

371. Since these teachers are yet to use their ICT knowledge to teach other subjects, there is a need for extensive, regular and adequate training in the use of ICT in these specific subject areas.

Box 4.1: Commendable Practice - ICT Penetration

Anambra State is leading other States in ICT through the establishment of the Microsoft Academy, with internet connectivity in 100 model Post-Primary Schools in the State. This demonstrates a strong commitment to ICT growth, adoption and use. The Microsoft Academy equips students with skills that qualify them to become either employable or self-employed. The programme also links academic learning to real world job skills, thus allowing students to graduate with the IT skills that they need to advance in their future careers with minimal adjustment in the working world.

ES 3.2.2 Arrangements to ensure reliability and relevance of education management information system

372. The Ministry of Education has an Education Management Information Systems (EMIS) Unit domiciled in the Planning, Research and Statistics Department. This unit carries out the Annual School Census every year and analyses the data. So far, the unit has not published any data but the TRM was told that it would start doing so with the 2011/2012 school census.
373. The central EMIS Unit has been established with the following facilities in use:
- One Server
 - Ten computers and accessories linked to the server and fully networked
 - Internet facility
 - Ten UPS
 - Tables and chairs
 - One printer
 - Two air conditioners
374. The unit is understaffed. It has two staff members, managing the unit. It also has eight others who come in to do data entry. All of them have been trained in the use of the software though only one person can manage the unit effectively. The Staff of the Ministry, ASUBEB, PPSSC and AANFE need to be trained fully on data management, analysis and presentation. The EMIS policy is partially being implemented. There is no data catalogue, although there were efforts during the TRM visit to put it in place before the end of this year.

375. Plans are underway to fully equip the EMIS units of the PPSSC and ASUBEB. Action plans for proposed trainings and monitoring were submitted to the TRM. Full institutionalization of this policy will ensure the reliability and relevance of EMIS at the pre-primary to senior secondary level of education.
376. EMIS staff trained in data management and analysis should be able to provide data hitherto unavailable, for example, the data per pupil teaching cost by level of education is still not available.

ES 3.3.1 Pupil Teacher Ratio

377. In Anambra State, the pupil-teacher ratio (primary schools) is 1:46. In some Local Governments such as Anambra West LGA, Aguata, and Anambra East, the pupil-teacher ratio was found to be high, at 1:100, 1:72, and 1: 79 respectively. However, in other local governments, such as Awka south, Idemili south and Ogbaru, the pupil-teacher ratio is 1: 25, 1: 26 and 1: 28 respectively. Only the LGA with PTR below 1: 35 met the standard set in the policy document.

Table 4.9: Pupil Teacher Ratio (Primary Schools) by location and sex

S/n	LGAs	Number of Teachers			Number of Pupils			PTR
		Male	female	Total	Boys	Girls	Total	
1	Aguata	80	993	1073	37889	35032	72921	71.61
2	Anambra East	91	325	416	16410	18105	34515	79.03
3	Anambra West	115	151	266	13336	13043	26379	102.07
4	Aniocha	45	673	718	21637	20968	42605	63.98
5	Awka North	62	256	318	11395	12175	23570	71.79
6	Awka South	122	977	1099	12783	13150	25933	24.94
7	Ayamelum	105	168	273	8951	8972	17923	65.77
8	Dunukofia	25	373	398	9084	10217	19301	46.66
9	Ekwusigo	82	590	672	12579	12279	24858	42.76
10	Idemili North	306	1911	2217	41710	43249	84959	40.41
11	Idemili South	51	662	713	9069	9128	18197	26.25
12	Ihiala	222	932	1154	24883	22823	47706	43.93
13	Njikoka	56	770	826	14075	13953	28028	37.70

14	Nnewi North	81	1298	1379	18785	21546	40331	33.04
15	Nnewi South	50	546	596	17487	17310	34797	62.28
16	Ogbaru	175	1055	1230	16406	17320	33726	28.43
17	Onitsha North	103	1338	1441	25213	26223	51436	39.45
18	Onitsha south	85	1087	1172	21790	33694	55484	44.44
19	Orumba North	78	533	611	15643	16352	31995	56.15
20	Orumba South	57	452	509	13636	13506	27142	58.68
21	Oyi	60	488	548	12481	12839	25320	47.24
TOTAL		2051	15578	17629	375242	391884	767126	46.30

Source: Anambra SSAR, March, 2012. P. 89

378. Pupil per teacher ratio (secondary schools) in Anambra State is 1:18. Table 4.10 shows that all the secondary school in the State having PTRs below 1:40 meet the standard set in the policy document.

Table 4.10: Pupil per teacher ratio (Secondary Schools) by location and sex

s/n	LGA	Number of Teachers			Number of Pupils			PTR
		Male	Female	Total	Boys	Girls	Total	
1	Aguata	345	685	1030	7227	7263	14490	14.85
2	Anambra East	181	264	445	4391	4393	8784	20.90
3	Anambra West	146	59	205	2824	2408	5232	25.24
4	Aniocha	146	289	435	2481	3771	6252	13.97
5	Awka North	90	234	324	1268	1326	2594	8.07
6	Awka South	209	1072	1281	8101	8291	16392	12.14
7	Ayamelum	104	74	178	2781	2475	5256	29.62
8	Dunukofia	49	217	266	1643	2001	3644	13.70
9	Ekwusigo	192	385	577	4449	5168	9617	18.36
10	Idemili North	511	1188	1699	15272	15345	30617	18.26
11	Idemili South	171	394	565	3668	5172	8840	15.90

12	Ihiala	294	383	677	8373	8943	17316	25.56
13	Njikoka	146	384	530	3601	2939	6540	11.74
14	Nnewi North	246	576	822	8580	9337	17917	23.58
15	Nnewi South	196	337	533	4064	5202	9266	18.89
16	Ogbaru	205	561	766	5718	7445	13163	15.80
17	Onitsha North	248	1157	1405	11854	19597	31451	21.61
18	Onitsha south	126	692	818	8972	5869	14841	19.32
19	Orumba North	143	317	460	3696	3645	7341	16.40
20	Orumba South	171	210	381	3825	3550	7375	20.73
21	Oyi	167	364	531	3581	4012	7593	14.82
TOTAL		4086	9842	13928	116369	128152	244521	17.66

Source: Anambra SSAR, March 2012, PP. 89 - 90

379. The NPE document stipulates a pupil/teacher ratio of 1:35 in primary and 1:40 in secondary schools. The high pupil-teacher ratio in primary schools in some LGAs 1:102.07, 1:79 must be addressed as a teacher cannot effectively manage so many pupils at this level of education and expect effective learning to take place.

380. In the secondary schools, the teacher-student ratio has a total average of 1:17.66 which is very low compared to the 1:40 ratio recommended by the policy document. Again, pupil per qualified teacher ratio is 1:55 in primary school and 1:23 in secondary schools. The ratio of 1:55 for pupil per qualified teachers is quite high for primary school and needs to be reduced.

ES 3.3.2 Pupils per qualified teacher ratio

381. The Pupil per Qualified teacher ratio is 1: 55 for primary schools and 1: 23 for Secondary schools.

Table 4.11: Pupils per qualified teacher ratio (Primary Schools) by location and sex

s/n	LGAs	Number of Qualified teachers			Number of pupils			PQTR
		Male	female	Total	Boys	Girls	Total	
1	Aguata	42	792	834	37889	35032	72921	90.39
2	Anambra East	58	298	356	16410	18105	34515	94.67
3	Anambra West	91	143	234	13336	13043	26379	117.68
4	Aniocha	30	591	621	21637	20968	42605	71.56
5	Awka North	32	243	275	11395	12175	23570	83.27
6	Awka South	65	830	895	12783	13150	25933	29.57
7	Ayamelum	57	142	199	8951	8972	17923	88.83
8	Dunukofia	13	330	343	9084	10217	19301	52.69
9	Ekwusigo	50	434	484	12579	12279	24858	56.13
10	Idemili North	228	1637	1865	41710	43249	84959	46.96
11	Idemili South	34	546	580	9069	9128	18197	30.79
12	Ihiala	162	804	966	24883	22823	47706	50.23
13	Njikoka	30	627	657	14075	13953	28028	45.29
14	Nnewi North	50	1021	1071	18785	21546	40331	41.19
15	Nnewi South	17	437	454	17487	17310	34797	79.69
16	Ogbaru	107	822	929	16406	17320	33726	35.52
17	Onitsha North	39	1161	1200	25213	26223	51436	45.29
18	Onitsha south	35	937	972	21790	33694	55484	51.48
19	Orumba North	51	456	507	15643	16352	31995	65.96
20	Orumba South	32	378	410	13636	13506	27142	71.12
21	Oyi	29	453	482	12481	12839	25320	52.95
TOTAL		1252	13082	14334	375242	391884	767126	55.05

Source: Anambra SSAR, March 2012, P. 90

ES 3.3.3 Percentage of teaching staff that received in-service training

382. Documents obtained by the TRM indicate that teachers were trained in the National Health Policy under the UNICEF supported project activities. Two thousand seven hundred and seventy seven (2,777) teachers were trained in

Anambra zones by the National Teachers Educational Institute, Kaduna. Another group of 63 teachers were trained in Scaling up Early Reading in Young Learners, from 24-26th November, 2011 in Anambra State.

383. There was a training/workshop for 70 Head Teachers on CFSI Modules and Benchmarks in Management of Schools from 18th-19th January, 2012. In addition, there were training sessions for 57 Supervisors, Inspectors, AIEs, ZIEs and NGOs on Infusing CFS Principles into Schools from 23rd-25th January 2012. On the whole, a total of 2967 staff, representing 20.7 percent of all teachers, was trained from 2011 to January 25th, 2012.

ES 3.3.4 Timely production of annual school census and annual education sector performance report (AESR)

384. The TRM was unable to obtain the AESR while in Anambra state because, as it learnt, of the delay in the release of funds for the collection of data. However, the 2010/2011 Annual School Census Report was made available to the TRM. The timely release of appropriate funds, in the view of the TRM, will facilitate prompt collection of data, which, in turn will ensure timely release of the AESR report.

ES 3.4.1 Arrangements for ensuring appropriate staff attendance standards

385. Education Officers at the Ministry and Zones monitor the re-opening of schools at the beginning of every term and check on staff and students attendance at school. Schools keep staff and pupils/students' attendance registers. There is monthly inspection from the LGAs and the State to monitor staff performance.

ES 3.4.2 Institutionalisation of M&E system

386. The M&E system is not properly harmonized, although education officers are now on regular inspection visits to schools. Monitoring is usually on a monthly basis, and includes:
- On-the-spot-check at resumption of schools to ensure that staff/students comply with resumption date.
 - Comprehensive monitoring four weeks later to examine the school environment, check diaries and lesson note of teachers, children's books, etc
 - Follow-up monitoring after seven weeks to verify whether the lapses and corrections pointed out had been effected.
 - During examinations, to ensure that examination conditions are duly observed to forestall examination malpractices.
387. The Ministry of Education submitted sample documents of monitoring reports which recorded objectives, findings/observations as well as recommendations based on the findings.
388. ASUBEB has a functional Monitoring and Evaluation Unit.

Recommendations

- A written document policy will enhance the work of the committee set up for the purpose of managing teachers' performance and deployment.
- The EMIS should be fully equipped to become more functional than it is currently.
- Strict compliance with the recommendations of the NPE vis-à-vis the pupil-teacher ratios should be adhered to.
Significant improvement in the reduction of qualified teacher/pupil ratio in primary schools in the State is a goal to be vigorously pursued.
- The training of staff is strongly encouraged and all staff should undergo periodic training.
- The timetable for data collection as directed by the national body should be judiciously followed in the State.

D. QUALITY ASSURANCE SYSTEM (POLICIES ON LEARNING STANDARD)

ES 4.1 Existence of policies on teaching and learning standards

389. The State is guided by the policies on teaching and learning standards as enshrined in the NPE.

ES 4.2.1 Establishment of functioning and effective quality assurance system

390. Quality assurance instrument has been developed and is available to all users. The Quality Assurance Committee was inaugurated on May 11, 2012, and a one-day workshop organized by the Quality Assurance Department of ASUBEB.

