authorities were intervening. We never got any data on the institution, not even the total enrolment. We derived an estimate from various sources including the Web and federal sources, for total enrolment and distribution by fields, but it is urgent that the data be verified before confirmation of the scenarios.

21. The other area of SMOE's activities for which no data was provided, is the SAME (state agency for mass education). We certainly have reduced their activities a lot, retaining only mass literacy and even so, just guessing their enrolments. Again verification is indispensable and possible adjustments.

Data on the private sector

22. Particularly challenging was to get data on the private sector. In Lagos, the private sector plays a unique role unseen in any other part of the country and even the continent. More than three-quarters of children attend private schools! Only very few parents who can't afford it send their children to public schools in the early sub-levels. There are a lot of factors for this situation including a perceived inefficiency of public schools and a pronounced recourse to religion.

23. The state EMIS contains some data on private schools; however this data is largely incomplete and inconsistent. For the purpose of the EPSSim model, this information is vital in order to assess the overall access to education. As a direct consequence, we developed the following methodology:

    - Basing ourselves on the CWIQ (2006) estimate of GER in primary and secondary education in the state and on the official population structures, we derived the expected number of pupils in each level and, by deducting the enrolment in the public sector we estimated the enrolment in the private sector.
    - That methodology could not however help us in estimating the distribution of enrolment by grades or the flow rates. We then resorted to the expedient of a "rain spot" survey of some private schools and used the findings as the rule. Although we sought to target schools in the average range of quality, this method is not robust. However, for the purpose of the simulation model, which is an estimate of the cost of public education, this method is satisfactory, as the state government only pays for the public sector[1].

Financial and Cost Data

24. The acquisition of some financial data proved too elusive. As a result, estimates were produced for: Basic education teacher salaries; higher education personnel and capital unit costs. For other data, no estimates were produced, but when available will be included in the EPPSim model: IGR for higher education institutions and LGA expenditure of education. Furthermore, Lagos' current line input-based budgeting system resulted in certain MDAs' capital and recurrent expenditure being appropriated to subsectors based on functional mandates.

[1] There is a new development that points to accessing better reliable private school data: the state in collaboration with a private company is developing LASGEMS (Lagos State Government Education Management System). This system tracks all pupils (in public and private schools) through the education system by giving each pupil a unique ID number/card. The sustainability and in-turn success of the system is based on gazetting (into law) that all pupils are legally required to have an ID card. This will tackle the rogue, unregistered private schools, as pupils enrolled in such institutions will not receive an ID card and thus cannot sit national exams, Junior WAEC and WAEC. Pupils enrolled in public and registered private schools will receive ID cards.

The population size issue

25. The 2006 population general census says that the population of Lagos state was: 9,011,920 inhabitants. However, the state officials totally disagree with that figure and have taken the issue to court against the Federal Government. They conducted their own investigation and concluded that the population figure is: 18,181,402, i.e. more than double the official number.

26. From all official sources the 18 million population figure is mandatory, whatever the evidence for it. But one thing is clear: basing the simulations on 18 million people rather than 9 million results in a big increase in costs for the government to reach the MDGs as well as further retrenchment of the public sector compared to the private sector. But given that EPSSim is a tool meant for the State, it must reflect the State's perceived situation and therefore is entirely based on the 18 million population.

Key meetings

27. Initially planned to last from 23 November to 12 December, the consultancy was affected by two events that substantially reduced the amount of contact time: the Output 2 technical workshop that was held in Abuja from 23 to 25 November and the Sallah public holiday that shut all activities from 26 to 30 November.

28. Most of the time daily consultations were held with the EPSSim team to gather data and to clarify structures and situations. In addition, three key meetings were held, namely one with the Special Advisor to the Deputy-Governor, one with Directors PRS and Finance and Administration in the SMOE and a final one to present the outline of the model at the end of the mission.

29. The Special Advisor heard a short presentation on EPSSim and a request for guidance in terms of policy targets and population figure. As expected, she reiterated the need to use the Lagos figure of 18 million – evidenced by the WB SESP PAD having a footnote disputing the official 9million population. On the model, she informed us of a recent school census and expressed her worries for missing information: reportedly 4 million children are out of school while at the same time official gross enrolment ratios are close to 100 percent! She therefore feels that the situation is not being well captured. Regarding policy targets she directed two senior officials to meet with the consultant in order to discuss them.

30. The meeting with the two senior officials took place to discuss policy targets. These targets, in the main, relate to the following:

    - Substantially increasing the share of the public sector in school intake/registration (20 percent in kindergarten and pre-primary, 25 percent in primary, 40 percent in JSS and 45 percent in SSS);
    - 100 percent qualified teachers at all levels, and a pupil-textbook ratio of 1

- General increase in quality of infrastructure
- Raise proportion of pupils going into technical colleges to 5 percent
- Maintain enrolment ratio in tertiary education.

31. The final key meeting took place at the end of the trip to present the main features of the Lagos EPSSim. The participants appreciated the way the model reflected Lagos state structures and discussed ways of better familiarizing themselves with it. It was suggested that weekly working gatherings will be organized for the team to review the details of the model and that SMOE budget will support that.

Work in Paris to finalize the model

32. It was necessary to hold additional work sessions after the trip to finalize the model. After waiting—in vain—for the missing data (LASU and SAME) to be provided, the consultants gathered in Paris for a two-day session where: (i) rough estimates were made for the missing data (ii) all necessary adjustments of the model were effected and (iii) alternative scenarios were developed.

Findings

33. This is to our knowledge the first attempt at quantifying policy targets in Lagos, as opposed to activities, mainly because of data problems. Even the recent MTSS had the same problem with none of the targets quantified (although the respective KPIs are made measurable).

34. Total Expenditure on education (capital and recurrent) in Lagos state in the base year of 2008 is estimated at N43.4bn, amounting to 8 percent of total state income and an estimated 12.9 percent of LGA income. Based on the official population figure of 18 million, the achievement of the stated targets (paragraph 30) would cost much more than available resources. If expenditure on education is kept at the same proportion, then the funding gap will be 900 percent in 2012 and 1444 percent in 2015!

