Education Sector Support Programme in Nigeria (ESSPIN)

Assignment Report

ESSPIN Infrastructure Completion Report

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Acronyms and Abbreviations

DFID	(British) Department for international development
ESSPIN	Education sector support programme in Nigeria
EU	European Union
JICA	Japanese International Cooperation Agency
LEA	Local Education Authority
LGA	Local government area
MDG	Millennium Development Goal
NGO	Non-Governmental Organisation
PSA	Programme Support Activity
RUWASSA	Rural Water Supply and Sanitation Agency
SBMC	School Based Management Committee
SESP	State Education Support Project
STL	State Team Leader
STOWA	Small Town Water and Sanitation
SSO	School Support Officer
SUBEB	State Universal Basic Education Board
ТА	Technical Assistance
UBEC	Universal Basic Education Commission
UNICEF	United nations children fund
USAID	United States agency for international development
VIP	Very Important Personality
WSSSRP	Water Supply and Sanitation Sector Reform Programme

Abstract

In a survey undertaken by ESSPIN in 2010 it was estimated that 70% of the schools were in a
poor state of repair, that 75% - 80% of schools had no access to toilet facilities for teachers or
pupils and that fewer than 50% of schools had access to potable water. Between 2010 and 2016,
ESSPIN implemented an infrastructure programme in a selection of schools across six states.
This report describes the successes and challenges that have faced ESSPIN's infrastructure work
and how working in close partnership with the States, ESSPIN has contributed to significant,
measurable and sustained progress in improving infrastructure delivery used by almost a
quarter of a million children every year.

Introduction

- 2. The ESSPIN infrastructure programme input extended from early 2010 to the end of 2016. The programme was implemented in two groups of three Northern States of Kano, Jigawa and Kaduna and three States designated as Southern: Kwara, Lagos and Enugu.
- 3. In a survey undertaken by ESSPIN in 2010 at the start of the infrastructure programme it was estimated that 70% of the schools were in a poor state of repair, that 75% 80% of schools had no access to toilet facilities for teachers or pupils and that fewer than 50% of schools had access to potable water.
- 4. The situation was exacerbated by the fact that most of the buildings that had recently been constructed were of poor quality. Severe institutional weaknesses were identified within SUBEB in the project States. Apart from the Senior Staff the capacity of the support personnel was weak, budgetary and planning and procurement procedures were poor and not transparent, and the infrastructure targets were unrealistic.
- 5. There was a general need for capacity building and the establishment or restoration of good practice in the infrastructure sector. Most importantly there was a need to emphasise that sustainability and the involvement and support of the Communities is the key to successful provision of Educational Infrastructure.
- 6. The infrastructure programme was split into 2 Phases. Phase I comprised the provision of water supplies, sanitation facilities and some classrooms to schools and Phase II concentrated primarily on Maintenance and Sustainability of the infrastructure facilities.
- 7. The provision of infrastructure facilities in schools in 6 states was completed in 2014. The infrastructure provided comprised the following elements:

State	Water Supplies	Sanitation	Classrooms	
	(No. of Schools)	(No. of Schools)	(No. of Schools)	
Kano	88	87	6	
Kaduna	86	88	7	
Jigawa	87	87	9	
Kwara	87	87	5	
Lagos	30	21	-	
Enugu	10	10	5	
Totals	388	379	32	

8. Schools were supplied with water boreholes, pumps and storage first, with latrines following in the next year, in order to safeguard public health, ie not installing toilets in the absence of hand washing facilities.

- 9. Phase II of the programme commenced in August 2014 with the emphasis on Maintenance and Sustainability, plus exploring opportunities to support state governments rolling out the ESSPIN approach to their own infrastructure programmes.
- 10. Given the scale of the problem facing the provision of infrastructure facilities in Education it was clear from the outset that the mere provision of a relatively modest amount of school sanitation and water supplies to schools would not in itself provide a solution. In addition to providing the actual infrastructure facilities, what the ESSPIN programme has endeavoured to achieve is to provide a good example of how infrastructure should be implemented. Through this good example and working closely with the State SUBEBs and providing capacity building to these organisations the objective was to enable them to restore good practice to their own infrastructure delivery. This accords with ESSPIN's original goal of helping Nigeria use its own resources to improve education.
- 11. The report describes the challenges that have faced ESSPIN's infrastructure work and how working in close partnership with the States, ESSPIN has contributed to significant, measurable and sustained progress in improving infrastructure delivery used by almost a quarter of a million children every year.

2. Implementation Phase of Infrastructure Delivery 2009-2014

2.1 Challenges and the ESSPIN Approach to Infrastructure

2.1.1 Restoration of Good Practice

12. an effort was made at each step of the implementation process to ensure that due process was followed and that SUBEB were involved at every stage. The objective was that the successful implementation of the programme would provide a good example which would be followed by SUBEB in all the Project States in the future.

2.1.2 Demonstration of Good Quality and Value for Money

13. At the start of the program all the current SUBEB designs and specifications for water points, sanitation and classrooms were reviewed and adapted to ensure that the designs were of good quality and appropriate for the schools in the Project States. Considerable attention was given to ensuring that the quality of material and workmanship were to a high standard. This process of continuous improvement was pursued as the Programme progressed and all parties were satisfied that the work was executed to a standard that demonstrates good value for money and provides a favourable example for SUBEB to follow in the future.

2.1.3 Adoption of Appropriate Prototype Designs and Transparent Tender Procedures

14. Prototype designs were developed by ESSPIN for VIP latrines, water supply units for all States and model classrooms for all the States except Lagos. These designs proved to be appropriate and successful and the designs for the VIP toilet latrines have already been adopted by Jigawa, Kano and Kwara. Kaduna have also stated their intention to adopt the 'ESSPIN' designs but due to changes in SUBEB personnel towards the end of the programme they have not yet done so.

- 15. In Enugu SUBEB intend to provide their schools with the ESSPIN VIP latrines but with the added refinement of an Eastern type toilet pan.
- 16. In Lagos water closet (WC) type toilets with cisterns were constructed at SUBEB's insistence but these proved to be neither robust nor durable and most had broken down or been damaged within weeks of hand over. These toilets were subsequently converted to 'pour flush' type latrines that are now working well. Following this successful introduction of pour flush latrines Lagos SUBEB intend to adopt this system in the future.
- 17. Similarly ESSPIN prepared the tenders with clearly detailed Bills of Quantities and Specifications which together with the Drawings provided a good basis for the Contractors to price their tenders. This tender format has now been adopted by most of the ESSPIN States.

2.1.4 Adoption of 'Whole School' Approach

- 18. At all schools where there was ESSPIN infrastructure input, water supply and sanitation were provided. In many schools in Nigeria there are neither water nor sanitation.
- 19. Following the benefits exhibited at the 'ESSPIN schools' where both water and sanitation have been provided all the project States are now committed to working towards this objective of the 'Whole School' approach in the future. Due to the scale of the task however and the obvious budgetary constraints it will be some time before this objective is achieved.

2.1.5 Payment Procedures

20. Delays both within ESSPIN and SUBEB adversely affected progress particularly in Kaduna and Lagos. The bureaucratic procedure within SUBEB presented major challenges at the start of the programme. As the programme progressed SUBEB were made aware of the detrimental effect delayed payment had on the infrastructure implementation. As a result and following ESSPIN guidelines the payment periods were significantly reduced resulting in a much improved cash flow situation for the Contractors and a marked improvement to the infrastructure implementation progress. Greater efficiency, transparency and speed of transactions were explicit objectives to contribute to an improved business environment in this area of government procurement and construction services.

2.1.6 Delivery of Quality Infrastructure

21. In all meetings held with the Consultants and the representatives of SUBEB and RUWASSA the emphasis was on the restoration of good practice with regard to construction and construction management. The importance of quality was always stressed. The positive example provided by the ESSPIN programme has now been appreciated by SUBEB and RUWASSA. This has fostered a sense of entitlement among the communities for quality infrastructure facilities and has helped

break the cycle of bad practice which resulted in poor quality, poor value for money and lack of interest in infrastructure by the Community.

2.1.7 Community Involvement in Infrastructure Activity

- 22. It is essential to engage with the Communities to ensure that they have a sense of ownership of the infrastructure facilities and therefore take good care of them when they are handed over. As a result, ESSPIN involved the schools and the Communities in all stages of the infrastructure process. The SBMCs and Communities were therefore key players at the following stages of the construction process:
 - Baseline studies and infrastructure planning
 - Tender stage. There was full transparency of prices and award of tenders. The Communities were fully aware of all aspects of the contract award process and were therefore satisfied that they were getting value for money
 - Implementation. The SBMCs played a part in quality control, were represented at site meetings and were part of the signing off process for all payments to the Contractors.
 - Community Level Workshop for Maintenance and Sustainability. Workshops were held at school and community level throughout the programme during construction and to enhance maintenance and sustainability
- 23. A considerable amount of time and effort was spent on helping communities to become selfreliant so that they can maintain the facilities by themselves or know who can reliably be called upon for technical support if assistance from SUBEB is not forthcoming.

2.1.8 The Importance of Communal Workshops

- 24. At an early stage in the programme it became apparent that one of the most effective ways of disseminating information in the Nigerian context was to hold Communal Workshops involving as many Stakeholders as possible. This enabled a broad audience to be reached, fostered enthusiastic discussion and attention amongst all the attendants and often led to a common consensus on objectives and simplification of procedures. Resolutions reached in a communal form of this nature were followed by the Stakeholders and proved to be very effective in the implementation of the programme. The workshops are an effective means of reducing the barrier to meaningful participation which is faced by illiterate parents and guardians.
- 25. Stakeholders were brought together in this manner in all stages of the programme but the two key types of workshops were:
- (i) The Inception Workshop at the start of the construction
- (ii) Maintenance and Sustainability Workshops
- 26. The content of these Workshops are dealt with in more detail in a later section of this report.

2.2 Methodology and Best Practice

27. The key objective of the ESSPIN programme was to reinstate good practice in the implementation of infrastructure provision. Over the five year ESSPIN infrastructure programme, the following aspects were deemed to be the most important.

2.2.1 Co-operation with SUBEB

28. By the end of the programme this was achieved in all the Programme States. The good relationship with SUBEB however took some time to nurture as the following stages in the relationship illustrate. Perseverance was essential.

Stage 1:

- SUBEB were unenthusiastic when they realized that they would not have complete control of ESSPIN infrastructure
- SUBEB resented ESSPIN interference in SUBEB processes such as payment procedures
- SUBEB were not always co-operative and were sometimes obstructive
- ESSPIN had to persevere and engage SUBEB in every stage of the implementation to demonstrate transparency and goodwill

Stage 2:

- ESSPIN started to deliver on the programme and started to attract attention
- SUBEB began to comply with ESSPIN requests, for example Payment periods
- Gradual acknowledgement of SUBEB that ESSPIN processes were working and quality, ontime construction was being achieved.
- Acceptance of ESSPIN infrastructure

Stage 3:

- Enthusiastic participation of SUBEB in ESSPIN meetings, change to a pro-active approach
- Incorporation of ESSPIN practices into SUBEB processes.
- SUBEB budgetary support to ESSPIN schools.
- Adoption of ESSPIN planning and procurement process

2.2.2 Planning Process

29. The ESSPIN State Team Leaders (STLs) and SUBEB counterparts were engaged in planning process to ensure that the infrastructure facilities were provided in the most deserving locations. In the past it was not uncommon that this was done on a patronage basis. As soon as the EMIS data was available this was utilized but in the initial stage of the programme this was not available. The available data from SUBEB was utilized but all the sites were individually visited and figures for enrolment and existing infrastructure condition were independently verified by the Project Consultants. A checklist of the criteria to be verified was drawn up and the final list of beneficiaries arrived at by a process of elimination.

2.2.3 Whole School Approach

30. This was adopted to ensure that all schools that were provided with sanitation were first provided with water supplies.

2.2.4 Site Plans

31. Detailed site plans, drawn to scale, were prepared for all the beneficiary schools and the exact location of the new facilities shown on the drawings. This ensured that the toilets were well located satisfying all the criteria for safe distances from water supplies and classrooms and that the new facilities took account of future development and expansion. This ensured that the location of new facilities would not impede or obstruct future development

2.2.5 Emphasis on Quality and Value for Money

32. In the period before the ESSPIN programme started the quality of school buildings had deteriorated to a very low level in most of the States. In order to arrest the deterioration it was essential to put a big emphasis on quality of construction.

Inception Workshops

- 33. At the start of the construction phase as soon as the construction contracts had been awarded, Inception Workshops were held in each of the States. These were run by ESSPIN and attended by all the Stakeholders:
 - SUBEB Infrastructure Reps ESSPIN Consultants (technical assistants and management) ESSPIN-appointed Infrastructure Consultants Contractors Head Teachers and Representatives of the SBMCs
- 34. In an interactive Workshop environment with all the Stakeholders present the following topics were discussed in detail:
 - Roles and Responsibilities of all Stakeholders Technical Details – Drawings, Specifications + Bills of Quantities Community Involvement – Community role in the construction process Contractual Procedure – Format of meetings etc Scheduling + Progress Supervision + Reporting Procedures Quality of Materials + Workmanship Payment Procedures
- 35. The Inception Workshops were instrumental in getting all the Stakeholders to appreciate the importance of Quality. The success of the Inception Workshop was such that SUBEB in Kwara and Lagos held their own Inception Workshops with ESSPIN support for their own construction programmes after the completion of the ESSPIN implementation.

36. During the programme value for money was stressed at every opportunity and all Payment Certificates, apart from being approved by all the Consultants, had to be signed off by a representative of the SBMCs. In this way Communities were kept fully informed in a transparent manner of the value of the infrastructure works. Comparisons with other SUBEB infrastructure were encouraged to highlight the difference in quality and value for money between the ESSPIN construction and SUBEB construction prior to the programme.

2.2.6 Simplification of Reporting

- 37. In order to avoid long winded often misleading written reports sometimes in broken English a simple standard one page format for progress reporting was devised
- 38. This form of reporting greatly improved the communication and monitoring within the project.It helped to pinpoint areas that needed attention and was used as a crosscheck for the approval of payment certificates

2.3 Main Procedures followed in the ESSPIN Infrastructure Implementation Process

- 39. The following procedures were followed in the infrastructure implementation process. The procedures are not described in detail but are backed up with complementary documentation where necessary in this report Annex.
 - An international Consultant was appointed (See Annex 1 for TORs)
 - A situation survey was undertaken by the ESSPIN Infrastructure Consultant and a position Paper prepared (See Annex 2)
 - MoUs were negotiated and agreed with each of the State SUBEBs/ RUWASAs (see Annex 3)
 - National Consultants, one for the Northern States and one for the Southern States were appointed by ESSPIN.
 - Standard Prototype Drawings and Bills of Quantities were prepared by the ESSPIN Consultants (see Annex 4)
 - Budgets and Scope of Work were prepared for each Project State
 - State Consultants were appointed to oversee the construction of the water supply and sanitation facilities (See Annex 5 for ToRs). These appointment involved the following procedures:-
 - ESSPIN drawing up ToRs
 - Consultants submitting EOI with qualifications
 - Screening of Consultants, based on Capacity, Experience and their
 - Recent track record.
 - Financial Evaluation and Appointment
 - Baseline studies were conducted by ESSPIN and SUBEB in each of the States and allocations of infrastructure facilities were made based primarily on school enrolment and equity.
 - Tenders were prepared

- Contractors were appointed. This process entailed the prequalification of contractors based on their capacity and previous track record. Following tender evaluation, contracts were signed between the Contractors and SUBEB.
- Financial procedures entailed the following steps:-
 - Certificates were prepared by the States Consultants
 - The Certificates were approved by SUBEB and the SBMCs
 - ESSPIN Infrastructure Consultants ratified and approved the
 - Certificates for payment
 - ESSPIN made payments to SUBEB / RUWASA
 - Disbursement to the Contractor.

2.4 Scope of Work and Achievements of the ESSPIN Infrastructure Programme

40. A detailed breakdown of the full Infrastructure Scope of Work is included in Annex 6 of the Report. The spreadsheets contained in these Annexes give details of all the schools in all of the Programme States that benefitted from the Infrastructure inputs of Sanitation, Water Supply, and Classrooms. This information includes the number of male and female students in each of the schools, the form of Water Supply provided, the number of classrooms, the number and type of latrine cubicles provided, the year of each intervention and the Contractor who was engaged for this work.

		ESSPIN INFR	ASTRUCTURE S	COPE OF W	ORK 2010	0 - 2013	
	States	States Water Supply(No of sch		hools) Sanitation(No of Schools)		Classroom Blocks (No	
		Hand PumpsAnn	Mech Pumps	Solar	WCs	Dry Pit Latrines	
North	Kwara	85	2			85	4
	Lagos		30		24		
	Enugu		10			10	5
South	Jigawa	87				86	9
	Kano	84		4		84	6
	Kaduna	85		1		86	7
Totals		341	42	5	24	351	31

41. The Infrastructure facilities that were provided by ESSPIN is summarized in the following table:

2.5 Cost Effectiveness and Value for Money of ESSPIN Infrastructure

All WCs in Lagos later converted to "pour flush" latrines

Note

42. A detailed breakdown of the ESSPIN Water and Sanitation Costings is included in Annex 7 of this report.

2.5.1 Unit cost Comparison Chart.

43. The following chart gives an indication of the costs of providing the various facilities compared to the costs of other implementing agencies at the time of the ESSPIN programme.

ESSPIN Cost Comparison Chart								
Unit Costs	ESSPIN	SUBEB/RUWASA	UNICEF	MDG				
2 Classroom Single Block with Office	6,000,000	6,000,000	N/A	N/A				
Hand Pump water point	1,110,000	850,000	950,000	1,200,000				
Solar powered water with o/head tank	5,781,714	6,500,000	7,000,000	7,600,000				
Mechanical water with o/head tank (Lagos)	2,788,701	Not provided	Not provided	Not provided				
Unit cost per Cubicle in VIP latrine block	394,000	480,000	Not provided	Not provided				
Unit cost per Cubicle in WC latrine block (Lagos)	831,841							
Notes								
1. ESSPIN Construction was done between 2010 a	nd 2013. Figures	are based on cost	s as of 2012					
2. All ESSPIN water point costs are inclusive of Co	nsultants supervi	sion costs						
3. All ESSPIN sanitation costs include handwashing	; (and septic tank	s forWCs) and cor	sultants superv	vision				
4. All ESSPIN costs are exclusive of ESSPIN Consult	ants and transpo	ort costs						

44. From the above chart it can be seen that ESSPIN's costs compare favourably with the other agencies. In the case of the hand pump water points the ESSPIN costs are higher than the SUBEB/ RUWASA and UNICEF prices but the quality of the installation of the later is generally extremely poor and the working life of these installations often limited to a couple of months.

2.5.2 No. of Students Benefiting from ESSPIN Infrastructure.

45. The following table illustrates the number of students that have benefitted from the ESSPIN Infrastructure

State	Students in ESSPIN Beneficiary					
	Female	Male	Total			
Lagos	11,422	11,494	22,916			
Kwara	8,952	8,519	17,471			
Jigawa	19,957	24,294	44,251			
Kaduna	19,381	21,358	40,739			
Kano	48,207	53,449	101,656			
Enugu	1,512	1,621	3,133			
Totals			230,166			

- 46. From the table, it is clear that in one academic year 230,166 students benefit directly from the infrastructure.
- 47. Assuming a conservative life span of these facilities of 25 years a total of 230,166 x 25 = 5,754,150 students will benefit directly from the ESSPIN constructed facilities.

2.5.3 Cost per Student of providing a Water Supply

48. These costs are as illustrated in the following table:

ESSPIN Water Supply Costings								
	ESSPIN		Units					
State	Students	Total Cost	Provided	Unit C	Cost	Cost per	Student	
	Total			Naira	See Note	Naira	See Note	
Lagos	22,916	83,661,019	30	2,788,701	1	3,651	5	
Kwara	17,471	103,201,744	87	1,186,227	2	5,907	6	
Jigawa	44,251	96,414,556	87	1,108,213	2	2,179		
Kaduna	40,739	96,925,588	86	1,127,042	2	2,379		
Kano	101,656	118,368,640	88	1,345,098	3	1,164	7	
Enugu	3,133	62,033,029	10	6,203,303	4	19,800	8	
					<u> </u>			
Totals	230,166	560,604,575	388	Ave Excl	Enugu	3,056		
							ļ	
Notes					<u> </u>			
	Costings are e	exclusive of ESSPIN	V costs (Consi	ultants, transp	ortation et	c)		
			la - stoo al la avai			م بند مامین مراجع مارد م	L .	
1	All locations p	provided with med	nanised bore	hole with elev	ated water	tank, relative	ly	
	expensive							
۷	All locations i	n Kwara ligawa a	nd Kaduna nr	avidad with st	andard hor	abolo and har	adauma	
3	All locations i	n Kano provided w	with standard	borehole and	bandnumn	ovcent / No.	with Solar	
5	numns and el	n kano provided w			Πατιαματιτμ	except + NO V	VILLI JUIAI	
4	Very high unit	cost in Enugu due	<u>s</u> to all locatio	ns requiring 2	00m deen v	vell horehole	with	
-	numns large	generators and ele	evated water	tanks	UUIII uccp •		S VVILII	
5	Unit cost per	student relatively	low due to hi	øh student nu	mbers in La	gos and shalle	w depth of	
-	wells	student relative.,		gir student na		505 4114 5114.1.5	macpare.	
6	Kwara concer	ntrated on providi	ng facilities to	remote rural	schools wit	th fewer stud	ents hence	
	the relatively	high unit cost per	student					
7	Lowest unit c	ost per student in	Kano due to l	high student n	umbers			
8	High average	cost per student in	n Enugu due t	o verv high un	it cost due f	to geology an	d type of	
	borehole requ	uired				0.000		

49. The average capital cost / student of providing a water supply in a school, excluding the figure for Enugu which is unrepresentative, is N 3,056. Assuming the water supply is functional for 25 years the capital cost per student per year is **N 122 per year**

2.5.4 Cost per Student of providing Sanitation.

50. S	imilarly the cos	sts for providing	sanitation are	illustrated in th	e following table
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ESSPIN Sanitation Costings									
	Sanitation								
	Cubicles								
State	ESSPIN	Total Cost	Provided	Unit	Cost	Cost per	r Student		
	Students			Naira	See Note	Naira	See Note		
Lagos	22,916	309,444,827	372	831,841	9	13,503	14		
Kwara	17,471	350,990,394	696	504,297	10	20,090	6		
Jigawa	44,251	323,795,904	942	343,732		7,317			
Kaduna	40,739	364,559,208	898	405,968	11	8,949			
Kano	101,656	378,265,838	1,165	324,692	12	3,721	15		
Enugu	3,133	71,702,217	136	527,222	13	22,886	13		
Totals	230,166	1,798,758,388	4,209	Average per Student 12,744					
Notes									
	Costings are e	exclusive of ESSPIN	l costs (Con	sultants, tra	nsportation	etc)			
6	Kwara concer	ntrated on providir	ng facilities t	o remote ru	iral schools v	vith fewer	students		
	hence the rela	atively high unit co	st per stude	nt					
9	Relatively hig	h unit cost due to _l	provision of	standard w	ater closets i	n Lagos ins	tead of pit		
	latrines								
10	High unit cost	High unit cost in Kwara due to remote locations and more 2 cubicle latrine blocks as							
	opposed to 6	cubicle blocks red	ucing the ec	onomy of se	cale				
11	Relatively hig	h unit cost in Kadu	na due to la	rge number	of schools w	ith 2 block	cubicles in		
	last phase due	e to budget cut							
12	Lowest unit c	ost per unit in Kan	o due to hig	h number of	6 cubicle un	its			
13	High unit cost	in Enugu due to lo	w number o	of unit, appo	intment of w	veak			
14	Relatively hig	h unit cost per stud	dent in Lago	s due to pro	vision of mo	re expensiv	ve water		
	closets					<u> </u>			
15	Kano boasts t	he lowest unit cos	t per studer	it due to the	high numbe	r of studen	ts and the		
	high number o	high number of 6 cubicle latrine blocks							

51. The average capital cost / student of providing sanitation is **N 12,744.** Assuming the sanitation facilities are functional for 25 years the capital cost per student per year is **N 510 per year**

52. In the case of the Northern States where the costs per student are lower the figures are further reduced to N 6,662 for 1 year and N 266 over 20 years

2.6 Sustainability

- 53. On the ESSPIN programme it soon became very clear that the provision alone of water and sanitation facilities at schools did not solve the problem.
- 54. Communal facilities of this nature had not been provided before in many of the Centres and additional support was required at schools and community level in the correct use, management and maintenance of the water supplies and toilets.

2.6.1 Water Supplies

- 55. In the case of the water supplies the following support was provided:
 - Instruction in the correct use of the pumps
 - Management of the water supply particularly where the wider community also benefit from the facility.
 - Maintenance of the hand pumps + motorized units.
- 56. This support took the form of instruction at school level by the Maintenance + Sustainability Consultants and direct technical support in the form of replacement and maintenance of consumable parts.
- 57. As the schools and communities got more familiar with the use, benefits and maintenance of the water supply units there was a gradual shift from Institutional Support (not always functional and at best slow to respond to low level routine maintenance) to self sufficiency of the schools and communities. Direct links were forged by the Maintenance Consultants between the schools and Communities and the competent RUWASSA and WATSAN technicians. All parties are now aware of the importance of having a 'good mechanic' to service a water pump as opposed to a poorly trained 'bad mechanic' whose input can be very detrimental.
- 58. In addition to working with Institutional support ESSPIN endeavored to spawn a home grown industry of hand pump and water supply maintenance technicians supported by the selfsufficiency of the Communities

2.6.2 Sanitation

- 59. Similarly, as VIP latrines that were been provided by ESSPIN were not very common in many of the Communities the first step to be taken was to address cultural attitudes towards the use of toilets. This took the following form:
 - Instruction on the hygienic benefits of toilets (vs open defecation)
 - Instruction in the use of toilets
 - Importance of Hand washing

- Importance of Cleanliness and strategies to adopt to ensure cleanliness (toilet monitors, cleaning rosters etc).
- Rosters for filling hand washing tanks.

2.6.3 Area Boys and Vandalism

- 60. In the early stages of the project in some of the unruly and densely populated areas of Lagos it was clear that 'Area Boys' (local gangsters) were a potential threat to the schools and particularly the ESSPIN infrastructure facilities. As the programme progressed an initiative was launched to engage with these Area Boys in an attempt to enlist their help to provide security to the schools. This was a tentative and slow process but the mere fact that these Area Boys were given some recognition and not treated with the customary hostility has yielded positive results in some locations. They are also invited to selected Community Meetings with the SBMCs and the Head Teachers have sought out the Area Boys mothers for advice on how to enlist their co-operation. The situation is obviously tenuous but has provided good results in some locations.
- 61. Similar situations regarding vandalism and misuse of infrastructure occurred in several schools predominantly in the highly populated schools in the big cities. Some but not all of the situations were dealt with successfully. The full details of the case study of Gobirawa Primary School in Kano are included in Annex 8 of the report. In this case success was achieved by holding a high level meeting at the school, analyzing the causes of the problem and discussing ways of addressing the issue. Commitments were made at all levels from the LGA Secretary, ESSPIN Senior staff, Head Teachers and SBMCs and the Community. All parties followed up their commitments with close monitoring from ESSPIN.
- 62. In the above instance success was achieved and the following Lessons Learned were applied to other high density schools with varying degrees of success:
 - The Head teachers and SBMCs in the large overcrowded urban schools with poor resources face formidable challenges and require additional support.
 - The approach of having a 'high level meeting' with the LGA Education secretary present appears to have worked.
 - The Head teacher and SBMC reps morale was boosted by knowing that they have the support of all the other Stakeholders
 - All parties have a clearer understanding of the problems that the schools are faced with and the ways in which these problems can be tackled
 - There is more enthusiasm to apply solutions when the approach to problems has been reached in an interactive way.
 - There is more willingness for Head teachers and SBMCs to persevere with solving problems when they realise that their efforts are being recognised and appreciated.
 - Following the provision of water and sanitation facilities it is essential to provide on-going support at a 'social' level until the communities have accepted ownership and responsibility for the facilities and are able to manage them properly.

• Continuous monitoring is essential to detect the onset of potential problems so that they can be addressed in a timely fashion.

2.6.4 Workshops at LGEA Level

- 63. These workshops proved to be very effective in terms of Sustainability in all the States. The benefits of the Workshops were clearly evident in follow up visits schools and a marked improvement was noted in the management, use and cleanliness of the toilets
- 64. The emphasis in the Workshops was on getting the Communities to articulate the problems that they face in the maintenance and sustainability of the facilities. All the Stakeholders were encouraged to have a say in formulating solutions, thereby fostering a sense of ownership and responsibility.
- 65. The following issues were discussed in detail, methods of dealing with the situations arising were discussed and resolutions made on how to tackle them:
 - Identification of Stakeholders in order to establish a clear sense of ownership
 - Benefits of the facilities to the Schools and the Communities as a whole
 - Nature of the school communities and their capacities
 - Importance of the involvement and commitment of SBMCs
 - Particular challenges being faced by the individual schools and communities
 - Area boys and attempting to deal with a potential threat and turning it to an advantage
 - Vandalisation and control
 - Importance of Cleanliness and ways in which it can be achieved. Appointment of Toilet Minders. Involvement of students
 - Toilet training and use of the facilities
 - Potential use of the facilities by the Communities. Advantages/ Disadvantages and management of this situation
 - Dealing with problems of overcrowding at some urban schools
 - Procedures for technical maintenance. The financial challenges faced by some schools
 - Responsibility of SUBEB and Government
- 66. There was a noticeable improvement in sustainability issues following the workshops and they became a regular and productive feature of the second phase of the programme.

2.6.5 Monitoring of Maintenance + Sustainability / Asset Management

- 67. In order to manage the maintenance and sustainability process a spreadsheet system was devised that was compiled on a quarterly basis by the Maintenance + Sustainability Consultant in each of the States.
- 68. The simple 'one page' format of the spreadsheet is self-explanatory and provides an effective way of monitoring and evaluating the functionality and condition of the water supplies and

toilets in each school. Their level of usage, cleanliness and Maintenance + Sustainability rating for each school is assessed.