ES 4.2.2 Per cent of schools inspected using quality assurance instruments

391. Since January 2012, all schools inspection has been carried out using QA instrument. Reports on the per cent inspected using the instrument will be available by mid-2012. No reports have been available since the inauguration took place on May 11, 2012. The information on per cent of schools using quality assurance instrument was yet to be released at the time of the TRM.

ES 4.3.1 Per cent of students who obtained pass certificates in standard examinations

392. Per cent of students who obtained pass certificate in standard examinations See table 4.12 for further information.

Table 4.12: Per cent of students who obtained pass certificates in WASSCE (2009-2010)

WASCE 2009							
Number of students that entered		Number of students that sat		% of students that obtained credits		% that obtained pass	
M	F	M	F	M	F	M	F
164971	157874	109828	154577	67.09	64.59	27.54	31.21
WASCE 2010							
151011	204929	146789	113819	77.76	85.37	16.42	16.71

Per cent of students' passes in Basic Education Certificate Examination (BECE)

Year	Number of students that sat	Number of students that pass	% that obtained pass
2010	47,081	46,192	98
2011	48,564	47,859	98

Passes in Post Literacy Adult and Non-formal certificate Examination (PLANCE)

Year	Number of students that sat	Number of students that pass	% that obtained pass
2010	985	964	97
2011	589	572	97

Source: Anambra SSAR March, 2012 P.92

393. The high per cent of credits in the results of the various examinations as indicated in Table 4.12 demonstrates that students performed creditably in these exams.

ES4.3.2: Per pupil teaching cost by level of education

394. Data on teaching cost per pupil by level of education were unavailable for the years under review at the time of the TRM.

ES 4.4 Extent to which recommendations from quality assurance and annual education sector review report continue to inform State education policy

395. Recommendations from re-inspection of Secondary Schools done in July 2011 guided the determination of carrying capacities of secondary schools for the purpose of SSCE to minimize examination malpractices. Recommendations from inspections on poor infrastructure and management also informed the handover of primary and some secondary schools to their original owners (missions).

396. As a result of its interactive sessions with various stakeholders, the TRM ascertained that 38 secondary schools and 800 primary schools were handed over to their original owners, the Missionaries.

Box 4.2: Commendable Practice – Return of Schools to Missions

In an effort to address the declining standard of education, the collapse of values and the high rate of indiscipline among students and staff, the Anambra State Government has returned 56 Secondary and 1,040 Primary mission schools¹ to their former owners and disbursed about ₦6 billion (in instalments) to the schools as take-off grants. While it is too early to assess the gains, it is hoped that this will turn the education system around and restore lost moral values.

Recommendations

- ASUBEB should ensure prompt release of per cent of inspected schools or furnish data to enable the timely calculation of the per cent of schools inspected.
- Concerted efforts should be made to provide data on per pupil teaching cost.

4.1.4 Conclusion

397. The Commendable Practice was validated during the mission's interactions with the LGAs officials, Civil Society Organizations (CSOs) and with the Ministry of Education officials. Also, it was mentioned that Anambra used to be on the list of states in the nation noted for examination malpractice. But now, the State is no longer on that list. This is a remarkable achievement.

HEALTH SECTOR REPORT

4.2.1 Overview

398. The vision of the health sector is to reduce the mortality and morbidity rates due to communicable and non-communicable diseases to the barest minimum, in order to significantly increase the life expectancy and quality of life of the people of Anambra State. In general, the health ministry aims to develop and implement policies and programmes that will strengthen the health system in order to deliver effective, qualitative, affordable and accessible health care services at primary, secondary and tertiary levels.
399. The TRM used different approaches to validate the report. The first approach was the visits to some selected health project sites in the state on Monday May 14 2002. The health facilities visited included the (i) Anambra State Teaching Hospital; (ii) the newly built Public Health Laboratory; (iii) The Epidemiological Unit, which included the Chest Clinic; and (iv) the Primary Health Centres at Nimo City and Nawfia. The TRM was impressed by the work in progress in the area of health care provision in the health project sites it visited.
400. The second approach was stakeholders' meetings with the Hon. Commissioner for Health, Professor Amobi L Ilika, and health sector officials on May 15 2012, and with civil society organisations working in the health on May 16 2012. From these meetings, the TRM learnt that the Strategic Health Development Plan was yet to be institutionalized and that this made enforcement very difficult. The TRM also learnt that sector targets had not been met because of poor releases of budgetary allocations, and that health workers in the state had been on strike for over one year.
401. Some Commendable practices uncovered during the Mission included the high level of compliance for immunization, procurement and distribution of ambulances to all the LGAs, establishment of Health Development Committees as well as accessibility of PHCs to communities.

4.2.2 Background

402. Health care delivery in Nigeria is a joint responsibility of the Federal, State and Local Governments. The health institutions in Anambra state comprise a federal tertiary institution, managed by the Federal Ministry of Health, and 33 secondary facilities, consisting of General Hospitals, Comprehensive Health Centres, and Cottage hospitals, distributed across the 21 LGAs, as shown in Table 4.13 and 4.14, which are state-owned. The state hospitals are managed by the state government through the State Hospitals Management Board of the State Ministry of Health (SMOH). There are also about 382 Primary Health Care Centres and health posts managed by the LGAs, which are coordinated by the Department of Primary Health Care/Disease Control (PHC/DC) in the State Ministry of Health.

Table 4.13: Distribution of Public Health Facilities by LGAs in Anambra State

SN	LOCAL GOVERNMENT AREA	NO OF TERTIARY FACILITY	NO OF SECONDARY FACILITY	NO OF PHC	NO OF HEALTH POSTS
1	Aguata	-	3	20	13
2	Anambra East	-	1	20	3
3	Anambra West	-	1	14	3
4	Anaocha	-	2	15	7
5	Awka- North	-	2	10	10
6	Awka- South	1	2	12	9
7	Ayamelum	-	-	7	8
8	Dunukofia	-	1	9	10
9	Ekwusigo	-	2	22	11
10	Idemili- North	-	2	14	18
11	Idemili- South	-	2	13	3
12	Ihiala	-	2	20	2
13	Njikoka	-	2	9	9
14	Nnewi- North	1	-	14	10
15	Nnewi – South	-	3	13	12
16	Ogbaru	-	2	10	16
17	Onitsha- North	-	1	3	7
18	Onitsha- South	-	-	8	21
19	Orumba- North	-	1	20	13
20	Orumba- South	-	2	8	21
21	Oyi	-	-	7	11
	TOTAL	1	31	268	217

Source; Anambra SSAR

403. There were also as at January 2006 14 mission hospitals, 186 maternities, 600 private hospitals and clinics, 126 registered pharmaceutical premises and about 1,500 licensed medicine shops, which are private healthcare providers.
404. From Table 4.14 which presents the current distribution of private and faith-based hospitals in the State, it is clear that more of the public and private health facilities were located in the urban areas. Also, some LGAs had more health facilities than others. Onitsha North for example has 314 private facilities compared to Anambra West with just 2 facilities.

Table 4.14: Distribution of Private Health Institutions by LGAs in Anambra State

S/N	LGA	NO OF PRIVATE HOSPITALS	NO OF FAITH BASED HOSPITALS
1	Aguata	90	2
2	Anambra – East	14	1
3	Anambra – West	2	2
4	Anaocha	32	1
5	Awka- North	13	1
6	Awka- South	95	2
7	Ayamelum	5	2
8	Dunukofia	25	-
9	Ekwusigo	33	1
10	Idemili- North	182	4
11	Idemili- South	24	3
12	Ihiala	83	2
13	Njikoka	44	1
14	Nnewi- North	117	5
15	Nnewi-South	45	1
16	Ogbaru	79	2
17	Onitsha- North	314	2
18	Onitsha- South	78	9

19	Orumba- North	20	-
20	Orumba- South	14	3
21	Oyi	32	1
TOTAL		1314	45

Source; Anambra SSAR

405. Some of the health facilities are non-functional because of lack of equipment and manpower. There is also a preponderance of non-governmental and private health facilities in Anambra State suggestive of high dependence on the private sector for curative services.

4.2.3 Budget Performance Review

406. The main sources of financing the health sector in Anambra State are: State Budgetary Allocation to the Ministry of Health; and financial assistance, grants or donations from development partners, corporate organizations, NGOs and philanthropists.
407. An analysis of the State budget size and allocation to health for the period under review indicates that: of the Total State Budget of N283.935 billion, N10, 245,014 billion or 3.04 per cent was allocated to the Ministry of Health. Out of the N10.245 billion budgeted for Health (capital and recurrent), actual expenditure was N4.795 billion (46 per cent). See Annex 18 of SSAR for details.
408. It was also observed that the health budget allocation was less than 5 per cent for the period under review. However, while 2011 had the highest with 4.9 per cent; actual release was only 22.99 per cent. The highest actual budget expenditure in the period was 56.89 per cent in 2007.
409. According to the government, some of the funds expended in the Health Sector came from donor agencies, such as The World Bank, UNICEF and the MDGs, but were not captured in the overall state budget. It was the government's view that since these funds were given or borrowed on behalf of the State Government, they should be captured in the overall budget.
410. During their interactions with the TRM, Members of the State House of Assembly promised to liaise with the state government power to improve the budgetary allocation and release to the Health sector in subsequent appropriations.

Recommendations

- It is important to capture all donor supports in the annual budget of the state. This way, the actual spending in the Health Sector can be correctly quantified.
- The State House of Assembly should also do all in its power to work with the state government to increase the budgetary allocation and release to the health sector.

4.2.3 Health Performance Indicators

A. STRATEGIC HEALTH DEVELOPMENT PLAN

HS 1.1 Existence and implementation of Strategic Health Development Plan

411. The Anambra State Strategic Health Development plan focuses on the need to improve on service delivery methodologies and strategies through (i) health system research; (ii) ensuring the availability of skilled manpower through advocacy and human resources development; and (iii) evidence-based decision making. Duplication and wastage within the system are expected to be controlled by ensuring effective coordination amongst partners, while effectiveness would be achieved through adequate monitoring and evaluation. The strategic plan was to be achieved utilizing strategies relating to the MDGs and targets.
412. This Strategic Plan was developed in 2009 for the period 2010 - 2015. The plan mirrors the National Strategic Health Development Plan (NSHDP) and addresses the following thematic areas: (i) Leadership and governance; (ii) Service delivery; (iii) Health Financing; (iv) Human resources for health; (v) Health information system; (vi) Community participation and ownership; (vii) Partnerships for health development; and (viii) research for health.
413. The TRM found that the Strategic Health Development Plan institutionalized and in use. It has been adopted by the State House of Assembly and is owned by major actors in the State.

HS1.3 Extent to which Sector targets are being met

414. The TRM further observed that 75 – 80 per cent of targets in the plan are met. Routine and special immunizations coverage has been scaled up. Health care facilities are accessible to all communities in the state, and no health facility is sited more than 2 km from the community.

Recommendations

- Even though the Strategic Health Development Plan is in use in the state, its use in all LGAs and Wards should be supervised so that the plan will be effective for all end users.
- Apart from the SHDP, all relevant legislations in the area of Health such as the Bill on the State Primary Health Agency as well as the HIV Anti Stigma Bill should be passed into law by the House of Assembly as soon as possible.

B. SERVICE DELIVERY PERFORMANCE

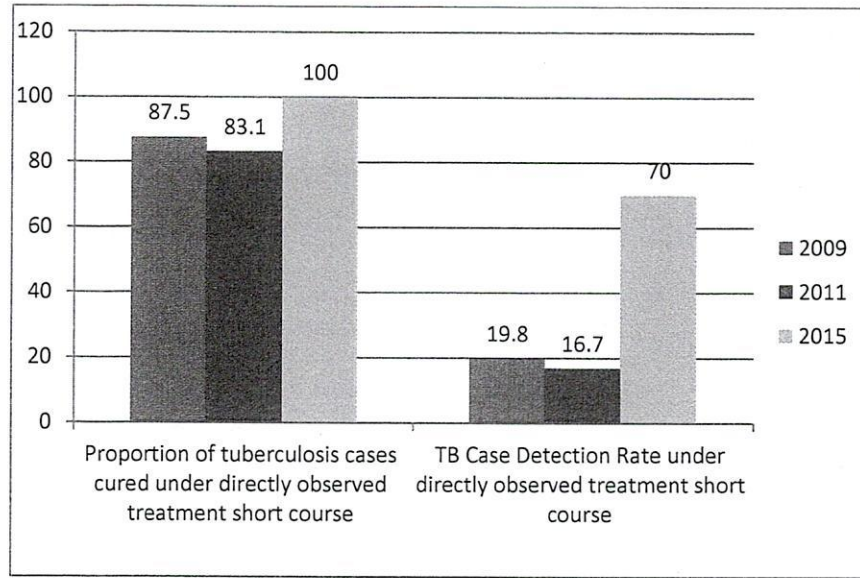
HS2.1 Institutional arrangements for Primary and Secondary Health care and financing of healthcare in the State

415. The TRM noted that there was effective collaboration between State and Local Government in the delivery of health care in the state. The TRM found that, in order to improve healthcare delivery in the state, the State Government procured and distributed 21 Ambulances to LGA health departments and provided seed money to secondary and primary health care facilities for purchase of drugs to ensure regular supply of drugs.