35. In view of that situation three alternative scenarios have been considered. These are nested scenarios with each one extending measures over the previous. The results can be seen in Tables 1 to 4 in the annex and summarized in Chart 1. Scenario 4, which is the closest to a feasible option, is based on an increase of state and LGAs education expenditure to 20 percent of total expenditure and at the same time halving the share of the public sector in basic education delivery. Then on average the funding gap from 2009 to 2023 would be 28 percent.

Conclusions

36. The intended structured simulation model, well suited to Lagos state educational structures, has been developed. Its major strength is that it can provide precise answers to questions on policy options, showing financial as well as technical feasibility. Its weakness is uncertainty of data. If the baseline data is checked and confirmed, then the model can give maximum results.

Options and next steps

Recommendations to the Lagos state team

37. As specified in the Annex (paragraphs 13 to 14), the recommendations to the team are first to fully familiarize themselves with the basic technicalities of the model. They have already agreed to hold weekly sessions with the financial support of the SOME.

38. The second recommendation is to engage the education policy makers in a dialogue aiming at determining the long-term targets. This can take the form of a ***preferred scenario***, based on one of the four scenarios described in the Annex (paragraphs 4 to 8) and appropriately modified to reflect the second best choices of the state.

Framework note on EPSSim and MTSS

39. In the course of this work, discussions among the consultants showed that there is a need for harmonizing and rationalizing the use of EPSSim in the overall MTSS process. The ways and extent of use of the tool in the five states are widely different but in none has the full potential of the model found appropriate use. Reasons have to do with both capacity weaknesses and institutional settings.

40. Jawaad is going to draft the note for discussion by the concerned ESSPIN colleagues. This will allow management to take an informed position on where to go with this process especially and how to adequately allocate resources. The expected date for the draft is by end of February 2010.

Annex 1: Lagos state EPSSim Model presentation document

The model

1. The Lagos state EPSSim simulation model is attached in the form of four files (0_EPSSIM_Lag_ESP-scenario1.xls to 0_EPSSIM_Lag_ESP-scenario4.xls). This short presentation document is intended for the EPSSIM team, both the original members who took part in the Kaduna workshop and the newer members from 3 districts, who were added later. They should be the interlocutors with the SOME policy makers to quickly identify systemic consequences of various policy measures including financial feasibility.

2. The model is in the form of an Excel file with many worksheets representing all educational sub-levels present in Lagos state: ECCE including a section on Kindergarten, Primary and Nomadic, Junior Secondary, Senior Secondary including a section on Technical colleges, Higher education including a section for LASU and another for LASPOLY, Teacher education combining MOCOPED and ACOED and Non formal education with adult literacy.

3. The model has also a worksheet on Costs where all information and cost projection is done for each of the sub-levels including public and private financing and the resulting funding gap.

The scenarios

4. Each of the four files represents a different scenario. Scenario 1 is based on perceived priorities of the EPSSim team as discussed in the meeting between the team and the consultants on December 10, 2009 in the ESSPIN office. The thrust of the targets was for the public sector to regain ground out of the private sector in the delivery of basic education. State and LGAs revenues are assumed to grow, on average, by 4 percent annually; and an inflation rate of 4 and 7 percent is applied to salaries and non-salary items respectively[2].

5. The scenario results in enormous funding gaps of 900 percent of budget in 2012/13 culminating at 1444 percent in 2015/16 before decreasing to 800 percent in 2023/24. The average gap for the whole period would be a staggering 1085 percent. This huge cost is partly to be explained by the decision to base all simulations on a Lagos state population of 18 million as opposed to 9 million shown by the 2006 general census (see paragraph 9 below).

6. The consultants then identified three alternative scenarios in order to come up with fiscally feasible options. Scenario 2 is based on the same priorities but with significantly increased

[2] The official IMF estimate of inflation is higher at 11.7 percent annually ; the model uses a reduced value to reflect the fact that salary increases don't exactly follow inflation.

resources by the state. Specifically it assumes that the education budget from both the state and local governments will reach 20 percent from the present 8 and 12.9 percent respectively. Even that, however, won't remove the funding gap, although it would be significantly reduced: 581 percent in 2012/13 culminating at 749 percent in 2015/16 and reaching 315 percent in 2023/24. On average for the whole period, the gap would be halved compared to scenario 1, at 563 percent.

7. A third scenario is to then renounce the increase in public sector delivery of basic education, maintaining it at the same level as in the base year. The resulting funding gap is very substantial, with 119 percent in 2012/13, 159 percent in 2015/16, reaching 44 percent in 2023/24. Although reduced, it is still not fiscally feasible with an overall average gap of 107 percent, a fifth of that in scenario 2.

8. Finally a fourth scenario was considered, reducing even more the public sector: the intake and registration rates up to Junior secondary are halved with the public sector. State intervention would be protected in Senior secondary education. The resulting gap would be 42 percent in 2012/13 and would result in a surplus of -27 percent in 2015/16 and of -15 percent in2023/24. On average the gap would be 28 percent, a quarter of the gap in scenario 3. Although such a gap is significant, it might be offset by such resources as internally generated revenues in higher education that have not been taken into account in the model (for lack of data).

9. Because the population figure is such an issue in Lagos state it is worth stating that the shift from a 9 million population to an 18 million one has very significant consequences in terms of cost. If you run scenario 4 (halving public sector share in basic education) with the former figure you find on average, not a funding gap but surplus resources of 14 percent compared to a funding gap of 28 percent with the latter figure. Scenario 3 (freezing public sector share) would attract a gap of 26 percent instead of 107 percent.

10. Tables 1 to 4 below provide summary educational and financial indicators for each of the four scenarios. These should be the basis for policy discussions. Chart 1 compares in graphic form the funding gaps of all four scenarios for each year. Further details of each scenario can be seen by opening the appropriate file.