- 69. The spreadsheet charts are color coded with green for good ratings and red for poor ratings. This means that the locations needing attention are highlighted and support resources can be concentrated in areas where they are required.
- 70. Over a period of time the improvement of the sustainability can be tracked from the charts. The following spreadsheets are included in Annex 9 of the report and give an indication of how the maintenance and sustainability improved at school level over the period from completion of construction to the end of the program
- 71. Maintenance and Sustainability Reports:

Kwara Aug 2013 and May 2016 Kaduna Dec 2014 and May 2016

2.7 SUBEB Institutional Responses to ESSPIN Infrastructure Intervention

2.7.1 Attitude

- 72. In the initial stages of the programme there was a certain amount of negativity towards the ESSPIN infrastructure team. There was some resentment at the fact that SUBEB did not have control over the ESSPIN programme and that ESSPIN were 'interfering' with SUBEB's internal processes by making changes to the Procurement process and forcing SUBEB to modify and streamline their Payment Procedures. As the ESSPIN programme progressed and the ESSPIN programme gathered momentum relationships improved and the initial barriers were broken down. Towards the end of the programme SUBEB were generally responsive to ESSPIN approaches and participated enthusiastically in meetings. They came up with proactive suggestions and enlisted our support for changes that they were keen to introduce in SUBEB.
- 73. In all States there was positive cooperation from SUBEB officials in the selection of sites to benefit from ESSPIN infrastructure support.
- 74. In the case of Kwara State, members of the ESSPIN team were invited to become part of the Kwara SUBEB Infrastructure committee for the utilization of the Challenge Fund.

2.7.2 Transparency and Effectiveness of Tendering

75. In some States most notably Kano and Lagos we were requested to provide assistance in the tendering process. SUBEB now appreciate the absolute necessity of prequalification of tenderers. Contractors without a good track record are now finding it harder to tender for SUBEB work. In Kano we were asked to assist with the review of designs, drawings and Bills of Quantities for SUBEB work and give opinions on pricing with comparisons to ESSPIN

infrastructure work. Furthermore, SUBEB in several States have adopted the ESSPIN format for presentation of tenders with Bills of Quantities, Specifications and Drawings.

76. SUBEB have also abandoned the practice of providing large Mobilisation payments at the start of Contracts (up to 50% prior to ESSPIN). In line with ESSPIN contracts Mobilisation payments are limited to 10-15% and this has led to a very much reduced percentage of abandonment of Contracts.

2.7.3 Quality of Infrastructure

- 77. Having seen the better quality of ESSPIN infrastructure SUBEB are now showing enthusiasm for the approach we adopted. This was manifested in the appreciation shown by SUBEB of the improved quality of ESSPIN infrastructure work in site meetings.
- 78. SUBEB with ESSPIN support adopted the practice of holding inception workshops which clarify the roles and responsibilities of the Stakeholders, the procedures to be followed and the necessity for the use of good quality materials and workmanship.
- 79. By following our example, they seem to understand the path to restoring good practice.

2.7.4 Staff and Procedural Changes within SUBEB

- 80. There were some staff changes within SUBEB which resulted in the moving of individuals who had been an obstacle to good practice. This applied particularly to individuals who have been frustrating the payment process.
- 81. SUBEB now clearly understand the benefit of streamlining the payment procedure, although this has not yet been fully achieved in all States.
- 82. The pressure brought to bear by the STLs, the Consultants, SUBEB infrastructure liaison reps and the Contractors has created an atmosphere that has enabled this change of personnel and procedures.

2.7.5 Community

- 83. One of the biggest changes that we experienced is the realization within SUBEB and also with the Consultants and the Contractors of the necessity of including the Community in the Infrastructure process. At the start of the programme there was staunch resistance from almost all parties with the assertion that the Communities did not have any knowledge of construction matters and did not understand the planning process. The message has now been understood that a sense of Ownership by the Community is essential. If the Community participates in the construction and planning process, there is a greatly increased chance of sustainability.
- 84. SUBEB are improving their links with the Community and for the most part the Contractors and Consultants are working harmoniously with the community. Head Teachers and members of

the SBMC attended meetings on all ESSPIN sites and signed progress certificates before payment was made to the contractors.

2.7.6 ESSPIN Prototype Designs

85. All the State SUBEBs are now enthusiastic about the ESSPIN toilet and classroom designs and if they have not already done so have expressed willingness to adopt them in the future. All SUBEB State architects have been given copies of the design drawings and Bills of Quantities. Our latrine designs have already been adopted in Kwara, Kano and Jigawa States.

2.7.7 Capacity Building

- 86. SUBEB States now appreciate the involvement of competent Nigerian Architectural Consultants and are now working harmoniously with them. SUBEB personnel benefited from working closely with both the Architectural and ESSPIN Consultants and are adopting the Lessons Learnt on SUBEB funded infrastructure work. They also appreciate the benefit of engaging Architectural Consultants in a form that is beneficial to their construction process.
- 87. In several States, SUBEB assigned their own staff to the ESSPIN infrastructure projects as trainee supervisors to benefit and understand from improved quality control in terms of workmanship and materials.

2.7.8 Budgetary Support and Counterpart Funding

- 88. In Lagos SUBEB have already committed budgetary support from their own funds as a direct result of the ESSPIN programme. SUBEB have allocated funds for perimeter walls and flood protection to protect the investment by ESSPIN at specific schools. Similarly Jigawa, Kano, Kaduna and Kwara are in the process of providing boundary walls to 'ESSPIN' schools.
- 89. RUWASSA are also endeavoring to get budgetary support for the maintenance of water supplies provided by ESSPIN. ESSPIN have set up a Maintenance model which engages RUWASSA technicians which hopefully RUWASSA will continue to support beyond the end of the programme.
- 90. All States are now adopting the 'Whole School' approach and agree on the importance of providing water and sanitation at all the schools. However, because of the scale of the problem this objective is a long way from being achieved.

2.7.9 Lagos SUBEB Structural Review

91. Independently of ESSPIN the Governor of Lagos commissioned an independent review of the Lagos SUBEB in 2014 which was led by one of the ESSPIN National Consultants. The continuing involvement of the ESSPIN National Consultant is helping to ensure that the lessons learned under the ESSPIN programme continue to be followed within SUBEB

2.7.10 Baseline Studies and Infrastructure Planning

- 92. SUBEB now fully appreciate the benefit of baseline studies for schools. When the programme first started, planning was done largely done on an ad hoc basis due to the lack of good school data, and as a result, site selection was often determined not by need but by patronage. They are now using ESSPIN EMIS data and the ESSPIN Infrastructure baseline model prior to the allocation of their own funding and construction of infrastructure facilities. The planning process has radically improved.
- 93. In the States of Kano and Jigawa, with the help of the ESSPIN National Consultant the SUBEB staff and TOs at LGA level undertook a thorough survey of condition of all the SUBEB building stock and drew up a comprehensive data base of all the infrastructure facilities of the Primary and JSS schools in the State.
- 94. It is intended that the data base will be used as an instrument for future planning of infrastructure and also for the allocation of a Maintenance and Sustainability budget.
- 95. It is hoped that SUBEB in Kaduna and Kwara will also replicate this survey of condition and also have their own data base for infrastructure planning

2.7.11 Measures to reduce Corruption and increase Accountability

- 96. The following measures were introduced by ESSPIN
 - <u>Transparent Tender Process</u>. A competitive and transparent tender process was introduced for all ESSPIN infrastructure work. At all stages throughout the tender process the status was communicated to all parties and comprehensive tender evaluation reports were shared with SUBEB and the other Stakeholders.
 - <u>Prequalification of Tenderers</u>. All tenderers participating in ESSPIN bids were required to
 prequalify. In addition to the standard registration requirements of Contractors their
 capacity in terms of personnel and equipment was verified and most importantly their track
 record on similar type of work was physically vetted. This had not been done for SUBEB
 contracts prior to the ESSPIN program and had the effect of avoiding the political
 appointment of 'briefcase' contractors and ensuring that only competent contractors with a
 respectable track record could participate.
 - <u>Appointment of Local Consultants</u>. Due to the lack of capacity in the SUBEB infrastructure departments local competent Consultants were engaged to supervise and manage the implementation at State level. These Consultants were to some extent trained by ESSPIN through Inception workshops and made accountable to ensure the construction of good quality classrooms, water and sanitation installations. Prior to the ESSPIN program there had been a very poor level of control at SUBEB (lack of experienced personnel for supervision and SUBEB transport resulted in some sites not being visited at all during construction and this translated into very poor quality both in terms of workmanship and materials).

- <u>Independent Pricing by Quantity Surveyor</u>. Prior to the tender launches an independent Quantity Surveyor was engaged to prepare current cost estimates for the various infrastructure elements. This provided an accurate guide during the tender evaluations to ensure that Value for Money would be achieved. This has had the effect of ensuring competitive tenders and preventing the possibility of contracts being awarded for inflated prices to favoured contractors
- <u>Publicity of Tender Evaluation Reports</u>. At the contract award stage, the scope and value of all contracts were widely disseminated. Not only was this shared with SUBEB but also with the local communities at LGA level where the school facilities were being provided. Again this enabled the Communities to appreciate that they were getting value for money and assured SUBEB/ESSPIN's accountability
- Limiting of Advance Payments to 10%. Advance payments on ESSPIN contracts were limited to 10% and were conditional on the Contractors mobilizing to the site. Prior to ESSPIN it was not uncommon for contracts to be awarded with a 30% unsecured deposit at the award of contract. This resulted in the encouragement of politically awarded contracts. Following the award to 'briefcase' or politically favoured individuals, the contracts were then 'sold' to third party contractors without the advance. This resulted at best in the work being done at 70% of the contract cost with the consequent detrimental effect on quality, and at worst with the contractors defaulting and abandoning the work
- <u>Community Level Workshops.</u> The workshops that were held at Community level provided an excellent platform for the dissemination of information. All Stakeholders were present at these workshops from ESSPIN/SUBEB, Education Secretaries, LGA officials, SBMCs, Head Teachers and even some students themselves. All issues relating to Infrastructure provision and Maintenance and Sustainability were discussed at these workshops. It soon became evident to all the Stakeholders that they each had an important role to play and for the program to succeed they all need to be accountable to each other.
- <u>Involving Communities in Payment Procedures</u>. The Community at LGA level were involved in the payment procedures. Payment Certificates prepared by the Consultants had to be signed off by the LGA representatives prior to disbursement of payment to the Contractors by ESSPIN/SUBEB. This procedure was widely publicized and helped the Communities establish a sense of Ownership and control and also appreciate that they were getting value for money for the construction
- <u>Streamlining of Payment Procedures</u>. The payment procedure within SUBEB was tortuous at the start of the program and required lubrication or influence on the part of the contractors. This had a detrimental effect on the Contractors cash flow and often brought progress on site to a standstill. This was streamlined by negotiation with SUBEB and a payment tracking system was introduced. It was then possible to identify exactly where payments were being held up and address the problem with SUBEB, eg with repeated visits by the ESSPIN State

Team Leader, the Educational Quality Specialist, and visiting national and international technical assistants.

- <u>Enforcement of Defects Liability Period</u>. The Defects Liability Period for Contractors was strictly enforced. The Consultants and LGA representatives were involved in the final sign off of the Completion certificates which released the retention funds. This ensured that all works were fully complete to the LGAs satisfaction.
- Importance of Continuity. The follow on presence of ESSPIN after the completion of the implementation phase for the maintenance and sustainability of infrastructure has also facilitated the continued engagement with SUBEB at State level. This is an ongoing process and is ensuring that the lessons learned under ESSPIN are incorporated within SUBEB practice. SUBEB are sharing and discussing their infrastructure planning proposals. This increases overall sector awareness and improves their accountability.

97. These measures had the following results:

- <u>Adoption of ESSPIN measures</u>. Almost all the above measures introduced by ESSPIN have subsequently been adopted by SUBEB in the program States. This has improved the accountability of both SUBEB and the Contractors.
- <u>Quality Improvement</u>. There has been a significant improvement in the quality of
 infrastructure provided for schools as a result of ESSPIN particularly in the provision of
 water and sanitation where ESSPIN standards have been adopted, but also in the case of
 classrooms and furniture. This improvement in quality has now become a standard expected
 by the Communities.
- <u>Value for Money</u>. Due to the transparency and widespread publication of the cost of work that was executed under ESSPIN the schools are now demanding value for money on SUBEB infrastructure contracts. In the past a considerable portion of the infrastructure budget was spent on 'rehabilitation' of poorly constructed buildings. In most cases all that was being achieved was cosmetic work on defective shells. This cycle has hopefully now been broken.

3. Maintenance and Sustainability of Infrastructure 2014-2016

98. This phase of the programme commenced in August 2014 and the infrastructure emphasis in this time was almost entirely on Maintenance and Sustainability. The infrastructure implemented by ESSPIN was used as the basis of the activities but the intention was that the systems adopted would be used in the future for all SUBEB facilities. During this time meetings were also held on a regular basis with SUBEB State Directors to discuss advocacy, good practice and planning.

3.1 Objectives

99. The main objective of the second Phase of the programme was to set up an effective Maintenance and Sustainability framework in the schools that benefited from ESSPIN construction. The intention then was that this framework would provide a model for SUBEB and RUWASA to adopt for the rest of their schools and thus the concept and practice of Maintenance and Sustainability would be embedded in the SUBEB system.

100. The ways in which ESSPIN endeavoured to achieve this objective was as follows:

- <u>Development of a good ESSPIN/ SUBEB relationship</u>. To build a stronger relationship with SUBEB following the positive results achieved during the implementation of Phase I.
- <u>Provision of water and sanitation to schools as standard practice</u>. To create awareness of the positive effect of providing Water and Sanitation at schools on overall educational outcomes. This is particularly true for girls' education. As a result of this ESSPIN worked to get SUBEB to adopt the 'whole school approach' and provide water and sanitation at all schools as standard practice.
- <u>Community participation</u>. To increase awareness within SUBEB of the importance of Community level involvement in the planning and implementation and maintenance of all infrastructure work.
- <u>School ownership and Community cooperation</u>. To promote the Ownership of school facilities at Community and LGA level and to encourage the Communities and schools to become more self-sufficient. To promote better co-operation between schools and their Communities.
- <u>Raise the profile of maintenance and sustainability</u>. To increase awareness of the importance of Maintenance and Sustainability amongst all stakeholders.
- <u>Maintenance Planning</u>. To make Maintenance an integral part of school planning. To arrange for SUBEB to make budgetary provision for this activity and to establish mechanisms to ensure that maintenance is done effectively.
- <u>Health and Hygiene</u>. To improve hygiene practices in the schools, particularly hand washing, and to encourage the adoption of the ESSPIN toilet design as a standard within SUBEB.
- <u>Inter departmental cooperation</u>. To promote better co –operation between different Govt. departments, NGOs and donor agencies

• <u>Strengthening SUBEBs</u>. To ensure that the lessons learned and the positive results experienced during ESSPIN are institutionalised within SUBEB.

3.2 Methodology adopted to achieve Maintenance and Sustainability

3.2.1 Appointment of Maintenance Consultants in each of the Project Sites.

- 101. Competent individuals who were involved in the implementation of the water supply facilities in each of the States were identified and given Maintenance Contracts for the duration of Phase II. A copy of the ToRs of these Maintenance Consultants is included in Annex 10 of the report. In addition to providing the mechanisms for physical maintenance of the facilities the role of these Consultants also included the promotion of hygiene in the Communities and the broader issues of community mobilization to provide longer term sustainability. Each of the Consultants was tasked with undertaking quarterly visits to all of the ESSPIN sites (approx 80 in each State).
- 102. At each of these visits the Maintenance Consultants were accompanied by RUWASA technicians and with spare parts provided by ESSPIN. They were required to ensure that all the water points were fully operational and that the sanitation facilities were also in good order. At all their visits to the schools the Head Teachers and representatives from the SBMCs were in attendance. All matters relating to Maintenance, Sustainability, Health and Management of the facilities were discussed and wherever possible resolved at local level. Where problems were more serious the issues were reported to ESSPIN and SUBEB for further action. The Maintenance Consultants also went to some lengths to identify and involve competent local artisans who were able to assist with maintenance at local level. This helped to make the Communities more self-sufficient and reduce their dependence on the not always responsive SUBEB institutional support.

3.2.2 Quarterly Maintenance Visits and Inspection Reports by the Maintenance

103. <u>Consultants</u> These visits ensured that the infrastructure facilities are well utilized, managed and maintained. In cases where physical maintenance of the water and sanitation facilities were required this was arranged by the Consultant. Issues of hygiene and health education were also addressed. The Quarterly Maintenance + Sustainability report was then prepared by the Consultant to enable the progress of the schools in respect of self-sufficiency and sustainability to be monitored. These reports were in spreadsheet form and included information on the physical condition of the water and sanitation facilities and gave a Maintenance and Sustainability rating to each of the individual schools. In the case of poorly performing schools the reasons for the poor performance were analyzed and any necessary support was provided by ESSPIN and SUBEB to ensure that the performance was improved. As the program progressed, with the improved management and maintenance at school level the technical input of the Consultants reduced and the emphasis is more on community support and support from RUWASA. 104. An illustration of how the maintenance and sustainability ratings have improved in the schools can be seen from the Maintenance and Sustainability reports for Kaduna over the duration of the program and into Phase 2. These reports are included in the Annex 9 to this report

3.2.3 Maintenance + Sustainability Workshops

105. A series of Policy and Community level workshops was held in each of the 6 States. The Policy workshops were held at State level with the Directors in attendance and the Community level workshops were held at LGA level and are attended by the Education Secretaries, LGA officials, SBMCs, Head Teachers and representatives from all the ESSPIN schools.

106. <u>Policy Monitoring Workshops held at State level covered the following issues:</u>

- Roles and responsibilities of stakeholders
- Establishment of ownership of the facilities by SUBEB and the LGAs
- Importance of proper use and management of facilities
- Setting up of mechanisms for maintenance activities.
- Establishment of budget lines for the funding of Maintenance and Sustainability
- Adoption of the "whole school" approach, the necessity to provide water supplies and sanitation at all schools, not just classrooms
- Security of school premises and facilities. The importance of a safe school environment and the provision of boundary walls by SUBEB as a priority in certain locations.
- The need for Health Officers from the LGEAs to visit the schools on a regular basis and the need for hygienic practices to be adopted.
- SUBEB and the Schools to be ready to assume full maintenance of facilities once ESSPIN involvement ceases
- The development of clear Infrastructure Policies at State level

107. LGA Community Level Workshops held at State level covered the following issues:

- Importance of the involvement and commitment of Education Secretaries, SBMCs and Head Teachers in the success and wellbeing of the schools
- Identification of Stakeholders and definition of their responsibilities
- Responsibilities of SUBEB and Government and the need for schools to take ownership of the schools and become more self sufficient
- Benefits of the water and sanitation facilities to the Schools and the Communities as a whole
- Importance of Cleanliness and ways in which it can be achieved. Appointment of Toilet Monitors. Involvement of students etc
- Toilet training for early learners and use of the facilities
- Improving the relationships between the schools and their local Communities.
- Procedures for technical maintenance. The financial challenges faced by some schools
- Comparison of successful schools with poorer performing ones

- Identification of common problems and means of resolving them
- Area boys and attempting to deal with a potential threat and turning it to an advantage
- Vandalism and control of areas boys
- Dealing with problems of overcrowding at some urban schools
- Particular challenges being faced by the individual schools and communities
- 108. These workshops proved to be a very effective means of promoting Maintenance and Sustainability. Although the institutional mechanisms provided by SUBEB are still weak the concept and its importance is now well understood. The Communities now have an enhanced sense of ownership of the facilities, appreciate the benefits they provide and are now considerably more self-sufficient. They are now more aware of SUBEBs responsibilities and are more demanding of their rights.
- 109. These Workshops have advanced the concept and practice of maintenance and sustainability and at the same time have been a very good method of improving hygiene in the schools.

3.2.4 Quarterly Meetings with SUBEB Directors in each of the States

- 110. These meetings with SUBEB Directors were used to discuss advocacy and promote good practice. The planning of the State and federal funded infrastructure work was discussed in detail to ensure that the priorities being adopted were justified and that value for money was being achieved.
- 111. In several States, Kwara being the most notable example, these quarterly meetings resulted in the constitution of quarterly inter departmental meetings with the various Govt Depts. These included the Ministry of Education, the Ministry of Water Development, Ministry of Health, Ministry of Local Govt and Women's Affairs, RUWASA and SUBEB. The meetings were successful in finding collaborative ways of supporting water and sanitation facilities in schools. The meetings promoted pupils' hygiene, promoted increasing access to safe drinking water and sanitation in schools and ensuring institutional support for provision of maintenance. For reference a copy of the Communique issued after one of these such meetings is included in Annex 11 of this report.

3.3 Achievements

112. The major achievement of Phase II is that 2 – 6 years after the initial installation in excess of 95% of the 388 water supply systems installed by ESSPIN are fully functional at any one time. (At the end of the programme in June 2016 this figure was close to 100%) Systems are in place to attend to breakdowns promptly and effectively. Thanks to the efforts of the ESSPIN appointed Maintenance Consultants good links have been forged between the State authorities, SSOs, Head Teachers, SBMCs, Communities and local artisans. There has been a continuous improvement in the maintenance, use and sustainability of the infrastructure facilities and the Communities are now considerably more self-sufficient.

- 113. Open defecation which was a common practice at the start of the ESSPIN program has been practically eliminated. The toilets are being well used and managed and the standard of cleanliness and general hygiene are much improved. The practice of hand washing has been introduced and is being followed although there is still room for improvement in some schools.
- 114. There is now a much greater awareness within SUBEB of the importance of Water and Sanitation in schools. There has been a significant increase in the enrollment of girls and SUBEB have agreed to adopt the 'whole school approach' which entails the provision of water and sanitation at all schools.
- 115. SUBEB have adopted the appropriate ESSPIN design for toilets in Kwara, Kano and Jigawa. It is hoped that they will also be adopted in Kaduna and Enugu in the future.
- 116. The ESSPIN Maintenance and Sustainability reporting system has made SUBEB aware of the benefit of monitoring. SUBEB are now in the process of adopting a similar form of monitoring for their own schools.
- 117. As a results of the successful implementation of the ESSPIN infrastructure program relationships with SUBEB, which were difficult at the start, have now been significantly strengthened. The exposure to ESSPIN and the regular contact through quarterly meetings has helped with the reintroduction of good practice and the lessons learned under ESSPIN are being institutionalized in SUBEB.
- 118. Progress has also been made in improving communication and co-operation between inter-Governmental organizations in the provision of water and sanitation facilities.
- 119. Meetings in the individual States have been arranged between the Ministry of Education, SUBEB, Ministry of Water Resources and RUWASSA and lines of responsibility clarified. There is now better control of donor agency inputs.

4. Lessons Learned

4.1 Realistic Targets, Quality Infrastructure and Demonstrating Value for Money

- 120. In the context of infrastructure it is essential to set realistic and achievable targets. Too often there is a temptation, not only in Nigeria, to set targets that in the short term look very attractive and have political appeal but in reality are not possible. In order to gain credibility in a programme like ESSPIN it is essential to deliver in this respect. As the programme progressed and lessons learned were incorporated in the process Capacity improved and targets were raised. All the annual targets adopted by ESSPIN were achieved.
- 121. Likewise the best way to attract attention and gain the support and respect of SUBEB and the Communities was to deliver good quality facilities and demonstrate good value for money. Good quality has been a cornerstone of the ESSPIN implementation process. Throughout the programme ESSPIN seized every available opportunity to broadcast the cost of the infrastructure facilities. The 'quality' ESSPIN buildings compare favourably in price with the poor quality structures that were built prior to ESSPIN. This proved that there were shortfalls and leakages in the previous process. It also acted as a tangible benefit for states and local governments to partner with ESSPIN, thereby increasing goodwill and reducing barriers to other aspects of ESSPIN such as organisational development and local government staffing reforms.

4.2 Prequalification of Tenderers

- 122. The process of prequalifying tenderers at the start of the programme was instrumental in being able to achieve the required standards of quality. At the time this was not a popular move as far as SUBEB were concerned as it took time which caused a short delay in delivery and also meant the disqualification of some of the politically favoured contractors who did not have the capacity and a verifiable track record. This did however send a strong message at the very start of implementation and over the duration of the whole programme this paid substantial dividends.
- 123. This process has now been adopted by most of the SUBEBs and has virtually stopped the practice of contracts being awarded on a patronage basis to briefcase contractors who then proceed to sell on the contracts at a reduced value.

4.3 Community Engagement and Technical Support

124. Sustainability is a key part of a programme of this nature. The fact that the infrastructure programme was extended for an additional 2 years after the completion of the physical implementation made a significant contribution to the success of the programme

- 125. Community engagement on an infrastructure programme of this nature is vital at all stages of the process and in the case of ESSPIN on the completion of the construction of the water and sanitation facilities proved to be very beneficial.
- 126. In many of the locations where ESSPIN have provided water and sanitation no previous communal water supplies and toilets had existed. The students needed to be given instruction on how to use the facilities and the Head Teachers and SBMCs needed guidelines for the management of the water supplies and the toilets.
- 127. The students needed basic hygiene education and the Head Teachers needed to ensure that toilets are used, kept clean and that water supplies are properly cared for.
- 128. The very nature of the water hand pumps that have been provided means that they require periodic maintenance (replacement of worn seals, repair of foot valves etc) and these maintenance tasks need to be performed by skilled technicians. If this is not done the hand pumps break down very quickly and if a repair is attempted by an unskilled technician the hand pumps and boreholes can be badly damaged. It was therefore essential to provide capable technical support for the water supplies.
- 129. After a period of time during which the water supply was working continuously the Communities appreciated the value of a clean reliable water supply and became dependent on it. They started to understand what is involved in maintaining it and learn how to manage the maintenance. The support can then be gradually withdrawn as the communities become more self-sufficient. They became able to arrange a 'good mechanic' as opposed to a 'bad mechanic' to take care of maintenance problems.

4.4 Water Closets vs 'Pour Flush' Latrines

130. Water closet toilets that were provided in Lagos with cisterns proved to be neither robust nor durable and most had broken down or been damaged within weeks of hand over. These toilets were subsequently converted to 'pour flush' type latrines that eventually worked well. Initially the SUBEB authorities in Lagos were insistent on the provision of Water Closets but following the ESSPIN experience they have agreed to provide 'pour flush' latrines for their schools in future.

4.5 Written Reports and Manuals vs Discussion + Workshops

131. The effectiveness of written reports and Manuals were found to be very limited. Most of the Stakeholders are comfortable with verbal discussion but the impression is that they find written language difficult. As a result most of the Stakeholders were not motivated to read them. This is particularly true if the documentation is provided in soft form.

- 132. Discussion at meetings was found to be far more effective. The best form of mass communication was found to be interactive discussion with as many of the Stakeholders present as possible. Results of workshops at school and LGEA level were very effective.
- 133. Similarly benefits were realized by simplifying the reporting system for monitoring and retrieving information from the field. Simple one page reports were devised which could be completed on a multiple choice or by a 1- 10 rating basis. This overcame the language barrier and helped to avoid misreporting.

4.6 Payment Procedures

- 134. The effect of delayed payments on an infrastructure programme that is dependent on the performance of small contractors is debilitating. As soon as the contractors experience cash flow problems the progress of work stops. Following eventual payment after a delay progress is slow to pick up again and then stops once more when the next cash flow problem arises. This stop start cycle can add months to contract periods.
- 135. It is therefore essential to set up a payment procedure for the infrastructure that is secure, transparent and not subject to procedural delays. On this programme delays were experienced both within ESSPIN and SUBEB particularly in the first two years of the programme. A simple payment tracking system was very effective in pinpointing where the delays were occurring.
- 136. When these problems were resolved in the latter years of the programme there was a marked improvement in infrastructure implementation delivery.

4.7 Responsibility for Infrastructure Facilities

137. As the implementation of the infrastructure is generally done by outside contractors it often takes time for the schools to take ownership of and responsibility for the facilities. In addition to engaging with the Communities the process can be greatly enhanced by including the management, usage, cleanliness and condition of the infrastructure facilities in the Head Teacher's evaluation review. For some reason Head Teachers did not regard the infrastructure as falling under their responsibility. By including these functions in the Head Teacher evaluation this helps define the responsibility for care, maintenance and upkeep.

4.8 Area Boys and Vandalism

138. In the course of the programme where these problems occurred we learnt that it was better to engage with the Area Boys and enlist their support rather than discipline or ignore them. This policy was effective in some locations but this is still a serious problem particularly in the highly populated areas of the big cities

5. Conclusion

- 139. The primary focus of ESSPIN's infrastructure programme has been on encouraging and restoring good practice to the SUBEB Physical Planning Units and promoting Maintenance and Sustainability. In so doing, the aim has been to address three of the four outputs of the programme:
 - To strengthen the governance and management of education at State level
 - To improve education service delivery in primary and junior schools
 - To increase the capacity for Communities to articulate demand for better quality education services
- 140. The structural systems and institutional challenges that faced ESSPIN in realizing these objectives are detailed in the main body of the report. It is clear that ESSPIN have been very influential in setting up systems and processes to improve delivery and quality control. There has been a strengthening of governance, and a reversal of previous bad practice in terms of procurement, selection of Contractors and delivering of poor quality facilities. The State SUBEBs have benefitted from the technical assistance and have improved their systems with regard to planning, delivery and timely utilization of budgets. ESSPIN has also endeavored to introduce Community engagement and Maintenance and Sustainability into the mainstream of SUBEB policy
- 141. In the second phase of the programme (2014 2016) the emphasis was almost entirely on Maintenance and Sustainability. Maintenance procedures were introduced by ESSPIN with the objective that these procedures would be institutionalized. These procedures were successfully adopted by SUBEB and the Communities who gradually became more selfsufficient. By the end of the programme, some 2 – 5 years after the infrastructure was built, all the sanitation facilities were still in good condition and at any one time at least 95% of the water installations were fully functional. It can be considered that a major step forward has been made in terms of infrastructure sustainability.
- 142. The programme has focused mainly on water and sanitation. Where classrooms have been built (only 30 across the whole programme) they have been used to demonstrate good practice and value for money.
- 143. At the start of the ESSPIN Programme approximately 75% of the school infrastructure was in very poor condition. In addition, the deterioration in the way that SUBEB was implementing the provision of new infrastructure meant that there was a continuing cycle of degradation. Due to the scale of the problem in Nigeria the condition of school infrastructure as a whole is still in very poor condition. There has however been an improvement and the example set by ESSPIN has enabled this general improvement and the restoration of good practice.