HS2.2.3 Prevalence of Tuberculosis

416. Figure 4.1 shows the 2011 Annual National TB data in Anambra state. The WHO estimates for TB in Nigeria are:
Prevalence = 199/100,000 population;
Incidence = 133/100,000; and
Mortality = 21/100,000.

Figure 4.1: Reduction in the Transmission of Tuberculosis



417. The TRM considers the TB detection rate in Anambra state low, although it also notes that the proportion of TB cases cured under directly observed treatment short course is encouraging and is likely to meet the 2015 target of 100 per cent. Figure 4.1 shows that the detection rate dropped from 19.8 per cent in 2009 to 16.7 per cent in 2011, which is short of the 'Stop TB Partnership' Global Plan and the ultimate target of 70 per cent by 2015. The proportion of cases cured under DOTS also dropped from 87.5 per cent in 2009 to 83.1 per cent in 2011. The drop has been attributable to health workers' strike in 2011. It is important to note that the success in eradicating tuberculosis rests on early detection of new cases and effective treatment. DOTS programmes, which involve the appropriate diagnosis and registration of each tuberculosis patient followed by standardized multi-drug treatment, are helping to mitigate the relative impact of the disease.
418. The TRM believes that, if trends in case detection in the past 2 years continue, Anambra state will fall short of targets of halving the prevalence and death rates by 2015, compromising any chance of reaching the global benchmark. There is need, therefore, to improve both the extent and timeliness of the diagnosis of active tuberculosis and increase the rate of successful treatment.

HS2.2.4 HIV prevalence rate and number of people living with HIV and AIDS (PLHA) with access to Antiretroviral drugs (ART) and the range of service rendered to them.

419. The high HIV prevalence rate of 8.7 per cent (2010, National Survey) has been confirmed as 'worrisome and unacceptable' by the state government (see Table 4.15)

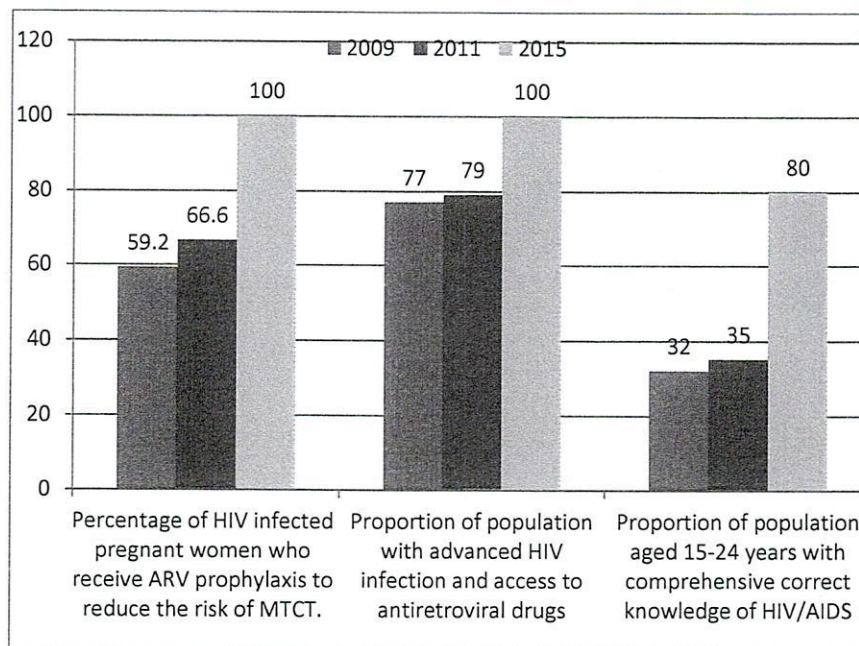
Table 4.15: Prevalence of HIV/AIDS in Anambra State

YEAR	1991/92	1993/94	1995/96	1999	2001	2003	2005	2008	2010
Prevalence	0.4%	2.4%	5.3%	6.0%	6.5%	3.8%	4.2%	5.6%	8.7%

Source; Anambra SSAR

420. Factors contributory to this high prevalence rate such as the presence of long distance truck drivers and transit population especially in urban areas, who engage in various businesses, continue to ensure that sex work thrives. The presence of a large number of students of the tertiary institutions who sell sex for survival and of uniformed organizations like the police, Army and prisons play a vital role in the spread of HIV.
421. In the rural communities, other factors that help drive the epidemic include: dearth of relevant information on HIV/AIDS, various cultural practices such as wife inheritance, blood oath taking and blood covenants, among others.
422. Anambra State's response to HIV/AIDS started in 1988 with the setting up of the State AIDS/STD control programme (SASCP) in the State Ministry of Health, Awka. SASCP started with baseline surveys on pregnant women attending antenatal clinics, sex workers, long distance drivers' youth and uniformed service personnel. Various HIV/AIDS activities in the state are driven by Government and Development partners. At present, there are 10(ten) HIV/AIDS treatment centers in the state. One is supported by Federal Government at Nnamdi Azikiwe Teaching Hospital, Nnewi. Five (5) are supported by the GHAIN project which has just ended its services. Three (3) sites are supported by AIDS relief and 1 by Hygea Foundation. All these facilities offer treatment free of charge. About 400,000 people are living with HIV/AIDS in the state, out of which about 177,763 people or 44.4% have access to ARV drugs.

Figure 4.2: Proportion of HIV positives accessing Antiretroviral drugs



Source: 2011 National HIV Sero prevalence Sentinel Survey

423. Figure 4.2 shows that the proportion of the population with advanced HIV infection accessing antiretroviral drugs has increased from 77 per cent in 2009 to 79 per cent in 2011, while the per cent of pregnant women who receive ARV prophylaxis to reduce the risk of MTCT has been on the increase, having increased from 59.2 per cent in 2009 to 66.6 per cent in 2011. Antiretroviral drugs are adding years to peoples' lives, but the need for treatment still outpaces the available supply. It is expected that by 2015, all HIV infected persons in the state will be in a position to receive ARV prophylaxis and that we would have halted and began to reverse the spread of HIV/AIDS. However, there is still need to address the knowledge gap among 15-24 years old. The proportion of this population with comprehensive correct knowledge of HIV/AIDS is, at 34 per cent, far below the 80 per cent projected figure for 2015. HIV prevalence among those aged 15- to 24 -years is believed to accurately reflect overall developments in the epidemic because their infections are likely to be recently acquired and mortality and antiretroviral treatment have less influence on HIV/AIDS data.

HS 2.2.5 Number of newly reported Wild Polio Virus cases.

424. For more than 5 years Anambra State has not experienced Wild polio virus cases. Despite the zero reporting, it was confirmed that Polio eradication campaign is usually done quarterly in the state and the flagging off is done by the Executive Governor himself. Children are immunized against Polio quarterly in addition to the routine immunization done in the health facilities.

Table 4.16: Childhood health indicators in Anambra state

Variable	Anambra state	South East zone	Source
% delivered by a health professional	95.2%	81.8%	DHS 2008
% delivered in a health facilities	87.8	73.9%	DHS 2008
DPT3 vaccination coverage	76.2%	54.2%	DHS 2008
OPV3 vaccination coverage	63.2%	53.6%	DHS 2008
Measles	71%	55.5%	DHS 2008
All vaccination	51.9%	36.0%	DHS 2008
No vaccination	10.4%	10.5%	DHS 2008
Nutritional status of children			DHS 2008
underweight @ -3SD	2.9	3.3	
Wasting @ -3SD	2.0	3.4	
Stunting @ -3SD	4.5	9.0	

Source: MICS 2011 Final Report

HS 2.3.2 Extent of collaboration with the Primary Health care Development Agency

425. Anambra State has no Primary Health Development Agency (PHCDA) for now. However, the bill for its establishment is in the State House of Assembly for passage. The State collaborates with National Primary Health Care Development Agency (NPHCDA) through the Zone A office at Enugu. An Officer of the zone covers the State.
426. The TRM confirmed that there was maximum collaboration between the state and NPHCDA in terms of immunization, family planning, reproductive health and other PHC activities. NPHCDA also provides technical support to the state.

HS 2.4.1 Proportion of wards with functioning public health facility, providing minimum health care package according to quality of care standards; including availability of safe water and sanitation.

427. The TRM confirmed that most of the wards in the state have access to functional public health facilities. Most PHCs have boreholes and toilets built by the communities or by MDGs, UNICEF and other partners' projects. While a great number of the PHCs do not have sophisticated equipment, expertise and facilities required (like blood bank, obstetrics care etc.), they utilize, by referrals, the facilities of secondary health care facilities in the vicinity. However, some of the PHCs still lack some basic facilities such as adequate water supply, stand by generators and reliable waste disposal facilities.

HS 2.4.3 Coverage of National Health Insurance Scheme or its equivalent in the State

428. The National health insurance scheme (NHIS) is not fully operational in the state. The state government is yet to buy into the scheme, though very few private health institutions have joined the scheme. However, the TRM found evidence to confirm that the state was the first to start the community health care financing project in the south East and probably in Nigeria. Unfortunately, this scheme has since become moribund.

Recommendations

- Effort should be made to provide the PHCs with adequate and functional methods of waste disposal such as incinerators.
- NEPWAN made up of about 400,000 people should have its own separate budget as well as input into the Budget making process. There is an urgent need to strengthen the network of People Living with HIV (NEPWAN) in the state, the capacity of which should be built up.
- Government should consider establishing more HCT Centres to handle the provision of counselling and treatment of HIV cases.
- Increase in public awareness and enlightenment activities such as radio jingles as well public enlightenment programmes in the area of HIV.
- It is important that government should increase funding to SACA and SASCP to mobilize/sensitize the masses; procure HIV test kits, and ARV drugs for people living with HIV/AIDS.
- The government should woo back donor partners such as GHAIN and UNFPA, which were previously funding Youth and Support organizations in the HIV sector but have left the state.
- There is need to measure the ability and capacity of the healthcare system to deliver quality services that ensures universal availability and access to essential package of primary Health Care services to all groups, using the NPHCDA minimum healthcare package and annual MDGs/CGS health facilities gap analysis report.
- There is need to resuscitate the previously effective but now moribund Community Health Insurance Scheme.
- Monitor the use of the ambulances procured and distributed to the 21 LGAs in other to ensure their judicious use.

C. IMMUNIZATION, CHILD AND MATERNAL MORTALITY

HS 3.1 Framework for immunization, child and maternal mortality in the State

429. The 100 per cent Immunization compliance rate and the well-organised cold chain system of the state are commendable practices' worthy of emulation by other states in the country. However, many of the HODs of Health complained of the lack of transport facilities with which to collect vaccines and send their reports.

HS 3.2.1 Proportion of 12-23 month-old children fully immunized

430. The information from the state's NPI unit of the Primary Health Care that 86 per cent of children less than 2 years were fully immunized with all the NPI recommended antigens for that age group is another achievement worthy of emulation by other states. The state aims at 100 per cent coverage for all types of immunization for all eligible people. Immunization is done quarterly during the Governor's Forum campaign apart from the normal routine immunization at the health facilities. Most children are now reached.