The data issue

11. As the team is fully aware, the consultants were not able to receive a complete set of baseline data, although the request had been sent five weeks earlier. In particular, no data whatsoever was ever received for LASU, the largest higher institution in the state. The establishment was closed at time of the exercise. Also no information was received from the SAME. Data gathered from the other higher education institutions was partial, with no information on infrastructure or teachers.

12. The consultants were obliged to estimate the missing data in order to complete the model. The proper use of the model requires that this data be cleaned and checked before running the scenarios. A special colour has been added to all cells where data was missing to make this work easier.

Next steps

13. As was discussed during the final presentation of the model outline on December 11th, the EPSSim Team would do well to immerse themselves with the model in order to get a full understanding of it. The proposal of weekly gatherings of the team with the sponsorship of the SOME to study the model and have organised discussions is excellent. As agreed in the meeting, the members are encouraged to contact Jawaad or Mathias, who will be more than happy to provide any technical clarifications on the model.

14. Then the Team will need to have an institutionalised dialogue with the policy makers in order to engage them on the long term policy objectives using EPSSim as their tool. The objective is to come up with a ***preferred scenario*** based on one of the above scenarios and modified as appropriate to reflect priority choices of the state ministry. If a need emerges for support of such a dialogue process, no doubt ESSPIN would provide it, but the demand has to come from the Ministry.

Table 1: Simulated Lagos State long-term educational development - Scenario 1

	Perceived priorities by Lagos EPSSIM team					
	Targets were discussed in a meeting of the team on December 10, 2009					
	2008	2012	2015	2018	2020	2023
	2009	2013	2016	2019	2021	2024
Pre-Primary education (4-5)						
Gross enrolment ratio	93.8%	96.4%	98.2%	100.0%	100.0%	100.0%
Children enrolment	1 113 848	1 270 889	1 402 457	1 547 122	1 631 795	1 767 571
Share of public sector	3.3%	0	0	0	0	0
No of teaching posts (pu)	2 296	10 282	14 615	18 803	19 832	21 482
Pupil-classroom ratio	23.2	16	17	16	16	16
Primary education						
Gross intake rate	85.4%	89.4%	93.8%	100.0%	100.0%	100.0%
Gross enrolment ratio	110.2%	92.5%	94.3%	98.8%	101.3%	103.6%
Share of public sector	11.7%	15.1%	18.5%	22.7%	24.8%	26.6%
No of books per pupil (pu)	5.00	5.00	5.00	5.00	5.00	5.00
Students/teacher ratio (pu)	30.3	32.1	33.5	35.0	35.0	35.0
Student enrolments	3 475 244	3 240 662	3 577 091	4 061 237	4 391 902	4 862 789
No of teaching posts (pu)	12 331	13 908	18 043	24 009	28 372	33 628
Pupil-classroom ratio (pu)	29.8	32	34	35	35	35
% double-shift classrooms (pu)	24.1%	14.5%	7.2%	0.0%	0.0%	0.0%
Junior secondary education						
Registration rate	59.4%	75.6%	87.8%	100.0%	100.0%	100.0%
No of books per pupil (pu)	5.00	5.00	5.00	5.00	5.00	5.00
Students/teacher ratio (pu)	37.9	36	35	34	34	34
Gross enrolment ratio	97.5%	85.8%	80.2%	92.5%	99.4%	103.5%
Share of public sector	24.8%	37.8%	41.0%	42.5%	43.3%	43.6%
Student enrolments	1 350 009	1 319 306	1 335 774	1 668 598	1 891 559	2 132 726
No of teaching posts (pu)	8 829	13 685	15 474	20 615	23 828	27 048
Pupil-classroom ratio (pu)	89.1	74	64	55	55	55
No of Labs (pu)	0	1 413	1 025	1 074	1 242	1 410
% double-shift classrooms (pu)	0.0%	4.0%	7.0%	10.0%	10.0%	10.0%
Senior secondary education						
Registration rate	66.3%	79.8%	89.9%	100.0%	100.0%	100.0%
Gross enrolment ratio	101.4%	59.7%	61.2%	63.1%	70.1%	80.0%
Share of public sector	18.7%	48.4%	55.9%	61.4%	62.5%	62.4%
Students/teacher ratio (pu)	28.7	32	35	38	38	38
Student enrolments	261 993	442 301	565 939	694 884	829 770	1 022 972
No of teaching posts (pu)	9 123	13 649	16 020	18 163	21 581	26 582
Pupil-classroom ratio (pu)	67.1	62	58	55	55	55
No of Labs (pu)	517	545	556	580	690	849
% double-shift classrooms (pu)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Higher education						
Students/teacher ratio	15	26	34	40	40	40
Gross enrolment ratio	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%
Student enrolments	36 642	40 857	44 346	48 144	50 779	55 004
No of teaching posts	2 466	1 596	1 318	1 204	1 269	1 375
No of classrooms	1 102	1 096	1 142	1 204	1 269	1 375