- 144. Following the construction of the school buildings implemented under ESSPIN, SUBEB, the schools and the Communities appreciate the value of good quality buildings and will now hopefully expect and achieve higher standards of quality in the future.
- 145. The weak Capacity of SUBEB was successfully addressed by continuous liaison with SUBEB during all stages of implementation and the introduction of external private Consultants. SUBEB in several of the States are now once again appointing private Consultants for the supervision of school construction in recognition of their weak capacity in this area.
- 146. Procedural Delays at the start of the programme were a major impediment to infrastructure implementation. The 'ESSPIN' States have adopted to a large extent the successful procedures used by ESSPIN and budget allocation and planning delays have been reduced. This has been facilitated by the examples set by ESSPIN in ensuring that implementation targets were met and pinpointing the stages where these delays were being caused, highlighting them and tackling the underlying causes.
- 147. Planning and Procurement within SUBEB has now improved. SUBEB are now using the criteria for Base line studies and planning used by ESSPIN in conjunction with the ESSPIN EMIS data that is now available. SUBEB have now also adopted the 'whole school' approach and plan to provide water and sanitation to all schools
- 148. With regard to Procurement, SUBEB have also been encouraged by ESSPIN results to restore good practice to their procurement procedures. They have re-introduced
 - Prequalification of Contractors
 - Comprehensive Tender Evaluation Reports in the ESSPIN format
 - Reduction in Contract Mobilisation Fees. Mobilisation payments of 10 15% are now being paid where formally these were often as high as 50% with a resulting high project abandonment rate.
- 149. The ESSPIN standard Prototype Designs for toilets have already been successfully introduced into 3 States and 2 more are hopefully going to follow. The ESSPIN designs have been fully inclusive in terms of catering for disability. Ramps have been provided to all classrooms and toilet blocks, together with the provision of easily accessible disabled toilets with outside opening door (more internal space) and handrails for support while using the toilet.
- 150. Quality and Value for Money has been a cornerstone of the ESSPIN implementation process. The 'ESSPIN' buildings have been constructed to a good standard and compare very favorably in terms of cost with the SUBEB poor quality structures that were being built prior to ESSPIN.
- 151. The restoration of good practice was one of the main objectives at the start of the programme. The intention was to "prolong the lifespan of buildings and break the current wasteful cycle of continuous spending on cosmetic rehabilitation of buildings with weak foundations and walls".

Hopefully the ESSPIN programme has achieved this so that the 70% of the education sector budget being allocated to infrastructure will now achieve better value for money.

- 152. One of the key aspects of the ESSPIN infrastructure programme was to increase the Community Involvement in Construction, Maintenance and Sustainability. The Communities were involved from the planning stage and throughout implementation. They attended site meetings and also a representative of the SBMCs had to sign off certificates prior to payment being made to Contractors. This aided the quality of construction and ensured that the Communities were kept aware of the value of money being allocated for 'their' infrastructure. Following completion of construction the Communities were fully involved in the maintenance procedures and encouraged to become self-sufficient. To a large extent this was achieved and this will contribute greatly to the overall sustainability and benefit of the infrastructure.
- 153. Systems were introduced to improve Monitoring, Evaluation + Reporting. Effective systems were set up with regular visits to the States by the International Consultant (quarterly) National Consultants (monthly) and State Consultants (weekly). A simple and very effective form of reporting (see Methodology + Best Practice) was devised. These reports were submitted and reviewed monthly by the ESSPIN infrastructure team and SUBEB. As the programme progressed these systems were adopted by SUBEB. (See 3.2.2 of the report)
- 154. The biggest challenge facing the implementation of the infrastructure was the delay in payment procedures both with ESSPIN and SUBEB. In a programme of this nature where the construction is being done by small scale local contractors good cash flow is critical. By the end of the Programme the payment procedures had been considerably streamlined without losing its transparency and payment periods were acceptable. This issue however required continuous monitoring at executive level.

6. Challenges

- 155. There are still massive challenges facing schools infrastructure in Nigeria. In a recent survey of condition undertaken in Kaduna State, the infrastructure deficit was of the order of N 112 Billion while the annual UBEC/ State funding allocation for infrastructure is only N 2 Billion.
- 156. On a recent visit Jigawa State articulated their main problems as severe overcrowding and dilapidated facilities in urban schools and lack of facilities and teachers in rural areas. This results in poor quality education in both the urban and rural situations and low enrolment in the rural areas. This complaint is fairly typical for the ESSPIN program States.
- 157. There are also challenges of capacity within the states SUBEB departments. At Director level the staff are well qualified but there is a lack of depth in personnel and poor operational capacity (lack of equipment, computers and transport).

- 158. Vandalisms and security is an issue at the larger urban schools particularly those without boundary walls. This poses a dilemma for the State SUBEBS. They are reluctant to commit scarce resources to the construction of boundary walls. In themselves the boundary walls do not contribute to Education but particularly in the crowded urban areas they are vital to protect the assets of the schools
- 159. More recently due to the harsh economic conditions that Nigeria has been experiencing the State SUBEBs are facing severe budgetary constraints. It is hoped that the situation will improve to enable the SUBEBs to perform at their improved potential.

7. Sustainability

- 160. The extension of the infrastructure programme for the additional 2 years after completion of the construction contributed significantly to the objective of sustainability of the infrastructure and the adoption of ESSPIN methods. There has been a continuous improvement in the maintenance, use and sustainability of these facilities over this period.
- 161. With the benefit of the maintenance systems that have been introduced by ESSPIN and adopted by SUBEB and the Communities improved awareness of self-sufficiency it is hoped that the programme objectives of sustainability will be achieved
Annex 1: ToR for ESSPIN International Consultant

Terms of reference: International Infrastructure and Water and Sanitation Consultant, School Infrastructure

Title of the assignment: School infrastructure and maintenance support

Duration and dates of the assignment: Up to days starting the week beginningApril 2010.

Background

Despite the possession of considerable oil wealth, a rising population, inefficient government investment in front line public services and years of neglect have left the Nigerian education system in a poor state. Education indicators are amongst the lowest in Sub-Saharan Africa, particularly for girls. Currently it is estimated that there are 7-9 million school aged children not attending school, a disproportionate percentage of whom are girls.

Since legislation was passed in 2004 establishing nine-year compulsory Universal Basic Education, the main sectoral focus of Federal and State governments has been an expansion of basic education to meet the Millennium Development Goals. There has been a significant increase in investment in the basic education sector through State governments and through Federal sources such as the Universal Basic Education Commission (UBEC). Access remains a problem, as do the low quality of education outcomes and the stark inequities in the system.

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. ESSPIN's aim is to have a sustainable impact upon the way in which government in Nigeria delivers education services and 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 six States (Kano, Kaduna, Kwara, Jigawa, Enugu and Lagos) and at the Federal level. ESSPIN builds upon previous technical assistance projects in education, in particular the Capacity for Universal Basic Education Project (CUBE). ESSPIN will run in parallel with World Bank credit-funded projects in four of the States (the State Education Sector Project (SESP) in Kano, Kaduna and Kwara and SESP II in Lagos).

Objectives of the assignment

The objective of the assignment is to provide technical assistance to the basic education stakeholders in the ESSPIN States in order to improve the quality of school infrastructure provision and procurement.

The International Infrastructure and Water and Sanitation Consultant will be part of a team of international and national consultants. The Consultants will be divided into 2 teams each comprising an International and a National Consultant. The Consultant will be assigned 2 or 3 States and will manage the Infrastructure and Water and Sanitation programme as outlined in the ESSPIN School Infrastructure and Maintenance Position Paper (June 2009)

The main objective of the assignment is to implement appropriate infrastructure and water and sanitation interventions that will be constructed to a high standard and will serve as an example for further sustainable development.

Tasks

Specific tasks include the following activities which will be undertaken in the ESSPIN Project States of Lagos, Kwara and Enugu in conjunction with the National Consultant and the rest of the infrastructure team.

- In association with the ESSPIN STLs oversee the allocation of direct ESSPIN budgetary assistance for the provision of water and sanitation and other infrastructure facilities
- In conjunction with the rest of the infrastructure team develop appropriate designs for the provision of water and sanitation and other infrastructure facilities
- Manage and Monitor the Tendering and Procurement Process for the Construction Management

Consultants and the water and sanitation contractors

- Co ordinate and monitor the activities of the National Consultant in the implementation of the Technical Assistance and Capacity Building programme
- Monitor the construction phase of the project with particular emphasis on ensuring that the facilities are constructed to a high standard
- Conduct Training Workshops (including Training of Trainers) for the Stakeholders Technical staff in the planning, design, management and supervision of infrastructure implementation.
- Assist with the preparation of an Infrastructure Maintenance Policy and development of a Maintenance Manual.
- Work closely with the School Based Management Committees (SBMCs) to develop ways in which the Communities can become more involved in the planning, implementation and maintenance of infrastructure facilities, particularly the water and sanitation facilities.
- Provide Guidance in preparation of a School Hygiene Promotion Manual together with associated IEC Tool kits to be distributed to all program schools

 Promote introduction of School Health Clubs (SHCs) in all program schools with the objective of achieving necessary hygiene behaviour change that could optimise the health benefits to be gained from the provision of improved water and sanitation facilities

Outputs

Improved planning of and procurement for State school construction and maintenance programmes.

Raised community awareness and oversight of school construction and maintenance programmes delivered by SUBEB and the State Ministries of Education.

Institutional/administrative arrangements

At the end of each input a report will be submitted detailing the aims and objectives of the consultancy visit together with the findings and ways forward for the subsequent inputs. Documents developed during the course of the input such as budgets, progress charts, implementation programmes, training documents, manuals etc will be annexed to the reports and distributed to the relevant Stakeholders.

The Consultant will report to the Lead Specialist Education Quality and the STL in States in which any field work undertaken during the course of the visit takes place. A debriefing will be conducted with the Lead Specialist and Technical Team Co-ordinator before the consultant leaves the country.

Annex 2: ESSPIN Position Paper, May 2009

ESSPIN School Infrastructure and Maintenance

Position Paper

Introduction

The challenges facing the Education sector in Nigeria are considerable at the present time. In trying to meet these challenges it is essential that the issue of infrastructure is addressed. Having a good physical learning environment is a critical part of the education process

Main Issues

Status of Basic School Infrastructure.

It is estimated that 75% of the school infrastructure in the Project States is in very poor condition. In some States particularly in the rural schools the situation is worse than this. In rural Kwara for example it is estimated that less than 20% of the school classrooms meet the current minimum requirements for a safe and comfortable learning environment.

The poor quality and shortage of classroom furniture exacerbates the problem.

Many classrooms are overcrowded and students are reduced to sitting on the floor.

The situation regarding water and sanitation is also extremely poor. It is estimated that less than 20% of all schools have adequate water and sanitation facilities. Many schools with thousands of students do not have suitable toilets and a considerable number have no toilets at all. Similarly many schools do not have a water supply.

Condition of Existing School Buildings

Most of the school buildings are not in good condition.

One of the main reasons for the current chronic situation is that the Education Sector, particularly infrastructure, suffered from an approximately 20 year period of neglect during the military regime. The situation has been exacerbated by the fact that most of the buildings that have been constructed in recent years are of very poor quality. They have been badly built because of poor procurement practices, poor construction management, political interference, the use of poor quality materials and workmanship and a lack of supervision during construction.

Even where buildings have been constructed to an acceptable standard (generally those more than 20 years old) there has been a severe lack of maintenance which has resulted in many buildings being in a state of disrepair and most buildings having a reduced lifespan

Rehabilitation of Existing Structures.

In the recent past a lot of emphasis has been placed on the rehabilitation of existing buildings. This is posing a real problem because funds are being badly utilised on sub standard buildings that have been constructed on poor foundations, have under strength concrete block superstructures and weak floor slabs. All that this achieves is a short term cosmetic job on a defective shell. It is not uncommon for buildings that were completed less than 5 years ago to require 'rehabilitation'. It is essential that the

quality of the buildings that are erected in future are of good quality so that this cycle of degradation can be broken

Magnitude of the problem

It can be seen from the foregoing that the scale of the problem is enormous. The condition of the infrastructure throughout the project States is in very poor condition when considered as a whole and it will take a considerable period of time to improve the situation. It is important that the deterioration is arrested, that good practice is restored and the process of rebuilding starts on a good footing.

<u>Assessment</u>

In order to make the assessment for this Position Paper visits were undertaken to all 4 of the Project States with the exception of Lagos State who were not in a position to host the visiting Consultant. The visits were undertaken in March and May 2009.

The condition of the existing infrastructure was assessed by a combination of site visits to a random selection of schools in the States and extensive discussions with stakeholders. Consensus was reached regarding the overall condition which is expressed in this report. The major problems that exist in most of the buildings are the following:

- Inadequate foundations that soon result in cracked walls
- Very poor floor slabs and consequently weak and damaged screeds
- Poor quality sandcrete blocks in the walls with many having holes
- Poor quality timber roof trusses (not seasoned and not termite treated)
- Roof sheets of inadequate gauge and poorly fixed
- Poor quality timber ceilings
- Poor quality window and door frames and shutters
- Poor quality furniture
- Poor and often no maintenance

Meetings were held with a range of representatives from the State MOEs and SUBEB from Director level down to technical assistants, the emphasis being on the staff from the Planning Research and Statistics Directorates. Meetings were also held with some LGEA officials

The MOEs and SUBEB explained their Institutional arrangements and the Organigrams for the 4 States are basically similar and conform with a traditional Public sector format.

An assessment was made of the capacity of the staff and their operating mechanisms and practices for the implementation of infrastructure projects. It was found that apart from the senior staff the capacity of the organisations was generally rather weak. The staff require capacity building in the form of training and assistance with planning, the development of better prototype designs and tender documents and operating manuals. The organisations also lack administrative capacity. This manifests itself in lack of transport, furniture, computers and printers, records and filing systems connectivity etc. The mechanism for budget allocation and the process that is followed was explained and was found to be logical but subject to excessive delays. This is due to the bureaucratic processes that have to be followed. Delays in releasing the budgets are also often caused by delays in counterpart funding being met by the States. In several of the States visited (in March and May 2009 the budget for 2008 had still not been released). However 70% of all funding for Education is allocated for infrastructure and therefore if these funds were disbursed in time and value for money achieved this would make a significant difference to the States infrastructure needs.

The ESSPIN State team leaders and Education quality representatives were also consulted at length. At all the meetings and discussions held stakeholders were asked for their recommendations and suggestions for interventions that could be made by the ESSPIN project to improve the delivery of infrastructure to the States

Issues to be Addressed

Before determining the overall approach and the practical steps to be taken to support the States and the Communities it is important to identify the issues to be addressed

- <u>Procedural Delays</u> in the release of annual budgets. This is having a detrimental effect on the implementation of infrastructure projects. The administrative processes need to be streamlined and the States need to deposit their counterpart funding from the UBEC fund in a timely manner
- <u>Planning and Data Collection</u>. Assistance needs to be given to the States in the preparation and reviewing of their short and medium term workplans. This needs to include methods of data collection and verification
- <u>Procurement procedures</u> Open and transparent procurement methods need to be used in the procurement of all construction contracts. Only reputable and competent construction companies should be allowed to bid for contracts. Political interference needs to be curtailed.
- <u>Water and Sanitation</u> The present situation is extremely poor and the provision of sanitation and water is a priority
- <u>Prototype designs</u>. Improved designs with accompanying specifications and tender documents should be used for all new school buildings to enable an improvement in quality of the building stock
- <u>Capacity Building at State level.</u> The introduction of operating manuals and training of staff at MOE and SUBEB. The roles of these 2 organisations sometimes overlap which results in a dilution of responsibilities in certain areas. Specific roles and responsibilities need to be defined
- <u>Capacity Building at LGEA and Community level</u>. For the sustainability of education as a whole including infrastructure it is essential that the communities play a greater role. Communities and LGEAs need to develop a sense of entitlement and also ownership and responsibility for the infrastructure they receive. They should be incorporated in the planning process and be involved in the supervision and maintenance of school buildings
- <u>Poor quality school buildings</u>. The cycle of poor quality buildings that require rehabilitation after less than 10 years (in some cases less) must be broken. This is a downward spiral. In most cases all that 'rehabilitation' achieves is a cosmetic job that lasts for a few more years before the cycle is repeated. This results in very poor value for money and makes no sense from a building or economic point of view.

- <u>Prioritisation of construction of sanitation, water supplies, classrooms and provision of furniture</u>. Due to the critical situation the emphasis needs to be on the decongestion of urban classrooms and new classrooms in underserved rural areas rather than diverting resources to Library and Laboratory construction. These units have a relatively high cost and high service demands which are often not met.
- <u>Supervision of Construction</u> There are very weak systems in place at present for supervision. Most States do not even have a budget for this item. The results of having unsupervised contractors is predictable and contributes to the ongoing trend of poor quality. Some States, realising this problem, have started to employ outside Consultants to fill this role. To overcome the problems of transport it is proposed that this function is decentralised with a greater involvement of the LGEAs and the Communities
- <u>Administrative Capacity of MOE and SUBEB</u> This is a constraint on the ability of these institutions to operate effectively and needs to be addressed jointly by ESSPIN and MOE/SUBEB
- <u>Maintenance</u> A workable Maintenance policy needs to be developed and implemented to preserve the sector's building stock

Overall Approach

<u>Adoption of Realistic Targets.</u> It is important for a project of this nature to adopt realistic targets. With the general educational infrastructure in such bad condition and the scale of the problem so big it is not realistic to aim for a transformation type situation in the time frame of the ESSPIN project. The objectives can be ambitious but must be achievable

<u>Sustainability</u>. The interventions introduced under the ESSPIN programme need to be sustainable and their benefits enduring. Provided the interventions of ESSPIN can re-establish the basis of good practice this can be built on by the MOE and SUBEB in the future. If this is achieved the long term benefit to all the stakeholders will far exceed the short term benefit during the ESSPIN programme

<u>Capacity Building and strengthening of Govt Systems</u>: The current institutional arrangements in the Planning, Research and Statistics Directorates of the State MOEs and SUBEB are well established and conform with the traditional organisation of similar types of infrastructure implementing authorities. Some aspects of these organisations do not function particularly well or efficiently but they are fundamentally sound. It would therefore be detrimental in the long term to work outside of these organisations with the intention of achieving a short term objective more quickly. The approach that will be taken is to work within these existing institutions with a view to strengthening the Government systems and getting them to work more effectively. Considerable input will therefore be in the capacity building and training of staff at State level.

70% of the current infrastructure budget is allocated for infrastructure. This is a significant resource and if it can be used effectively it will make a big difference to infrastructure delivery.

Capacity building and training of the MOE and SUBEB staff at State level will form an important part of the ESSPIN approach

<u>Involvement of Communities</u>: At present there is very limited involvement of Communities in the planning, implementation and maintenance of school buildings. The capacity of the communities is very weak due to their limited resources. In the past they have tried to construct classrooms and toilets in a small number of locations but the standard of these buildings is nearly always lower than those built by

Contractors working under SUBEB. This is because the Communities receive no technical assistance and generally try to do too much with small amounts of money. This results in buildings being badly built and often not being completed.

Support from these often impoverished communities in the form of direct contributions in terms of labour and materials would require a lot of technical assistance, professional supervision and monitoring even if they could afford to make these contributions.

Similarly their ability to manage the construction directly with donated funds would be limited and require considerable technical and managerial assistance. The communities often have fragile organisational structures and no training in construction management and therefore this approach is not recommended on a large scale. It may however be adopted on a small scale/pilot basis. Instead the approach that will be adopted is one of trying to raise Community awareness in terms of entitlement to and the benefit and ownership of school buildings.

Work will be done in conjunction with the School based Management Committee Programme to raise the Communities' awareness and involve them in the planning stages and also the supervision of construction.

This will be done at a fairly elementary level using basic manuals that illustrate good construction practice and will include supplying samples of building materials that meet the required specification. This will help to ensure that the Contractors on site use good quality materials and acceptable workmanship. Mechanisms will be put in place to enable the Communities to get advice and assistance from SUBEB when they consider it necessary. The wide coverage of the mobile telephone network in most of the Project areas will be of great help in this regard.

This supervision input from the Community will help raise the quality of the buildings and at the same time involve the Community and help them develop an interest in the buildings and a sense of ownership. With this input in the construction from the beginning, and the sense of ownership and benefit to them of the buildings the Communities will be far more willing to play a part in the maintenance and long term well being of the buildings.

Use of Model Classroom Construction as a basis of the Training and Capacity Building programme The ESSPIN team leaders in 3 of the 4 Project States are selecting a limited number of LGAs for the first phase of the project. The intention is that in these selected LGAs model classroom blocks will be constructed in the first year of the project and they will be used for the training of the technical staff of MOE and SUBEB and also the LGA staff and the Communities. The intention will be for ESSPIN technical assistance to be provided such that the complete process from planning and procurement to actual construction is followed by the ESSPIN technical team and used as a training exercise. This will give the opportunity for Workshops and Training sessions to be given on a live project which should be very effective in Capacity building. Construction Management and Supervision Manuals can be drawn up and refined and adapted to the local situation as the training progresses. All players in the construction management process will receive training from the planners down to the site supervisors. It will also provide the opportunity to impart practical knowledge, at an appropriate level, to the Community.

This inclusive approach involving all the players has been used very successfully in the past. By working with individuals at all stages of the process ESSPIN technical staff will quickly be able to identify problem areas and work together as a team to find and implement solutions rather than imposing them with a policing attitude

<u>Restore good practice in construction of infrastructure.</u> The aim of the training and capacity building is to restore good practice and improve the quality of the school buildings. This will provide good quality comfortable classrooms, prolong the lifespan of buildings and break the current wasteful cycle of continuous spending on cosmetic 'rehabilitation' of buildings with weak foundations and walls. With the needs being so great in the education sector as a whole it is essential that value for money is realised for the 70% of the budget that is allocated to infrastructure.

Practical Support to States and Communities

Capacity Building at State Level

i. <u>Preparation of State Workplans and Pilot Projects</u>

Working sessions will be held with SUBEB and MOE representative to review their current workplans and prepare the Workplans for the first 2 years of the ESSPIN programme. This will involve several visits to the SUBEB offices in each of the States for up-to a week at a time to carry out reviews and assist in the formulation of the Workplans.

Issues to be addressed will include:

- Data collection. Assist with methods to obtain relevant information for planning purposes and introduce checks to verify the accuracy of information being used.
- Review current SUBEB workplans in terms of priorities and quality/ effectiveness.
- Ensure that institutional responsibilities between and within MOE and SUBEB are well defined.
- Establish the current budgetary status and ensure the availability of funds for the first two years of the ESSPIN programme.
- In association with the ESSPIN State Team Leaders and SUBEB prepare the Workplan for the 1st Year of the programme utilising the ESSPIN budget for construction of model classrooms in the selected LGEAs, water and sanitation facilities and pilot projects.
- Workshops will be held to discuss key issues relating to school layout plans, preparation of prototype designs and specifications for school buildings and furniture.
- The preparation of the technical procurement documents will also be dealt with in the workshops and mechanisms for the prequalification of competent contractors explored.

Following initial visit to each of the States covering the above issues a series of follow up visits will be held to agree the final workplans and review the procurement documents. The tender process will be monitored including the preparation of the tender evaluation reports and award of contracts.

ii. Preparation of Manuals for Construction Management, Supervision

and Maintenance

The intention is to develop these Manuals at State level in each State with the participation of all the relevant personnel in the MOE and SUBEB. The skeleton of each of these manuals will be essentially

the same for each of the States but they will be formulated and edited in the teamwork atmosphere of individual Workshops. In this way each of the attendants at the Workshop will be able to actively contribute to the formulation of the Manuals – it is intended that this non prescriptive approach will promote greater interest and ownership of the manuals and be appropriate to the needs and conditions in each States. In addition to being a useful training exercise in itself it will result in the production of Manuals and Guidelines that can be embedded in the system and used in the future in the construction and maintenance of the school buildings.

iii. Direct on the Job Training in Construction Management and Supervision

Workshops and training sessions will be held at regular intervals during the construction of the model classrooms and water and sanitary facilities that are being implemented in the first year programme. These training sessions will include site visits. During this period the Construction Management and Supervision Manuals will be put into practice in a 'live' situation and further refinements and improvements can be made to the Manuals in the process.

Capacity Building at LGEA and Community Level

As outlined elsewhere in the report it is essential for the Communities and LGEAs to become more involved in the infrastructure process.

In order to introduce infrastructure issues to the Community it is intended that this is done in close cooperation with the School Based Management Committee Programme that is being incorporated in the ESSPIN project.

Workshops will be held with the LGEA staff and the SBMCs with the objective to involve communities more in the planning, supervision of construction and maintenance of school buildings. Workshops will be held with SBMCs with the following objectives:

- To sensitise the communities regarding their entitlement to school buildings of a reasonable quality.
- To involve communities and LGEAs in the planning of school buildings.
- To provide simple guidelines on the quality of building materials and good building practice. This will be done in the form of a simple manual with illustrations and captions in the local language and will be supplemented with samples of building materials (concrete blocks of acceptable strength, door and window frames and locking mechanisms, roof sheets of the correct gauge etc)
- To set up empowerment mechanisms that will enable the voice of communities to be heard and establish a course of action that should be followed when they require assistance.
- To establish the part Communities can play in the Maintenance of School facilities.

The Communities and LGEA personnel will also participate in the "on the job training sessions" that will be conducted during the construction of the model classroom blocks and water and sanitation facilities. This will enable all the participants in the infrastructure programme to establish the best ways in which Communities can participate and become more involved in the construction and maintenance process.

Development and Implementation of School Maintenance Policy

There is currently little or no maintenance in most schools in the Project States. The objective will be to develop a tiered maintenance policy with mechanisms that enable the various maintenance functions to be implemented at the appropriate level.

It is intended that a Maintenance Manual will be developed in tandem with the Construction management and Supervision manuals.

It is essential that regular periodic inspections of the school building stock are included in the inspection process and budgets and mechanisms are established for maintenance.

Direct Budgetary Assistance

It is proposed that direct budgetary assistance is provided under ESSPIN for the following facilities in schools in the initial 2 years of the project.

Water Supplies + Sanitation

Model Classroom Blocks in selected LGEAs.

Pilot projects at selected LGEAs.

A breakdown of the proposed budget is included as an Annex to this report.

In addition to providing badly needed facilities in the form of classrooms and water and sanitation, the construction of these facilities will provide a training ground for capacity building among the MOE and SUBEB staff at State level and also the LGEAs and Communities at school level.

International and National Technical Assistance

In order to provide the Capacity Building outlined in this paper it is intended that both International and National Consultants are engaged.

At this stage it is likely that two TA teams are formed each comprising 1 International and 1 National Consultant and that the Project States are divided between the two teams. This would provide continuity but rotating the teams and the States may also provide variety and added value. A decision on the option to be adopted will be made as the training programme evolves.

A copy of the programme indicating the roll out of the training programme is attached in the Annex to this Report.

Annex 3: ESSPIN Infrastructure MoU with States SUBEB

MEMORANDUM OF UNDERSTANDING BETWEEN EDUCATION SECTOR SUPPORT PROGRAMME IN NIGERIA (ESSPIN) AND LAGOS SUBEB

BETWEEN

THE EDUCATION SECTOR SUPPORT PROGRAMME IN NIGERIA [ESSPIN], a programme funded and supported by the British Department for International Development (DFID), and having its office at Orji Uzor Kalu House, First Avenue, Off Ahmadu Bello Way, Central Business Area, Abuja **AND**

The Lagos State Universal Basic Education Board (SUBEB), a parastatal of the State Ministry of Education

WHEREAS:

- A. ESSPIN is a DFID funded programme, working alongside other DFID programmes in the country. ESSPIN aims to bring about systemic change in the governance and provision of public services, with a focus on strengthening the governance and management of education, and on improving educational service delivery to primary and junior secondary schools in the various states with which the programme is being implemented.
- B. The Lagos State Government has indicated interest in participating in the programme and has committed itself to cooperating with ESSPIN and providing all necessary assistance in facilitating an enabling environment in order to ensure the programme is implemented successfully.
- C. ESSPIN and SUBEB Lagos have agreed to work together with regards to the terms and conditions outlined in this Memorandum of Understanding.

DEFINITIONS:

In this Memorandum except where the context otherwise requires:-

1.	"this Agreement"	refers to this Memorandum of Understanding.
2.	"Applicable Laws"	shall mean the Laws of Lagos State and any subsequent amendment thereto.
3.	"the parties"	means all the parties under the preamble to this agreement, SUBEB Lagos and ESSPIN.
4.	"contract"	means the Agreement executed between the ESSPIN or SUBEB and a third party who is not party to this Agreement.

1.0 **DURATION**

- 1.1 The duration of the Agreement shall commence from the day the Agreement is signed by the parties until the..... day of unless it is prematurely terminated in accordance with the terms and conditions contained herein.
- **1.2** The parties may extend the duration of this Agreement for a further period on terms and conditions as may be determined by the parties.

2.0 SCOPE OF THE AGREEMENT

2.1 The scope of the Agreement shall cover specific contracts, activities and services related to the implementation of ESSPIN programme initiatives agreed between ESSPIN and SUBEB.

3.0 ESSPIN's OBLIGATIONS

3.1 ESSPIN will provide expertise, consultancy and agreed funds for the implementation of specific ESSPIN activities.

4.0 **SUBEB's OBLIGATIONS**

4.1 SUBEB shall provide the necessary staff needed to support, manage, administer and supervise contracts, and to undertake activities and services agreed between ESSPIN and SUBEB.

5.0 **THE PARTIES' OBLIGATIONS**

The Parties agree in collaboration with each other to:

5.1 Conduct meetings at least once in every two months or as the need arises to discuss progress of programme activities.