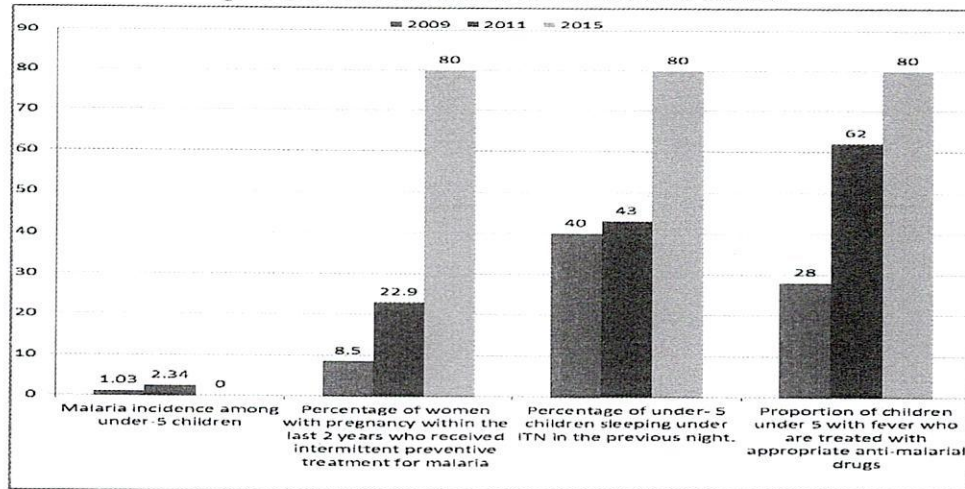
HS 3.2.2 per cent of children 6-59 months old receiving Vitamin A supplement

431. Statistical records of MCH programmes and facility records indicate that an average of 125 per cent of children 6 – 59 months received Vitamin A supplement. During various immunization exercises in 2011, it was recorded that 190 per cent of children 6-11 months, and 117 per cent of children 12-59 months received Vitamin A supplement. There is a considerable per cent of children given Vitamin A supplement because of the frequency of immunization in the state.

HS 3.2.3 Malaria Incidence among under-five

432. Anambra state's incidence of malaria among under-five children of 11.3 per cent is a commendable figure when compared with that for the South East Zone (23 per cent) and the National Average of 16 per cent.
433. The increases in funding and attention to malaria through the World Bank-Assisted Malaria Control Booster Project and the additional financing have accelerated malaria control activities in Anambra State. For example, there has been a rapid rise in the number of mosquito nets procured and distributed in Anambra state under this project. However, despite this tremendous progress, use of insecticide-treated mosquito nets falls short of the national targets. Figure 5 show that the malaria incidence increased from 1.03 per cent in 2009 to 2.34 per cent in 2011. This increase has been attributed to improved programme management and better reporting rather than an actual increase. The percentage of under 5 children sleeping under ITN in the previous night before the survey show a marginal increase from 40 per cent in 2009 to 43% in 2011, which is still short of the 2015 target of 80 per cent. However, case management has shown a tremendous improvement as the per cent of fewer than 5 children with fever who are treated with appropriate anti malaria drugs has increased from 28 per cent in 2009 to 6 per cent in 2011.
434. Evidence suggests that the expansion of prevention programmes and improved access to more effective antimalarial drugs can substantially reduce malaria cases and deaths. Therefore more efforts should be made to further improve on these indices.

Figure 4.3: Reduction in the Transmission of Malaria



Source: 2011 Malaria Indicator Survey.

HS 3.2.4 Total fertility Rate

435. The state's total fertility rate of 5 per cent is far below the National Average of 30 per cent.

HS 3.2.5 Number of newly reported wild Polio Virus cases

436. No newly reported wild Polio Virus Cases has been recorded recently. Incidence of wild polio virus is not something that can happen without notice. This is because Disease Surveillance and Notification Officers are all over the State keeping watch, especially over polio incidence and control.

HS 3.2.7 Contraceptive prevalence rate

437. Data available for the computation of contraceptive prevalence rate for the State is incomplete. Presently, only Government owned health facilities submit their statistics; private healthcare providers who sometimes have the highest patronage, do not submit data. However, the NDHS puts contraceptive prevalence rate at 10 per cent.

438. This figure is lower than the average National rate of 14 per cent. The reason for the low figure was attributed to the high number of Roman Catholics in Anambra State, who eschew the use of contraceptives and rely on the natural method of Family Planning.

HS 3.2.8 Per cent of pregnant women with 4 ANC visits performed according to national standards

439. Statistics of a few facilities located in the three senatorial zones of the State indicate that about 70 per cent of pregnant women had 4 ANC visits performed according to national standards, during their pregnancy. There is need to conduct more detailed surveys and add the reports to summary reports of service providing facilities, to obtain actual results.

HS 4.1 Framework for staffing and capacity development of health personnel in the State

440. Health professionals are hired like other workers in the State; and they have Health Salary Schemes. Hitherto, paying them while in training was an incentive. However, in –service training still obtains.
441. Most of the training is said to be carried out by Development Partners only for specific programs. There is the need for other cadre of Civil Servants to be given training opportunities.

HS 4.2 Proportion of health professionals per population (Physician, nurses and health Worker per population rural/urban)

442. Health professionals in the State Ministry of Health and State Hospitals Management Board are as shown in table 4.17. The number of professionals and population is not disaggregated by sex because the information was not stored. In summary, there are 597 Nurses; 133 Medical Doctors; 56 Pharmacists; and 55 Medical Laboratory Scientists. Physiotherapists, and Radiologists, are very few. Community Health Workers are employed/deployed by the Ministry of Local Government, and they work in Primary Health Care facilities all over the State.

Table 4.17: Health Professionals per Population

S/N	CADRE	SMOH	SHMB	TOTAL	POP	Proportion
1	Nurse	56	541	597	About	1:7035
2	Med. Doctors	10	123	133	4,200,000	1:31538
3	Pharmacists	4	52	56		1:75000
4	Medical Lab.	-	55	55		1:76363
5	Comm. Health Workers	In PHCs	all	Over the	State	
	Total	70		841		1:4994

Source; Anambra SSAR

443. The approximate proportion of health professional per population 1:4994 (20:99,000), is a far cry from the 20:10,000 target set by NSHDP for 2015. Although the explanation given by the government that the state is in the process of disengaging from the management of hospitals by giving them back to voluntary

agencies and organizations may appear reasonable, the fact remains that government still has a lot of responsibility in providing adequate health care to its citizens through the government hospitals. In view of this, there is the need to recruit additional relevant staff after an analysis of specific professionals' needs assessment has been conducted.

HS 4.3 Number and types of plans and programmes for strengthening and motivating the human resource capacities in the health Sector implemented.

444. There are promotions every 3 to 4 years for professionals in the health sector, who are qualified/due for promotion. Regular capacity building trainings are conducted for virtually every programme in the sector: Immunization, HIV/AIDS control, Nutrition, Family planning, Roll-back malaria, TB & Leprosy control trainings are conducted according to the needs.

445. The Roll –back malaria programme and the HSDP run series of appropriate training for health workers, Community volunteers and other stakeholders and gate keepers. Also, the State conducts CME (Continuing Medical Education) with appropriate credits for various categories of health staff. This information disaggregated by sex and cadre is not immediately available. This underscores the need for regular banking of detailed information.

HS 4.4 Quantity and quality of schools for training health professionals in the State

446. The State has 2 Colleges of Medicine, 5 Schools of Nursing & Midwifery and 1 College of Health Technology. There are Schools of Medical laboratory at Our Lady of Lourdes Hospital, Ihiala, and at the Immaculate Heart Hospital, Nkpor.

447. Table 4.18 shows the training institutions in the state and the category of professionals trained. Nnamdi Azikiwe Teaching Hospital Nnewi is a tertiary institution for training medical doctors, nurses and midwives. Other professionals like Pharmacists, medical laboratory scientists, Dentists are also trained.

Table 4.18: Training Institutions for Health Professionals in Anambra State

NNAMDI AZIKIWE TEACHING HOSPITAL & AMAKU ANSU TH AWKA	SCH OF NURSING & MIDWIFERY IYENU	SCH OF MIDWIFERY ONITSHA	STATE SCH OF NURSING & MIDWIFERY NKPOR	SCH OF NURSING & MIDWIFERY ST JOSEPH HOSPITAL ADAZI	SCH OF NURSING OUR LADY OF LOURDES HOSPITAL IHIALA	ANAMBRA STATE COLLEGE OF HEALTH TECH. OBOSI
Doctors	Nurses	Midwives	Nurses	Nurses	Nurses	Public health Nurses.
Nurses	Midwives		Midwives	Midwives	Midwife	Env. Health off, tech, & Asst.
Med lab scientists						Comm. Health workers
Midwives						Med lab tech & asst.
						Pharmacy tech.

Source Anambra SSAR

448. The Anambra State University Teaching Hospital, Amaku, Awka was established for the training of medical students from the newly accredited College of Medicine, ANSU. The Commissioner of Health confirmed that the Teaching Hospital has been accredited by the MDCN. This facility was inspected during our visit.

449. Apart from the Nnamdi Azikiwe University Teaching Hospital, which is Federal Government owned, others are State or Mission owned. Presently all the schools of Nursing and Midwifery, both State- and mission-owned are accredited by the Nursing and Midwifery Council of Nigeria. However, with the new policy of updating nursing to award HND, there is the need to improve on the infrastructure and personnel to meet accreditation needs. The same goes for the College of Health Technology, Obosi.

Recommendations

- There is an urgent need to provide transport facilities for the PHCs, to collect vaccines and collate their reports.
- Additional relevant staff should be recruited after specific professionals' needs assessment has been conducted.
- The Continual Medical Education program for Health Workers should be documented.
- The new State Teaching Hospital and other Specialist Hospitals in the state should be urgently provided with adequate waste collection method such as incinerators.
- The infrastructure and personnel of the Schools of Nursing and Midwifery in the state should be improved.

- The high differential ratio between salaries of Health Workers at the Federal and State levels need to be addressed to avoid attrition through the movement of workers from the state to the federal and other agencies in search of better salaries and conditions of living.

D. PHARMACEUTICAL MANAGEMENT PROGRAMME

HS 5.1 Existence of Drug Revolving Fund modeled after Public- private partnership.

450. The Drug Revolving Fund Scheme, which is a very effective strategy for ensuring uninterrupted drug supply in the health care delivery system, is functional in the State, but it is not yet based on the Public-Private partnership model.

HS 5.2 Number of health facilities experiencing Stock –outs of drugs within the last one year

451. The TRM was unable to validate the assertion that there are no stock-outs in the state's health care facilities. However, if found to be true, it will be another achievement by the state worthy of emulation by other states in view of the perennial problem of drug scarcity in many health facilities in the country. However, many stakeholders confirmed the great support given by the state government to faith-based hospitals in the state.

HS 5.4 Options for recapitalizing the DRF including public –private partnership schemes

452. The Health Commissioner and other health officials confirmed that the DRF Scheme is managed and recapitalized by the Authorities of the participating health facilities. They further corroborated the state government's assistance of the regular provision of seed drugs.

Recommendations

- Efforts should be made to situate the DRF Scheme under a PPP arrangement in order to reduce the financial burden on the government.
- The support given to voluntary based hospitals by the state government should be encouraged, sustained and replicated by other state governments.

E. HEALTH INFORMATION AND MANAGEMENT SYSTEM, COMMUNICATION AND ADVOCACY

HS 6.1 Existence of fully established HIMS in the State

453. The TRM obtained documentary evidence of the establishment of HMIS in the State, structured according to the National HMIS. It is functional. There are HMIS offices in the 21 LGAs with their minimum packages.

HS 6.2.1 Per cent of State annual health budget earmarked and utilized for health research, generation of evidence, and research capacity strengthening

454. Table 4.19 shows that for the period under review, 0.83 per cent of the health budget was earmarked for research and 0.66% was actually utilized. The current benchmark is 2% of total health budget.