	Perceived priorities by Lagos EPSSIM team					
	Targets were discussed in a meeting of the team on December 10, 2009					
	2008	2012	2015	2018	2020	2023
	2009	2013	2016	2019	2021	2024
No of Labs	220	219	228	240	254	275
Mass literacy						
Number of adult literacy learners	44 569	105 290	133 027	168 823	198 365	253 513
Proportion of women	57%	61%	64%	67%	69%	72%
Expenditures						
Recurrent costs (SMOE)	**33 024 842**	76 350 810	99 977 035	139 850 839	171 920 709	223 982 650
ECCE	1 732 272	15 933 615	21 588 458	29 649 214	33 828 611	41 228 510
Primary & nomadic education	11 564 295	14 324 463	20 803 985	31 096 285	39 805 198	53 229 442
Junior secondary education	8 174 285	13 666 717	17 518 804	26 796 373	33 598 949	43 102 718
Senior secondary education	8 027 029	13 806 221	18 931 291	25 190 579	32 464 033	45 182 343
Technical colleges	223 009	1 036 634	2 141 006	3 682 237	5 031 610	7 063 701
Higher education	1 919 683	13 830 626	13 951 588	15 206 475	17 347 469	21 137 201
Non formal education	71 869	1 649 276	2 743 617	5 718 278	7 180 495	10 127 336
Cross-cutting	1 312 399	2 103 257	2 298 286	2 511 399	2 664 343	2 911 399
Educ. as % of state expenditure						
Basic ed. as % of total educ. expenditure	65%	58%	60%	63%	62%	61%
Primary as % of total educ. expenditure	35%	19%	21%	22%	23%	24%
% of non staff cost in Basic education	13.3%	7.5%	7.8%	8.2%	8.5%	9.0%
Capital costs (SMOE)	**626 257 529**	433 290 248	786 425 079	558 686 227	535 206 247	488 740 217
ECCE	539 854 253	243 133 960	308 859 163	131 619 503	138 822 906	146 420 545
Primary & nomadic education	50 574 775	181 004 263	462 906 741	409 250 427	378 816 563	325 797 040
Junior secondary education	23 132 904	4 699 425	6 702 807	8 890 510	7 202 049	7 257 364
Senior secondary education	1 948 217	2 468 370	5 147 150	5 871 796	7 178 201	6 167 220
Technical colleges	264 149	687 792	1 415 050	1 475 565	1 517 841	1 312 727
Higher education	10 155 131	770 624	819 597	950 576	1 002 600	1 057 472
Non formal education	0	0	0	0	0	0
Cross-cutting	328 100	525 814	574 571	627 850	666 086	727 850
Available domestic resources	43 434 000	50 815 772	57 164 322	64 306 012	69 553 383	78 238 096
Simulation Costs	659 282 372[3]	509 641 058	886 402 114	698 537 066	707 126 956	712 722 867
GAP Budget/Simulation costs	#N/A	899.5%	1444.4%	978.2%	907.3%	800.3%

[3] This cost is theoretical, based on assumed unit costs and estimated quantities. In reality there is no funding gap, reflecting that on the one hand resources were underestimated with for example direct expenditure by LGAs, and on the other hand, costs are overestimated in terms of both unit costs and quantities. An example is that a 2 percent amortization rate is assumed for all infrastructures as well as a 3 percent maintenance rate per year, which may not have been done.

Table 2: Simulated Lagos State long-term education development - Scenario 2

Significantly increased budget allocation to education

Education expenditure as a proportion of state revenue increases from 8 in 2008 to 20% by 2018

Education expenditure as a proportion of LGAs revenue increases from 12.9 in 2008 to 20% in 2018

	2008	2012	2015	2018	2020	2023
	2009	2013	2016	2019	2021	2024
Pre-Primary education (4-5)						
Gross enrolment ratio	93.8%	96.4%	98.2%	100.0%	100.0%	100.0%
Children enrolment	1 113 848	1 270 889	1 402 457	1 547 122	1 631 795	1 767 571
Share of public sector	3.3%	0	0	0	0	0
No of teaching posts (pu)	2 296	10 282	14 615	18 803	19 832	21 482
Pupil-classroom ratio	23.2	16	17	16	16	16
Primary education						
Gross intake rate	85.4%	89.4%	93.8%	100.0%	100.0%	100.0%
Gross enrolment ratio	110.2%	92.5%	94.3%	98.8%	101.3%	103.6%
Share of public sector	11.7%	15.1%	18.5%	22.7%	24.8%	26.6%
No of books per pupil (pu)	5.00	5.00	5.00	5.00	5.00	5.00
Students/teacher ratio (pu)	30.3	32.1	33.5	35.0	35.0	35.0
Student enrolments	3 475 244	3 240 662	3 577 091	4 061 237	4 391 902	4 862 789
No of teaching posts (pu)	12 331	13 908	18 043	24 009	28 372	33 628
Pupil-classroom ratio (pu)	29.8	32	34	35	35	35
% double-shift classrooms (pu)	24.1%	14.5%	7.2%	0.0%	0.0%	0.0%
Junior secondary education						
Registration rate	59.4%	75.6%	87.8%	100.0%	100.0%	100.0%
No of books per pupil (pu)	5.00	5.00	5.00	5.00	5.00	5.00
Students/teacher ratio (pu)	37.9	36	35	34	34	34
Gross enrolment ratio	97.5%	85.8%	80.2%	92.5%	99.4%	103.5%
Share of public sector	24.8%	37.8%	41.0%	42.5%	43.3%	43.6%
Student enrolments	1 350 009	1 319 306	1 335 774	1 668 598	1 891 559	2 132 726
No of teaching posts (pu)	8 829	13 685	15 474	20 615	23 828	27 048
Pupil-classroom ratio (pu)	89.1	74	64	55	55	55
No of Labs (pu)	0	1 413	1 025	1 074	1 242	1 410
% double-shift classrooms (pu)	0.0%	4.0%	7.0%	10.0%	10.0%	10.0%
Senior secondary education						
Registration rate	66.3%	79.8%	89.9%	100.0%	100.0%	100.0%
Gross enrolment ratio	101.4%	59.7%	61.2%	63.1%	70.1%	80.0%
Share of public sector	18.7%	48.4%	55.9%	61.4%	62.5%	62.4%
Students/teacher ratio (pu)	28.7	32	35	38	38	38
Student enrolments	261 993	442 301	565 939	694 884	829 770	1 022 972
No of teaching posts (pu)	9 123	13 649	16 020	18 163	21 581	26 582
Pupil-classroom ratio (pu)	67.1	62	58	55	55	55
No of Labs (pu)	517	545	556	580	690	849
% double-shift classrooms (pu)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Higher education						
Students/teacher ratio	15	26	34	40	40	40
Gross enrolment ratio	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%

Significantly increased budget allocation to education

Education expenditure as a proportion of state revenue increases from 8 in 2008 to 20% by 2018

Education expenditure as a proportion of LGAs revenue increases from 12.9 in 2008 to 20% in 2018