6.0 ACCOUNTS AND RECORDS

- 6.1 SUBEB shall open and maintain an account (hereinafter referred to as 'the ESSPIN Account'), through which specified funding from ESSPIN will be received, in accordance to an agreed cash flow plan.
- 6.2 With specific regard to water and infrastructure activities, SUBEB shall pay monies to contractors for services provided on the receipt of payment certificates signed by ESSPIN's Consultant Engineer and SUBEB's appointed representative.
- 6.3 Release of funds for other activities, for example school grants, will be determine by procedures agreed between ESSPIN and SUBEB.
- 6.4 Signatories to the ESSPIN Account shall be as follows:
- ?????????? Category A
- ????????? Category A
- ?????????? Category B
- ?????????? Category B.

All cheques require two signatures and must be signed by one person from category A and one person from category B.

6.5 All funds accrued from ESSPIN must be utilized only for the purposes of programme activities and in accordance with ESSPIN's accounting procedures.

- 6.6 SUBEB shall prepare and maintain accurate and up to date records of accounts and supporting documentation including invoices, receipts and bills relating to the funds received and disbursed in respect of the programme. SUBEB shall maintain and keep these records for a period of seven [7] years following the completion of the programme or termination of this Agreement.
- 6.7 SUBEB shall make available these records for auditing by ESSPIN appointed auditors at any given time.

7.0 LIABILITY

- 7.1 In the execution of the project, SUBEB has the status of an independent contractor vis-à-vis ESSPIN.
- 7.2 ESSPIN is not liable for claims arising out of the activities performed under this agreement, or any claims for death, injury or damage to property that may be suffered by SUBEB's personnel, agents or subcontractors as a result of negligence of their work on the Programme..
- 7.3 SUBEB agrees to indemnify, hold and save harmless and defend at its expense, ESSPIN and its personnel from and against all liability of any nature including their costs and expenses arising out of the acts of omission of SUBEB, its personnel, agents or subcontractors.

8.0 NON-ASSIGNMENT

8.1 All parties will not assign nor transfer any of their obligations to this Agreement to any third party, unless in accordance with this Agreement.

IN WITNESS whereof the parties hereto have executed this Agreement in the manner below the day and year first above written.

Sign: _							
Name							
Date: _							
State Team Leader, ESSPIN							

Date: ______ Honourable Chairperson

SUBEB, Lagos

Annex 4: ESSPIN Prototype Drawings and BoQ Samples

4 Œ 1315 1200 8560 able Build 935 1700 6860 SECTION B-B s 8 (m ß Polsh Desk Une of ms Ang on gable wa 1000 Ę Ē 11 BOD 1:2:4 p Ę U П π Т Ń 400 STRO Ű Л. I 0 Fi SECTION C - C 11 N_{-1} Ű 5 5 40 π 66 Une of mis Ang on gable wal Z OFFICE 8 1 STORE 1720 X E 3000 140 300 Ŕ ⊅ 8 1000 G Soft board (display with timber frame thk CI 20/25 50 mm d15 1400 300 0 CLASSRODM 30 877 140 2 x 40 No. students (I FLOOR PLAN **V** 1500 10 516 \square 840 \bigcirc 1050 8330 Line of mis Angle raffer on gable wal 1700 6860 1200 ▶0 ESSPIN-09-01 PLAN à STATUS OF DRAWING Prehrinary for Internation Issued for Parring Approach Issued for Construction N I EDUCATIONAL SECTOR SUPPORT PROGRAMME IN NIGERIA ESSPIN 2 CLASSROOM BLOCK PROTOTYPE DESIGN DRAWN : MO CHECKED : RDC APPROVED : NW FEB. 2011 10. 20 ŝ 1:75, 1:50 2 0008 100 ≻

i. ESSPIN Classroom Plan



ii. ESSPIN Classroom Section





iv. ESSPIN VIP Laterine section

v. Clalssrom BoQ

BILL No. 2

2 CLASSROOM BLOCK

	BILL NO. 2				
	SUBSTRUCTURE [ALL PROVISIONAL]				
A	Excavation Excavate oversite to remove vegetable top soil average 150mm deep spread and level on site as directed.	213	m2	80	17,040.00
В	Excavate trench for foundation starting from stripped level ,exceeding 0.30m width and maximum depth not exceeding 2.0m	73	m3	575	41,975.00
С	Allow for keeping the surface of the site and excavation free from surface water.		ltem		
D	Disposal of Excavated Materials Remove surplus excavated materials away from site.	32	m3	525	16,800.00
E	<u>Filling</u> Backfill around foundation walls e.t.c with selected materials arising from the excavation.	29	m3	357	10,353.00
F	150mm Approved imported laterite filling deposited spread and levelled in maximum 150mm thick layers and well compacted in making up levels.	166	m2	450	74,700.00
G	200mm thick Bed of hardcore filling deposited ,spread, levelled in maximum of 150mm thick layers and well compacted in making up levels.	169	m2	470	79,430.00
Н	25mm thick clean sharp sand blinding to receive DPM	169	m2	125	21,125.00
J	500mm gauge polythene sheet sa DPM on well rammed sand blinding to receive concrete with 300mm lapping at joints [measured nett with no aloowance for laps]	169	m2	90	15,210.00
	Surface Treatment				
К	Level and compact bottom of excavation to receive concrete,	63	m2	100	6,300.00
L	Prepare and spread Dieldrex or equal and approved anti-termit treatment solution to surface of excavation,	279	m2	142	39,618.00
	To collection Page 2/2				322,551.00
	page2/1 Concrete Work				

A	50mm thick plain concrete (1;8) blinding poured against excavation to receive concrete.	63	m2	1201	75,663.00
	Vibrated reinforced in-situ concrete(1:2:4 -20mm aggregate) developing minimum 21N/mm2 works strength at 28 days filled into formwork and well packed around steel reinforcement (formwork and reinforcement both measured separately) in:				
В	Foundation	14	m3		
с	Ramp	0.38	m3		
D	Steps	0.27	m3		
E	300 x 230 x 600mm deep base to receive SHS pipe	0.33			
F	Bed 100mm thick	18	m3	27100	802 758 00
G	200 X 200mm thick Toe	52.98	m	1300	6,500.00
н	Mesh fabric reinforcement to Bs 4483 BRC type A142 lapped 300mm at all joints in Bed (measured nett-no aloowance made for laps)	184	m2	725	133,400.00
	Sawn Formwork to.				
J	Edge of bed 150mm high	60	m	375	22,500.00
к	Ditto Ramp ditto	5	m	375	1,875.00
L	Blockwork 225mm thick hollow sandcrete blockwork laid in cement and sand (1:5) and filled with weak concrete in foundation.	80	m2	4000	320,000.00
	COLLECTION				
	Page No 2/1				322,551.00
	Page No 2/2				1,453,696.00
	SUBSTRUCTURE CARRIED TO SUMMARY				1,776,247.00
	Page2/2				
	CONCRETEWORK Vibrated reinforced in-situ concrete(1:2:4-20mm aggregate) developing minimum 21N/mm works at 28 days filled into formwork and well packed around steel reinforcement (formwork and reinforcement both measured separately) in:				

A	Beam over 0.03 but not exceeding 0.10 square metre cross sectional area.	4	m3	27100	108400
В	Pad in walls to receive roof steel trusses.	0.42	m3	27100	11382
	Reinforcement High yield steel reinforcement to Bs 4449 including all hooks, bends,distance blocks and tying wire e,t,c. In beam, column, slab,staircases and like.				
с	10mm - 12mm diameter bar	457	kg	250	114,250.00
D	Sawn Formwork to: Sides and soffit of beams	48	m2	1513	72,624.00
E	Ditto Pad	2	m2	1513	3,026.00
	CONCRETEWORK CARRIED TO SUMMARY <u>BLOCKWORK</u> Hollow sandcrete block wall bedded and jointed in				309,682.00
	cement and sand mortar (1:6)				
F	225mm Wall	185	m2	3400	629,000.00
	BLOCKWORK CARRIED TO SUMMARY <u>ROOFING</u> <u>28G Galvanised roofing sheets fixed to 100 x 50mm</u> <u>purlin bolted to 80 x 80 x 5mm angle cleat welded</u> <u>50 x50 x 5mm rafter all in accordance with</u> <u>manufacturer''s instructions.</u>				629,000.00
G	Roofing	231	m2	1160	267,960.00
н	Ridge capping 600mm girth to suite the proile of the sheetings Page2/3	23	m	696	16,008.00
А	145mm [average] cement and sand (1:3) mortar as infill between ring beam and roofing sheets.	16	m2	3625	58,000.00
	ROOFING CARRIED TO SUMMARY				341,968.00
	WOODWORK CARPENTRY				
	Sawn Hardwood [Black Afara] treated with two coats of Bergernol as preservative				
В	50 x 100mm Purlins	355	m	295	104,725.00

	WOODWORK				
	CARRIED TO SUMMARY STRUCTURAL STEELWORK				104,725.00
	Fabrication and erction of steel roof trusses				
С	50 x 50 x 5mm x 3.91kg/m equal angle Rafter	282	kg	420	118,440.00
D	50 x 50 x 5mm x 3.91kg/m equal angle Rafter overhang.	37	kg	420	15,540.00
E	50 x 50 x 5mm x 3.91kg/m equal angle Tie beam	223	kg	420	93,660.00
F	50 x 50 x 5mm x 3.91kg/m equal angle King post	76	kg	420	31,920.00
G	50 x 50 x 5mm x 3.91kg/m equal angle Struts & braces	236	kg	420	99,120.00
н	Brackets 50 x 50 x 5mm x 3.91kg/m equal angle 300mm long Cleat welded to rafter	32	No	494	15,808.00
J	80 x 80 x 5mm x 3.91kg/m equal angle 80mm long Cleat welded to top of rafter with 15mm holes for 12mm holes.	128	No	215	27,520.00
к	50 x 50 x 5mm x 3.91kg/m equal angle 600mm long extension Cleat fixed with 12mm bolts.	8	No	985	7,880.00
L	400 x 50 x 5mm Splice plate bolted to kingpost &braces	8	No	660	5,280.00
м	200 x 100 x 6mm Base plate bolted to ring beam	16	No	556	8,896.00
N	200 x 50 x 10mm Flat bar fixed with 12mm nuts and washers in ring beam Page2/4	16	No	225	3,600.00
A	200 x 100 x 6mm Flat bar fixed with 12mm nuts and washers in ring beam	16	No	235	3,760.00
В	12mm diameter "U" bolt cast in- situ into concrete ring beam	16	No	215	3,440.00
С	10mm diameter "U" bolt welded to 50 x 50 x 5mm L and cast in - situ into concrete pad.	24	No	110	2,640.00
D	Nuts and Washers [Provisional]	365	No	250	91,250.00
E	Prepare and apply One primer coat before erection of all structural steel and two finishing coats of Epoxy red oxide paint in erected position.		ltem		55,000.00
	STRUCTURAL STEELWORK CARRIED TO SUMMARY				583.754.00
F	METALWORK 75 X 75MM SHS 3115mm long x 3mm gauge hollow				

	pipe along the corridor as support to extended rafter burried 500mm deep in concrete at bottom with 2No. 300mm long y12mm diameter bars and bolted to steel roof trusses on plate at top and apply one red oxide undercoat and two finishing coats of gloss.	8	No	7475	59,800.00
	Steel windows Crittal-Hope steel windows and doors complete with fittings including lugs to concrete and blockwork and bedding frame in cement mortar,all all round and pointing one side in non-setting mastic compound.				
G	Windows overall size 1400 x 1650mm high including 1400 x 500mm high top fixed light,glazing and burglar bars.	11	No	24725	271,975.00
н	Ditto size 700 x 1650mm high ditto.	1	No	12364	12,364.00
ſ	Flat bar Catch bedded into the wall on one side to receive and secure window to adjoining wall when open[Architect"s drawing.]	24	No	615	14,760.00
К	SteelDoors Doors overall size 1000 x 2550mm high including top 1000 x 500mm high fixed light, glazing, burglar bars and Locks.	4	No	26875	107,500.00
А	Page2/5 Flat bar Catch bedded into the wall on one side to receive and secure door to adjoining wall when open[Architect"s drawing.]	3	No	615	1,845.00
	METALWORK				468 244 00
В	FITTINGS AND FIXTURES Wrought treated and well seasoned polished 50 x 15mm softwood timber plugged and screwed to blockwork or concrete along the perimeter of classroom wall as picture rail.	59	m	825	48,675.00
С	2400 x 1200 x 8mm thick celotex display board screwed to 2400 x 1200 x 6mm thick plywood backing and framed with 15mm x 25mm polished timber frame, plugged and screwed to blockwork.	2	No	6459	12,918.00
	FITTINGS AND FIXTURES				61 502 00
					61,593.00
	FLOOR,WALL AND CEILING FINISHINGS				
	In -situ finishings				

	12mm cement and sand (1:5) smooth rendering on :				
	Internal				
D	Walls	210	m2	1100	231,000.00
E	Walls not exceeding 150mm wide	90	m	165	14,850.00
	on walls,painted with three coats of blackboard paint as blackboard [size 3000mm x 1150mm]	7	m2	2950	20,650.00
	External				
G	Walls	60	m2	1100	66,000.00
н	Walls not exceeding 150mm wide	81	m	165	13,365.00
J	Two coats of tyrolean finish with colour additives to general surfaces of walls slightly floated on immediate application to prevent sharp dry surface to the satisfaction of the Architects	69	m2	815	56,235.00
	Page2/6 In-situ terrazzo paving laid in 1200 x 1200mm panels divided with ebonite strips and including additional strips around perimeters polishing with carborundum and treating with approved hardener.				
	Internal				
А	25mm paving	130	m2	2200	286000
В	External 25mm paving	36	m2	2200	79,200.00
	Quary tiles in selected colours bedded and jointed in cement mortar (1 :3) and pointed with neat flush joint in cement on sreeded backing (measured separately)on :				
с	Skirting 100mm high.	80	m	475	38,000.00
D	<u>Ceiling Finishings</u> P.V.C ceiling panels [paragon ex- china] fixed to underside of timber purlins in accordance with manufacturer"s instructions.	235	m2	2070	486,450.00
	Beds and Backings				
E	25mm screeded bed	166	m2	700	116,200.00
	FLOOR,WALL AND CEILING FINISHINGS CARRIED TO SUMMARY				1,407,950.00
	PAINTING AND DECORATION				

	Decomposition and complete the condemonstrate and comp				
	finishing coat of CAPL silk emulsion paint on:				
	Internal				
F	Rendered walls.	210	m2	440	92,400.00
G	Walls not exceeding 100mm wide	90	m	44	3,960.00
	<u>External</u>				
н	Rendered walls.	60	m2	440	26,400.00
J	Walls not exceeding 100mm wide	81	m	44	3,564.00
	Page2/7 <u>Knot,Prime,stop and paint two undercoats and one</u> <u>finishing coat of gloss paint on steel windows and</u> <u>doors.</u> <u>Internal</u>				
к	General surfaces	68	m2	535	36,380.00
	PAINTING AND DECORATION CERRIED TO SUMMARY				162,704.00
	SUMMARY				
	SUBSTRUCTURE				1,776,247.00
	CONCRETEWORK				309,682.00
	BLOCKWORK				629,000.00
	ROOF COVERING				341,968.00
	WOODWORK				104,725.00
	STRUCTURAL WORK				583,754.00
	METALWORK				468,244.00
	FITTINGS AND FIXTURES				61,593.00
	FLOOR,WALL AND CEILING FINISHINGS				1,407,950.00
	PAINTING AND DECORATION				162,704.00
	CARRIED TO GENERAL SUMMARY			N	5,845,867.00
	Page2/8				

vi. Four Cubicles VIP Laterine BoQ

BILL No.4

	4 TOILETS BLOCK VIP LATRINE					
	BILL NO. 4					
	<u>SUBSTRUCTURE</u> [ALL PROVISIONAL]					
	·					
А	Excavation Excavate oversite to remove vegetable top soil average 150mm deep spread and level on site as directed.		25	m2	80	2,000.
В	Excavate trench for foundation starting from stripped level , exceeding 0.30m width and maximum depth not		8	m3	575	4 600
	exceeding 2.0m		0	1115	575	4,000.
С	Diito pit ditto.		23	m3	575	13,225.
D	Excavate working space ditto		9	m3	575	5,175.
E	Disposal of Excavated Materials Remove surplus excavated materials away from site.		30	m3	525	15,750.
F	Filling Backfill around foundation walls e.t.c with selected materials arising from the excavation.		7	m3	357	2,499.
G	Ditto with approved hardcore		2	m3	1500	3,000.
н	Ditto with approved impervious clay		1	m3	540	540.
J	200mm thick Bed of hardcore filling deposited ,spread, levelled in maximum of 150mm thick layers and well compacted in making up levels.		7	m2	470	3,290.
к	500mm gauge polythene sheet sa DPM on well rammed sand blinding to receive concrete with 300mm lapping at joints [measured nett with no aloowance for laps]		7	m2	90	630.
G	<u>Concrete Work</u> 50mm thick plain concrete (1;8) blinding poured		19	m2	1201	22 819
	Plain in-situ concrete (1:3:6 - 20mm aggregate) developing minimum 21N/mm2 works strength at 28		15	1112	1201	22,019.
н	Gays. Foundation To collection Page 2/3		4	m3	27100	108,400. 181,928.
	page2/1 <u>Vibrated reinforced in-situ concrete(1:2:4 -20mm</u> <u>aggregate) developing minimum 21N/mm2 works</u> strongth at 28 days filled into formularly and well					
I I	strength at 28 days filled into formwork and well	I	l	I	1	1

	packed around steel reinforcement (formwork and reinforcement both measured separately) in:				
А	Bed 150mm thick	1	m3	27100	27,100.0
В	Suspended slab 150mm thick.	1	m3	27100	27,100.0
с	Extra over for forming key type toilet hole size 350mm x 150mm as per Architect"s drawings	4	No	1800	7,200.0
	High yield steel bar reinforcement to Bs 4449 including all hooks, bends, distance blocks and this wire a t a				
D	10 mm diameter bar	59	kg	250	14,750.0
E	Mesh fabric reinforcement to Bs 4483 BRC type A142	7	m2	725	5,075.0
F	Pre-cast reinforced concrete (1:2:4- 20mm aggregate) developing minimum 21N/mm2 works strengh at 28 days. 1045 x 355 x 75mm Cover slabs reinforced with and including 10mm diameter high yield bars100mm both and finished fair on exposed faces and grout edges				
	with cement and sand .	12	No	2600	31,200.0
G	Extra over cutting out for 200mm precast vent block.	4	No	1400	5,600.0
н	Sawn Formwork to. Sofit of suspended slab	8	m2	1513	1210
J	Edge of bed 150mm high	15	m	375	5,625.0
ĸ	Blockwork 225mm thick hollow sandcrete blockwork laid in cement and sand (1:5) and filled with weak concrete (1:4:8) in foundation	46	m2	4000	184 000 (
M	Extra over for weeping holes at alternative courses.	8	No	250	2,000.0
	COLLECTION Page No 2/1 Page No 2/2 SUBSTRUCTURE CARRIED TO SUMMARY				181,928.0 321,754.0 503,682.0
	Page2/2 <u>CONCRETEWORK</u> <u>Vibrated reinforced in-situ concrete(1:2:4-20mm</u> <u>aggregate) developing minimum 21N/mm works</u> <u>at 28 days filled into formwork and well packed</u> <u>around steel reinforcement (formwork and</u> <u>reinforcement both measured separately) in:</u>				
А	Lintel	0.5	m3	27100	1355

	ReinforcementHigh yield steel reinforcement to Bs 4449including all hooks, bends, distance blocks andtying wire e,t,c.In beam, column, slab, staircases and like.				
В	6mm - 10mm diameter bar	20	kg	250	5,000.0
с	Sides and soffit of Lintel	4	m2	1513	6,052.0
	CONCRETEWORK CARRIED TO SUMMARY				24,602.0
	BLOCKWORK Hollow sandcrete block wall bedded and jointed in cement and sand mortar (1:6)				
D	150mm thick.	42	m2	3300	138,600.0
E	150mm Louvre blocks	1	m2	3400	3,400.0
F	SUNDRIES 300 x 300mm Precast block with 200mm diameter hollow insert laid to form stack 3915mm high with 8mm reinforcement tied back to 150mm blockwork at 1000mm centres as shown on the drawing.	4	No	3900	15,600.0
G	Stainless steel mosquito mesh fixed with mortar cap	4	No	350	1,400.0
Н	Extra over 50mm p,v,c pipe 275mm long weeping holes	3	No	165	495.0
	BLOCKWORK CARRIED TO SUMMARY				159,495.0
	Page2/3				
	ROOFING 28G Galvanised zinc roofing sheets with 100mm overlap and fix to timber purlin				
А	Roofing	7	m2	1160	8,120.0
В	Verge board 300mm girth	4	m	348	1,392.0
	ROOFING CARRIED TO SUMMARY				9,512.0
	WOODWORK CARPENTRY Sawn Hardwood [Black Afara] treated with				

	two coats of Bergernol as preservative				
С	50 x 100mm Purlins	16	m	195	3,120.0
D	50 x 150mm Rafter	7	m	295	2,065.0
	WOODWORK				
	CARRIED TO SUMMARY				5,185.0
	METALWORK Crittal-Hope steel doors complete with fittings including lugs to concrete and blockwork and bedding frame in cement mortar,all				
	all round and pointing one side in non-setting mastic compound.				
E	<u>Steeldoors</u>				
F	Doors overall size 800 x 2100mm high glazing ,locks and burglar bars .	4	No	17200	68,800.0
G	Steel frame lockable metal grill gate size 800 x 1800mm	1	No	12075	12,075.0
н	Flat bar Catch bedded into the wall on one side to receive and secure door to adjoining wall		No	615	2 460 0
	when open[Architect's drawing.]	4	NO	015	2,460.0
	METALWORK CARRIED TO SUMMARY				83,335.0
	Page2/4				
	FLOOR AND WALL FINISHINGS				
	<u>In -situ finishings</u>				
	12mm cement and sand (1:5) smooth rendering on :				
	Internal				
A	Walls	34	m2	1100	37,400.0
В	Walls not exceeding 100mm wide	7	m	110	770.0
С	Walls not exceeding 150mm wide	20	m	165	3,300.0
	External				
D	Walls	44	m2	1100	48,400.0
E	Walls not exceeding 100mm wide	7	m	110	770.0
F	Walls not exceeding 150mm wide	24	m	165	3,960.0

	25mm cement and sand (1:5) smooth rendering on :					
G	Top of walls not exceeding 150mm wide	7	m	330		2,310.0
	<u>Floor Finishings</u> Internal					
	<u>Cement and sand (1:3) paving trowelled smooth</u> and treated with approved hardener.					
н	50mm thick laid fall to keyhole.	4	m2	1600		640
J	50mm thick paving laid fall to weeping hole.	7	m2	1440		1008
	FLOOR,WALL AND CEILING FINISHINGS CARRIED TO SUMMARY					113,390.0
	PAINTING AND DECORATION					
	Prepare,prime and apply two under coats and one finishing coat of BERGER emulsion paint on: Internal					
к	Rendered walls. Page2/5	34	m2	440		14,960.0
А	Walls not exceeding 100mm wide	7	m	40		280.0
В	Walls not exceeding 150mm wide	20	m	66		1,320.0
с	External Rendered walls.	44	m2	440		19,360.0
D	Walls not exceeding 100mm wide	7	m	40		280.0
E	Walls not exceeding 150mm wide	24	m	66		1,584.0
F	Internal Apply two undercoats and one finishing coat of BERGER gloss paint on steel doors.	14	m2	535		7,490.0
G	Door frame over 150mm but not exceeding 300mm girth	20	m	161		3,220.0
	PAINTING AND DECORATION					
	CERRIED TO SUMMARY					48,494.0
	<u>SUMMARY</u>					
		•	•		•	

SUBSTRUCTURE			503,682.0
CONCRETEWORK			24,602.0
BLOCKWORK			159,495.0
ROOF COVERING			9,512.0
WOODWORK			5,185.0
METALWORK			83,335.0
FLOOR, WALL AND CEILING FINISHINGS			113,390.0
PAINTING AND DECORATION			48,494.0
CARRIED TO GENERAL SUMMARY Page2/5		N	947,695.0

Annex 5: ESSPIN/SUBEB ToR for State Infrastructure Consultants

Construction Management Consultancy Services Kano State

LOCATION OF ASSIGNMENT: School Construction Sites in 3 LGAs in Kano

1. 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.

ESSPIN's aim is to have a sustainable impact upon the way in which government in Nigeria delivers education services and is directed at enabling institutions resources in support of State and Federal Education Sector Plans and building capacity for sustainability. It is currently operating in five States (Kano, Kaduna, Kwara, Jigawa and Lagos) and at the Federal level. ESSPIN builds upon previous technical assistance projects in education, in particular the capacity for Universal Basic Education Project (CUBE). ESSPIN will run in parallel with World Bank credit – funded projects in four of the States (the Stated Education Sector project SESP) in Kano, Kaduna and Kwara and SES II in Lagos.

2. OBJECTIVES

- (iii) To significantly improve the quality of school buildings by providing Quality Supervision and Management of the Infrastructure component (Civil Works) for Construction and Rehabilitation of selected Schools facilities in targeted LGAs.
- (iv) To assist SUBEB management and the ESSPIN Consultants in the Contract supervision from contract signing to full Contract implementation.
- (v) To upgrade the Standard Basic Education facilities established under ESSPIN using prepared Specifications, Designs, Drawings and Bills of Quantities.
- (vi) To provide technical and financial supervision in order to ensure the effective completion of the ESSPIN infrastructure programme.
- (vii) To ensure that the construction works are carried out in compliance with the specifications, drawings and the contract document and conditions.

3. RESPONSIBILITIES OF THE CONSULTANT

The responsibilities of the Consultant shall include:

- The provision of project management support services for the construction of works to completion and final handover of completed schools.
- The provision of construction supervision as described hereinafter including the provision of qualified experience personnel, management, co-ordination and efficient execution of the works.

4. DURATION OF ASSIGNMENT

The Consultant's responsibilities under the Terms of Reference will commence from the date of the Consultancy Service award and terminate with the final acceptance and turnover by the works contractors of all the contracted works on the schools to the State Ministry of Education – State Universal Education Board SUBEB. The duration of these services is expected to cover approximately 6 months, subject to agreement between the Consultant and the Employer on the extension or reduction of the contract period. The contract under these TOR is subject to the prior approval of ESSPIN.

5. SCOPE OF THE ASSIGNMENT:

5.1 <u>General</u>

The Consultant shall provide Consultancy services in relation to construction management and supervision to the State Ministries of Education (Employer) as represented by the management and SUBEB for the upgrading, and expansion of the selected Primary and Junior secondary school facilities (Works) supported by ESSPIN and financed by DFID. The Consultant shall ensure that the works are completed by the civil works contractors (Contractor) in a satisfactory, timely and cost-effective manner, and in strict compliance with the construction drawings, technical specifications, required standards and conditions of contract between the Employer and Contractors for the execution of the works. The scope of work under this TOR together with the list of schools and their locations is detailed in Appendix 1.

5.2 Site Surveys and preparation of Bidding Documents

The Consultant will conduct surveys at each of the schools where work is to be carried out and in conjunction with the school authorities and SUBEB agree the locations for the new facilities. The Consultants will prepare a site layout plan for each location which will include the following information:

OrientationNorthBoundary of the school propertyLocation of all existing buildings and boundary wallsAccess and surrounding roads.Description of areas surrounding the school.Location of all services in and around the schoolLocal ground conditions and drainageLocation of the new facilities including the water supply facilities that will be installed byOthers

The Consultant will prepare Bidding Documents for the Scope of work using the Prototype Design Drawings, Bills of Quantities and Specifications provided by ESSPIN. The conditions of Contract and Form of Tender will be provided by SUBEB.

5.3 Day to Day Supervision and Quality Control

Comprehensive day-to-day on-site supervision, quality, time and cost control of the works, including periodic measurement of completed works. The Consultants shall:

- Ensure that the Contractors are in possession of an up-to-date set of all Contract documentation (Conditions of Contract, Drawings, Specifications and Bills of Quantities).
- Ensure that the site supervisors and contractors understand the drawings and other contract documents and what is required of them. Exercise control over the Contractors in this respect.
- Check that the works are correctly set out and constructed.
- Approve the construction programme
- The Consultant shall strictly control the quality of supplied materials to ensure they comply with the specifications. The Consultant shall request quality certificates for supplied materials and approve materials prior to their use in the work.
- Provide on-site supervision and ensure compliance with technical and workmanship standards relating to works including:
 - Structural works
 - Architectural works
 - Sanitation, drainage/sewerage works
- The Consultant shall promptly inform the Employer of any breach or deviation from the Conditions of the Works Contracts, recommending remedies and requesting directives from the Employer in case the Contractor fails to follow the Consultant's instructions.

5.4 Drawings and Bills of Quantities

The Consultant shall be responsible for the timely preparation of necessary amendments to the construction drawings/documents, and issuance to the Contractor(s) upon the Employer's approval. These responsibilities include:

- amendments and revisions of drawings, if necessary
- amendments to the bills of quantities which do not significantly affect the total construction contract value. The Consultant shall issue variation orders to the Contractor as approved by the employer

5.5 Meetings, Progress and Reporting Requirements

- The Consultant will organise a weekly meeting on site with the Contractor. Minutes of the meeting are to be prepared and copied to the Contractor.
- The Consultant will organise a monthly meeting with the Employer and the Contractor. Minutes of the meetings are to be circulated to all parties.
- The Consultant will maintain the site diary
- The Consultant will submit a monthly report to the Employer on the progress of the Works and status of building construction costs.
- The Consultant shall monitor the progress of the works against the construction implementation programme. They shall advise the Contractors on any necessary measures to ensure the completion of the construction works on time.
- They should advise the Employer of any likely delays to the construction works.