Table 4.19: Proportion of Total State Health Budget Dedicated To Research

Programme	2008 N	2009 N	2010 N
Public Health Lab.	2m Actual =9.4m	10m Actual =.7m	10m Actual =5.1m
Health Statistical Surveys & Data Banking including PHC Monitoring	6m Actual =nil	5m Actual =nil	3m Actual =.5m
Total	8m Actual =9.4	15m Actual =.7m	13m Actual =5.6m
Health Budget	1,325,000,000	1,635,000,000	1,322,000,000
Actual Health release	716,518,927	457,693,751	1,057,528,833
%Earmarked	0.6%	0.91%	0.98%
%Utilized	1.3%	0.15%	0.53%

Source: Anambra SSAR

HS 6.2.2 Number of health programmes and intervention plans and strategies for improved coverage and high quality impact developed based on information generated from routine HMIS data

455. HMIS data are collected and there is evidence of data analysis and utilization system, structure and mechanism at LGA and State levels. These are however most observable in Donor-assisted programmes such as immunization, malaria, TB/Leprosy, HIV. Based on these data, there have been interventions in: Buruli ulcer epidemic in Ayamelum LGA; Lassa fever surveillance. Data collection and analysis, however, need to be improved in other sections of the Health sector.

HS 6.4 Extent of collaboration with communities (active participation of women groups, traditional rulers, opinion leader, CBOs, NGO and CSOs)

456. There is ample evidence to support the existence of an active collaboration between the state government and the communities in health development. There are community health committees (village health committee; ward health committee; hospital management committees) made up of presidents-general, traditional rulers, representatives of women, youth and CSOs, and the facility management staff.

Recommendations

- Efforts should be made at various health facility levels to collect adequate and reliable data.
- Data can be transmitted for now through the GSM for now until enough number of computers is made available.
- More funds should be allocated for planning and research, in order to keep abreast of the latest medical information and practices.

4.3 Conclusion

457. Anambra State has made appreciable progress in the Health Sector. The TRM hopes that performance and systems domains in the SHDP and some of the 2015 targets can be reached by the target date of 2015. Efforts to improve childhood and maternal indices have continued to show positive results but there are still gaps. Immunization coverage is improving, pregnant women are attending antenatal clinics and HIV patients are having access to antiretroviral drugs. Malaria prevention and treatment service is expanding, with increases in insecticide-treated net use and access to appropriate antimalarial drugs among children under five. Although TB case detection has not improved, more TB cases are receiving treatment.
458. Availability of qualified and adequately equipped personnel and funding for health care is still a problem. Community participation is still weak and research is not yet institutionalized. Therefore, there is a downside to the commendable achievements; unless additional, strengthened or corrective actions are taken urgently some of the 2015 targets are likely to be missed. Therefore the present course of action should be accelerated and expanded so that recent progress is sustained and broadened. Finally, the State and LGAs should commit more funds to the health sector.

Box 4.3: Summary of Recommendations on Health

- It is important to capture all donor supports in the annual budget of the state. This way, the actual spending in the Health Sector can be correctly quantified.
- The State House of Assembly to work assiduously with the state government to increase the budgetary allocation and release to the health sector.
- Apart from the SHDP, all relevant legislations in the area of Health such as the Bill on the State Primary Health Agency as well as the HIV Anti Stigma Bill should be passed into law by the House of Assembly as soon as possible
- Effort should be made to provide the PHCs with adequate and functional methods of waste disposal such as incinerators.
- NEPWAN made up of about 400,000 people should have its own separate budget as well as input into the Budget making process. There is an urgent need to strengthen the network of People Living with HIV (NEPWAN) in the state, the capacity of which should be built up.
- It is important that government should increase funding to SACA and SASCP to mobilize/sensitize the masses; procure HIV test kits, and ARV drugs for people living with HIV/AIDS.
- The government should woo back donor partners such as GHAIN and UNFPA, which were previously funding Youth and Support organizations in the HIV sector but have left the state.
- There is need to measure the ability and capacity of the healthcare system to deliver quality services that ensures universal availability and access to essential package of primary Health Care services to all groups, using the NPHCDA minimum healthcare package and annual MDGs/CGS health facilities gap analysis report.
- There is need to resuscitate the previously effective but now moribund Community Health Insurance Scheme.
- Monitor the use of the ambulances procured and distributed to the 21 LGAs in order to ensure their judicious use.
- There is an urgent need to provide transport facilities for the PHCs, to collect vaccines and collate their reports.
- Additional relevant staff should be recruited after specific professionals' needs assessment has been conducted.
- The Continual Medical Education program for Health Workers should be documented.
- The new State Teaching Hospital and other Specialist Hospitals in the state should be urgently provided with adequate waste collection method such as incinerators.
- The infrastructure and personnel of the Schools of Nursing and Midwifery in the state should be improved.
- The high differential ratio between salaries of Health Workers at the Federal and State levels need to be addressed to avoid attrition through the movement of workers from the state to the federal and other agencies in search of better salaries and conditions of living.
- Efforts should be made at various health facility levels to collect adequate and reliable data.
- More funds should be allocated for planning and research, in order to keep abreast of the latest medical information and practices.

4.4 Environment

4.4.1 Overview

459. The environment is a cross-cutting issue that touches virtually every sphere of human existence. It is, therefore, everybody's business. Probably for this very reason, governments tend not to give it deserved attention, treating it as a residual issue tackled only after other issues have been taken care of. The result is that the environment tends to suffer neglect.
460. In assessing the status of the environment as presented in the SSAR, the TRM interacted with Directors in the State Ministry of Environment, Local Government staff as well as a cross-section of the people of Anambra State. The TRM also visited some urban and rural Local Governments to see the environmental challenges of the state firsthand. The TRM believes that Anambra State is making strenuous efforts to tackle its environmental problems, particularly those caused by flooding, erosion and solid waste management. It has some solid achievements that it can boast of in these areas that can be recommended for adoption by other State Governments. But there is still a lot to be done in other areas, and even in the above areas, the State needs to press ahead with and consolidate on the initiatives that are currently on ground.

4.4.2 Background

461. The environment provides life support in the form of land, air, water and a host of living and non-living materials for fulfilling all human development aspirations. It is because of the need for individuals, communities, nations and the world generally to use it sustainably that the United Nations Conference on Environment and Development (UNCED) was held in Rio de Janeiro in 1992. In pursuit of Agenda 21, the main outcome of that conference, Anambra State created the Anambra State Environmental Protection Agency (ANSEPA), which was transformed into a full-fledged Ministry in 1999, the Ministry of Environment, Mineral Resources, Science and Technology. Relevant Units were moved from various MDAs to constitute the new Ministry, which was renamed the Ministry of Environment in 2008 when the Ministry of Science and Technology was excised to stand on its own.
462. The Ministry of Environment is pursuing the broad goal of environmental sustainability as evidenced by a safe, clean and green environment in the state. In general, it aims to promote inter-sectoral linkages to reduce environmental degradation and promote the preservation and enhancement of biodiversity. Its main focus is on the two most pressing environmental challenges facing the State, namely, erosion and waste management.
463. The review which follows shows that Anambra state has policies and strategies to ensure environmental sustainability. The state has put in place a good institutional framework for environmental management since 2011, when the Anambra State Waste Management Authority Law was passed. The State has formulated and

adopted *Technical Guidelines for Flood and Erosion Control Policy in Anambra State*, which should form the basis of scientifically sound and socially appropriate flood and erosion control and water resources management in the State. It also has a policy on an integrated approach to solid waste management with a PPP arrangement which has the potential to generate wealth from waste. It has reintroduced sanitary inspection of premises. However, implementation of these policies is not as effective as might be expected because of capacity and operational issues. Similarly, the management of biodiversity and pollution management need to be more robust.

4.5 Environment Performance Indicators

A. WASTE MANAGEMENT

EnvS 1.1 Existence of Waste Management Policies, Strategies and Plans that align With Federal Government

464. The SSAR states that "*Anambra State has a robust policy on waste management, derived from the National Policy . . .*" The TRM was unable to lay hold of this document. However, the State is implementing a Public-Private Partnership (PPP) arrangement for the management of urban waste. There is a tripartite arrangement between the Federal Government, the State Government and LAGA International, a waste management consultant, requiring LAGA to execute an Integrated Waste Management System for Onitsha. This includes, among other things, a recycling facility, engineered landfills and waste-to-wealth activities. The arrangement is still in its infancy and the essential elements of it are yet to be put in place.
465. Since the idea is to extend the initiative to other parts of the State, its success is critical. The TRM heard complaints by residents, landlords and Local Government officials that LAGA is not performing satisfactorily.

EnvS 1.2.1 State Institutional Framework for Waste Management and its Alignment With Federal Institutions

466. Until 2011, the Anambra State Environmental Protection Agency (ANSEPA), a parastatal of the State Ministry of Environment, provided waste management services. The State Government has now decided to put waste management on a sounder footing by establishing an agency for it. Thus the Anambra State Waste Management Authority Law was passed in 2011. This law empowers ASWAMA, the new agency, under the supervision of the Ministry of Environment, to engage the services of private entities for integrated waste management. The Authority is now in the process of being established.

EnvS 1.2.2 Existence of Policy Encouraging Waste-to-Wealth Programme

The PPP arrangement with LAGA International includes a waste-to-wealth programme which is still in its infancy. There is a plastics recovery programme, as well as a plastics recycling facility at Nnewi. There are plans for the production of organic fertilizers from biodegradable waste.

EnvS 1.3.1 Availability of Final Disposal Sites

467. Only temporary solid waste dump sites exist in Anambra State. At Onitsha, the TRM saw the dump site being used by LAGA International. It is an old borrow-pit opposite the Metallurgical Institute, which is an eye sore and a health hazard. A site for a properly engineered land fill has been secured for the town at Nkwelle Ezunaka. Compensation has been paid for it and the area has been cleared. Relevant equipment has also been acquired. The process of securing similar sites for the permanent dumping of solid waste in Nnewi and Awka has started.

EnvS 1.3.2 Frequency of Waste Evacuation

468. There are no data on the frequency and rate of evacuation of solid waste from the streets.

EnvS 1.3.3 Number of Illegal Refuse Disposal Sites and Black Spots

469. The provision of receptacles for solid waste has led to a reduction of illegal waste disposal sites and black spots. However, indiscriminate dumping of waste still occurs, including in drainage ditches still under construction.

Env 1.4.1 Increase in Capacity Building/Equipment/Increase of Prosecuted Polluters/Year

470. LAGA International is yet to fully deploy personnel and equipment for the comprehensive management of solid waste in Onitsha and its environs that it is meant to service in the current arrangement. Such a management system is projected to include a properly engineered land fill facility that will include:

- Sorting and recycling of secondary materials;
- Treatment of hospital/household/mechanics workshop and hazardous waste;
- Weighing bridge for receiving and tipping characterized waste.

471. All of these will require both personnel and equipment.

EnvS 1.4.2 Existence and Extent of State Maintenance and Improvement of Waste Management

472. The State has adopted the following two main strategies to ensure the sustainability of its solid waste management efforts:

- Creating public awareness through a sensitization campaign. This has led to:
 - An increase in the amount of waste being dumped into the receptacles provided instead of being dumped indiscriminately; and
 - An increase in the revenue generated from the users of waste management service (although the revenue is still not sufficient and although landlords and residents are complaining about the charges).
- Procuring additional evacuation equipment to take care of the large amount of waste dumped in the receptacles. This has led to:
 - A relative reduction in the volume of solid waste being dumped on illegal sites.

473. These developments, if sustained, will ultimately ensure the sustainability of the State's solid waste development efforts.

EnvS 1.4 Increase in Capacity Building/Equipment/Increase of Prosecuted Polluters/Year

474. There are no data on capacity building, equipment acquisitions, or number of polluters prosecuted.

475. Two commendable practices were observed in the State in the area of Waste Management:

- The enactment of the Anambra State Waste Management Authority Law. The vigorous implementation of this law should put solid waste management in the State on a sound footing.
- Commencement of integrated solid waste management in the State, using a PPP arrangement. Integrated solid waste management recognizes that solid waste can be a resource in the sense that it often contains materials which can be recovered for re-use or recycling or for conversion into energy or organic fertilizer. Because of the profit motive of business, a PPP arrangement has a good chance of success. It also creates a wide range of jobs.

Recommendations:

- The Anambra State Waste Management Authority Law should be reviewed with inputs from relevant stakeholders. The State House of Assembly confirmed to TRM that no public hearing was conducted prior to the passing of this legislation. This should be corrected to have a sound waste management system in place that enjoys public support. Only then will ASWAMA stand a chance of succeeding.
- The Integrated Waste Management System arrangement in Onitsha should be revisited by all key stakeholders, including the service beneficiaries, so that critical issues, such as charges, can be addressed.