	2008	2012	2015	2018	2020	2023
	2009	2013	2016	2019	2021	2024
Student enrolments	36 642	40 857	44 346	48 144	50 779	55 004
No of teaching posts	2 466	1 596	1 318	1 204	1 269	1 375
No of classrooms	1 102	1 096	1 142	1 204	1 269	1 375
No of Labs	220	219	228	240	254	275
Mass literacy						
Number of adult literacy learners	44 569	105 290	133 027	168 823	198 365	253 513
Proportion of women	57%	61%	64%	67%	69%	72%
Expenditures						
Recurrent costs (SMOE)	**33 024 842**	76 350 810	99 977 035	139 850 839	171 920 709	223 982 650
ECCE	1 732 272	15 933 615	21 588 458	29 649 214	33 828 611	41 228 510
Primary & nomadic education	11 564 295	14 324 463	20 803 985	31 096 285	39 805 198	53 229 442
Junior secondary education	8 174 285	13 666 717	17 518 804	26 796 373	33 598 949	43 102 718
Senior secondary education	8 027 029	13 806 221	18 931 291	25 190 579	32 464 033	45 182 343
Technical colleges	223 009	1 036 634	2 141 006	3 682 237	5 031 610	7 063 701
Higher education	1 919 683	13 830 626	13 951 588	15 206 475	17 347 469	21 137 201
Non formal education	71 869	1 649 276	2 743 617	5 718 278	7 180 495	10 127 336
Cross-cutting	1 312 399	2 103 257	2 298 286	2 511 399	2 664 343	2 911 399
Educ. as % of state expenditure						
Basic ed. as % of total educ. expenditure	65%	58%	60%	63%	62%	61%
Primary as % of total educ. expenditure	35%	19%	21%	22%	23%	24%
% of non staff cost in Basic education	13.3%	7.5%	7.8%	8.2%	8.5%	9.0%
Capital costs (SMOE)	**626 257 529**	433 290 248	786 425 079	558 686 227	535 206 247	488 740 217
ECCE	539 854 253	243 133 960	308 859 163	131 619 503	138 822 906	146 420 545
Primary & nomadic education	50 574 775	181 004 263	462 906 741	409 250 427	378 816 563	325 797 040
Junior secondary education	23 132 904	4 699 425	6 702 807	8 890 510	7 202 049	7 257 364
Senior secondary education	1 948 217	2 468 370	5 147 150	5 871 796	7 178 201	6 167 220
Technical colleges	264 149	687 792	1 415 050	1 475 565	1 517 841	1 312 727
Higher education	10 155 131	770 624	819 597	950 576	1 002 600	1 057 472
Non formal education	0	0	0	0	0	0
Cross-cutting	328 100	525 814	574 571	627 850	666 086	727 850
Available domestic resources	43 434 000	74 587 258	103 958 778	139 502 296	150 885 684	169 725 874
Simulation Costs	659 282 372[3]	509 641 058	886 402 114	698 537 066	707 126 956	712 722 867
GAP Budget/Simulation costs	#N/A	581.0%	749.2%	397.0%	364.3%	315.0%

Table 3: Simulated Lagos State long-term education development - Scenario 3

Increased resources combined with concentration of public delivery to post-basic

- Intake & registration rates in basic education are kept at their base-year level in public sector with the private sector catering for the remainder;
-In higher education all student/teacher, student/section and student/classroom ratios are set at 40;
- Resource allocation remains as in scenario 2

	2008	2012	2015	2018	2020	2023
	2009	2013	2016	2019	2021	2024
Pre-Primary education (4-5)						
Gross enrolment ratio	93.8%	96.4%	98.2%	100.0%	100.0%	100.0%
Children enrolment	1 113 848	1 270 889	1 402 457	1 547 122	1 631 795	1 767 571
Share of public sector	3.3%	3.2%	3.1%	3.0%	3.0%	3.0%
No of teaching posts (pu)	2 296	3 567	3 388	3 262	3 441	3 727
Pupil-classroom ratio	23.2	15	15	14	14	14
Primary education						
Gross intake rate	85.4%	91.0%	95.3%	100.0%	102.5%	106.5%
Gross enrolment ratio	110.2%	93.1%	95.1%	99.0%	101.6%	105.6%
Share of public sector	11.7%	12.8%	11.7%	10.7%	10.1%	9.5%
No of books per pupil (pu)	5.00	5.00	5.00	5.00	5.00	5.00
Students/teacher ratio (pu)	30.3	32.1	33.5	35.0	35.0	35.0
Student enrolments	3 475 244	3 260 820	3 608 671	4 068 956	4 404 203	4 958 447
No of teaching posts (pu)	12 331	11 831	11 530	11 294	11 512	12 249
Pupil-classroom ratio (pu)	29.8	32	34	35	35	35
% double-shift classrooms (pu)	24.1%	14.5%	7.2%	0.0%	0.0%	0.0%
Junior secondary education						
Registration rate	59.4%	75.6%	87.8%	100.0%	100.0%	100.0%
No of books per pupil (pu)	5.00	5.00	5.00	5.00	5.00	5.00
Students/teacher ratio (pu)	37.9	36	35	34	34	34
Gross enrolment ratio	97.5%	85.6%	79.3%	91.8%	98.5%	102.3%
Share of public sector	24.8%	28.6%	25.0%	21.5%	20.8%	20.9%
Student enrolments	1 350 009	1 316 724	1 321 116	1 656 353	1 873 251	2 108 901
No of teaching posts (pu)	8 829	10 324	9 328	10 357	11 325	12 786
Pupil-classroom ratio (pu)	89.1	74	64	55	55	55
No of Labs (pu)	0	1 066	618	540	590	666
% double-shift classrooms (pu)	0.0%	4.0%	7.0%	10.0%	10.0%	10.0%
Senior secondary education						
Registration rate	66.3%	79.8%	89.9%	100.0%	100.0%	100.0%
Gross enrolment ratio	101.4%	60.0%	62.6%	64.6%	72.2%	82.2%
Share of public sector	18.7%	48.5%	55.8%	61.4%	62.5%	62.4%
Students/teacher ratio (pu)	28.7	32	35	38	38	38
Student enrolments	261 993	444 224	578 735	711 382	854 498	1 051 580
No of teaching posts (pu)	9 123	13 708	16 381	18 595	22 224	27 325
Pupil-classroom ratio (pu)	67.1	62	58	55	55	55
No of Labs (pu)	517	547	569	594	710	873
% double-shift classrooms (pu)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Higher education						
Students/teacher ratio	15	26	34	40	40	40