5.6 Measurement and Contractual Issues

- The Consultant shall be responsible for the measurement of quantities of all the work executed on site.
- The Consultant shall prepare interim payment certificates based on measured quantities of works indicated on "as built" drawings submitted by the Contractor, and measured quantities of materials supplied for incorporation into the works based on invoices, quality certificates and physical checking. The Consultant shall submit these certificates to the Employer for further processing and payment.
- The Consultant shall not allow any increase of the total contract value or revision of the unit rates, except in cases stated in the Conditions of the Works Contract. In such cases, the Consultant shall analyse the reasons and shall prepare a report(s) recommending necessary remedies for the Employer's approval.
- The Consultant shall liaise with the Client and advise on areas of concern, potential delays or cost increases.

5.7 Completion Certificates

The Consultant will prepare Certificate as to the practical and final completion of the Works for purposes of final acceptance by the Employer. These responsibilities include:

- co-ordinating with the Employer and relevant Authorities the preliminary and final handing over procedures including preparing handing over certificates attesting to the completion of the works contracts.
- preparing two complete sets of as-built documentation related to the Project and handing it over to the Employer.

6. REQUIREMENTS OF THE CONSULTANT:

The Consultant will generally be an engineering consulting firm legally registered with CAC and COREN/ARCON to conduct comprehensive construction management, technical supervision of the execution of construction/ works contracts, including quantity surveying and measurement of works. The Consultant shall have not less than five years experience in this field and qualified technical specialist engineers/architects, equipment and logistical resources to conduct the day-to-day monitoring and supervision of the works and the performance of works contractors at the project sites.

The Consultant should have the following staff, with the minimum qualifications described below, who will be assigned full time to undertake the assignment described under these Terms of Reference:

Principal Consultant

- should have a university degree in civil engineering or architecture
- should be licensed to practice the profession in Nigeria
- should have at least 15 years experience in the field of management of large construction contracts, materials management, construction personnel management
- good knowledge of work scheduling, cost monitoring and accounting

- very good knowledge of and practice with FIDIC contract procedures, and of Nigerian rules and regulations for the implementation of works contracts, and the standard provisions governing construction contracts
- good knowledge of engineering economy , legal and financial regulations
- personnel management and crisis management skills
- proficiency in the English language
- computer literacy, proficiency in use of standard applications software (e.g. Microsoft Office, Microsoft Project Manager and AutoCAD)
- Should have an adequate number of *Experienced Support Staff* with computer skills and experienced in office procedure to assist in the preparation of progress reports, financial reports, schedules, etc.

Senior Site Supervisor

- should have a university degree in civil engineering or architecture
- should be licensed to practice the profession in Nigeria
- should have at least 10 years experience in the field of construction contract, materials and personnel management and supervision
- expertise/very good knowledge in *quantity surveying*
- good knowledge of construction technologies and quality control
- personnel management and crisis management skills
- proficiency in the English language
- computer literacy, proficiency in use of standard applications software (e.g. Microsoft Office/Excel, Microsoft Project Manager and Auto CAD)

The Consultant should specify in their proposal the Number of Senior Site Supervisors they propose to engage on the Project.

Site Supervisors

- Minimum of OND or City & Guilds in the relevant field of engineering
- should have at least 5 years experience in construction and supervision or works contracts
- good knowledge of construction technologies and quality control
- general knowledge in works measurement

The Consultant should specify in their proposal the number of Site Supervisors they propose to engage on the Project.

7. FREQUENCY OF VISITS TO THE SITE

(i) Principal Consultant

The Principal Consultant shall be required to have visited the Site at the generation of each Certificate
(ii) Senior Site Supervisors

The Senior Site Supervisors are required to visit each of the construction sites a minimum of one (1) time per week. Site visits are required by the senior site supervisors at each of the following critical stages of construction:

- Handover of the site
- Approval of site setting out
- Inspection and approval of excavated foundations
- Casting of foundations
- Inspection of compacted fill and hardcore prior to casting of floor slabs
- Casting of floor slabs
- Checking of setting out of first course of block work for superstructure.
- Inspection of superstructure prior to the erection of roof trusses.
- Inspection of roof structure prior to the fitting of roofing sheets.

(iii) Site Supervisors

The Consultant is to specify in his proposal the number of site supervisors and the number of sites covered by each supervisor that will be employed for this Work.

8. DOCUMENTS TO BE SUBMITTED WITH THE CONSULTANT'S PROPOSAL:

The Consultants Proposal shall be submitted in 2 sealed envelopes

- A Technical Proposal for SUBEB/ESSPIN Consultancy Supervision 2010
- B Financial Proposal for SUBEB/ESSPIN Consultancy Supervision 2010

A. Technical Proposal

1 Organisational Chart

The Consultant shall prepare an *organisational chart* showing the relationships and functions of the professional staff which will supervise and monitor the implementation of the works contracts for the Project schools

2 Methodology

The organisational chart shall be accompanied by a description of the methodology by which the Consultant intends to implement the supervision of the work. This methodology should take into account the geographical spread of the location of the works and the deployment and number of senior site supervisors and site supervisors

3 Logistics/Transport

The Consultant shall submit a description of the method by which the supervisors will travel between the sites

<u>4 CVs</u>

The Consultant shall submit *detailed CVs* outlining the experience and qualifications of the professionals who will be involved in this Assignment

B. Financial Proposal

The financial Proposal shall be submitted in the form included in Appendix 3

9. INSTITUTIONAL ARRANGEMENTS:

The Consultant will report to the Lead person Infrastructure SUBEB and the ESSPIN National Consultant. The Principal Consultant will be present at the project site at practical completion date and at final hand-over of the completed works

10. OBLIGATION OF THE EMPLOYER

The Employer will co-ordinate with relevant Authorities for the timely approval of official permits, licenses, clearances related to the implementation of the Works. These include public authorities responsible for public hygiene, environmental protection, fire prevention, utility companies, municipal authorities and other property owners at the sites.

11. OBLIGATION OF THE CONSULTANT

The Consultant will collaborate with the Lead person on Infrastructure on the exchange of technical information about their observations concerning the quality, quantity and design of the works, as necessary.

The Consultant shall not enter into any association with ANY contractor, sub-contractor, or supplier connected with the execution of this Works

List of Appendicies

- 1 Scope of Work
- 2 Proposed program of Work
- 3 Preamble and Form of Financial Proposal
- 4 Plans and sections of Prototype Classrooms and VIP latrine Blocks

Date

Annex 6:ESSPIN Scope of Infrastructure Work 2010 – 2013

i. Kwara

ESSPIN INFRASTRUCTURE SCOPE OF WORK 2010 - 2013

KWARA STATE

Annex 6 i) 25/09/2013

	LGEA	School	EMIS Code	St	tudents				Wate	r Supply			Classrms					Toilets	;	Remarks
				Female	Male	Total	Hand/ P	Mech	Solar	Year	Contractor	1 X 2	Contractor	Year	1 X 2	1 X 4	1 X 6	Year	Contractor	
1	Kaiyama	Bani	2411055150	436	523	959	1			2010	J K Obielodan				1		2	2011	FAB Confidential	
2		Cent Kaiyama	2411126150	282	251	533	1			2010	J K Obielodan					3	1	2011	FAB Confidential	
3		Bani Sulla	2411073120	22	61	83	1			2011	Bitto				3			2012	FAB Confidential	
4		Tungan Garua	2411176123	32	36	68	1			2012	Fatigen				3			2012	FAB Confidential	
5		Nuku	2411063120	100	152	252	1			2011	Bitto	1	FAB Consult	2012	1	2		2012	FAB Confidential	
6		N/Gatte A	2411118120	79	140	219	1			2012	Fatigen				3			2012	JAMT	
7		Vobera	2411117120	63	46	109	1			2011	Bitto/ Fatigen				3			2012	JAMT	Borehole re drill 2013
8		Ban Moshe	2411210150	13	57	70	1			2012	Fatigen				3			2012	JAMT	
9		Tenebo	2411062120	28	40	68	1			2011	Bitto				3			2012	FAB Confidential	
10		Olori	2411125120	67	59	126	1			2012	Fatigen				3			2012	JAMT	
11		Hamdallahi	2411083120	33	40	73	1			2012	Fatigen				3			2012	JAMT	
12		Dada	2411048120	46	61	107	1			2012	Fatigen				3			2012	FAB Confidential	
13		Gate	2411056120	61	107	168	1			2013	Daygem				2	1		2013	Envocon	
14		Gwaria Labe	2411111120	62	95	157	1			2013	Daygem	1	MF Ahmed	2013	2	1		2013	Envocon	
15		Gwaria	2411070150	145	188	333	1			2013	Daygem				2	1		2013	Envocon	
16		Moshe	2411059150	47	55	102	1			2013	Davgem				2	1		2013	FAB	

		Gada																Confidential	
17		Tunga Zabaruma	2411105120	30	37	67	1		2013	Fatigen				2			2013	FAB Confidential	
18		Adogun	2411093120	36	38	74	1		2013	Fatigen				2			2013	FAB Confidential	
19		Degeji	2411178123	40	50	90	1		2013	Fatigen	1	FAB Consult	2013	2			2013	FAB Confidential	
20		Nomadic Gorobani	2411172123	9	56	65								2	1		2013	M F Ahmed	
21		Ka agbona	2411234200	19	21	40	1		2013	Fatigen				2			2013	M F Ahmed	
22		Abatabu	2411110120	23	19	42	1		2013	Fatigen				2			2013	M F Ahmed	
23		Wuromakoto	2411106120	39	37	76	1		2013	Fatigen									No toilets
24		Aboki	2411051150	142	147	289	1		2013	Fatigen									Existing Sanitation
25		Mahuta	2411075120	28	19	47	1		2013	Fatigen				2			2013	M F Ahmed	
		Camp									1	FAB Consult	2013						
26	llorin East	lpata A	2406111150	182	159	341		1	2010	Lanfar				1		2	2011	Envoconstructs	
		lpata B	2406112150	141	137	278													
27		St John Apado	2406204150	60	47	107	1		2011	Lanfar				1	2		2012	Homecon	
28		Sentu	2406209150	43	57	100	1		2011	Lanfar				1	2		2012	Homecon	
29		Apata Yakuba	2406026150	84	104	188	1		2011	Lanfar				1	2		2012	M F Ahmed	
30		Budo Apa Gori	2406043120	53	45	98	1		2011	Lanfar				2	1		2012	Homecon	
31		Jolasun/ Abangbe	2406116150	44	57	101	1		2011	Lanfar				3			2012	M F Ahmed	
32		Budo Oyo	2406042150	47	39	86	1		2011	Lanfar	1	MF ahmed	2012	3			2012	M F Ahmed	
33		Panada	2406193150	71	60	131	1		2011	Lanfar				1	2		2012	M F Ahmed	
34		Alokolaro Afara	2406021150	22	53	75	1		2011	Lanfar				3			2012	Homecon	
35		Aranmonu	2406027150	21	30	51	1		2011	Lanfar				3			2012	M F Ahmed	
36		Aregun	2406141120	29	36	65	1		2011	Lanfar				3			2012	Homecon	
37	Oyun	Baptist Ipee	2415020150	88	88	176	1		2010	Daygem				3			2011	Bestworth	

38		Nomadic Ipee	2415203150	35	31	66	1	2011	Davgem							Sanitation not provided
39		Reke	2415045120	26	14	40	1	2011	CGC		3			2011	McRalph	
40		Asaoye/Ira Fere	2415049120	47	36	83	1	2011	CGC		3			2011	Lesstonik	
41		Adinimodo	2415031150	45	40	85	1	2011	CGC		3			2011	Lesstonik	
42		Alaya Aiyekale	2415048120	120	81	201	1	2011	CGC		3			2011	Lesstonik	
43		Ajoko Budo Arin	2415037120	45	44	89	1	2011	CGC		3			2011	McRalph	
44		Afijagba	2415036120	35	32	67	1	2011	CGC		3			2011	Lesstonik	
45		Inaja Alaro	2415114150	66	55	121	1	2011	CGC		3			2011	Lesstonik	
46		lwoye	2415033120	33	31	64	1	2011	CGC		3			2011	McRalph	
47		Ajoko Oja	2415038150	64	80	144	1	2011	Daygem		3			2011	McRalph	
48	Oke Ero	St Joseph Ode Owa	2414070150	621	68	689	1	2010	Daygem		1		2	2011	Devictor	
49		Comm Idofin Ehin Apo	2414012150	53	57	110	1	2011	Fatigen		3				Devictor	
50		Erinmope	2414011150	125	87	212	1	2011	Fatigen		1	2		2012	Envoconstructs	
51		Egosie Ile	2414013150	61	79	140	1	2011	Fatigen			3		2012	Envoconstructs	
52		Comm Idofin Odo Aga	2414015150	69	67	136	1	2011	Fatigen		3			2012	Devictor	
53		Imode	2414014150	91	92	183	1	2011	Fatigen		1	2		2012	Envoconstructs	
54		St Paul Idofin Igbana	2414072120	45	32	77	1	2011	Fatigen			3		2012	Devictor	
55		Nomadic Ilofa	2414093150	15	9	24	1	2011	Fatigen		3			2012	Envoconstructs	
56		Odo Owa	2414010150	147	70	217	1	2011	Fatigen		3			2012	Devictor	
57		Jama'at, Illofa	2414048252	114	74	188	1	2011	Daygem			1	2	2012	Devictor	
58		Egose Ille Nomadic	2414013150	61	79	140	1	2011	Fatigen		3			2012	Envoconstructs	
59	Edu	Central Lafiagi	2403228150	304	259	563	1	2010	J K Obielodan			1	2	2011	Lesstonik	

		ETSU Abdullahi								1 K							
60		Tsaragi	2403049150	201	188	389	1		2010	Obielodan			1	2	2011	Lesstonik	
61		Gamalegi	2403144120	18	64	82	1		2012	Fatigen		3			2013	Lesstonik	
62		Guye Doko	2403111120	60	61	121	1		2012	Fatigen		2			2013	Lesstonik	
63		Tsunfeniti	2403175120	36	54	90	1		2012	DAYGEM		2			2013	Lesstonik	
64		Fanagun	2403143120	18	62	80	1		2012	Fatigen		3			2013	Lesstonik	
65	Moru	Elemere	2412178150	101	84	185	1		2010	J K Obielodan		3			2011	Homecon	
66		Lasaki Fallah	2412118150	55	45	100	1		2012	Fatigen		2			2013	Mc Ralph	
67		Animaje	2412129150	46	55	101	1		2012	Fatigen		3			2013	Mc Ralph	
68		Logun Jehunkunu	2412166150	64	66	130	1		2012	Fatigen		3			2013	Mc Ralph	
69		Amu	2412168150	68	60	128	1		2012	Fatigen		2			2013	Mc Ralph	
70	Ekiti	St Cyprian Eruku	2404072150	87	73	160	1		2010	Daygem		3			2011	Devictor	
71		Osi I	2404088150	82	86	168	1		2010	Daygem		1	2		2011	Devictor	
		Osi 2	2404087150	89	75	164											
72		St Luke Obbo Ille	2404077150	112	97	209	1		2012	Daygem		3			2013	Devictor	
73		Central 1+2 Opin	2404014150	71	48	119	1		2012	Daygem		2	1		2013	Devictor	
			2404013150	72	44	116											
74	Irepodu n	St Andrew Oro	2409222150	191	190	381	1		2010	Daygem			3		2011	Bestworth	
75		Com Araromi Ijan Ojuin	2409083150	21	32	53	1		2012	Daygem		2			2013	Devictor	
76		Igbonla	2409074150	36	38	74	1		2012	Daygem		3			2013	Homecon	
77		Ago Paano	2409094120	47	46	93	1		2012	Daygem		2			2013	Devictor	
78	llorin South	Ansarul Islam A+B	2407031152	229	236	465	1		2010	J K Obielodan			1	4	2011	Envoconstructs	
			2407034152	245	259	504											
79		Akata Oshode	2407017150	152	143	295	1		2012	Daygem		2	1		2013	Homecon	
80		Ago	2407011150	61	72	133	1		2012	Daygem		2	1		2013	Homecon	

		Aiyekale																
81	Asa	Alapa	2401025150	166	232	398	1		2010	J K Obielodan				3		2011	Homecon	
82		Sapati Oko	2401251150	87	96	183	1		2010	Daygem			3			2011	Envoconstructs	
83	Offa	Taoheed	2413147250	45	36	81	1		2010	Daygem			3			2011	Bestworth	
84	Illorin West	Barakat	2408076150	542	545	108 7		1	2010	Lanfar				3	2	2011	Homecon	
85	Patigi	Central Lade	2416055150	343	389	732	1		2010	J K Obielodan			1	2	2	2011	Lesstonik	
86	Baruten	llesha	2402059150	305	278	583	1		2010	J K Obielodan			1		2	2011	FAB Confidential	
87	Isin	Baptist Alla	2410014150	24	20	44	1		2010	Daygem			3			2011	Devictor	
88	Ifelodun	Babanla	2405208150	61	67	128	1		2010	Daygem				3			McRalph	
		Totals		8,724	8,50 5	17,2 29	85	2					17 5	52	23			
												Cubi cles	35 0	20 8	13 8		696	Total Cubicles

ii. Lagos

ESSPIN INFRASTRUCTURE SCOPE OF WORK 2010 - 2013

LAGOS STATE

	-						-						-				Date	25/09/2013
	LGEA	School	EMIS Code	S	tudents			١	Nater Su	upply		Classrooms			Toile	ets		Remarks
				Female	Male	Total	Hand/P	Mech	Solar	Year	Contractor	1 X 2	1 X 2	1 X 4	1 X 6	Year	Contractor	
1	Alimosho	Aboru/ Ifesowopo Primary School	2503004150	391	460	851		1		2010	APEX		2	4		2011	Descope	
2	Alimosho	LG Primary School, Egan	2503050150	346	384	730		1		2010	APEX		2	4		2011	Descope	
3	Ikeja	Oke-Ira Primary School	2511023150	221	260	481								1	2	2011	Descope	Enhanced WS Erosion
4	Ikeja	Central Primary School	2511009150	222	224	446		1		2010	APEX			3		2011	Descope	
5	Agege	Unity Primary School	2501048150	208	198	406								3		2011	Descope	Enhanced WS+tank
6	Epe	Comm. Primary School	2507013150	190	197	387		1		2010	APEX		2	2		2011	stack wall	
		Comm Primary School II	2507014150	293	344	637												
7	Ере	Army Children Primary School	2507010150	314	370	684							1	2		2011	stack wall	Enhanced WS+tank
8	Epe	Solomon Memorial Primary School	2507056150	181	215	396							1	2		2011	stack wall	Enhanced WS+tank
9	Epe	Baptist Primary School Agbowa	2507011150	321	345	666								3		2011	stack wall	Enhanced WS+tank
10	Ikorodu	C & S Primary School	2512016150	319	294	613		1		2010	APEX			2	4	2011	bid	
11	Ikorodu	AUD Primary Sch Igbogbo	2512011150	546	523	1069		1		2011	Lanfar							Existing toilets

12	Ikorodu	Etunrere Primary	2512022150	1112	1044	2156	1	2011	Mcheli						Existing toilets
12	ikorodu	Temidire Prim	2512022150	1112	1044	2150	-	2011	WIEDEN						
13	Ikorodu	Sch	2512048150	98	112	210	1	2011	Lanfar						Existing toilets
	Ajeromi/														
14	Ifelodun	Wowo Prim Sch	2502067150	161	135	296	1	2010	LANFAR						No space for toilets
		LA Primary													
15	Ajeromi/	School (Ugbe wa	2502056150	151	121	202	1	2010			n		2011	Did	
15	Aieromi/	limoh Oiora	2502050150	151	151	202	 1	2010	APEA		3		2011	ый	
16	Ifelodun	Primary School	2502030150	175	166	341	1	2010	APEX		2	4	2011	Bid	Addit drainage
		Jimoh Ojora Pry													
		School II	2502031150	212	191	403									
		Community Pry													
17	Ibeju Lekki	School, folu	2509010150	264	192	456	 1	2011	LANFAR		3		2012	Descope	
10	Ihain Lakki	Community Pry	2500012150	200	201	410	1	2011			2		2012	Did	
10	ibeju Lekki	SCHOOL, IDELIKOUO	2509012150	209	201	410	 1	2011	LANFAR		3		2012	ый	
		O sure d'incer Date													
19	lfako liave	Ogundimu Pry School, Ifako	2510021150	217	254	471	1	2011	ΔΙΟΙΔ		1	2	2012	Bid	Drainage nending
10	nako ijaye		2310021130	217	231	., 1	 -	2011	/003/		-	-	2012		
		Anglican Pry													SORER
20	Oio	School 1, Ijanikin	2517005150	256	463	719	1	2011	AJOJA		1	4	2012	Descope	
	-	Anglican Pry												·	
		School 2, Ijanikin	2517006150	576	574	1150									
24	0:-	L.A. Pry School,	2547027450		26	00	1	2010							
21	UJO		251/02/150	44	30	80	1	2010	ΑΡΕΧ						Existing toilets
22	Oio	llogbo	2517029150	369	390	759	1	2011	AJOJA		1	4	2012	Bid	
	-,-	.0					-				-	•			
		Agbovi Prim													
23	Kosofe	School	2513001150	240	196	436	1	2011	Mcbeli						Existing toilets
24	Kosofe	UACC Pry School	2513036150	229	264	493	1	2011	LANFAR		1	2	2012	Descope	
	Oshodi	Ewutuntu													
25	Isolo	Primary Sch	2518033140	254	182	436	1	2011	AjOJA						Existing toilets

26	Oshodi Isolo	Ifoshi Pry School, Ejigbo	2518024150	247	256	503	1	2011	AJOJA			3	2	2012	Descope	
															·	
27	Somolu	Adeife Pry School, Somolu	2519004150	111	139	250	1	2011	AJOJA			3	2	2012	Bid	
28	Amuwo Odofin	Kuje Nursery & Primary Sch	2504019150	232	211	443	1	2011	Mcbelli							Existing toilets
29	Арара	Baptist Primary School	2505007150	595	524	1119	1	2010	LANFAR			3		2011	Bid	
30	Арара	Ire Akari Primary School 1	2505010150	662	583	1245	1	2011	Mcbeli							Toilets by SUBEB
		Ire Akari Primary School 2	2505011150	251	222	473										
31	Арара	St Theresa Primary Sch	2505022150	341	321	662	1	2010	LANFAR							Existing toilets
32	Eti Osa	Ikota Primary Sch	2508015150	189	186	375	1	2011	Mcbeli							Toilets by NGO
33	Mushin	Ajenifuja Primary Sch	2516007150	120	129	249	1	2010	APEX							Toilets by SUBEB
34	Surulere	Canal primary sch	2520019150	449	486	935	1	2010	LANFAR							Toilets by SUBEB
35	Surulere	jinadu Prim Sch	2520035150	75	59	134	1	2011	McBeli							Toilets by SUBEB
		Totals		11,391	11,461	22,852	30				8	50	26			
										Cubicles	16	200	156		372	Total Cubicles

Notes

iii. Enugu

ESSPIN INFRASTRUCTURE SCOPE OF WORK 2010 - 2013 ENUGU STATE

			-																Date	25/09/2013
	LGEA	School	EMIS Code	s	tudents	-		Wa	ater S	upply		Classrooms						Toilets		Remarks
				Female	Male	Total	Hand/P	Mech So	olar	Year	Contractor	1 X 2	Contractor	Year	1 X 2	1 X 4	1 X 6	Year	Contractor	
1	Udi	PPS Udi	1416076101	229	267	496		1		2012	Phinotech*					2	2	2011/12	Nvu Ode	
2	Udi	C.S. Um <u>uabi</u>	1416023101	70	82	152		1		2011	Phinotech	1	Olivan	2012	1	2		2011/12	Nvu Ode	
3	Udi	C.P.S Ngwo- Uno 1	1416053101	227	234	461		1		2011	Beldon*				2		4	2011/12	Cox Proj.	
		C.P.S Ngwo- Uno 2	1416054101	253	279	532														
4	Udi	C.P.S Nachi	1416052101	154	137	291		1		2011	Beldon*				1	2		2011/12	Cox Proj.	
5	Udi	C.P.S Okwojo- Ngwo	1416079101	65	70	135		1		2011	Strasboug	1	Olivan	2012		3		2011/12	Cox Proj.	
6	Udi	C.S. Amokwe	1416027101	14	23	37		1		2011	Strasboug					3		2011/12	Nvu Ode	
7	Udi	C.Ps Ezi-Nze 1	1416092151	129	128	257		1		2011	Dial Tone	1	Spiders Tec	2012	1		2	2011/12	Spiders Tec	
		C.Ps Ezi-Nze 2	1416029101	76	73	149														
8	Udi	C.P.S U/Egede	1416043101	88	73	161		1		2011	Dial Tone	1	Spiders Tec	2012	1	2		2011/12	Spiders Tec	
9	Udi	C.P.S Amokwu Affa	1416013101	73	65	138		1		2011	Olive Gate*	1	Spiders Tec	2012	1	2		2011/12	Ratsah	
10	Udi	C.P.S AmankwoEke	1416011101	134	190	324		1		2011	Olive Gate*				1	2		2011/12	Ratsah	
11		Totals		1,512	1,621	3,133		10				5			8	18	8			
12														Cubicles	16	72	48		136	Total Cubicles

iv. Kaduna

ESSPIN INFRASTRUCTURE SCOPE OF WORK 2010 - 2013

KADUNA STATE

Date 25/0	9/2013
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	LGEA	School					Water S	Supply				Classrooms	Toilets	5				Remarks
			EMIS Code	Student	s		Hand/P	Mech	Solar	Year	Contractor	1 X 2	1 X 2	1 X 4	1 X 6	Year	Contractor	
				Female	Male	Total												
1	Kachia	LGEA Rehab	1908149120	283	282	565	1			2010	Bernas			3		2011	Crew	
2		Model Kachia	1908141120	950	905	1855	1			2010	Bernas			3	2	2011	Crew	
3		LGEA Fadan Anchi	1908074120	322	472	794	1			2010	Bernas		1	2		2011	Crew	
4		LGEA Kwaturu	1908134120	223	245	468	1			2011	Fatigen	1	1		2	2011	Crew	
5		Sabon Gari Ankuwa	1908275120	73	76	149	1			2011	Fatigen		3				Crew	
6		LGEA Kachia II	1908105120	888	870	1758	1			2011	Fatigen				7	2012	Sytarch	
7		LGEA Sakwai	1908152120	108	100	208	1			2011	Fatigen		2	1		2012	Sytarch	
8		LGEA Sabon Maro	1908150120	89	101	190	1			2012	Fatigen			3		2012	Sytarch	
9		LGEA Sarahu	1908154120	71	64	135	1			2011	Fatigen		3			2012	Sytarch	
10		UBE Sabon Gari Gan	1908277120	75	80	155	1			2011	Fatigen		1	2		2012	Sytarch	
11		LGEA Doka	1908073120	259	285	544	1			2011	Fatigen		1		2	2012	Sytarch	
12		LGEA Bahago	1908063120	167	158	325	1			2012	Fatigen							Existing toilets
13		LGEA Ungwan Ate	1908158120	138	160	298	1			2012	Fatigen		3			2013	Crew	
14		LDEA Gidan Sarni	1908231120	56	69	125	1			2012	Fatigen		3			2013	Crew	
15		UBE Sabon Gari doka	1908276120	66	85	151	1			2012	Mev		3			2013	Crew	
16		LGEA Gantan	1908078120	109	118	227	1			2011	Fatigen		3			2012	Sytarch	
17		LGEA Sabon Kaura	1908282120	75	86	161	1			2013	Mev		3			2013	Crew	
18		LGEA Maidamishi	1908138120	110	122	232	1			2013	Fatigen		3			2013	Crew	
19		UBE Kurmin Mata	1908246120	90	103	193	1			2013	Fatigen		3			2013	Crew	
		Kasa																
20		IQTE Ung Liman Hal	???	228	240	468	1			2013	Mev		3			2013	Crew	
21	Kajuru	LGEA Kajuru Town	1914071120	286	313	599	1			2010	Bernas		1		2	2011	Trimo	

22		LGEA Rimau Gari	1914112120	218	242	460	1		2010	Bernas	1	1		2	2011	Trimo	
23		LGEA Kurminjuwa	1914085120	103	98	201	1		2010	Bernas		1	2		2011	Trimo	
24		UBE Badayi	1914029120	121	145	266	1		2011	Mev		1	2		2012	Crew	
25		LGEA Ekuzeh	1914042120	128	131	259	1		2011	Mev		1	2		2012	Crew	
26		LGEA Kajuru statio	1914072120	293	264	557	1		2011	Mev			5		2012	Crew	
27		LGEA Kadanya	1914070120	119	120	239	1		2011	Mev		3			2013	Crew	
28		LGEA Kutura station	1914087120	237	224	461	1		2011	Mev		3			2013	Crew	
29		UBE SarkinHausa RI	1914128120	106	118	224	1		2011	Mev		1	2		2012	Crew	
30		LGEA Jankasa Rim	1914068120	167	181	348	1		2012	Mev		3			2013	Crew	
31		IQTE Kasuwan Mag	1914078120	547	487	1034	1		2012	Mev							No space for toilets
32		UBE Ungwan Damisa	1914034120	82	76	158	1		2012	Mev		3			2013	Crew	
33		UBE Gurgu 1	1914140120	82	101	183	1		2013	Mev		3			2013	Crew	
34		UBE Akusha	1914132120	151	140	291	1		2013	Mev		3			2013	Crew	
35		IQTE Ahmed Musa	1914077120	490	453	943	1		2013	Mev							No space for sanitation
		Lgea Kujeni	1914083120			0						3			2013	Crew	Water by Others
36	Kad North	LGEA Gwari Street	1909043120	78	81	159	1		2010	Mev			3		2012	Trimo	
37		LGEA Lagos street	1909050120	104	123	227	1		2919	Mev							Joint toilet use with Gwari st.
38		LGEA Hayan Banki	1909044120	867	815	1682	1		2010	Mev							Toiltes relocated to Abakpa
39		LGEA Ungwan Kana	1909064120	496	536	1032	1		2010	Mev	1			3	2011	Trimo	
40		Sabon Gari PS	1909060120	203	200	403	1		2011	Mev			3	1	2012	Crew	
41		Maiduguri Rd PS	1909052120	341	317	658	1		2011	Mev		1	4	-	2011	Crew	
42		Ali Dogo Ung Shanu	1909032120	672	652	1324	1		2011	Mev			1	4	2011	Crew	
43		LGEA Abakpa	1909068120	1064	1048	2112	1		2011	Mev				3	2010	Trimo	
44		Katsina Road P S	1909048120	505	523	1028	1		2011	Mev			1	4	2011	Crew	
45		LGEA Research Model	1909059120	571	583	1154						3				Ramusal	Existing water