- The other elements of the waste management arrangement, especially the provision of permanent waste disposal sites, should be put in place as soon as possible so that the unsightly and unhealthy open dumping and burning of waste in a borrow-pit opposite the Metallurgical Institute can stop.
- The new Anambra State Waste Management Authority (ASWAMA) should be constituted without further delay, adequately staffed and equipped in order to put solid waste management in the State on a sound footing.
- The problem of shortage of direct labour and other ad-hoc staff in the waste management sub-sector should be tackled.

B. BIODIVERSITY MANAGEMENT

EnvS 2.1 Existence of Updated Laws on Biodiversity, Status of Biodiversity Management Policies, Strategies and Plans that Align With Federal Equivalents

476. There are currently no up-to-date laws on biodiversity management in the State. The SSAR claims that there are State *"policies/guidelines"* which have been *"adopted from Federal guideline and the United Nations Conventions on Biodiversity."* However, the TRM was not presented documents outlining what these *"policies/guidelines"* are. Similarly there was no documentary evidence of "State Government *"plan and strategy for controlling exploitation of wild biodiversity as well as biopiracy"* or of the *"effort being made to support a sustainable agro forestry practices in free areas"* In short, the TRM saw no documentary evidence to suggest that the State has and is working with appropriate laws, policies, strategies and plans in the area of biodiversity.

EnvS 2.2 Inventory of State Biodiversity Resources, Institutional Framework for Biodiversity Management and its Alignment with Relevant Federal Institutions

477. A comprehensive inventory of the biodiversity resources of the State does not exist and although the SSAR states that *"the State Forestry Department has a working document containing list of common tree plants . . . in the Forest Reserves"* (p.108), the TRM was unable to lay its hands on the document.

EnvS 2.3.1 Existence of Conservation Facilities (e.g. zoo, parks, botanical gardens)

478. There are no State-owned conservation facilities in the State. But in response to civil society calls for *"the establishment of a zoological garden and parks in the State"*, Government has made provision for the development of parks and gardens in the Ministry of Environment's budget for 2011/2012. The release of the amounts of money voted for this purpose will be a test of the political will to develop parks and gardens in the State.

EnvS 2.3.2 Number of Wildlife Parks

479. The State has no Government-owned wildlife parks.

EnvS 2.3.3 Comprehensive Biodiversity Report

480. The State does not have a comprehensive state of biodiversity report.

EnvS 2.4.1 Increase in Capacity Building/Equipment/Increase of Prosecuted Polluters/Year

481. Capacity and equipment for biodiversity management in the State are lacking. There are no data on the number of polluters prosecuted per year.

Recommendations

- Existing collaborative biodiversity initiatives with international Non-Governmental and non-profit organizations with clear benefit-sharing provisions with host communities should be encouraged.
- The plans to consolidate on the management of existing forest reserves along the lines stated in the SSAR should be implemented.
- Government should implement the plan contained in its 2011/2012 budget for the development of Parks and Gardens in the State.
- The State should, as a matter of urgency, commission a State Biodiversity Report, perhaps as part of a comprehensive State of the Environment Report to address the problem of dearth of environmental baseline data and information.
- Government should press ahead with its planned massive afforestation/re-afforestation programme in the six (6) degraded Forest Reserves in the State;

C. DATA MANAGEMENT (DM)

EnvS 3.1 Existence of State Policy on Data Management (DM)

482. The State does not have a functional data collection, banking and dissemination policy in the environment sector.

EnvS 3.2 Existence of Baseline Data on Different Components of the Environment

483. The State does not have a database on various components of the environment. This makes the assessment of performance in the sector problematic.

EnvS 3.3.1 Number of Environmental Studies Carried Out

484. The only environmental studies that have been carried out are EIAs of development projects. These were carried out in compliance with Federal Ministry of Environment requirements and guidelines. They were for specific development projects by the private sector. Apparently EIAs are not carried out for Government projects.

EnvS 3.3.2 Availability of Evidence-based Data and Accessibility to Credible, Reliable and Evidence-based Environmental Data.

485. The Ministry of Environment does not have facilities for the collection and analysis of environmental data. It also does not have a laboratory.

EnvS 3.4.1 Research and Development Units

486. The Environment Sector does not have a Research and Development Unit and there is no budgetary provision specifically for R&D.

EnvS 3.4.2. Budgetary Provision for Effective Equipment, Funding, Capacity Building and Manpower for Data Collection.

487. Budgetary provisions of N5 million and N2 million for an Analytical Laboratory were made in 2008 and 2009 respectively. Even these nominal amounts were never released. Some laboratory equipment has been acquired but there is no functional laboratory yet.

Recommendations

- Efforts should be made to give the Ministry of Environment an R&D Unit for the collection, analysis and dissemination of environmental data and information. The Unit should have a functional laboratory and be well-staffed and equipped so that it can examine environmental quality issues scientifically.
- State Government-sponsored projects must also be subject to EIA;

D. POLLUTION

EnvS 4.1 Existence of Management Policies, Strategies and Plans that align With Federal Equivalents and Commendable Practice

488. There is no documentary evidence of management policies, strategies and plans for pollution in the State

EnvS 4.2.1 Extent of Institutional Framework and Enforcement Mechanism

489. The State Ministry of Environment provides the National Environmental Standards and Regulations Enforcement Agency (NESREA), with office space. This is the Federal Government Agency that has responsibility for pollution control in Nigeria. The Ministry also has Environmental Marshals who enforce environmental laws in the State.

EnvS 4.2.2 Encouragement of Non-Polluting Sources of Energy

490. Anambra State has no deliberate policies to encourage non-polluting of sources of energy.

4.3.1 EnvS 4.3.1 Low level of Untreated Industrial Effluent

491. The State relies on NESREA for the monitoring of industrial effluent in the State and has no data of its own on levels of untreated industrial effluent that is released into the environment.

EnvS 4.3.2 Availability of Data and Monitoring Mechanism

492. The Federal Ministry of Environment and its parastatal, NESREA, monitor pollution in the State and are the only organizations that are likely to have data although this could not be confirmed by the Mission

EnvS 4.3.3 Number of Companies with EAR Processed

493. The level of enforcement of existing regulations and standards by NESREA and the Federal Ministry of Environment is low; there are no data on the number of companies with EAR processed.

EnvS 4.3.4 Number of Industries with Abatement Measures

494. There are no data on the number of industries with abatement measures.

EnvS 4.3.5 Reduction of Air Quality Index (AQI)

495. There are no data on reduction of AQI.

EnvS 4.4 % level of Compliance by All Sectors with Pollution-free Policies and Guidelines

496. The data for calculating the per cent compliance by the various sectors do not exist.

E. ENVIRONMENTAL GOVERNANCE

EnvS 5.1.1 Environmental Policies and Presence of Environmental Laws and Enforcement

497. There is a law as well as two policy documents, which are concerned with the most important environmental problems of the State, namely, waste management, floods and erosion. The documents are:

- The Anambra State Waste Management Authority Law, 2011;
- Technical Guidelines for Flood and Erosion Control Policy in Anambra State; and
- Abridged Version of Anambra State Flood, Erosion Control and Water Conservation Technical Guidelines.

Box 4.4: Why Technical Guidelines are Important

Every State of the Federation has one or more ecological problems. Such problems are usually tackled in an ad hoc manner. Technical Guidelines are desirable because they approach an ecological problem in a systematic, scientifically-sound manner. The guidelines are applicable wherever the problems and conditions are similar

EnvS5.2.1 Coordinated Approach to Environmental Management

498. There does not seem to be a formal arrangement for the coordination of activities by various MDAs engaged in activities that affect the environment.

EnvS 5.2.2 State of Environment Report

499. Anambra does not yet have a State of the Environment Report.

EnvS 5.3.3 Level of Implementation of National Council on Environment Resolutions

500. The data for assessing the level of implementation of National Council on Environment Resolutions do not exist. However, the ASWAMA Law and the policy documents referred to above are examples of the State's attempts to implement resolutions of the Council.

EnvS 5.3 Level of Interference in Prosecution of Environmental Offenders

501. Data on the level of interference in the prosecution of environmental offenders do not exist.

Achievements

502. The TRM observed four notable achievements in the area of Environmental Governance. They are:

- The production of the **Technical Guidelines for Flood and Erosion Control Policy in Anambra State**; and the **Abridged Version of Anambra State Flood, Erosion Control and Water Conservation Technical Guidelines**. These documents should form the basis of scientifically sound and socially appropriate flood and erosion control and water resources management in the State;
- The State Government's action in teaming up with Local Governments and Communities in funding and implementing erosion control projects. Such projects stand a good chance of succeeding because people have a sense of ownership of them and will do whatever it takes to protect them against trespassers;
- The mobilization of the populace for the achievement of a clean and green environment through the formation of non-governmental bodies, such as:
 - Erosion Vanguard;
 - Women in Environmental Health; and
 - Environment Volunteer Corps.

These are very significant steps because they place the environment where it properly belongs, as everybody's business. Government's environmental policies and projects are unlikely to succeed until there is sufficient sensitization and mobilization of the populace.

- Reintroduction of the Sanitary Inspection of premises in the State. During the colonial period, sanitary inspectors played a major role in ensuring that people kept their premises clean. It was a mistake to have phased them out. Reintroducing them will mean a return to a process that ensured environmental cleanliness in the past.

Recommendation:

The TRM recommends that efforts should be made to document all policies, strategies and plans in the environment sector.

OVERALL ASSESSMENT

Challenges

503. The TRM believes that the Environment Sector faces three major challenges:

- Lack of evidence-based data, especially baseline data, on virtually all aspects of the environment. In the absence of such data any attempt to assess performance in the sector will amount to groping in the dark. Under these circumstances the best that can be done is to make general statements such as abound in the SSAR.
- Dearth of documentation of what the State has been doing in the Sector. For them to be of real value, policies, strategies and plans as well as their implementation need to be documented. Documentation is a *sine qua non* for continuity in any establishment. Without it we will be perpetually starting everything and making no progress.
- Lack of a mechanism for environmental monitoring that is independent of Federal agencies. The State must be in a position to advice or make demands on NESREA in its regulatory and enforcement roles, for example, based on its own independent findings.

Commendable Practices

504. The TRM identified the following commendable practice in the environment sector :

Box 4.5: Commendable Practice - Erosion Control

Soil erosion is a common problem in many parts of Anambra State, especially in Agulu, Nanka, Oko, Awka, Uga, Ozubulu, where it has devastated several communities. It is estimated that there are no fewer than 1000 erosion sites. The State Government has team up with Local Governments and Communities to fund and implement several erosion control projects. Those at Nkpor, Mgbakwu and Ebenebe have been completed while seven others are on-going at Nsugbe, New Judiciary Complex Awka, Utuh/Osumenyi, Iyiagu Channelization/Drainage Project (Phase 2) in Awka, Agulu, Nnewi-Ichi, and Adazi Nnukwu.

4.6 AGRICULTURAL SECTOR

4.6.1 Overview

505. With a population of 4,182,032 million people, farming families of 338, 721 and a landmass of 4,416 square kilometres, Anambra State stands out as a state where agriculture is not the mainstay of the economy. Only 46 percent of the population is into agriculture, as the rest are mostly traders or artisans.
506. As in many other areas of the country, agriculture is still at its subsistence level in the state with an average holding of 0.25ha. Though most food crops are cultivated in the state, food insecurity is a feature of the state. Livestock and fisheries enterprises are also carried out in the State. The State Irrigation Scheme at Enugu-Abor-Ufuma, and Ogboji have been abandoned and need to be rehabilitated. The bulk of the improved oil palm in the State comes from homestead farms.
507. Since the creation of Anambra state in 1991, agriculture has consistently suffered from poor and inadequate release of approved budgetary provisions. For example, the budgetary ceiling for agriculture for 2012 stands at less than 2 per cent of the total capital provisions. This situation, unfortunately, has contributed in no small measure to constricting growth and development of the sector. The budgetary allocation and actual funds release must improve significantly for the state to achieve its well-articulated policy objectives and improve on the overall sector performance and contribution to state level GDP.
508. But microcredit agricultural scheme of the state government is functional, as attested to by several farmers, who made reference to its benefits during TRM's interactive sessions with them.
509. The state needs to shore up its performance in the sector particularly in the following areas: (i) production and irrigation infrastructure; (ii) improved access to land and credit; (iii) the entire value chain of strategic crops (Cassava, rice, maize and oil palm); and (iv) availability of critical baseline data.