Increased resources combined with concentration of public delivery to post-basic

- Intake & registration rates in basic education are kept at their base-year level in public sector with the private sector catering for the remainder;
-In higher education all student/teacher, student/section and student/classroom ratios are set at 40;
- Resource allocation remains as in scenario 2

	2008	2012	2015	2018	2020	2023
	2009	2013	2016	2019	2021	2024
Gross enrolment ratio	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%
Student enrolments	36 642	40 857	44 346	48 144	50 779	55 004
No of teaching posts	2 466	1 596	1 318	1 204	1 269	1 375
No of classrooms	1 102	1 096	1 142	1 204	1 269	1 375
No of Labs	220	219	228	240	254	275
Mass literacy						
Number of adult literacy learners	44 569	105 290	133 027	168 823	198 365	253 513
Proportion of women	57%	61%	64%	67%	69%	72%
Expenditures						
Recurrent costs (SMOE)	**33 024 842**	60 514 843	69 401 987	86 228 457	103 793 247	134 800 528
ECCE	1 732 272	5 528 201	5 003 991	5 143 829	5 868 911	7 152 716
Primary & nomadic education	11 564 295	12 185 294	13 294 395	14 627 527	16 150 437	19 387 957
Junior secondary education	8 174 285	10 310 684	10 561 132	13 462 988	15 968 791	20 375 995
Senior secondary education	8 027 029	13 865 920	19 358 855	25 789 253	33 431 858	46 444 607
Technical colleges	223 009	1 041 584	2 190 123	3 768 708	5 180 942	7 263 317
Higher education	1 919 683	13 830 626	13 951 588	15 206 475	17 347 469	21 137 201
Non formal education	71 869	1 649 276	2 743 617	5 718 278	7 180 495	10 127 336
Cross-cutting	1 312 399	2 103 257	2 298 286	2 511 399	2 664 343	2 911 399
Educ. as % of state expenditure						
Basic ed. as % of total educ. expenditure	65%	46%	42%	39%	37%	35%
Primary as % of total educ. expenditure	35%	20%	19%	17%	16%	14%
% of non staff cost in Basic education	13.3%	8.1%	8.6%	9.1%	9.3%	9.7%
Capital costs (SMOE)	**626 257 529**	104 308 363	203 869 516	82 219 242	101 821 436	118 820 453
ECCE	539 854 253	14 831 262	21 139 417	22 834 609	24 084 325	25 402 436
Primary & nomadic education	50 574 775	82 951 298	172 247 487	46 930 186	63 762 170	80 647 023
Junior secondary education	23 132 904	1 832 717	2 379 173	3 150 462	3 218 630	3 438 543
Senior secondary education	1 948 217	2 683 715	5 263 453	6 182 988	7 502 936	6 219 662
Technical colleges	264 149	712 933	1 445 818	1 542 570	1 584 689	1 327 467
Higher education	10 155 131	770 624	819 597	950 576	1 002 600	1 057 472
Non formal education	0	0	0	0	0	0
Cross-cutting	328 100	525 814	574 571	627 850	666 086	727 850
Available domestic resources	43 434 000	74 587 258	103 958 778	139 502 296	150 885 684	169 725 874
Simulation Costs	659 282 372[3]	164 823 205	273 271 504	168 447 699	205 614 683	253 620 981
GAP Budget/Simulation costs	#N/A	118.6%	159.4%	16.9%	31.8%	44.4%

Table 4: Simulated Lagos State long-term education development - Scenario 4

Halving Public sector school delivery

Based on scenario 3, with the intake and registration rates into public basic education institutions halved by 2018 compared with their level in 2008; the private sector caters for the remainder.