46	Kudan	LGEA Domoso	1916043120	1130	1004	2134	1		2010	Mev				2	2011	Ramusal	
											1		1				
47		Madauchi	1916026120	132	219	351							3		2011	Ramusal	Existing water
48		Musawa	1916063120	188	283	471							1	2	2011	Ramusal	Existing water
49		Nomadic U/Namata	1916012120	83	137	220	1		2011	Н&Н			3		2012	Ramusal	
50		UBE Kyaudai	1916053120	116	164	280	1		2011	Н&Н			3		2012	Ramusal	
51		UBE P S Ang / Maka	1916085120	37	46	83	1		2011	Н&Н		1	2		2012	Ramusal	
52		UBE P S K/KUDU	1916089120	211	189	400	1		2010	Mev		1		2	2012	Ramusal	
53		UBE Sarama	1916067120	24	80	104	1		2011	Н&Н		3			2013	Ramusal	
54		IQTE Sabon Gari ZK	???	233	266	499	1		2012	Mev		3			2013	Ramusal	
55		LGEA Sabon Gari Da	1916065120	173	270	443	1		2012	Mev		3			2013	Ramusal	
56	Makarfi	LGEA Gazara	1918028120	342	306	648	1		2010	Mev			1	2	2010	Ramusal	
57		LGEA Ruma	1918051120	207	363	570	1		2010	Mev			1	2	2010	Ramusal	
58		LGEA Danguruzuri	1918023120	299	471	770	1		2010	Mev			1	3	2010	Ramusal	
59		UBE PSTasharYarill	1918090120	108	147	255	1		2011	Н&Н		1	2		2011	Ramusal	
60		UBE DanbakwA	1918021120	348	381	729	1		2011	Н&Н	1	1	1	1	2011	Ramusal	
61		LGEA P S Godai	1918031120	166	205	371	1		2011	Н&Н		2	1		2011	Ramusal	
62		UBE Alhazawa	1918096120	58	177	235	1		2011	Н&Н			4		2011	Ramusal	
63		LGEA Dan Ayamaka	1918020120	61	202	263	1		2011	Н&Н		3			2013	Ramusal	
64		UBE Maryamu	1918064120	91	104	195	1		2011	Н&Н		3			2013	Ramusal	
65		LGEA Jama	1918034120	175	325	500	1		2012	Mev		3			2013	Ramusal	
66		UBE Ungwan Wamb	1918122120	78	147	225	1		2012	Mev		3			2013	Ramusal	
67		UBE Ungwan Geri	1918055120	83	226	309	1		2012	Mev		3			2013	Ramusal	
68		IQTE Guburchi Mak	1918118120	15	39	54	1		2012	Mev		3			2013	Ramusal	
69	Kaura	LGEA Kaura Model	1912053120	204	309	513	1		2010	Bernas	1	3			2011	Syntarch	
70		UBE Fadan Daji	1912027120	258	252	510	1		2010	Bernas		1	2		2011	Syntarch	
71		LGEA U/Rami	1912081120	173	176	349	1		2011	CGC		3			2011	Syntarch	
72		UBE Tuyit Kagoro	1912106120	35	48	83	1		2011	CGC		3			2013	Syntarch	
73		LGEA Gizagwai	1912029120	160	148	308	1		2011	CGC		3			2013	Syntarch	
74		LGEA Ung Nka Giza	1912080120	103	120	223	1		2011	CGC		1	2		2012	Trimo	

75		L.G.E.A.Central Kag	1912022120	261	274	535	1		2011	CGC		1		2	2012	Trimo	
76		L.G.E.A. Kadau Kag	1912032120	186	167	353	1		2011	CGC		1	1	1	2012	Trimo	
77		UBE Gayansa	1912095120	135	131	266	1		2011	CGC		1	2		2012	Trimo	
78		LGEA Dutse Kagoro	1912026120	202	201	403		1	2013	Hemense							
79	Kauru	LGEA Rahama	1913158120	221	219	440					1	1	2		2011	Syntarch	Existing water
80		LGEA Chori	1913042120	69	78	147	1		2012	Mev		3			2013	Syntarch	
81		LGEA Ikulu Pari	1913071120	111	121	232	1		2010	Bernas		2	1		2011	Syntarch	
82		LEA Kigum Yelwa	1913077120	101	108	209	1		2011	CGC		1	2		2012	Trimo	
83		LEA Kizachi Adams	1913115120	71	91	162	1		2011	CGC		1	2		2012	Trimo	
84		LEA Kuyanbana	1913132120	108	172	280	1		2011	CGC		1	2		2012	Trimo	
85		Ungwan Madaki	1913180120	82	74	156	1		2011	CGC		3			2013	Syntarch	
86		LGEA Ungwan Garm	1913174120	83	75	158	1		2012	Fatigen		3			2013	Syntarch	
87		LGEA Kiffin Chawai	1913100120	114	125	239	1		2012	Fatigen		3			2013	Syntarch	
88		LGEA Gizachi Dawai	1913116120	98	104	202	1		2013	Fatigen		3			2013	Syntarch	
89		UBE Ungwan Kaya	1913178120	37	46	83	1		2013	Fatigen		3			2013	Syntarch	
90		LGEA Lungut	1913137120	58	68	126	1		2013	Fatigen		3			2013	Syntarch	
		Totals		19,639	21,450	41,089	85	1			7	144	79	49			
									No of	Cubicles	•	288	316	294			
	Notes											Total	No of		898		
												Cubic	les				

To be verified

v. Kano

ESSPIN INFRASTRUCTURE SCOPE OF WORK 2010 - 2013

KANO STATE

Annex 6 v)

Date 10/07/2014

	LGEA	School	EMIS Code	Students			Water	Suppl	y			Classrooms	Toilet	s				Remarks
				Female	Male	Total	Hand/P	Mech	Solar	Year	Contractor	1 X 2	1 X 2	1 X 4	1 X 6	Year	Contractor	
1	ALBASU	Hamdullahi	2002050120	165	368	533	1			2010	Makoda Ro		1	1	1	2011	Bukar Mak	
		Central PS																
2		Hamdullahi	2002051102	148	101	249	1			2010	Makoda Ro						Bukar Mak	Existing Toilets
		Islamiyya PS																
3		Panda Central PS	2002075120	275	409	684	1			2010	Makoda Ro			1	3	2011	Bukar Mak	
4		GGJSS Panda	2002036130	0	318	318	1			2010	Makoda Ro	1	1		1	2012	Bukar Mak	
5		Albasu Islamiyya	2002001122	586	354	940	1			2010	Makoda Ro		1		3	2011	Bukar Mak	
		PS																
6		Albasu Special	2002004120	244	362	606	1			2010	Makoda Ro			1	3	2011	Bukar Mak	
		PS																
7		Tsangaya	2002091122	501	340	841	1			2010	Makoda Ro							No Toilets
		Islamiyya																
8		Faragai Central	2002026120	654	830	1484							1		3	2011	Bukar Mak	Existing water
		PS																
9		Bataiya Central	2002007120	185	340	525							1		3	2011	Bukar Mak	Hand dug well
		PS											_					
10		G.J.S.S. Bataiya	2002055130	0	93	93							1	1	-	2011	Bukar Mak	Ground Water
11		CC1455 5000	2002025120	42	02	125	1			2011	Fautia		4	2		2012	Dulian Mali	Tank?
11		GGJASS Saya	2002035130	43	82	125	1			2011	Fortia		T	2		2012	Bukar Iviak	
12		Saya Nom Prim	2002041120	127	110	246	1			2011	Fortia		1	2		2012	Bukar Mak	
12		Gagarame	2002041120	127	115	240	1			2011	TOTLA		-	2		2012	Dukai Wak	
13		Biyauri Primary	2002011120	135	215	350	1			2011	Fortia		1	1	1	2012	Bukar Mak	
1.0		Chabarana Drim	2002011120	155	157	246	-			2011	Fortio		-	-	-	2012	Dukar Mak	
14		Chanarana Prim	2002010120	69	157	240	1			2011	Fortia		1	1	1	2012	BUKAR IVIAK	
15		Jirago Primary	2002063120	59	102	161	1			2011	Fortia		2	1		2012	Bukar Mak	

16		Zangon Gala PS	2002106120	90	277	367	1		2011	Fortia		1	2		2012	Bukar Mak	
17		Rubun P. S.	2002079120	80	155	235	1		2011	Fortia		2	1		2012	Bukar Mak	
18		Farantama P. S.	2002028120	122	144	266	1		2011	Fortia		1	2		2012	Bukar Mak	
19		GGJSS Faragai	2002034130	164	420	584	1		2011	Fortia	1	1	2		2012	Bukar Mak	
20		Albasu Clus	2002001001	586	354	940	1		2011	Fortia							No space
		Islamiya															
21		Ribo P S	2002076120	66	97	163	1		2011	Fortia							Existing toilets
22		Daho PS	2002019120	181	418	599	1		2011	Fortia		1	2	1	2013	Bukar Mak	Add 1 by 4 Ph 3
23		Sabon Gari Naira	2002081120	91	264	355	1		2012	Fortia		1	2		2013	Bukar Mak	Add 1 by 4 Ph 3
		PS															
24		Umbara PS	2002094120	129	133	262	1		2012	Fortia			2	1	2013	Bukar Mak	Add 1 by 4 Ph 3
25		Khalahadi PS	2002066120	744	0	744	1		2012	Fortia			1	1	2013	Bukar Mak	Add 1 by 4 Ph 3
26		Gwagwaranda	2002048120	222	382	604	1		2012	Fortia		1	2	1	2013	Bukar Mak	Add 1 by 4 Ph 3
27		Faragai IPS	2002027122	279	120	399	1		2012	Fortia			2	1	2013	Bukar Mak	Add 1 by 4 Ph 3
28		Fikaji PS	2002029120	61	102	163	1		2013	Fortia		1	2		2013	Bukar Mak	Add 1 by 4 Ph 3
29		GGASS	2002032140	744	0	744	1		2013	Fortia			2	1	2013	Bukar Mak	Add 1 by 4 Ph 3
30		Zakailawa	2002104120	82	166	248	1		2013	Fortia		1	2		2013	Bukar Mak	Add 1 by 4 Ph 3
31		Kargo PS	2002067120	179	203	382	1		2013	Fortia		1	2	1	2013	Bukar Mak	Add 1 by 4 Ph 3
32		Mangari PS	2002072120	47	138	185	1		2013	Fortia			2	1	2013	Bukar Mak	Add 1 by 4 Ph 3
33		Hammdullai	2002051102	184	259	443	1		2013	Fortia							No space for
		Islamia PS															toilets
34		Gidan Isau Nom	2002047120	100	124	224	1		2013	Fortia			2	2	2013	Bukar Mak	Add 1 by 4 Ph 3
		PS															
35		Tarefa	2002090120	153	168	321	1		2013	Fortia				1	2013	Leon	
36	FAGGE	Gobirawa P.P.S	2012051120	8668	9532	18200		2	2010	Fortia/MH				6	2011	Polydiment	
37		Fagge Model	2012030120	598	559	1157							2	1	2011	Polydiment	Existing water
38		Thirmarul	2012137100	850	922	1772	1		2010	Apex		1	1	1	2011	Polydiment	
		Qur`an															
39		Aisha Shehu	2012039130	432	0	432	1		2010	Apex	Ī		1	2	2011	Polydiment	
		G.G.J.S.S															
						÷											

40	Kurna S.P.S.	2012085120	362	499	861							4	1	2011	Polydiment	Existing Water
41	Maikwaru Pri.	2012093122	191	143	334	1		2010	Apex				0.5	2011	Polydiment	1 x 3 cub
	Islamiyya															
42	Riga Special Pri.	2012112120	258	412	670	1		2010	Apex		1		2	2011	Polydiment	
	Sch.															
43	Suleiman	2012128120	2226	2374	4600		1	2011	Fortia	1			7	2012	Bukar Mak	
	Chambers .P.S															
44	Rumfa SPS	2012116120	86	99	185	1		2011	Beacon		1	2		2012	Bukar Mak	
45	Dan Waire SPS	2012023120	194	190	384	1		2011	Beacon		1		2	2012	Bukar Mak	
46	GJSS Kwakwachi	2012045130	0	571	571	1		2011	Beacon			1	3	2012	Bukar Mak	
47	Kundila PS	2012084120	42	67	109	1		2011	Beacon		1	2		2012	Leon	
															Projects	
48	Dabo SPS	2012021120	48	68	116	1		2011	Beacon		1	2		2012	Leon	
															Projects	
49	Suka SPS	2012127120	164	189	353	1		2011	Beacon		1	2		2012	Leon	
															Projects	
50	Zawai SPS	2012144120	337	82	419	1		2011	Beacon		1	2	1	2012	Leon	
															Projects	
51	Dadin Kowa	2012022122	226	176	402	1		2011	Beacon			1	2	2012	Leon	
	Islamyya														Projects	
52	IQTANUL Quran	2012067100	126	137	263	1		2011	Beacon		1	2		2012	Leon	
															Projects	
53	Hassan Bin Sale	2012060102	663	618	1281	1		2011	Beacon							No space for
																toilets
54	Riadu Islam	2012113102	418	318	736	1		2011	Beacon							No space for
																toilets
55	Liman Malik	2012064102	397	246	643	1		2012	Fortia							No space for
-				-									_			toilets
56	GGJSS T/Bojuwa	2012040130	1397	0	1397	1		2012	Fortia				3	2013	Bukar Mak	
57	GGJSS	2012043130	1090	0	1090	1		2012	Fortia				3	2013	Bukar Mak	
	Maikwatashi															
58	Raulatu Islamiya	2012111122	422	235	657	1		2012	Beacon							No space for