4.6.2 Background

510. Anambra State occupies an area of 4, 416 square kilometres. Seventy percent of this is arable. The number of farming families is 338, 721 with an average size of 8 persons per farming family or household. The major crops cultivated in the state are cassava, yam, rice, maize, oil palm, plantain/banana and leafy vegetables. The average holding is 0.25ha, which leaves production in the State at subsistence level. Livestock and fisheries enterprises are also carried out in the State.
511. The TRM, accompanied by the Honourable Commissioner for Agriculture, the Programme manager, Anambra Agricultural Development Programme (ADP) and

the State Coordinator of Fadama III visited and inspected several projects including the following:

- The College of Agriculture at Ngabakwu, which was established by the present administration. It has an administrative block, male and female hostels, several laboratories and class rooms, and agro-processing mill, an orchard, a livestock pen, a tractor shed and a weather station. The college recently obtained its accreditation and academic activities are in full swing.
- The Fadama Village, located at Enugu Ukwu. It is a cluster-based system whereby farmers in different agricultural enterprises are clustered together in one place under an integrated agricultural production approach. For example; waste water from the fish ponds is used to irrigate the vegetable garden. The village consists of a Piggery, a Goatery, Snailery, Poultry, Fishery, a processing mill and a Biogas production unit. The TRM also interacted with some of the farmers, who individually attested to the fruitfulness of the enterprise. However, the facility cannot be easily accessed because of the bad terrain. A road is urgently needed to open up the area. Funds were also not disbursed under both Fadama and NPFS programmes this year. However, the state government is highly commended for the swift and timely payment of GCCC.
- The Omor Rice Mill established during the green revolution programme of Nigeria's Second Republic. It is directly attached to the lower Anambra Irrigation project. The rice mill has huge potential but is presently dormant. If fully activated and functional, it has capacity to produce 25 per cent of the total rice requirement of Nigeria and can employ up to 50,000 people from out growers up to the entire value chain. The TRM learnt that the state government has already signed an MOU with the Wiklow Consortium under a PPP arrangement for the resuscitation of the rice mill.

512. Overall, some progress has been recorded but there is need to revamp agriculture in the State.

4.6.3 Budget Performance Review

513. The allocation and actual releases to the Agricultural Sector (2007-2010) are presented in Table 4.20. The data show that the actual releases to the sector were less than 0.25 per cent of the State Budget. These allocations are a far cry from the FAO/NEPAD recommendation that a minimum of 10 per cent of the State budget be allocated to the sector.

Table 4.20: Allocation to the Agricultural Sector (budgeted and actual)

Year	Budget Amount (Naira Million)	% Total budget of the state	Actual Release (Naira)	% Total budget of the state
2007	840.00	2.39	45,675,652.12	0.13
2008	1,075.25	3.07	228,484,239.00	0.39
2009	1,515.00	3.20	104,869,420.00	0.22
2010	652.00	1.62	124,652,000.00	0.31
2011	652.00	1.62	59,288,606.00	0.18

Source: Adapted from Anambra State Self-Assessment Report P. 94.

514. The expenditure in the sector from 2007-2010 is shown in Table 4.21. The data show that in spite of acute underfunding of the sector, much of the funds were expended on the recurrent expenditure.

Table 4.21: Expenditure on Agriculture

YEAR	EXPENDITURE(N)		TOTAL EXPENDITURE(N)
	CAPITAL	RECURRENT	
2007	45,675,652.00	156,887,782.00	202,563,434.00
2008	228,484,239.00	153,233,814.00	381,718,053.00
2009	104,869,420.00	n.a	n.a
2010	124,652,000.00	171,801,578.00	171,926,230.00
2011	59,288,606.00	244,784,702.00	304,073,308.00

Source: Anambra State Self-Assessment Report

4.6.4 Agricultural Performance Indicators

A. Food and Agricultural Raw Material Supply

AS 1.1 Framework to ensure and stimulate increase in food and agricultural raw materials

515. Anambra state has an agricultural vision report. The TRM looked at the document. It can readily transform agriculture in the state if fully implemented with commitment and full governmental financial backing. The agricultural policy goals of the state are laudable and include:

- i. To increase output per unit area for targeted crops like rice, cassava, maize, yam, oil palm and tree crops.
- ii. To improve the existing breeds and increase the output of fish and livestock.
- iii. To expand the land area under production for the target crops.
- iv. To develop agricultural land in the state.
- v. To empower farmers, especially women and youths to increase their productive and processing capacity.
- vi. To provide and promote extension service delivery.

- vii. To promote entrepreneurship development through public-private partnership; and,
- viii. To increase access to credit.

AS 1.2.1 Existence and extent of effectiveness of livestock/fisheries health facilities

- 516. The TRM observed that there is no single health facility for the livestock sub-sector in the State. Awka the state capital lacks a modern abattoir, there are no governmental veterinary clinics and only five veterinary doctors are in the service of the state government. This is inadequate for a state such as Anambra with immense potentials. The situation reflects a major disconnect, more so when integrated agricultural development is envisaged all over the country.
- 517. Both primary and secondary data on livestock/fisheries facilities were not readily available to the TRM.

AS.1.2.2 Existence and effectiveness of meteorological facilities in the state.

- 518. Meteorological data are crucial for effective planning of agricultural production systems. The TRM inspected a functional weather station at the College of Agriculture, Mgbakwu. The State has also invested in the establishment of six weather stations. There are on average 3 desk staff per station in the state.

AS 1.3.1 Percentage change in the quality and quantity of farm inputs delivered to farmers.

- 519. Fertilizer is, perhaps, the most important agricultural input. The TRM interacted extensively and confirmed that fertilizer is being distributed widely throughout the state. It also confirmed that political party affiliations do not matter in the distribution exercise.
- 520. The state government's establishment of a fertilizer distribution system through traditional and religious leaders, town unions, youths and women groups is laudable. However, during TRM's stakeholders' meetings, some women farmers leveled accusations at the men folk for cornering such products only to sell to them at exorbitant prices. The TRM corroborated the view in the SSAR that the State's performance in fertilizer procurement and distribution as per the needs/demands in the State is adequate.

AS 1.3.2 Annual count of private organizations/companies involved in farm inputs

521. No private agricultural firm was present during the TRM's interaction with the private sector. However, the mission was informed that three private firms are involved in the procurement and distribution of fertilizer in the State. The provision of seeds is also being handled privately by private seed companies like most states of the federation.

AS 1.3.3 Annual count of public-private partnership and government investments directed at financing and maintaining inputs and their supply.

522. Anambra State is blessed with arable land, and only a small fraction is cultivated. The Mission was informed that the area under cultivation increased from 94, 000.00 ha in 2009 to 100, 000.00 ha in 2010, a net increase of 6.4 per cent.

523. Anambra State has made some progress towards making tractors available to farmers between 2007 and 2010. The indicators are outlined below:

Number of tractors available in the State (2007-2010):	41
Ratio of tractors to cultivated area in 2010:	0.00041
Area tractorized in 2010:	4000ha
Ratio of tractorized to cultivated area in 2010:	0.04

524. The indicators reveal that the situation on ground is still a far cry from accomplishing the overall objective of increasing the ratio of tractors to land in the State.

AS 1.4.1 Percentage Growth in Agricultural Production

525. Cassava, rice, yam, and maize are the main crops cultivated in the State. There was an increase in output by 0.26 per cent (gross for cassava, rice, yam, and maize) from 379, 000mt in 2009 to 380, 000mt in 2010. The output growth of 0.26 per cent is dismal, when viewed against the increase in human population.

526. The TRM is of the view that the Igbarian farm settlement which is located at Okpara, Anambra East and adjudged the oldest in Nigeria could further boost agricultural productivity in Anambra State if resuscitated as a vocational skills centre devoted to agriculture. It is presently dormant and decaying.

AS.1.4.2 Extent of Farmers' Output Commercialization.

527. Because of the subsistence nature of farming in Anambra state, the average hectareage farmed is only 0.25ha. The level of commercialization of farmers' output is very hard to measure as the TRM found neither information nor data on which to base the measurement.

B. AGRICULTURAL RESEARCH AND EXTENSION SYSTEMS

AS 2.1 Existing programmes at state level aimed at ensuring dissemination of appropriate new technology.

528. Anambra State has continued to participate in the IDA-assisted Third National Fadama Development Project (NFDP III), the IDB-assisted National Programme on Food Security (NPFS), the IFAD-assisted Root and Tuber Expansion Programme (RTEP), IFAD-assisted Rural Finance Institutions Development Programme (RUFIN). The State is actively participating in the Research-Extension Input Linkage System (REFILS) activities. Anambra State is also very active in the Presidential Initiatives on rice and cassava.
529. The State Fadama III Project is currently rated as the best in the South-East and one of the best in the country and this is a best practice worthy of emulation as shown in Box 4.6.

Box 4.6: Best Practice: Provision of Jobs through the Anambra State Fadama III Project

The State's Fadama III Project is currently rated as the best in the South-East and one of the best in the country by the National Fadama¹ Office. A major success factor of the project is regular funding by the IDA, the State Government and the twenty participating Local Government Councils. Anambra State has been the only state that has fully paid its counterpart cash contribution for two years. This is to the tune of over ₦193 million. It has been estimated by the State Fadama office that 33,911 youths were gainfully employed by the programme which also boosted average real income by about 9%.

AS.2.2 Annual count of new varieties (by commodities) and technologies made available for transfer

530. The Anambra state government through the ADP has worked relentlessly to introduce new improved high yielding crop varieties, improved production and processing technologies to the farming community.

531. The TRM confirmed the availability of the following new hybrid crop varieties:
Rice: Two (2) - FARO 44 and 52
Cassava: Twelve (12) high yielding and pest/disease resistance/ tolerance varieties of cassava-
TME 419, TME 0581, TME 0505, TME 0561, NR 8082, TMS 30577, TMS 4(2)1425, TMS 91934, TMS 1368, TMS 1412, TMS 1371
Sweet potato: Three (3) carotene based sweet potato varieties.
532. Several new technologies in crops, agro forestry, livestock, fisheries and processing are also readily available to be disseminated to the farming population.

AS 2.3 Ratio of farmers to extension agents

533. The ratio of extension agents to farmers in the state is 1:9409. This is grossly inadequate against the benchmark of 1:1000 recommended by the FAO.

AS 2.4 Proportion of farmers getting information from extension services and frequency of information supply measured as a % of the base line.

534. As indicated in the SSAR, the annual target was 4948 visits/ contacts with farmers, out of which 2426, representing 49 per cent, was attained.

C. LAND MANAGEMENT AND TENURE SYSTEMS.

AS 3.1 Framework that is gender and socially inclusive to promote land management and tenure systems for agricultural purpose

535. The issues of sustainable land management and tenure systems are major constraints to agricultural production in the State. Unfortunately, the State has no policy on land use and acquisition for agricultural purposes and farm settlement scheme.

AS 3.2 Measures undertaken by the State to ensure access to land and conserve land for good agricultural practices, including for women and marginalized groups.

536. The State has no policy or programme in place to ensure access to land and to conserve land for good agricultural practices, and for use by women and marginalized groups. There is also no functional farm settlement.

AS 3.3 Proportion of land area with Sustainable Land Management (SLM) Practice

537. There is no information/ data on this indicator.

AS 3.4 Annual count of Training mounted for extension agents in SLM techniques

538. There is no information/data on this indicator.

D. ACCESS

AS.4.1 Framework that ensures access to market.

539. There is no defined policy on the issue of access to market. There is no single agricultural processing plant in the state, and no machinery in place to mop up excess production.

AS.4.2 Proportion of certified services providers and price information systems measured as % baseline.

540. The TRM found neither information nor data on this indicator.

AS. 4.3 Status of state rural infrastructure in ensuring market access.