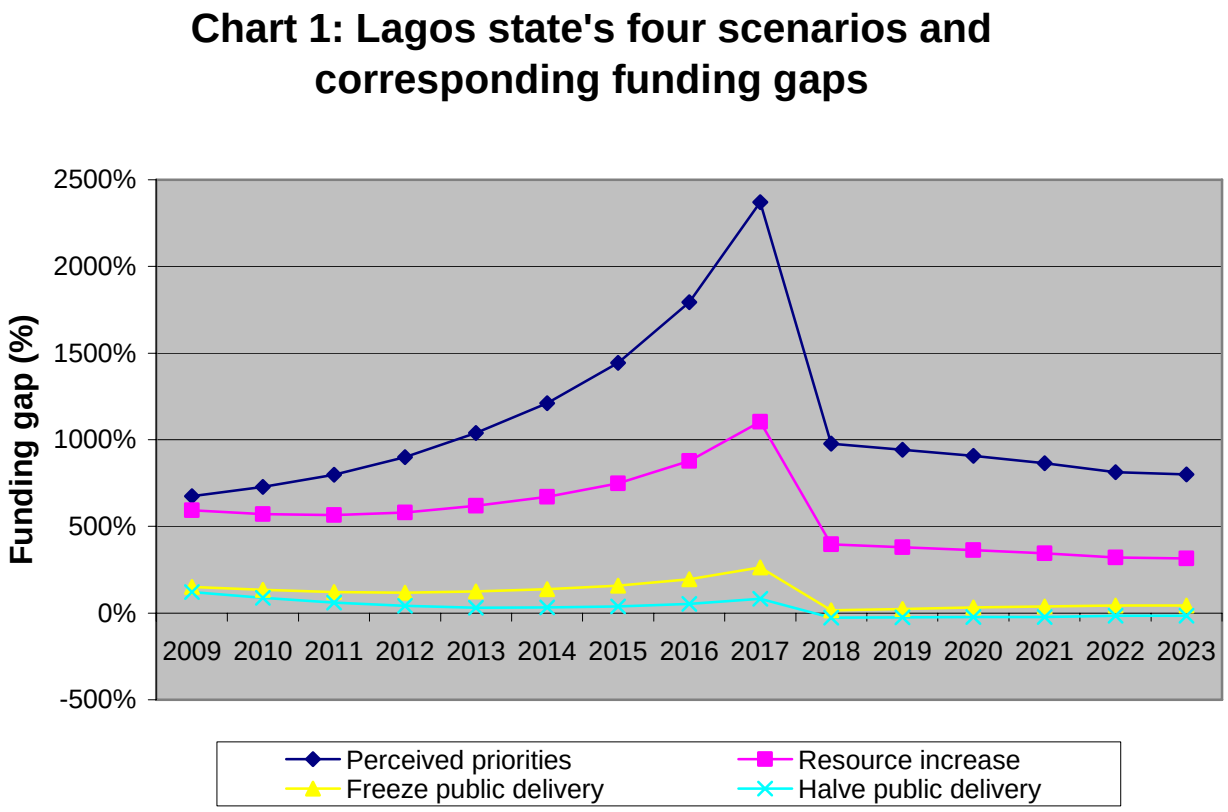
	2008	2012	2015	2018	2020	2023
	2009	2013	2016	2019	2021	2024
Pre-Primary education (4-5)						
Gross enrolment ratio	93.8%	96.4%	98.2%	100.0%	100.0%	100.0%
Children enrolment	1 113 848	1 270 889	1 402 457	1 547 122	1 631 795	1 767 571
Share of public sector	3.3%	2.6%	2.0%	1.5%	1.5%	1.5%
No of teaching posts (pu)	2 296	2 561	1 705	932	983	1 065
Pupil-classroom ratio	23.2	16	19	25	25	25
Primary education						
Gross intake rate	85.4%	90.4%	94.8%	100.0%	103.1%	108.2%
Gross enrolment ratio	110.2%	92.7%	94.3%	98.3%	101.3%	106.1%
Share of public sector	11.7%	11.6%	8.9%	6.6%	5.5%	4.8%
No of books per pupil (pu)	5.00	5.00	5.00	5.00	5.00	5.00
Students/teacher ratio (pu)	30.3	32.1	33.5	35.0	35.0	35.0
Student enrolments	3 475 244	3 246 544	3 576 114	4 037 248	4 387 815	4 979 183
No of teaching posts (pu)	12 331	10 738	8 685	6 922	6 321	6 180
Pupil-classroom ratio (pu)	29.8	32	34	35	35	35
% double-shift classrooms (pu)	24.1%	14.5%	7.2%	0.0%	0.0%	0.0%
Junior secondary education						
Registration rate	59.4%	75.6%	87.8%	100.0%	100.0%	100.0%
No of books per pupil (pu)	5.00	5.00	5.00	5.00	5.00	5.00
Students/teacher ratio (pu)	37.9	36	35	34	34	34
Gross enrolment ratio	97.5%	85.6%	78.8%	90.4%	96.6%	100.6%
Share of public sector	24.8%	24.6%	18.0%	12.2%	10.7%	10.6%
Student enrolments	1 350 009	1 315 613	1 312 550	1 631 475	1 837 774	2 073 973
No of teaching posts (pu)	8 829	8 868	6 669	5 805	5 726	6 377
Pupil-classroom ratio (pu)	89.1	74	64	55	55	55
No of Labs (pu)	0	916	442	303	298	332
% double-shift classrooms (pu)	0.0%	4.0%	7.0%	10.0%	10.0%	10.0%
Senior secondary education						
Registration rate	66.3%	79.8%	89.9%	100.0%	100.0%	100.0%
Gross enrolment ratio	101.4%	60.1%	63.2%	65.1%	72.5%	82.0%
Share of public sector	18.7%	48.5%	55.8%	61.4%	62.5%	62.4%
Students/teacher ratio (pu)	28.7	32	35	38	38	38
Student enrolments	261 993	445 048	584 272	717 154	857 686	1 048 663
No of teaching posts (pu)	9 123	13 733	16 538	18 746	22 307	27 248
Pupil-classroom ratio (pu)	67.1	62	58	55	55	55
No of Labs (pu)	517	548	574	599	713	871
% double-shift classrooms (pu)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Higher education						
Students/teacher ratio	15	26	34	40	40	40
Gross enrolment ratio	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%
Student enrolments	36 642	40 857	44 346	48 144	50 779	55 004

Halving Public sector school delivery

Based on scenario 3, with the intake and registration rates into public basic education institutions halved by 2018 compared with their level in 2008; the private sector caters for the remainder.