		PS															toilets
59		Miadorowa p S	2012092120	1016	1566	2582	1		2012	Beacon	1		1	1	2012	Bukar Mak	Existing toilets
															/13		
60		GGJSS S/Abacha	2012042130	546	0	546	1		2012	Beacon				2	2013	Leon	
61		GGJSS M/Fagge	2012038130	390	0	390	1		2013	Fortia			1	1	2013	Leon	
62	кимвотѕо	Naibawa SPS	2025146120	1056	1245	2301							1	4	2011	Leon	Existing Water
																Projects	
63		Maikalwa PS	2025132120	641	773	1414	1		2010	Apex			1	2	2011	Leon	
																Projects	
64		llmul-Huda Isl	2025015102	396	278	674	1		2010	Apex			-				No space for
		Sheka										-		-			toilets
65		Sabuwar	2025175120	559	528	1087						1	2	1	2011	Leon	Existing Water
		GanduD/Mal														Projects	
66		Gov Jun Arab	2025087130	0	678	678	1		2010	Apex		1	1		2011	Leon	
		Sec. Ja`oji														Projects	
67		Bechi Primary	2025020120	243	382	625	1		2010	Apex		1	2		2011	Leon	
~~~		School														Projects	
68		Chiranci Special	2025029120	2936	2910	5846		1	2010	Apex			2	6	2011	Leon	
60		PS	2025064420	250	200				204.0						2011	Projects	
69		Gadama Primary	2025061120	350	380	730	1		2010	Apex		1	1	1	2011	Leon	
70			2025000120	220	272	600	1		2011	Wood Liji	1	1	-		2012	Projects	
70		Dalladi Nasidi	2023099130	220	572	800	1		2011		1	1	5		2012	Projects	
71		Mariri	20250/9130	/35	0	435	1		2011	Wood Hiil			1	4	2012	Leon	
, 1		SPS/GGISS	2023043130	-55	Ŭ	435	1		2011	Wood IIII			-	-	2012	Projects	
72		Danbare PS	2025034120	562	808	1370	1		2011	Wood Hiil			2	1	2012	Leon	
. –																Projects	
73		Gurin Gawa SPS	2025070120	468	468	936	1		2011	Wood Hiil		2		1	2012	Leon	
																Projects	
74		Wailari SPS	2025211120	1183	1197	2380	1		2011	Wood Hiil			1	4	2012	Leon	
																Projects	
75		Farawa SPS	2025043120	649	602	1251	1		2011	Wood Hiil			5		2012	Leon	
																Projects	

76	Limawa Primary	2025111120	207	346	553	1	2011	Wood Hiil		1	3		2012	Leon	
77		2025220420	201	274	572		2011	M(				-	2012	Projects	
//	Zara PS	2025220120	301	2/1	5/2	1	2011	WOOD HIII			1	2	2012	Leon	
														Projects	
78	Kumbotso	2025106100	75	75	150	1	2011	Wood Hill							No space for
	Cluster Isla														toilets
79	Yan Sango PS	2025215120	159	270	429	1	2011	Wood Hiil	1	1	2		2012	Leon	
														Projects	
80	Zawachiki JSS/PS	2025221120	918	1072	1990	1	2011	Wood Hiil		1	1	2	2013	Leon	Add 1 by 4 Ph 3
														Projects	
81	Kumbotso	2025106100	98	126	224	1	2011	Wood Hiil		1	2		2013	Leon	Add 1 by 4 Ph 3
	Quranic													Projects	
82	Medule SP	2025135120	870	978	1848	1	2011	Wood Hiil			2	2	2013	Leon	Add 1 by 4 Ph 3
														Projects	
83	Batakaye SP	2025019120	221	203	424	1	2011	Wood Hiil		2	4	4	2012	Leon	
84	Charanchi Gabas	2025028120	575	370	945	1	2012	Becon			2		2013	Leon	
	PS													Projects	
85	Bubugaje	2025025100	194	180	374	1	2012	Becon			2		2013	Leon	
														Projects	
86	Gwazaye	2025072120	421	603	1024	1	2012	Becon			2	1	2013	Leon	Add 1 by 4 Ph 3
	GGJS/PS													Projects	
87	Ululalbab GGJSS	2025197130	506	625	1131	1	2012	Becon							No space for
															toilets
88	GGJSS Isa Waziri	2025050130	665	0	665	1	2012	Becon			1	2	2013	Leon	Phase III Add 1 by
														Projects	4 Ph 3
89	GGJSS Mariri	2025049130	0	645	645	1	2012	Becon							Phase III
90	JSS U/rimi	2025089130	0	335	335					1	1		2013	Leon	Water by Others
														Projects	
91	GG JA SS Liman	2025047130	291	110	401	1	2013	Fortia			2	1	2013	Leon	Add 1 by 4 Ph 3
	Idi													Projects	
92	GGSS Chiranchi	2025056130	257	0	257	1	2013	Fortia			2	2	2013	Leon	Add 2 by 4 Ph 3
														Projects	
93	GG JASS	2025290130	0	1100	1100	1	2013	Fortia			1	2	2013	Leon	Add 1 by 4 Ph 3

	Panshekara															Projects	
94	Dangoro PS	2025036120	540	777	1317	1			2013	Fortia		1	1	1	2013	Leon	Add 1 by 4 Ph 3
																Projects	
95	Kusuba PS	2025109120	265	363	628	1			2013	Fortia			1	1	2013	Leon	
																Projects	
96	Chalawa	2025027120	224	472	696								3		2013	Leon	Existing water
																Projects	
	Shekar Barde												1				Add 1 by 4 Ph 3
																	Exist water
	Total		45,155	46,659	91,814	84	0	4			6	47	123	11			
														2.5			
										No of Cubicle	S	94	492	67			
														5			
												Total	No of		1261		
												Cubic	les				

### vi. Jigawa

### **ESSPIN INFRASTRUCTURE SCOPE OF WORK 2010 - 2013**

### **JIGAWA STATE**

Annex 6 vi)

Date 10/07/2014

	LGEA	School	EMIS Code	Students	5		Water S	Supply				Classrooms	Toilet	s				Remarks
				Female	Male	Total	Hand/P	Mech	Solar	Year	Contractor	1 X 2	1 X 2	1 X 4	1 X 6	Year	Contractor	
1	Dutse	Zai Primary	1806172121	514	576	1,090	1			2013	Landbase			1	4	2012	Bukar Mak	Existing water
2		Gidan Sarkin As	1806180122	138	160	298	1			2013	Landbase	1	1	2		2012	Bukar Mak	Existing water
3		Chai-Chai JSS	1806015121	96	187	283	1			2010	Landbase		3			2012	Bukar Mak	
4		Kwarin Mekera	1806098121	85	171	256	1			2010	Landbase		2	1		2012	Bukar Mak	
5		Galadanchi Pr	1806045121	252	475	727	1			2011	Carling Ear			3	2	2012	Sukudai	
6		Chamo J.S.S	1806077131	84	116	200	1			2011	Carling Ear		2	1		2012	Sukudai	
7		Malamawa	1806133121	109	155	264	1			2011	Carling Ear		1	2	0	2012	Sukudai	
8		Yalwawa P.S	1806165121	161	249	410	1			2011	Carling Ear		1	1	1	2012	Sukudai	
9		BPS/JSS Kudai	1806071131	235	579	814	1			2011	Carling Ear							Toilets by Others
10		Fagogi	1806033121	752	557	1,309	1			2011	Carling Ear		1	1	1	2013	Sukudai	
11		Kudai Yamma	1806119121	114	203	317	1			2012	Carling Ear			1	2	2012	Sukudai	
12		GJSS Baure	1806066131	853	0	853	1			2012	Landbase			3		2013	Sukudai	
13		Dr Nuhu Md Sunusi	1806022121	346	363	709	1			2013	Carling Ear			4	1	2013	Sukudai	Add 2 by 4 Ph 3
14		Y'argaba PS/JSS	1806093131	44	76	120							1	4		2013	Sukudai	Exist water Add 1 by 4 Ph 3
15	Buji	Sagu JSS	1805026131	14	113	127	1			2010	Landbase		2	1		2012	Bukar Mak	
16		Lafiya P. S	1805037121	64	99	163	1			2010	Landbase	1	3			2012	Bukar Mak	
17		Gantsa Special PS	1805016121	161	238	399	1			2012	Landbase			2	1	2013	Sukudai	
18		Nurul Huda Islamiya	1805041122	48	54	102	1			2012	Landbase							No space for toilets
19		Kora	1805034121	158	180	338	1			2013	Landbase		3	1		2013	Sukudai	Add 1 by 4 Ph 3
20		GJSS Kukuma	1805025131	34	128	162	1			2013	Carling Ear		3			2013	Sukudai	

21		Gwadayi	1805020121	122	140	262				Landbase		3	1		2013	Sukudai	Exist water Add 1 by 4 Ph 3
22	Miga	Zareku P. S	1822058121	159	363	522	1		2010	Landbase		2	1		2012	Bukar Mak	
23		Dan Gyatin Isl. P.S	1822011122	132	80	212	1		2010	Landbase		1	2		2012	Bukar Mak	
24		Damaganawa P. S	1822010121	55	226	281	1		2010	Landbase	1	2		1	2012	Bukar Mak	
25		Kirnande P. S	1822033121	112	156	268	1		2011	CGC		2	1		2012	Sukudai	
26		Shunawa P.S	1822051121	27	30	57	1		2011	CGC		1	2		2012	Sukudai	
27		Dabaka Ladan P. S	1822009121	133	138	271	1		2011	CGC		2	1		2012	Sukudai	
28		Agufa Islamiyya P S	1822002122	141	155	296	1		2011	CGC		1	2		2012	Sukudai	
29		Ganuwa	1822043223	144	271	415	1		2012	Carling Ear		3			2013	Sysi	
30		Koya P S	1822035121	152	285	437	1		2012	Carling Ear		3	1		2013	Sysi	Add 1 by 4 Ph 3
31		Sabon Gari	1822048121	125	373	498	1		2013	Carling Ear		2	1		2013	Sysi	
32		Romawa	1822046121	80	124	204	1		2013	Carling Ear		3	1		2013	Sysi	Add 1 by 4 Ph 3
33		Sarawuya	1822050121	68	204	272	1		2013	Carling Ear		2	1		2013	Sysi	
34	Kaf-Hausa	Kamugatawa P.S	1815079121	73	140	213	1		2010	Carling Ear		2	1		2012	Nasiha	
35		Sarawa JSS	1815073131	156	245	401	1		2010	Carling Ear		1	3		2012	Nasiha	
36		Kafin-Hausa Spec	1815077121	44	95	139	1		2011	Carling Ear	1	1		5	2012	Nasiha	
37		Waek P S	1815134121	146	414	560	1		2011	Carling Ear		2		1	2012	Sysi	
38		Mezan P S	1815105121	85	144	229	1		2011	Carling Ear		1	1	1	2012	Sysi	
39		Ruba P S	1815117121	119	164	283	1		2011	Carling Ear		1	2		2012	Sysi	
40		Gafaya PS	1815044121	75	130	205	1		2012	Landbase		3	1		2013	Sysi	Add 1 by 4 Ph 3
41		Kauzawa PS	1815083121	238	181	419	1		2012	Carling Ear		2	2		2013	Sysi	Add 1 by 4 Ph 3
42		Bulangu Spec	1815024121	239	347	586	1		2012	Carling Ear		2	3		2013	Sysi	Add 2 by 4 Ph 3
43		Baraduwa	1815020121	100	153	253	1		2013	Carling Ear		3	1		2013	Sysi	Add 1 by 4 Ph 3
45		WuiWui	1815135121	77	140	217	1		2013	Landbase		3			2013	Sysi	
46		Shakato	1815124121	210	290	500	1		2013	Landbase		3	1		2013	Babandoki	Add 1 by 4 Ph 3
47	Birniwa	Gabas Mari P. S	1803026121	111	98	209					1	3			2012	Nasiha	Existing Water
48		Birniwa Spec	1803009121	173	324	497	1		2010	Carling Ear			1	3	2012	Nasiha	
49		Birniwa JSS	1803035131	153	282	435	1		2010	Carling Ear							Adj to Birniwa SPS
																	with toilets
50		Dagil Fani P. S	1803014121	170	182	352	1		2011	Landbase		1	2		2012	Sysi	
51		Nurul Huda Islamiya	1803071122	561	385	946	1		2011	Landbase							No space for

																	toilets
52		Kachallari P S	1803046121	139	158	297	1		2011	Landbase							Existing toilets
53		Karanka	1803049121	96	111	207	1		2013	Landbase		3	1		2013	Nasiha	Add 1 by 4 Ph 3
54	M-madori	Tosarawa P.S	1821084121	108	154	262	1		2010	Landbase		1	2		2012	Nasiha	
55		Mallamawa P.S	1821003121	96	128	224	1		2010	Landbase		3			2012	Nasiha	
56		Mabugi P.S	1821063121	38	59	97	1		2010	Landbase	1	2	1		2012	Nasiha	
57		Jarniski P.S	1821037121	83	124	207	1		2011	Landbase		1	2		2012	Sysi	
58		Kadawa P S	1821052121	121	135	256	1		2011	Landbase			3	1	2012	Sysi	
59		Jama'are Islam	1821036122	306	211	517	1		2011	Landbase		1	2		2012	Sysi	
60		M/Madori	1821062121	344	659	1,003	1		2011	Landbase		0	1	3	2012	Sysi	
		Spec(pilot)															
61		Dunari PS	1821023121	121	183	304	1		2011	Landbase			4		2013	Nasiha	
62		Dantamo	1821049131	169	179	348	1		2011	Landbase							No space for toilets
63		Tahafizu Islamia PS	1821078121	476	272	748	1		2011	Landbase							No space for
																	toilets
64		Garin Gabas Isl PS	1821029122	187	68	255	1		2012	Carling Ear		3			2013	Nasiha	
65		Garin Mallam Isl PS	1821033121	66	93	159	1		2012	Carling Ear		3			2013	Nasiha	
66		GJSS Makadari	1821046131	44	48	92	1		2012	Carling Ear		3			2013	Nasiha	
67		Zaro	1821087121	73	121	194						3			2013	Nasiha	Existing water
68	Gumel	M. R. A. Isl. P. S	1809045122	448	327	775	1		2010	Carling Ear		0	1	3	2012	Modern	
69		Zango GJSS	1809039131	246	289	535							3		2013	Nasiha	Existing water
70		Maidabara P. S	1809046121	35	51	86	1		2010	Carling Ear		3			2012	Modern	
71		J S S Nasoro	1809038131	414	704	1,118	1		2011	Landbase			3	1	2012	Babandoki	
72		Bariki P. S	1809006121	417	441	858	1		2011	Landbase			1	6	2012	Babandoki	
73		C O E PS	1809002120	279	297	576	1		2011	Landbase			5		2012	Babandoki	
74		Nasoro Spec Science	1809054121	1812	2327	4,139	1		2011	Landbase	1					Modern	Existing toilets
75		Nakota Islamiya PS	1809053122	533	496	1,029	1		2012	Carling Ear		1	4		2013	Babandoki	Add 2 by 4 Ph 3
76		Model Boarding PS	1809064130	395	249	644	1		2012	Carling Ear			5	1	2013	Babandoki	Add 3 by 4 Ph 3
77	Roni	Dansure P.S	1824006121	523	704	1,227	1		2011	CGC			3	2	2012	Modern	
78		Amaryawa P. S	1824001121	278	331	609	1		2011	CGC		3			2012	Modern	
79		Janbulo Islamiyya	1824016122	440	333	773					1				2012	Modern	Existing

																		Water/Toilets
80		Roni Arewa J S S	1824025131	88	85	173	1			2011	CGC			3	1	2012	Babandoki	
81		Roni Kudu JSS	1824026131	127	161	288	1			2011	CGC		1	2		2012	Babandoki	
82		Takwardawa PS	1824043121	98	158	256	1			2011	CGC		1	2		2013	Babandoki	
83		Tsubut PS	1824044121	220	291	511	1			2011	CGC		1	2		2013	Babandoki	
84		Roni Arewa PS	1824037121	328	289	617	1			2012	Landbase		2	3		2013	Babandoki	Add 2 by 4 Ph 3
85	Ringim	Kyarama P. S	1823071121	197	284	481	1			2010	ELL		1	2		2012	Modern	
86		Gidan Ari P. S	1823029121	85	159	244	1			2010	ELL		2	1		2012	Modern	
87		Karshi P. S	1823063121	98	156	254	1			2010	ELL	1	1	2		2012	Modern	
88		Chai Chai PS	1823013121	180	316	496	1			2011	CGC		1	1	1	2012	Babandoki	
89		Kijawal PS	1823067121	88	124	212	1			2011	CGC		1	1	1	2012	Babandoki	
90		JSS Sankara	1823056131	84	191	275	1			2011	CGC		2	2		2013	Babandoki	Add 1 by 4 Ph 3
91		JSS Beguwa PS	1823011121	138	174	312	1			2011	CGC		3			2012	Babandoki	
92		GJSS Ganjin Gabi	1823052131	7	84	91	1			2012	Landbase		3			2013	Babandoki	
93		Sabon Gari PS	1823086122	625	167	792	1			2012	Landbase			2	1	2013	Babandoki	
94		GJSS Yan-Dutse	1823059131	135	193	328	1			2012	Landbase		1	4		2013	Babandoki	Add 2 by 4 Ph 3
95		Galadanshi Transit	1823038121	227	375	602							3			2013	Babandoki	Existing water
		Total		19,454	23,397	42,851	87					9	131	128	44			
								1	Nun	nber of	cubicles		262	512	264			
													Total	no of	1	1038		
													cubic	es				

## Annex 7: ESSPIN Water and Sanitation Costing

## i. ESSPIN Water Costings

State	Item	Phase 1	Phase 2	Phase 3	Phase 4	Totals	Cost inc WHT	Units	Cost/unit	Pupils	Cost/Pupil
Lagos	Contractors	19,049,685	38,374,389	10,219,821		67,643,896					
	Consultants	4,247,035	3,539,196	4,247,035		12,033,265					
	Total					79,677,160	83,661,019	30	2,788,701	22,916	3,651
						-					
Kwara	Contractors	19,639,186	29,543,310	18,///,04/	12,985,775	80,945,318					
	Consultants	4,247,035	3,539,196	4,247,035	5,308,793	17,342,058					
	Total					98,287,376	103,201,744	87	1,186,227	17,471	5,907
						-					
Jigawa	Contractors	17,405,846	27,961,489	18,034,828	11,079,166	74,481,328					
	Consultants	4,247,035	3,539,196	4,247,035	5,308,793	17,342,058					
						-					
	Total					91,823,387	96,414,556	87	1,108,213	44,251	2,179
						-					
Kaduna	Contractors	13,366,032	37,638,612	15,008,590	8,954,791	74,968,025					
	Consultants	4,247,035	3,539,196	4,247,035	5,308,793	17,342,058					
	Total					- 92,310,083	96,925,588	86	1,127,042	40,739	2,379
						-			, ,	,	,
Kano	Contractors	30,472,868	35,284,309	16,686,312	12,946,491	95,389,980					
	Consultants	4,247,035	3,539,196	4,247,035	5,308,793	17,342,058					
						-					
	Total					112,732,038	118,368,640	88	1,345,098	101,656	1,164
						-					
Enugu	Contractors		46,571,986	4,720,859		51,292,845					

	Consultants		3,539,196	4,247,035		7,786,230					
						-					
	Total					59,079,075	62,033,029	10	6,203,303	3,133	19,800
					Grand Total	533,909,119		388			
	Consultants	21,235,173	21,235,173	21,235,173	21,235,173						
Notes/ C	omments										
Why Kaduna Phase 2 so high. Focused on small rural schools											
Enugu Phase 3 maintenance/ corrective work											
Lagos unit cost high because all schemes mechanised											
Enugu ur	nit cost very hig	h because all deep	o well boreholes 2	.00m							
Kano uni	t cost marginal	ly higher due to so	olar schemes								
Total Co	nsultancy Cost f	or Darl Hab appro	x 85M averaged								

### ii. ESSPIN Sanitation Costings

State	ltem	Phase 1	Phase 2	Phase 3	Unpaid Allowance	Totals	Cost inc WHT	Units	Cost/unit	Pupils	Cost/Pupil
Lagos	Contractors	172,435,652	93,293,707			265,729,359					
	Consultants	18,678,000	10,302,000			28,980,000					
	Total					294,709,359	309,444,827	372	831,841	22,916	13,503
Kwara	Contractors	97,827,528	138,742,408	60,079,464	6,007,946	302,657,346					
	Consultants	14,930,820	14,400,000	13,608,000	680,400	43,619,220					
	Less classrooms					12,000,000					
	Total					334,276,566	350,990,394	696	504,297	17,471	20,090
Jigawa	Contractors	156,780,000	95,244,326	81,968,295	8,196,830	342,189,451					
	Consultants	2,124,000	8,181,000	9,412,000	470,600	20,187,600					
	Less classrooms					54,000,000					
	Total					308,377,051	323,795,904	942	343,732	19,957	24,294
Kaduna	Contractors	121,325,721	129,252,154	83,254,232	8,325,423	342,157,530					
	Consultants	20,358,915	16,019,000	10,156,000	507,800	47,041,715					
	Less classrooms					42,000,000					
	Total					347,199,245	364,559,208	898	405,968	40,739	8,949
Kano	Contractors	99,676,481	153,105,812	95,841,351	9,584,135	358,207,779					
	Consultants	14,176,000	11,471,000	11,808,000	590,400	38,045,400					
	Less classrooms					36,000,000					
	Total					360,253,179	378,265,838	1,165	324,692	101,656	3,721
Enugu	Contractors	59,525,073			1,785,752	61,310,825					
	Consultants	6,977,000				6,977,000					
	Total					68,287,825	71,702,217	136	527,222	3,133	22,886
						1,713,103,227		4,209			

Enugu classrooms33,023,000

Notes/ Comments

Cost of classrooms calculated at 6M each

Unpaid allowance for pending payments to Contractors 10%

Unpaid allowance for pending payments to Consultants 5%

## iii. Summary of ESSPIN Infrastructure Costings

				Water Supply	Sanitation										
State	Students in ESSPIN Beneficiary			Total Cost	Units	Unit Cost		Cost per S	tudent	Total Cost	Cubicles	Unit Cost		Cost per Student	
	Schools			Provided					Provided						
	Female	Male	Total			Naira	See Note	Naira	See Note			Naira	See Note	Naira	See Note
Lagos	11,422	11,494	22,916	83,661,019	30	2,788,701	1	3,651	5	309,444,827	372	831,841	9	13,503	14
Kwara	8,952	8,519	17,471	103,201,744	87	1,186,227	2	5,907	6	350,990,394	696	504,297	10	20,090	6
Jigawa	19,957	24,294	44,251	96,414,556	87	1,108,213	2	2,179		323,795,904	942	343,732		7,317	
Kaduna	19,381	21,358	40,739	96,925,588	86	1,127,042	2	2,379		364,559,208	898	405,968	11	8,949	
Kano	48,207	53,449	101,656	118,368,640	88	1,345,098	3	1,164	7	378,265,838	1,165	324,692	12	3,721	15
Enugu	1,512	1,621	3,133	62,033,029	10	6,203,303	4	19,800	8	71,702,217	136	527,222	13	22,886	13
Totals			230,166	560,604,575						1,798,758,388					
	Notes														
	Costings are exclusive of ESSPIN costs (Consultants, transportation etc)														
1	All locations provided with mechanised borehole with elevated water tank, relatively expensive														
2	All locatio	ns in Kwara	, Jigawa and	l Kaduna provideo	l with standar	d borehole and	handpump								
3	All locatio	ns in Kano p	provided wit	h standard boreh	ole and handp	oump except 4 M	No with Sola	r pumps and	elevated wa	ater tanks					
4	Very high	unit cost in	Enugu due 1	to all locations red	quiring 200m d	leep well boreh	oles with pu	ımps, large g	enerators ar	nd elevated water	r tanks				
5	Unit cost p	per student	relatively lo	ow due to high stu	dent numbers	in Lagos and sl	hallow depth	n of wells							
6	Kwara cor	centrated c	on providing	facilities to remo	te rural schoo	ls with fewer st	udents hence	e the relativ	ely high unit	cost per student					
7	Lowest un	it cost per s	tudent in Ka	ano due to high st	udent numbe	rs									
8	High avera	age cost per	student in	Enugu due to very	high unit cos	t due to geolog	y and type o	f borehole re	equired						
9	Relatively	high unit co	ost due to pr	rovision of standa	rd water close	ts in Lagos inste	ead of pit lat	rines							
10	High unit o	cost in Kwar	a due to rei	mote locations an	d more 2 cubi	cle latrine block	ks as oppose	d to 6 cubicl	e blocks redu	ucing the econom	y of scale				
11	Relatively	high unit co	ost in Kadun	a due to large nur	nber of schoo	ls with 2 block o	cubicles in la	st phase due	e to budget c	ut					
12	Lowest un	it cost per ι	init in Kano	due to high numb	per of 6 cubicle	e units									
13	High unit o	cost in Enug	u due to lov	w number of unit,	appointment	of weak consul	tantant,poo	r supervision	and failure	of some contract	ors. Unit rat	es for constru	ction were a	Ilso too higi	1
14	Relatively	high unit co	ost per stude	ent in Lagos due t	o provision of	more expensive	e water close	<u>ets</u>							
15	Kano boas	sts the lowe	st unit cost	per student due t	o the high nun	nber of student	s and the hi	gh number o	f 6 cubicle la	trine blocks					



# Annex 8: Gobirawa Primary School Case Study

Suleman Chamber SPS Before Esspin water and Sanitation



Suleman Cahmber before school garden



Suleman Chamber schools Garden now



School Garden at Suleman chamber Guava, orange and some vegetables



Gobirawa as at 2010



Gobirawa before commissioning



Gobirawa pupils enjoying water before garden decision



Gobirawa Garden preparations





Gobirawa school Garden now



Landscaping and plantations at Gobirawa



water supply to toilets at Gobirawa for propers cleaning of toilets now.



GGSS Aisha Shehu School Garden


# Annex 9: ESSPIN Comparative and Sustainability Schedule

### i. Kaduna Maintenance and Sustainability Report, December 2014

							Water	Supply		Sanitation	l					
			Date	Head	SBMC	Need	Funct-	Corrective Action	Maint +	Remarks	Condition		Com. M	anagmt	Maint +	Remarks
				Teach		for B/	ional		Sustain						Sustain	
						Wall			Rating						Rating	
	LGEA	School	of visit				Yes/	Bearings/Seal/Foot-valve			Structure	H/	In use	Clean		
							No	Riser/Cylinder/Handle/				Washing				
								Other								
				Rate	Rate	Rate			Rate				Rate	Rate	Rate	
				1-10	1- 10	1- 10			1- 10				1- 10	1- 10	1- 10	
1	Kachia	LGEA Rehab	18-Dec-14				Yes	Sunken Platform	9		Ok	Ok	7	6	6	
2		Model Kachia	24-Oct-14				Yes		9		Ok	Ok	7	5	5	
3		LGEA Fadan Anchi	19-Dec-14				No	Pedestal Stand to be	6		Ok	Тар	7	6	5	
								replaced								
4		LGEA Kwaturu	23-Oct-14				Yes		9		Ok	Ok	8	7	6	
5		Sabon Gari Ankuwa	23-Oct-14				Yes		9		Ok	Ok	8	8	7	
6		LGEA Kachia II	18-Dec-14				Yes		8		Ok	Тар	6	5	4	
7		LGEA Sakwai	24-Oct-14				Yes		9		Ok	Ok	7	7	5	
8		LGEA Sabon Maro	19-Dec-14				Yes		8		Ok	Ok	8	7	7	
9		LGEA Sarahu	23-Oct-14				Yes		9		Ok	Ok	6	5	5	
10		UBE S/Gari Gantan	23-Oct-14				Yes		8		Ok	Ok	7	7	7	
11		LGEA Doka	19-Dec-14				Yes		9		Ok	Ok	8	8	7	
12		LGEA Bahago	23-Oct-14				No	Community yet to take	6							Not Provided
								responsibility								
13		LGEA Ungwan Ate	24-Oct-14				Yes	Cylinder	7		Ok	Ok	7	6	5	
14		LDEA Gidan Sarni	23-Oct-14				Yes		10		Ok	Ok	10	9	8	
15		UBE Sabon Gari doka	19-Dec-14				Yes	Risers, Rods and Cylinder	6		Ok	Ok	6	5	5	

16		LGEA Gantan	23-Oct-14		,	Yes		8	Ok	Ok	8	8	7	
17		LGEA Sabon Kaura	18-Dec-14			Yes		8	Ok	Ok	7	6	6	
18		LGEA Maidamishi	23-Oct-14		,	Yes		8	Ok	Ok	8	8	7	
19		UBE Kurmin Mata	23-Oct-14			Yes		9	Ok	Ok	9	8	7	
		Kasa												
20		IQTE L Halilu Naibi	18-Dec-14		,	Yes		7	Ok	Taps	6	5	5	
21	Kajuru	LGEA Kajuru Town	13-Jan-15		,	Yes		8	ОК	Taps	8	7	7	
22		LGEA Rimau Gari												
23		LGEA Kurminjuwa	12-Jan-15		,	Yes		8	Ok	Ok	8	7	7	
24		UBE Badayi												
25		LGEA Ekuzeh	12-Jan-15		,	Yes		9	Ok	Ok	9	7	7	
26		LGEA Kajuru statio	13-Jan-15		,	Yes		9	Ok	Ok	7	7	6	
27		LGEA Kadanya	12-Jan-15		,	Yes	Cylinder	7	Ok	Ok	8	8	7	
28		LGEA Kutura station	13-Jan-15		,	Yes		9	Ok	Ok	7	7	7	
29		UBE SarkinHausa RI												
30		LGEA Jankasa Rim												
31		LGEA Kujeni	13-Jan-15			Yes		6	Ok	Ok	8	7	6	
32		IQTE Kasuwan Mag												
33		UBE Ungwan Damisa	13-Jan-15		,	Yes		10	Ok	Ok	9	8	7	
34		UBE Gurgu 1												
35		UBE Akusha												
36		IQTE Ahmed Musa												
37	Kad Nth	LGEA Gwari Street	4-Nov-14		,	yes		7	Ok	Taps	7	5	4	
38		LGEA Lagos street	4-Nov-14		,	yes		7	Ok	Taps	7	5	4	
39		LGEA Hayan Banki	5-Nov-14		,	yes		8						Not Provided
40		LGEA Ungwan	5-Nov-14		,	yes		7	Ok	Taps	6	5	4	
		Kanawa												
41		Sabon Gari PS	4-Nov-14		,	yes		9	Ok	Ok	8	7	7	
42		Maiduguri Rd PS	4-Nov-14		,	yes		9	Ok	Ok	7	5	4	
43		Ali Dogo Ung Shanu												

44		LGEA Abakpa	5-Nov-14		No	Dropped Cylinder,	5	Fishing	Ok	Taps	6	5	4	
						Risers and Rods								
45		Katsina Road P S	4-Nov-14		yes		8		Ok	Ok	7	6	6	
46		LGEA Research						Not Provided	Ok	Ok	7	5	5	
		Model												
47	Kudan	LGEA Domoso	28-Oct-14		No	Head Assembly	4							Not Provided
						Vandalised								
48		Madauchi	12-Dec-14					Not Provided	Ok	Ok	6	5	5	
49		Musawa	12-Dec-14					Not Provided	Ok	Ok	8	7	7	
50		Nomadic U/Namata	12-Dec-14		Yes		9		Ok	Ok	7	6	5	
51		UBE Kyaudai	12-Dec-14		Yes		10		Ok	Ok	10	9	7	
52		UBE Ang Makada	12-Dec-14		Yes		9		Ok	Ok	8	7	7	
53		UBE K/KUDU	28-Oct-14		No	Head Assembly to be	8		Ok	Taps	7	5	5	
						replaced								
54		UBE Sarama	28-Oct-14		Yes		9		Ok	Ok	8	7	6	
55		IQTE Sabon Gari ZK	12-Dec-14		Yes		8		Ok	Ok	7	6	5	
56		LGEA Sabon Gari	28-Oct-14		Yes	Reconnected Rod	8		Ok	Ok	8	7	5	
		Danbami												
57	Makarfi	LGEA Gazara	29-Oct-14		No	2 Connecting rod to be	8		Ok	Ok	7	5	4	
						replaced								
58		LGEA Ruma	11-Dec-14		Yes		7		Ok	Ok	7	6	5	
59		LGEA Danguruzuri	30-Oct-14		Yes		6		Ok	Ok	7	5	4	
60		UBE Tashar Yari II	29-Oct-14		Yes		7		Ok	Ok	7	6	5	
61		UBE DanbakwA	30-Oct-14		Yes	Seal	7		Ok	Ok	6	5	5	
62		LGEA Godai	29-Oct-14		Yes	Seal	10		Ok	Ok	9	8	7	
63		UBE Alhazawa	29-Oct-14		Yes	Riser and Seal	7		Ok	Ok	6	5	5	
64		LGEA Dan Ayamaka	30-Oct-14		Yes		9		Ok	Ok	7	6	6	
65		UBE Maryamu	30-Oct-14		Yes		8		Ok	Ok	8	7	7	
66		LGEA Jama	11-Dec-14		Yes		8		Ok	Ok	7	6	5	
67		UBE Ungwan	29-Oct-14		Yes		9		Ok	Ok	8	7	6	

		Wambai												
68		UBE Ungwan Geri	11-Dec-14		Yes		8		ОК	Ok	8	7	6	
69		IQTE Guburchi Makarfi	11-Dec-14		Yes		8		Bad	Taps	7	6	5	Plaster peeling
70	Kaura	LGEA Kaura Model	22-Oct-14		Yes		9		Bad	2 Taps	7	7	7	Plaster peeling
71		UBE Fadan Daji	15-Dec-14		Yes		10		Ok	ОК	8	8	7	
72		LGEA U/Rami	15-Dec-14		Yes		9		Ok	Ok	8	8	7	
73		UBE Tuyit Kagoro	22-Oct-14		Yes		9		Ok	Ok	7	7	6	
74		LGEA Gizagwai	22-Oct-14		Yes		8		Bad	Ok	7	7	6	Door+peeling walls
75		LGEA Ung Nka Giza	22-Oct-14		Yes	Seal	7		Walls	2Taps	7	6	5	collapsed divider
76		L.G.E.A.Central Kag	22-Oct-14		Yes	Seal	7		Ok	3 Taps	7	6	6	
77		L.G.E.A. Kadau Kag	22-Oct-14		Yes		9		Ok	1 Тар	8	8	7	
78		UBE Gayansa	22-Oct-14		Yes		9		Ok	2Taps	7	6	6	
79		LGEA Dutse Kagoro	21-Oct-14		Yes		8	Solar						Solar Water
80	Kauru	LGEA Rahama	20-Oct-14					Not Provided	Ok	ОК	8	7	7	
81		LGEA Chori	20-Oct-14		Yes		9		Ok	Тар	7	7	6	
82		LGEA Ikulu Pari	20-Oct-14		Yes	Seal	8		Ok	Taps	7	7	5	2 Taps broken
83		LEA Kigum Yelwa	15-Dec-14		Yes		9		Ok	Ok	7	6	6	
84		LEA Kizachi Adams	21-Oct-14		No	Community yet to take responsibility	6		Bad	Ok	5	4	4	
85		LEA Kuyanbana	21-Oct-14		Yes	Seal	8		Bad	Тар	6	6	5	Plaster peeling
86		Ungwan Madaki	21-Oct-14		Yes		8		Ok	Ok	7	6	6	
87		LGEA Ungwan Garma	21-Oct-14		Yes	Replaced Cylinder	8		Ok	Ok	8	6	6	
88		LGEA Kiffin Chawai	16-Dec-14		Yes		8		Ok	Ok	8	7	7	
89		LGEA Kizachi Dawai	16-Dec-14		Yes		9		Ok	Ok	8	7	7	
90		UBE Ungwan Kaya	17-Dec-14		Yes		7		Ok	Ok	6	5	5	
91		LGEA Lungut	17-Dec-14		Yes		8		Ok	Ok	8	7	6	

## ii. Kaduna Maintenance and Sustainability Report, May 2016

							Water Supply     Sau       Funct     Remarks			Sanitation					
			Date of	Head	SBMC	Need	Funct-	Remarks	Maint+	Condition		Com. Ma	anagmt	Maint+	Remarks
	LGEA	School	Visit	Teach		for B/	ional		Sustain					Sustain	
						Wall			Rating					Rating	
							Yes/No			Structure	H/Washing	In use	Clean		
									Rate			Rate	Rate	Rate 1-	
									1- 10			1-10	1- 10	10	
1	Kachia	LGEA Rehab	Time	9	10		No	June visit planned	9	Ok	Ok	9	9	7	
2		Model Kachia	19-May-16	9	8		Yes		10	Ok	Ok	8	7	7	
3		LGEA Fadan Anchi	20-May-16	9	9	7	Yes	Connecting Rods	9	Ok	Ok	9	8	8	
4		LGEA Kwaturu	28-May-16	10	9		Yes		10	Ok	Ok	10	9	8	
5		Sabon Gari Ankuwa	19-May-16	9	9	6	Yes	Connecting Rods	10	Ok	Ok	10	9	8	
6		LGEA Kachia II	19-May-16	9	7		Yes		8	Ok	Ok	8	8	7	
7		LGEA Sakwai	19-May-16	9	8		Yes		10	Ok	Ok	10	9	8	
8		LGEA Sabon Maro	20-May-16	9	7		Yes	New Solar	8	Ok	Ok	10	9	8	
								Powered BH							
9		LGEA Sarahu	28-May-16	9	8		Yes		10	Bad	Bad	7	7	7	Collapsed Tank Stand,
															Handwash and Pillars
10		UBE S/Gari Gantan	28-May-16	9	7		Yes		10	Ok	Ok	10	10	8	
11		LGEA Doka	20-May-16	9	9	7	Yes	Connecting Rods	9	Ok	Ok	9	8	8	
12		LGEA Bahago	28-May-16	8	7		Yes		8						Not Provided
13		LGEA Ungwan Ate	28-May-16	10	9	7	Yes		10	Ok	Ok	10	9	8	
14		LDEA Gidan Sarni	28-May-16	10	10		Yes		10	Ok	Ok	10	10	8	
15		UBE Sabon Gari Doka	20-May-16	8	9		Yes	Rods and Risers	8	Ok	Ok	10	9	9	
16		LGEA Gantan	28-May-16	7	9		Yes	Seals	8	Ok	Ok	9	8	8	
17		LGEA Sabon Kaura	19-May-16	7	10		Yes		10	Ok	Ok	10	10	8	
18		LGEA Maidamishi	28-May-16	9	7		Yes		10	Ok	Ok	10	9	8	
19		UBE Kurmin Mata Kasa	28-May-16	10	10		Yes		10	Ok	Ok	10	10	8	
20		IQTE L Halilu Naibi	19-May-16	7	9		Yes		8	Ok	Ok	8	7	7	

21	Kajuru	LGEA Kajuru Town	16-May-16	9	9		No	Redrilling	8	ОК	Ok	10	10	9	RUWASA/UNICEF to be
								Recommended							requested to redrill