	2008 2009	2012 2013	2015 2016	2018 2019	2020 2021	2023 2024
No of teaching posts	2 466	1 596	1 318	1 204	1 269	1 375
No of classrooms	1 102	1 096	1 142	1 204	1 269	1 375
No of Labs	220	219	228	240	254	275
Mass literacy						
Number of adult literacy learners		105 290	133 027	168 823	198 365	253 513
Proportion of women		61%	64%	67%	69%	72%
Expenditures						
Recurrent costs (SMOE)	**33 024 842**	56 403 798	60 830 846	71 214 901	84 569 072	109 724 479
ECCE	1 732 272	3 968 362	2 517 872	1 470 313	1 677 571	2 044 534
Primary & nomadic education	11 564 295	11 060 160	10 013 879	8 964 938	8 867 785	9 782 083
Junior secondary education	8 174 285	8 856 882	7 550 343	7 545 748	8 074 018	10 162 477
Senior secondary education	8 027 029	13 891 516	19 543 816	25 998 501	33 555 793	46 314 999
Technical colleges	223 009	1 043 719	2 211 445	3 799 249	5 201 598	7 244 450
Higher education	1 919 683	13 830 626	13 951 588	15 206 475	17 347 469	21 137 201
Non formal education	71 869	1 649 276	2 743 617	5 718 278	7 180 495	10 127 336
Cross-cutting	1 312 399	2 103 257	2 298 286	2 511 399	2 664 343	2 911 399
Educ. as % of state expenditure						
Basic ed. as % of total educ. expenditure	65%	42%	33%	25%	22%	20%
Primary as % of total educ. expenditure	35%	20%	16%	13%	10%	9%
% of non staff cost in Basic education	13.3%	8.3%	8.9%	9.4%	9.7%	10.1%
Capital costs (SMOE)	**626 257 529**	50 969 128	87 379 795	36 579 658	37 664 101	43 719 011
ECCE	539 854 253	5 509 963	3 940 863	6 527 050	6 884 269	7 261 038
Primary & nomadic education	50 574 775	39 600 079	74 389 519	19 983 862	18 793 970	25 539 608
Junior secondary education	23 132 904	1 061 883	884 650	821 564	1 376 632	1 737 428
Senior secondary education	1 948 217	2 776 903	5 311 768	6 131 473	7 380 078	6 093 946
Technical colleges	264 149	723 860	1 458 827	1 537 284	1 560 466	1 301 670
Higher education	10 155 131	770 624	819 597	950 576	1 002 600	1 057 472
Non formal education	0	0	0	0	0	0
Cross-cutting	328 100	525 814	574 571	627 850	666 086	727 850
Available domestic resources	43 434 000	74 587 258	103 958 778	139 502 296	150 885 684	169 725 874
Simulation Costs	659 282 372[3]	107 372 926	148 210 641	107 794 559	122 233 173	153 443 490
GAP Budget/Simulation costs	#N/A	41.6%	39.0%	-26.6%	-23.5%	-14.6%

Chart 1: Lagos state's four scenarios and corresponding funding gaps



Annex 2: Terms of reference of the consultancy

Education Sector support Programme in Nigeria (ESSPIN)

Terms of reference

Development of an Education Cost and Finance Simulation Model for Lagos State

Background

The Education Sector Support Programme in Nigeria (ESSPIN) is a six year DFID programme of education development assistance and is a part of a suite of programmes aimed at improvements in governance and the delivery of basic services. The aim of ESSPIN is to have a sustainable impact upon the way in which government in Nigeria delivers education services. The program is directed at enabling institutions to bring about systemic change in the education system, leveraging Nigerian resources in support of State and Federal Education Sector Plans and building capacity for sustainability. It is currently operating in five States (Jigawa, Kaduna, Kano, Kwara and Lagos) and at the Federal level.

The five States in which ESSPIN is currently active have established a significant planning base for the improvement of education delivery with the completion of education sector plans (ESP) during the early part of 2008. The ESPs built on State Education Public Expenditure Reviews (SEPERs) which were completed during 2007. To strengthen resource planning in the sector, ESSPIN supported the five States during 2009 to develop three-year medium term sector strategies (MTSS). This is a key part of a broader promotion of strategic and financial planning to improve the efficiency and effectiveness of resource use and assist in achieving greater transparency and accountability. This approach lies at the heart of the ESSPIN support programme to States over the coming years.

ESSPIN builds upon previous technical assistance projects in education, including CUBE (Capacity for Universal Basic Education). It is under the CUBE programme—ended in 2008—that the three states of Kaduna, Kano and Kwara developed an education cost and finance simulation model, one based on the UNESCO-initiated and UN-shared EPSSim model. Jigawa State also managed to secure their version of the model through UNICEF intervention in late 2008. Only Lagos State doesn't have a version of the model. Thus, in contrast to other ESSPIN states, Lagos didn't have an option to use financial simulation in recently developing their MTSS plan. This consultancy is designed to bridge that gap.

Although Lagos State doesn't have a model of their own, a team of five staff from the state sector MDAs took part in a four-day training workshop on EPSSim in April 2009 and so there is some relevant capacity that can be tapped in developing a simulation model for Lagos State.

Objectives

The overall objective of the consultation is to develop a genuine education cost and finance simulation model for Lagos State. The model will be built and used to help the State to address the following fundamental questions:

(i) What trade-offs are envisaged to reach the stated goal (i.e. UBE) in a manner that is fiscally realistic and that accommodates other claims on public resources, including claims by other sub-sectors of the education system?

(ii) What structural policies are being adopted to ensure that student learning continues to improve in a context of rapid expansion?

(iii) What specific policies are being adopted to meet the challenges of gender inequality in relation to enrolment, retention, completion and learning outcomes in a context of rapid expansion?

The cost and education finance simulation model will be tailored as far as possible to fit Lagos education system peculiarities, both for the resource envelope (three tier financing system) and for the expenditure blocks. The level of sophistication/disaggregation of the model will rely upon the key features of the education system per level of education as well as on the available data to feed the baseline year. Attention should also be paid to ensure that the model remains at a manageable size for practical use.

After completion of the baseline year that will establish initial conditions for the education sector, the simulation model will be used to compute alternative scenarios, modifying targets for educational outcomes and service delivery, and showing the corresponding cost and financing implications. A pedagogical approach will be followed during the simulation exercise with State officials. Typically, one would show a status quo scenario (presumably the first one) and a final scenario (the one that the government has adopted) and in between two or three alternative options to illustrated trade-offs made in arriving at the final scenario.

Expected output

An Education financing simulation model built and a set of scenarios to achieve UBE generated and debated at State level

Proposed time-schedule

The activity is planned for late November-early December 2009 for a period of three weeks.

Management/Reporting Arrangements

The consultant will report to ESSPIN Lead Specialist (Institutional Development) and to the state ESSPIN Team leadership. He/she will report administratively to the Lead Specialist (Institutional Development).

The consultancy will be based in Lagos.

Competences required

- A post graduate degree in education economics, education development or a related field
- The expert should have at least 10 years of experience of education policy, education sector analysis and/or education management at government level
- Team leadership and facilitation skills
- Ability to communicate fluently in English with first rate writing skills
- Proficient knowledge of standard data analysis software.

- Experience in education sector analysis, education finance simulation model and planning in Africa, preferably within a SWAp context, including developing sector strategic plans linked to longer term financing frameworks