22		LGEA Rimau Gari	17-May-16	8	7		Yes	Connecting Rods	9	Ok	Ok	10	9	8	
23		LGEA Kurminjuwa	17-May-16	9	8		Yes		10	Ok	Ok	10	9	8	
24		UBE Badayi	17-May-16	9	8		Yes		9	Ok	Ok	10	9	8	
25		LGEA Ekuzeh	17-May-16	9	9		No	Backfilled.	10	Ok	Ok	10	9	8	RUWASA/UNICEF to be
								Redrilling							requested to redrill
26		LGEA Kajuru statio	18-May-16	7	7		Yes		9	Ok	Ok	8	7	7	
27		LGEA Kadanya	17-May-16	9	9		Yes		10	Ok	Ok	9	8	8	
28		LGEA Kutura station	18-May-16	8	8		Yes		10	Ok	Ok	9	8	8	
29		UBE SarkinHausa RI	17-May-16	9	9		Yes		8	Ok	Ok	10	10	9	
30		LGEA Jankasa Rim	17-May-16	9	7		Yes		10	Ok	Ok	10	10	9	
31		LGEA Kujeni	18-May-16	8	7		Yes		7	Ok	Ok	8	8	7	
32		IQTE Kasuwan Mag	16-May-16	6	9		Yes		7						
33		UBE Ungwan Damisa	16-May-16	8	8		Yes		10	Ok	Ok	10	10	9	
34		UBE Gurgu 1	Time	7	8		No	June visit planned	8	Ok	Ok	9	8	8	
35		UBE Akusha	16-May-16	8	8		Yes		10	Ok	Ok	10	9	8	
36		IQTE Ahmed Musa	16-May-16	8	8		Yes		8						
37	Kad Nth	LGEA Gwari Street	13-May-16	8	8	7	Yes		7	Ok	Ok	7	7	6	
38		LGEA Lagos street	13-May-16	8	8	7	Yes		7	Ok	Ok	7	7	6	
39		LGEA Hayan Banki	13-May-16	8	8		Yes	Connecting Rods	8						
40		LGEA Ungwan Kanawa	13-May-16	8	7		Yes		7	Ok	Not Ok	6	6	5	Tanks Stolen/Burnt
41		Sabon Gari PS	13-May-16	8	7		Yes		9	Ok	Ok	8	7	7	
42		Maiduguri Rd P S	13-May-16	8	7	8	Yes		9	Ok	Ok	8	7	7	
43		Ali Dogo Ung Shanu	13-May-16	6	7		Yes		8	Ok	Ok	8	7	7	
44		LGEA Abakpa	13-May-16	8	7	10	No	June visit planned	7	Ok	Ok	6	5	5	
45		Katsina Road P S	13-May-16	8	8		Yes		8	Ok	Ok	8	8	7	
46		LGEA Research Model	13-May-16	6	6			Public Water		Ok	Ok	8	7	7	
								Supply							
47	Kudan	LGEA Domoso	12-May-16	7	8	8	Yes		8						

48		Madauchi	11-May-16	8	7		Yes		7	Ok	Ok	9	8	8	
49		Musawa	11-May-16	8	7		Yes		9	Ok	Ok	9	8	8	
50		Nomadic U/Namata	11-May-16	7	8		Yes		10	Ok	Ok	9	8	8	
51		UBE Kyaudai	11-May-16	9	7		Yes		10	Ok	Ok	10	10	9	
52		UBE Ang Makada	11-Mar-16	9	8		Yes	Seals	9	Ok	Ok	10	10	8	
53		UBE K/KUDU	12-May-16	8	7	8	Yes	Connecting Rods	8	Ok	Ok	7	6	6	
54		UBE Sarama	12-May-16	8	8		Yes		9	Ok	Ok	10	10	9	
55		IQTE Sabon Gari ZK	11-May-16	7	8		Yes		9	Ok	Ok	8	7	7	
56		LGEA S/ Gari Danbami	11-May-16	7	7		Yes	Connecting Rods	9	Ok	Ok	9	8	7	
57	Makarfi	LGEA Gazara	10-May-16	8	7		Yes		9	Ok	Ok	8	7	7	
58		LGEA Ruma	10-May-16	6	8		Yes		10	Ok	Ok	9	8	7	
59		LGEA Danguruzuri	11-May-16	6	8	10	No	June visit planned	7	Ok	Ok	7	5	4	
60		UBE Tashar Yari II	10-May-16	8	7		Yes		10	Ok	Ok	8	7	7	
61		UBE DanbakwA	11-May-16	8	7	8	Yes		8	Ok	Ok	9	8	7	
62		LGEA Godai	10-May-16	6	7		Yes		10	Ok	Ok	10	9	8	
63		UBE Alhazawa	10-May-16	8	7		Yes		8	Ok	Ok	8	7	6	
64		LGEA Dan Ayamaka	10-May-16	8	7		Yes		9	Ok	Ok	9	8	8	
65		UBE Maryamu	11-May-16	7	7		Yes		9	Ok	Ok	10	9	8	
66		LGEA Jama	10-May-16	7	7		Yes		10	Ok	Ok	9	9	8	
67		UBE Ungwan Wambai	10-May-16	8	7		Yes		10	Ok	Ok	10	9	8	
68		UBE Ungwan Geri	11-May-16	7	7		Yes		10	ОК	Ok	9	8	8	
69		IQTE Guburchi Makarfi	Time	7	7		No	June visit planned	9	ОК	Ok	8	8	7	
70	Kaura	LGEA Kaura Model	Time	9	8	9	Yes		9	Ok	Ok	9	8	8	
71		UBE Fadan Daji	27-May-16	9	8		Yes	Connecting Rods	10	Ok	ОК	10	9	8	
72		LGEA U/Rami	27-May-16	9	7		Yes		10	Ok	Ok	10	9	9	
73		UBE Tuyit Kagoro	27-May-16	8	8		Yes		9	Ok	Ok	10	9	9	
74		LGEA Gizagwai	26-May-16	9	8		Yes		9	Ok	Ok	10	10	9	
75		LGEA Ung Nka Giza	26-May-16	8	7		Yes		9	Ok	Ok	9	9	8	
76		L.G.E.A.Central Kag	26-May-16	8	7		Yes		8	Ok	Ok	9	8	7	

77		L.G.E.A. Kadau Kag	27-May-16	8	7	9	Yes		10	Ok	Ok	9	8	7	
78		UBE Gayansa	26-May-16	9	7		Yes		9	Ok	Ok	10	9	8	
79		LGEA Dutse Kagoro	28-May-16	8	7		No	Burnt switch	10						Solar Water/
															Community to resolve
80	Kauru	LGEA Rahama	23-May-16	8	8		Yes		10	Ok	ОК	9	8	8	
81		LGEA Chori	23-May-16	9	8		Yes		10	Ok	Ok	10	9	8	
82		LGEA Ikulu Pari	24-May-16	8	7		Yes	Seal, Riser and	10	Ok	Ok	9	8	8	
								Rods							
83		LEA Kigum Yelwa	23-May-16	8	7		Yes		10	Ok	Ok	10	9	8	
84		LEA Kizachi Adams	25-May-16	8	8		Yes	Connecting Rods	8	Ok	Ok	9	8	7	
85		LEA Kuyanbana	Time	8	9		No	June visit planned	8	Ok	Ok	8	8	7	
86		Ungwan Madaki	24-May-16	8	7		Yes		8	Collapsed SA	Ok	9	8	8	Collapsed Soak away
87		LGEA Ungwan Garma	24-May-16	9	7		Yes		8	Ok	Ok	10	9	8	
88		LGEA Kiffin Chawai	25-May-16	8	7		Yes		10	Ok	Ok	10	9	8	
89		LGEA Kizachi Dawai	Time	9	8		No	June visit planned	10	Ok	Ok	10	10	9	
90		UBE Ungwan Kaya	25-May-16	8	8		Yes		8	Collapsed SA	Ok	10	9	8	Collapsed Soak away
91		LGEA Lungut	24-May-16	8	7		Yes		10	Ok	Ok	8	8	8	

# iii. Kwara Maintenance and Sustainability Report, June – August 2013

				Water Supp	ly			Sanitation					
	LGEA	School	Date of Visit	Functional	Corrective Action	Maintenance+	Remarks	Condition		Com.		Maintenance+	Remarks
						Sustainability				Manag	ement	Sustainability	
						Rating						Rating	
				Yes/No	Bearings/Seal/Foot-valve			Structure	H/Washing	In use	Clean		Remarks
					Riser/Cylinder/Handle/Other								below
						Rate 1- 10				Rate	Rate	Rate 1- 10	
										1- 10	1-10		
1	Kaiyama	Bani	14/07/2013	Yes		8		ОК	ОК	8	8	8	
2		Cent Kaiyama	10/07/2013	Yes		8		ОК	ОК	8	8	8	
3		Bani Sulla	10/07/2013	Yes		5		ОК	ОК	1	1	1	See Remark
4		Tungan Garua	10/07/2013	Yes		9		ОК	ОК	10	10	10	Tap replaced
5		Nuku	11/07/2013	Yes		8		ОК	ОК	7	10	9	Tap replaced
6		N/Gatte A	12/07/2013	Yes		8		ОК	ОК	10	8	8	Tap replaced
7		Vobera	11/07/2013	Yes	Water tank and foot valve	5	Yes	ОК	ОК	7	6	6	Tap replaced
8		Ban Moshe	13/07/2013	Yes		9		ОК	ОК	5	8	8	
9		Tenebo	10/07/2013	Yes		9		ОК	ОК	10	10	10	
10		Olori	14/07/2013	Yes		9		ОК	ОК	8	10	10	
11		Hamdallahi	14/07/2013	Yes		8		ОК	ОК	5	8	8	
12		Dada	15/07/2013	Yes		9		ОК	ОК	9	9	9	
13		Gate	12/07/2013	Yes		9		Subside			New		
14		Gwaria Labe	12/07/2013	Yes		10		Subside			New		
15		Gwaria	12/07/2013	Yes		10		Subside			New		
16		Moshe Gada	13/07/2013	Yes		9		Subside			New		
17		Tunga Zabaruma	10/07/2013	Yes		9		Subside			New		
18		Adogun	15/07/2013	Yes	Bolt and nut	8		Subside			New		
19		Degeji	11/07/2013	Yes		8		Subside			New		

20		Nomadic Gorobani	11/07/2013	Yes		9	Subside			New		
21		Ka agbona	14/07/2013	Yes		9	Subside			New		
22		Abatabu	14/07/2013	Yes		9	Subside			New		
23		Wuromakoto	11/07/2013	Yes		9	Subside			New		
24		Aboki	13/07/2013	Yes		9	Subside			New		
25		Mahuta	13/07/2013	Yes		9	Subside			New		
26	llorin E	A and B Ipata	31/07/2013	Yes		5	ОК	ОК	6	6	5	See Remark
27		St John Apado										
28		Sentu	31/07/2013	Yes	Return valve	8	ОК	ОК	10	10	10	
29		Apata Yakuba	31/07/2013	Yes		8	ОК	ОК	1	1	1	See Remark
30		Budo Apa Gori	31/07/2013	Yes		8	ОК	ОК	1	1	1	See Remark
31		Jolasun/ Abangbe										
32		Budo Oyo										
33		Panada										
34		Alokolaro Afara										
35		Aranmonu	31/07/2013	Yes	Return valve and foot valve	8	ОК	ОК	10	10	10	
36		Aregun										
37	Oyun	Baptist Ipee	18/07/2013	Yes	Seal + footvalve	8	ОК	ОК	8	5	6	
38		Nomadic Ipee	18/07/2013	Yes		7	ОК	ОК	1	1	1	Yes
39		Reke	19/07/2013	Yes		8	ОК	ОК	8	8	8	
40		Asaoye/Ira Fere	20/07/2013	Yes	Return valve	7	ОК	ОК	9	8	8	
41		Adinimodo	19/07/2013	Yes		7	ОК	ОК	9	8	8	
42		Alaya Aiyekale	19/07/2013	Yes	Return valve and foot valve	8	ОК	ОК	9	8	8	
43		Ajoko Budo Arin	19/07/2013	Yes		9	ОК	ОК	6	6	5	
44		Afijagba	20/07/2013	Yes	Return valve and foot valve	9	ОК	ОК	8	8	8	
45		Inaja Alaro	20/07/2013	Yes		10	ОК	ОК	8	8	8	
46		lwoye	20/07/2013	Yes		10	Subside	ОК	5	4	5	Yes
47		Ajoko Oja	18/07/2013	Yes	Foot valve	8	ОК	ОК	8	8	8	
48	Oke Ero	St Joseph Ode Owa	25/07/2013	Yes		8	ОК	ОК	8	8	8	

49		Comm Idofin Ehin Apo	26/07/2013	Yes	Return valve + foot valve	8		ОК	ОК	8	8	8	
50		Erinmope	25/07/2013	Yes		7		ОК	ОК	8	8	8	
51		Egosie Ile	25/07/2013	Yes		9		ОК	ОК	10	10	9	
52		Comm Idofin Odo Aga	26/07/2013	Yes	Return valve	10		ОК	ОК	8	8	8	
53		Imode	25/07/2013	Yes		8		ОК	ОК	9	9	9	
54		St Paul Idofin Igbana	26/07/2013	Yes		7		ОК	ОК	9	9	9	
55		Nomadic Ilofa	25/07/2013	Yes	Return valve	7		ОК	ОК	8	8	8	
56		Odo Owa	25/07/2013	Yes		7		ОК	ОК	6	8	6	
57		Jama'at, Illofa	25/07/2013	Yes		8		ОК	Not OK	8	7	8	Yes
58		Egose Ille Nomadic	25/07/2013	Yes	Return valve	8		ОК	ОК	7	6	6	Yes
59	Edu	Central Lafiagi											
60		ETSU Abdullahi Tsaragi											
61		Gamalegi											
62		Guye Doko											
63		Tsunfeniti											
64		Fanagun											
65	Moru	Elemere	30/07/2013	Yes	Socket, safety rope, platform	6	Yes	ОК	ОК	8	8	8	
66		Lasaki Fallah	29/07/2013	Yes		7	Yes	ОК	ОК	8	9	8	
67		Animaje	30/07/2013	Yes	Return valve foot valve	6	Yes	ОК	ОК	7	8	8	
68		Logun Jehunkunu											
69		Amu	29/07/2013	Yes	Return valve foot valve	8		ОК	ОК		New		
70	Ekiti	St Cyprian Eruku	26/07/2013	Yes		10		Ok	ОК	10	10	10	
71		SDA I+2 Osi	26/07/2013	Yes		10		Ok	ОК	10	10	10	
72		St Luke Obbo Ille	26/07/2013	Yes	Return valve	4	Yes	Ok	ОК		New		
73		Central 1+2 Opin	26/07/2013	Yes	Foot valve	7		Ok	ОК		New		
74	Irepodun	St Andrew Oro	27/07/2013	Yes		9		Ok	ОК	8	8	8	
75		Com Arar Ijan Otun	24/07/2013	Yes		8					New		
76		Igbonla	24/07/2013	Yes	Foot valve	7					New		
77		Ago Paanu	24/07/2013	Yes	Tiger pipe	7					New		

78	Ilorin South	Ansarul Islam A+B	23/07/2013	No		6	Yes	ОК	ОК	8	7	8	
79		Akata Oshode	23/07/2013	Yes		8					New		
80		Ago Aiyekale	23/07/2013	Yes		8					New		
81	Asa	Alapa	18/07/2013	Yes		10		ОК	ОК	8	7	8	
82		Sapati Oko	21/07/2013	Yes	Pump and foot valve	7		ОК	ОК	8	8	8	
83	Offa	Taoheed	19/07/2013	Yes	Return valve	6	Yes	ОК	ОК	8	4	4	Yes
84	Illorin West	Barakat	31/07/2013	Yes		10		ОК	ОК	10	10	10	
85	Patigi	Central Lade											
86	Baruten	llesha Baruba	13/07/2013	Yes		10		ОК	ОК	10	9	9	
87	Isin	Baptist Alla	01/08/2013	Yes		9		ОК	ОК	7	9	9	
88	Ifelodun	Babanla	01/08/2013	Yes		10		ОК	ОК	10	9	9	

## iv. Kwara Maintenance and Sustainability Report, May 2016

							Water Supply				Sanitatio	n				
	LGEA	School	Date of Visit	Head	SBMC	Need	Funct-	Corrective Action	Maint +	Remarks	Condi	tion	Co	om.	Maint +	Remarks
				Teach		for	ional		Sustain				Man	agmt	Sustain	
						В/			Rating						Rating	
						Wall										
							Yes/No	Bearings/Seal/Foot-valve			Structure	Н/	In use	Clean		Remarks
								Riser/Cylinder/Handle/Other				Washing				below
									Rate				Rate	Rate	Rate	
									1-10				1- 10	1-10	1- 10	
1	Kaiyama	Bani	08/05/2016	8	7		Yes		9		ОК	ОК	9	9	9	
2		Cent Kaiyama	04/05/2016	8	8		Yes		9		ОК	ОК	9	9	9	
3		Bani Sulla	04/05/2016	8	7		Yes		9		ОК	ОК	9	9	9	
4		Tungan Garua	04/05/2016	8	8		Yes		9	See remark	ОК	ОК	9	9	9	
5		Nuku	05/05/2016	8	9		Yes	Aqua socket (9), Gum	9		ОК	ОК	9	9	9	2 Taps
6		N/Gatte A	05/05/2016	8	8		Yes		9		ОК	ОК	9	9	9	
7		Vobera	07/05/2016		6		Yes		8		ОК	ОК	9	9	9	
8		Ban Moshe	06/05/2016		7		Yes		9		ОК	ОК	9	9	9	
9		Tenebo	07/05/2016	8	7		Yes		9		ОК	ОК	9	9	9	
10		Olori	08/05/2016	8	7		Yes		9		ОК	ОК	9	9	9	
11		Hamdallahi	08/05/2016		9		Yes		9	See remark	ОК	ОК	9	9	9	
12		Dada	09/05/2016		7		Yes		9		ОК	ОК	9	9	9	
13		Gate	07/05/2016	7	7		Yes		9		ОК	ОК	9	9	9	
14		Gwaria Labe	07/05/2026	7	8		Yes		8		ОК	ОК	9	9	9	
15		Gwaria	04/05/2016	8	7		Yes	Foot Valve	9		ОК	ОК	9	9	9	
16		Moshe Gada	06/05/2016	8	7		Yes		9		ОК	ОК	9	9	9	
17		Tunga Zabaruma	06/05/2016	7	7		Yes	2 Bolt/Nut	9		ОК	ОК	9	9	9	
18		Adogun	09/05/2016		7		Yes		9		ОК	ОК	9	9	9	
19		Degeji	6/5/2016		7		Yes		9	See remark	ОК	ОК	9	9	9	

20		Nomadic Gorobani	06/05/2016	7	7	Yes		9	ОК	ОК	9	9	9	
21		Ka agbona	08/05/2016		9	Yes	Foot Valve, Return Valve	9	ОК	ОК	9	9	9	
22		Abatabu	08/05/2016	7	8	Yes		9	ОК	ОК	9	9	9	
23		Wuromakoto	05/05/2016	8	8	Yes		9	No	No				
									Toillet	Toillet				
24		Aboki	03/05/2016	7	7	Yes		9	No	No				
25		Mabuta	02/05/2016	0	0	Vac		0	Tolliet	Tolliet	0	0	0	
25		Manuta	03/05/2016	8	8	 Yes		9			9	9	9	
26	llorin E	A and B Ipata	27/05/2016		8	Yes		9	OK	ОК	9	9	9	
27		St John Apado	31/05/2016		8	Yes		8	ОК	ОК	9	8	8	
28		Sentu	01/06/2016		8	Yes		9	OK	ОК	9	8	9	
29		Apata Yakuba	01/06/2016		9	Yes		9	ОК	ОК	9	9	9	
30		Budo Apa Gori	01/06/2016		8	Yes		9	OK	ОК	9	9	9	
31		Jolasun/ Abangbe	01/06/2016		8	Yes	1 Rod, F.V	9	ОК	ОК	9	9	9	
32		Budo Oyo	01/06/2016		8	Yes		9	ОК	ОК	9	9	9	
33		Panada	01/06/2016		8	Yes	6 Rods, 1 R.P,F.V	9	OK	ОК	9	9	9	
34		Alokolaro Afara	31/05,16		8	Yes	Cylinder, 1 R.P	7	OK	ОК	9	8	9	
35		Aranmonu	01/06/2016		8	Yes		9	ОК	ОК	9	9	9	
36		Aregun	31/05/2016		8	Yes		9	ОК	ОК	9	9	9	
37	Oyun	Baptist Ipee	16/05/2016	8	8	Yes	Foot Valve	9	ОК	ОК	9	9	9	
38		Nomadic Ipee	16/05/2016		8	Yes		9	ОК	ОК	9	8	8	
39		Reke	17/05/2016	8	8	Yes	Foot Valve, 1 Riser Pipe	9	ОК	ОК	9	9	9	
40		Asaoye/Ira Fere	17/05/2016		8	Yes		9	ОК	ОК	9	9	9	
41		Adinimodo	17/05/2016	7	8	Yes		9	ОК	ОК	9	9	9	
42		Alaya Aiyekale	17/01/2016	8	8	Yes		9	OK	ОК	9	9	9	
43		Ajoko Budo Arin	16/05/2016	8	8	Yes		9	ОК	ОК	9	9	9	
44		Afijagba	18/05/2016	8	8	Yes		9	ОК	ОК	9	9	9	
45		Inaja Alaro	17/05/2016	8	8	Yes		9	ОК	ОК	9	9	9	
46		lwoye	17/05/2016	8	8	Yes		9	ОК	ОК	9	9	9	

47		Ajoko Oja	16/05/2016	7	8	No	Foot Valve	8	See remark	ОК	ОК	9	9	9	
48	Oke Ero	St Joseph Ode Owa	27/04/2016	8	8	Yes		9		ОК	ОК	9	9	9	
49		Comm Idofin Ehin Apo	26/04/2016	8	8	Yes		9		ОК	ОК	9	9	9	
50		Erinmope	29/04/2016	8	8	Yes	1 Rod	9		ОК	ОК	9	9	9	
51		Egosie lle	27/04/2016	8	8	Yes		9		ОК	ОК	9	9	9	
52		Comm Idofin Odo Aga	26/04/2016	8	8	Yes		9		ОК	ОК	9	9	9	
53		Imode	29/04/2016		8	Yes		9		ОК	ОК	9	9	9	
54		St Paul Idofin Igbana	26/04/2016	8	8	Yes		9		ОК	ОК	9	9	9	
55		Nomadic Ilofa	27/04/2016	8	8	Yes		9		ОК	ОК	9	9	9	
56		N.Odo Owa	27/04/2016	8	8	Yes		9		ОК	ОК	9	9	9	
57		Jama'at, Ilofa	27/04/2016	8	7	Yes		9		ОК	ОК	9	9	9	
58		Egose Ile Nomadic	27/04/2016	8	8	Yes		9		ОК	ОК	9	9	9	
59	Edu	Central Lafiagi	23/05/2016	9	9	Yes		9		ОК	ОК	9	9	9	
60		ETSU Abdullahi Tsaragi	23/05/2016	8	8	Yes		9		ОК	ОК	9	9	9	
61		Gamalegi	24/04/2016	7	7	Yes	2 R.P, 5 Rods, F/V	7		ОК	ОК	9	9	9	
62		Guye Doko	25/05/2016	9	9	Yes		9		ОК	ОК	9	9	9	
63		Tsunfeniti	24/5/2016	8	9	Yes		9		ОК	ОК	9	9	9	
64		Fanagun	25/05/2016	8	8	Yes		9		ОК	ОК	9	9	9	
65	Moro	Elemere	12/05/2016	7	7	Yes		8		ОК	ОК	9	9	9	
66		Lasaki Fallah	11/05/2016		7	Yes		9		ОК	ОК	9	9	9	
67		Animaje	11/05/2016		8	Yes		9		ОК	ОК	9	9	9	
68		Logun Jehunkunu	12/05/2016		8	Yes	Return valve	9	See remark	ОК	ОК	8	7	7	
69		Amu	12/5/-2016		7	Yes	Return valve,FV	9		ОК	ОК	9	9	9	
70	Ekiti	St Cyprian Eruku	28/04/2016	8	8	Yes		9		ОК	ОК	9	9	9	
71		SDA I+2 Osi	28/4/22016	9	9	Yes		9		ОК	ОК	9	9	9	
72		St Luke Obbo Ille	28/04/2016	8	8	Yes		9		ОК	ОК	9	9	9	
73		Central 1+2 Opin	28/4/22016	7	8	Yes	Cylinder, 9 Rods	9		ОК	ОК	9	9	9	
74	Irepodun	St Andrew Oro	20/05/2016	8	8	Yes	Foot Valve, R.V	9		ОК	ОК	9	9	9	

75		Com Arar Ijan Otun	20/05/2016	7	6		Yes	Foot Valve, R.V	8		ОК	ОК	9	9	9	
76		Igbonla	19/05/2016	8	8		Yes	Foot Valve	8		ОК	ОК	9	9	9	
77		Ago Paanu	19/05/2016	7	8		Yes		9		ОК	ОК	7	9	9	
78	Ilorin South	Ansarul Islam A+B	27/05/2016		8		Yes		9		ОК	ОК	9	9	9	
79		Akata Oshode	27/05/2016		8		Yes				ОК	ОК	9	9	9	
80		Ago Aiyekale	27/05/2016		8		Yes		9		ОК	ОК	9	9	9	
81	Asa	Alapa	12/05/2016		8		Yes		9		ОК	ОК	9	9	9	
82		Sapati Oko	19/05/2016	8	8		Yes		9		ОК	ОК	9	9	9	
83	Offa	Taoheed	17/05/2016	8	8		Yes	Chain, 2 B/N	9		ОК	ОК	9	9	9	
84	llorin West	Barakat	27/05/2016	8	8		Yes	Fix pump cable	9		ОК	ОК	9	9	9	
85	Patigi	Central Lade	25/05/2016	8	8		Yes		9		ОК	ОК	9	9	9	
86	Baruten	llesha Baruba	02/05/2016	9	9		Yes		9		ОК	ОК	9	9	9	
87	Isin	Baptist Alla	20/05/2016	8	8		Yes		9		ОК	ОК	9	9	9	
88	Ifelodun	Babanla	21/05/2016	8	7		Yes	Borries, R/V, Cylinder	8		ОК	ОК	8	8	8	
			needs more commitment													
			Good													

### **Annex 10: ESSPIN Draft Terms of Reference for Water Maintenance Consultants**

#### 1. Background

In the past 3 years between 2010 and 2013 approx 87 water supply points have been installed in Kano, Kaduna and Jigawa schools under the ESSPIN program. The water supply points are in the form of hand pumps and there are also 4 Solar powered schemes in Kano.

A full list of the water supply points, their year of installation and their localities is included in Annex 1.

By the end of April 2013 all 87 water points in each State will be fully functional and will have been handed over to SUBEB. In order to ensure that the boreholes remain fully functional and are sustainable ESSPIN intends to provide a part time Maintenance Supervisor for a period of 1 year (with the option to extend for a further 1 year) from the beginning of May 2013. The maintenance and sustainability of the water supply points will ultimately be the responsibility of the Communities in the form of the Head Teachers and the SBMCs assisted by the LGAs and RUWASSA.

It is intended that in the period of the Maintenance Supervisor's engagement that there is a gradual handover of maintenance management skill to the Communities to enable them to take over this function.

The experience to date on the ESSPIN programme is that hand pumps are often out of service for very simple reasons – the Communities need support to put in place a sustainable form of maintenance.

#### 2. Objectives

- The main objectives of providing a Maintenance Supervisor is to ensure that all the Water Points remain fully functional for the duration of the engagement. The Maintenance Supervisor will also be required to report on the condition and usage of the Toilet facilities installed under the ESSPIN program.
- ii) The Maintenance Supervisor is to strengthen ties between all the Stakeholders to ensure that a sustainable maintenance arrangement is in place at the end of the ESSPIN programme.
  The Stakeholders include:
  School Children
  Teachers
  Head Teachers
  SBMCs
  - LGAs
  - RUWASSA
- iii) Key personnel are to be identified amongst the stakeholders and they are to become familiar with facilitating the maintenance of the units.
- iv) By the end of the engagement the supervisor, with ESSPIN support, is to ensure that a sustainable maintenance programme is in place.

#### 3. Provisions/ Responsibilities of ESSPIN and RUWASSA

#### 3.1 ESSPIN

- i) <u>Transport:</u> ESSPIN will provide transport in the form of a pickup and driver as required.
- ii) <u>RUWASSA Allowance:</u> ESSPIN will provide allowances for the RUWASSA technicians assisting the Maintenance Supervisor.
- iii) <u>Materials and Major Repairs</u>: ESSPIN to approve the purchase of materials not available from RUWASSA and authorize any major repairs. These will be funded by ESSPIN following National Consultant approval.

#### 3.2 <u>RUWASSA</u>

- i) <u>Maintenance Technicians:</u> RUWASSA will provide maintenance technicians that are capable of performing routine and basic maintenance.
- ii) <u>Spare Parts:</u> RUWASSA will provide the fast moving spare parts that are made available to them by UNICEF.

Should spare parts not be available from RUWASSA these will be purchased from the market and funded by ESSPIN following ESSPIN National Consultant approval.

#### 4. Methodology and Duties of the Supervisor

4.1 <u>Quarterly Inspections</u>: Each of the 87 water points is to be inspected at least once a quarter. A basic performance test and detailed physical inspection of the hand pumps/ facility is to be done. At the same time as the water points are inspected the Supervisor will be required to inspect the Toilet facilities that have been provided at the same schools under the ESSPIN programme. No action on the toilet facilities is required by the Supervisor other than to submit the toilet report to the ESSPIN STL and the ESSPIN National Consultant

4.2 <u>Engagement with the Communities</u>: The Head Teachers and SBMCs are to be engaged during the inspection to provide details of its operation and highlight any problems or maintenance issues.

4.3 <u>Reporting</u>: A checklist report is to be prepared by the Supervisor and countersigned by the Head Teacher or a member of the SBMC at the time of the site visit/inspection.

4.4 <u>Inspections</u>. The quarterly inspection is to be done by the Supervisor and a RUWASSA technician. If maintenance is required that requires the support of additional RUWASSA technicians an appointment is to be made for when the supervisor will return with the RUWASSA technicians to affect the repairs.

4.5 <u>Minor Repairs</u>: If minor repairs are required that can be handled by the supervisor and the RUWASSA technician these are to be done at the time of the inspection visit wherever possible.

4.6 <u>Major Repairs</u> Should any major repairs that cannot be done by the supervisor and the RUWASSA technicians the ESSPIN National Consultant is to be informed and a quotation for the repair

obtained from a drilling/ water contractor. ESSPIN is to approve the quotation before the Contractor is appointed.

#### 4.7 Engagement with SUBEB on Social Mobilization

The quarterly reports shall be reviewed with ESSPIN/SUBEB and the supervisor will participate in social mobilization exercises in assisting communities on sustainability issues.

#### 5. Institutional Arrangements and Reporting

The supervisor is to co-ordinate all his activities and conduct his reporting through the ESSPIN STL and the ESSPIN National Consultant.

#### 6. Qualifications of the Supervisor

The supervisor is to be an experienced geologists and /or drilling contractor with at least 5 years experience.

The supervisor must be acceptable to ESSPIN.

#### 7. Duration of the Assignment

The initial period of the assignment will be for 1 year with the option to renew for a further 1 year.

#### 8. Estimated Time Input of the Maintenance Supervisor

Quarterly Inspections and minor repairs	15 days
Allowance for Major Repairs	5 days
Allowance for SUBEB reviews and social Mobilization meetings	5 days
Total Time input/ quarter	25 days
Total Time input/ year	100 days
Invoices will be settled on a monthly basis.	

#### 9. Allowances

Allowances will be paid to the Geologist and the RUWASSA technician at the standard ESSPIN rate

### 9.1 Night Allowances

<u>Kaduna</u>

In the case of Kaduna additional night allowances will be paid as follows

Kaura	2 nights
Kauru	2 nights
Makarfi/Kudan	1 night
Total for inspection	5 nights
<u>Jigawa</u>	
In the case of Kaduna ad	dditional night allowances will be paid as follows
Roni	2 nights
Kafin Hausa	2 nights

Gumel1 nightBirinua2 nightsTotal for inspection7 nights

#### 9.2 Communication Allowance

An allowance of N10,000 per quarter will be paid for each State

All allowances will be paid from the State ESSPIN office following the approval of the ESSPIN National Consultant

#### 10. Remuneration

Geologist daily rate N 15,000 per day Payment will be made at quarterly intervals directly by ESSPIN Finance Dept.

#### 11. Duration and Date of Commencement.

The duration of the contract will be 1 year commencing 1st May 2013

Dec. 2013

# Annex 11: Communique of Inter-Departmental Water and Sanitation Sustainability Meeting

## A Communique Issued at the End of Kwara Water & Sanitation Facilities Sustainability Committee Meeting Held on Thursday 6th August, 2015 at the Conference Room of the State's Ministry of Education & Human Capital Development

The Kwara State Water & Sanitation Facilities Sustainability Committee held it meeting today, the 6th of August, 2015 at the Conference Room of the State's Ministry of Education & Human Capital Development. The objectives of the meeting were:

- To seek collaborative ways of supporting water & sanitation facilities maintenance and sustainability
- To promote pupils' hygiene
- To promote access to safe drinking water and sanitation in schools
- To ensure institutional support for provision and maintenance of water and sanitation facilities

The meeting appreciated the efforts of Kwara State Government, RUWASA, SUBEB, Ministries of Local Government and Women Affairs, LGAs and ESSPIN for their roles in providing water and sanitation facilities into schools in Kwara.

During the meeting, three sub-committees were set up, namely:

- (iv) Planning, Replication and Reporting Committee
- (v) Funding and Collaboration Committee
- (vi) Usage, Maintenance and Security Committee

At the end of extensive deliberations by the sub-committees, the Committee regrouped and the following resolutions were made:

- (vii) That the existing Reporting System should be strengthened and sustained so that proactive measures can be taken as needs are identified.
- (viii) That there should be a very strong collaboration among MDAs, Community Based Organizations (CBOs) and International Development Partners (IDPs) in order to ensure deliberate and concerted efforts geared toward funding, replicating, maintaining and securing water & sanitation facilities in the state.
- (ix) That issues associated with funding, replication, usage, maintenance, security, monitoring and reporting should be given utmost priority.
- (x) That the various plans of the MDAs should be harmonized to arrive at standard models for implementation and maintenance.
- (xi) That planning and adoption of situation analysis based on data, such as, Annual School Census
   (ASC), Annual Education Sector Performance Review/Report (AESPR) and Needs Assessment

Reports are very crucial to successful implementation of the plan on water and sanitation in the state.

- (xii) That there is a strong need to replicate the good models introduced by ESSPIN and other IDPs to ensure standardization and conformity with international best practices.
- (xiii) That, as a matter of urgency, the following bodies should be resuscitated at the school and community levels:
  - Water, Sanitation & Hygiene Committees (WASHCOMs)
  - Environmental Health Clubs (EHCs)
  - Village Level Operation & Maintenance (VLOM). The members should be trained by RUWASA and they should be involved in all water and sanitation activities.
- (xiv) That schools where there are water & sanitation facilities but have not been fenced be fenced as a matter of urgency in order to protect the facilities from vandalization.
- (xv) That in schools where there are water & sanitation facilities but no guards, guards should be employed as a matter of urgency.
- (xvi) That the Chairmen of LGAs should be engaged and collaborated with to ensure the maintenance and security of water & sanitation facilities in schools.
- (xvii) hat there should be budgetary provisions, at all level, for replication and maintenance of water & sanitation projects.
- (xviii) That all the communities where there are water & sanitation facilities should be sensitized in order to create awareness on maintenance and security of these facilities.
- (xix) That there is a need to reach out to philanthropists, Communication Service Providers, African Development Bank (AFDB) and other organizations in order to generate sufficient fund for sustainability and maintenance of water & sanitation facilities in schools and communities.
- (xx) That the current two hundred thousand Naira (NGN200,000:00) given to LGAs for maintenance of water & sanitation facilities should be strengthened and monitored to ensure that they are used solely for maintenance purposes.
- (xxi) That Head teachers, class teachers, pupils and SBMCs are change agents who are very close to the communities; therefore, they should be trained and involved in the sensitization, maintenance and security matters.
- (xxii) That where communities benefit from water & sanitation projects, time of usage should be regulated in order not to interrupt teaching & learning activities in schools.
- (xxiii) That end users at the community levels should pay token fees for the purpose of maintaining the facilities.

While thanking the Kwara State Government for all her efforts at ensuring Kwarans live in good health, it was concluded that copies of this communique should be given to appropriate organs of government.

The meeting was co-ordinated by the following officials:

NAME	DESIGNATION/ORGANIZATION	SIGNATURE
Alhaji O.A. Amasa	Director, PRS, MoE&HCD	
Alhaji Sulyman Ibrahim	GM, RUWASSA	
Alhaja R.O. Yusuf	Director, PRS, SUBEB	
Alhaji Rasak F. Aiyeleso	Director, CD, MoLGA&CA	
Mrs. M. Mustapha	Director, PRS, MoWA	
James Fadokun	STL, ESSPIN Kwara	



# Annex 12: Samples of Completed Infrastructure Projects.