541. The present administration has constructed a broad network of roads across the state. It is pertinent to note that the state government conducted a 'poverty survey', and Anambra West was adjudged the poorest region in the state. That area has now been opened up with the construction of ISU Bridge across the ISU River. This river had hitherto cut-off the western part of the state. Rural markets are now closer to the farmers.

AS. 4.4 Proportion of small-scale producers and farmers' association linked to value chains and marketing companies/organisations.

542. The TRM found no information or data on this issue.

D. WATER AND IRRIGATION SUPPLY AND CONTROL.

AS. 5.1 Framework for water irrigation supply and control.

543. The lower Anambra irrigation project, where the Omor rice mill is located, is dormant. The state government has, however, entered into a PPP arrangement with Wicklow Consortium; but no work had started at the time of TRM visit.

AS. 5.2 Existence of institutional structure to manage and control water irrigation system in the state.

544. Abundant potentials for irrigation do exist in the state. There is a vast arable land and a number of rivers pass through the state. Such rivers can be harnessed for irrigation purposes. Rice production under irrigation is a top priority but as stated earlier, it is yet to fully take off.

545. The State policy on irrigation water supply targets only rice presently. The State Rice Project, (a Unit in the Department of Agriculture) is responsible for the operation of the State Irrigation Project. The unit is poorly staffed.

AS5.3 Volume and value of irrigated water capacity developed or rehabilitated.

546. The TRM found neither information nor data on this issue

AS 5.4 Proportional increases in yield of Crop/Fish and Farm Income Measured as a % of the baseline

547. The TRM found neither information nor data on this issue

E. CREDIT SUPPLY AND INSURANCE

AS 6.1 Frameworks for Credit Supply and Insurance.

548. There is a policy for credit supply, but none for insurance.

AS 6.2 Number of financial institutions (saving/ credit/ insurance and products offered in rural areas.

549. There are several financial institutions in the state. The Bank of Agriculture and the Bank of industry are very active. The state government through the Manufacturers Association of Nigeria also released ₦ 1billion as loan which was accessed by some beneficiaries in the agriculture sector.

AS 6.3 Annual counts of financial institutions (Savings/ credit/Insurance/and products offered in the rural area.

550. The TRM found no data on the issue.

AS 6.4 Proportion of farmers with access to credit and insurance measured as a % of the baseline.

551. The TRM found neither information nor data on this issue.

4.6.5 Conclusion

552. The State's ability to put agriculture on the front burner of her development efforts is not in doubt. What is lacking is the will to take concrete steps to do this. Agriculture is one sector that can rapidly create jobs for the unemployed youths within a short space of time. Agriculture is one sector that can make the State depend less on food imports from other parts of the country.
553. Agriculture is on the concurrent list, and presently a key sector in the FGN's drive to transform the economy of the country. Anambra state has to key into this transformation agenda. It is crucial that the budgetary allocation and releases to the sector be increased far above the present level.

Achievements

- The Agriculture Sector has a well-articulated policy document. The policy has short term, medium term, and long term objectives targeting major commodities in the State.
- In Fadama III, the State has paid 100 per cent of her GCCC. The Fadama III now ranks as the number one in the country in terms of performance.
- 50 per cent of the GCCC on the National Programme on Food Security has been paid. The Programme is performing relatively well.
- In the input subsector, the State has in place a system that ensures the availability of fertilizer - a critical input in the crop-based farming system of the State - to the farming community.
- Construction of road network in the state covering all parts of the state is second to none.
- Some positive steps are also being taken to reduce the ratio of tractor to cultivated area.
- The State has also invested in the establishment of weather stations (A total of 6 weather stations)

Challenges

- Poor allocation and actual releases to the sector have adversely affected its performance.
- There is no state policy on land use and acquisition for agricultural purposes and farm settlement.
- The State policy on irrigation water supply is not comprehensive. It targets only rice production and the state rice project unit is poorly staffed.

- There is no policy or programme in place to ensure access to land and to conserve land for good agricultural practices, and access to agricultural land by women and marginalized groups.
- There is a dearth of young people, who are engaged in agriculture in the state, as trading is the major pre-occupation of most youths.
- The state also does not have a functional farm settlement.
- The state lacks a modern and functional abattoir.
- Most of the agricultural lands are not tractorable
- Inadequate livestock/fisheries health facilities
- The ratio of extension agents to farmers (1:9409) is unsatisfactory

Recommendations

- Increasing budgetary allocation to the sector to 10 per cent in line with CAADP recommendations and also ensuring that the budgetary allocation is released timeously.
- Partnering with credible private organizations to develop the value chain of major commodities in the State including the resuscitation of the Omor rice mill.
- Resuscitation of the Igbarian farm settlement as a vocational skills centre devoted to agriculture.
- An access road to the Enugu Ukwu Fadama village in Njikoka LGA is urgently needed.
- Establishment of a functional modern abattoir in Awka, the state capital.
- Government to rehabilitate the irrigation schemes.
- There is need to improve access to credit for small, medium, and large scale enterprises .
- Partnering with credible private organizations to develop the value chain of major commodities in the State.

4.7 Infrastructure Sector

4.7.1 Overview

554. In the context of Anambra state, the Infrastructure Sector comprises the road sub-sector, water and sanitation sub-sector and the power sub-sector. These three sub-sectors are regarded by the Anambra State Government as priority sectors, strongly supported by both the Executive and legislative arms of the Government.

555. In terms of budgetary allocations, the road sub-sector has fared very well in the last 4 years. This has translated into even distribution of asphalt-surfaced road network in the State. For sustainability of these roads, the State Government established, by law, the Anambra State Road Maintenance Agency (ARMA).
556. The Water and Sanitation sub-sector has enjoyed the support of donor agencies as well as the MDGs Office, in addition to the support from the State Government. However, access to potable drinking water through-out the State is not more than 50 per cent, while efforts are in the right direction with respect to awareness creation, sensitization and provision of sanitation and hygiene facilities in public places. The State has developed a water and sanitation policy document which is yet to be passed into law. The policy provides a road map for activities in the sub-sector with respect to funding, roles and responsibilities, development, private sector participation and cost recovery for sustainability.
557. Access to power facilities in the State is high. The State Government through its rural electrification programme has assisted many communities with the provision of transformers and by linking them to the National Grid. However, the Government is yet to have its own power policy.
558. One of the major challenges that the infrastructure sector is facing in the State is the inadequate professional and technical personnel in the sector Ministries i.e. Ministry of Works and Ministry of Public Utilities, Water Resources and Community Development. There is also the challenge of low funds release compared to amount budgeted.
559. In Anambra State, the Ministry of Works has responsibilities for road construction and maintenance, while the Ministry of Public Utilities, Water Resources and Community Development have responsibilities for Water, Sanitation and Power.

Ministry of Works

560. Road development under the Ministry of Works (MOW) is largely guided by the principle of continuity of road works already in progress and also by the policy of traversing into those areas of the state not earlier covered. However in the aspect of road maintenance, a major shift occurred in 2008 with the establishment of the Anambra State Road Maintenance Agency (ARMA) through the Anambra State Road Maintenance Agency Establishment Law. The agency has the responsibility to regulate all road maintenance activities in the state.

Ministry of Public Utilities, Water Resources and Community Development

Water and Sanitation

561. When Anambra State was created in 1991, the Ministry was just a Department of Public Utilities in the office of the Executive Governor, Government House, Awka. In 1994 it was transformed into the Bureau of Public Utilities and Rural Development, Government House, Awka and this lasted up to 1999 when it was renamed Bureau of Basic Infrastructure and Rural Development. This name existed up to 4th October, 2007 when the Executive Council under Governor Peter Obi's Administration created the Ministry of Public Utilities, Water Resources and Community Development through Executive Council Circular letter No.SSG/EXCO/S.6/V/324 dated 4th Oct. 2007 and Head of Service Circular No.HOS/Adm/179/393 of 8th Nov, 2007.
562. With the creation of a full-fledged Ministry and the Federal Government's guidelines on Water Resources, all Water Projects in the State were centralised under the Ministry through the letter No. HOS/Adm/179/401 dated 10th January, 2008. With this, the Rural Water Supply and Sanitation Agency (RUWASSA) became part of the Ministry.

Power

563. The Anambra State Rural Electrification Board (Authority) was established by Edict No. 25 of 1978 which empowers it, among other things, to provide and distribute electricity for public, domestic and industrial use in any part of the State where PHCN (NEPA), for the time being, does not maintain any electricity undertaking or installation.
564. The main focus of the REB is on rural areas. The philosophy behind the concept is to provide basic amenities for social and economic development, including rural industrialisation of the communities and by so doing, transform the socio-economic lives of the rural dwellers by assisting the growth of small scale and cottage industries, which will in turn provide employment opportunities. It is aimed at stopping the tide of urban migration. The REB was later changed to Rural Electrification Authority by Executive Council decision.

565. In addition to the above, the State Government through Executive Council Memo (2008) No.57 and HOS letter No. HOS/Adm/179/T.1/40 dated 6th Nov. 2008 approved the transfer of the Electrical Service components of the Mechanical/Electrical department of the State Ministry of works as well as the absorption of the Rural Electrification Authority Staff into the Ministry of Public Utilities, Water Resources and Community Development. The Electrical Engineering Services Department is now overseeing the activities of both rural and urban electricity concerns.

4.7.2 Budget Performance Review

566. A review of the budget performance of the infrastructure sector in Anambra state was conducted in order to analyze the trend and budget allocation (budgeted and actual releases), level of expenditure and prudent management of public resources in the sector, geared towards achieving economic growth and development of the entire State.
567. The review which covered the period, 2007 – 2011, aimed to determine the extent of performance in the infrastructure sector over this period in terms of effectiveness as regards government policies, plans and programmes for the sector.

Funds Allocations to Infrastructure Sector (Budgeted and Actual Releases)

Road

Table 4.22: Allocations to Road Sub-Sector

Year	Proposed Expenditure (N'm)	Actual Expenditure (N'm)	Actual Expenditure as a percentage of proposed expenditure (%)
2007	12,848,000,000.00	11,947,647,976.00	93
2008	20,705,000,000.00	16,620,707,035.00	80.3
2009	15,717,000,000.00	11,330,281,720.00	72
2010	12,744,000,000.00	10,184,932,914.00	80
2011	10,740,000,000.00	9,685,053,730.00	90.18

Effectiveness as affected by budget allocation (Budgeted and Actual)

Table 4.23: Effectiveness and Equity Consideration (Road)

Year	Length of Road Awarded (km)	Length of Completed Asphalted Road per Yearly Awards (km)	Gross Total Length of Road Asphalted (Including spill over from previous years) Km	% Achieved
2006	318.832	120.85	128	40.15
2007	174.166	89.534	93.835	54.06
2008	94.675	62.831	70.736	78.92
2009	60.747	26.925	85.473	132.15
2010	61.815	11.216	63.94	103.44
2011	34.86	0	103.882	298
TOTAL	745.095	147.851	545.866	73.26

Source: Ministry of Works, Highways Department

568. From Tables 4.22 and 4.23, it would be observed that the actual expenditure ranges between 72-93 per cent (Average=83.1 per cent) of the budgeted amount while the cumulative length of road asphalted during the period under consideration is 73.26 per cent of the total length of road awarded. Each year there is a decline in the total length of asphalted road completed. This could be attributed to the following factors:

- Difference between budgeted and actual funds released
- Untimely release of funds for the projects
- Inadequate planning for the effective utilization of the construction (dry) season
- Award of high capacity contracts to low capacity contractors.

Problems of Recruitment and Retention of Infrastructure Personnel

569. After the recruitment exercise of 2006, the road sub - sector in the state did not witness any other recruitment as no waiver was given, either to the Civil Service Commission for the recruitment of the senior service cadre or the Ministry of Works for the junior service cadre. This has led to a situation of retirement of personnel without replacement. There has also been remarkable drain of personnel especially from the professional/technical units to the private sector because of more attractive wages the sector. These factors all lead to a huge noticeable downturn in the effectiveness and efficiency of manpower in the sector.

Performance Criterion (Are the funds optimally or fairly distributed among various or major problem areas, among regions (LGAs) and sectors (urban/rural))

Roads

570. The choice of roads to be constructed, upgraded/ rehabilitated depends on the requests from the various communities and LGAs to the Governor. These requests are appraised by the Ministry of Works and a Consultant is appointed who then

carries out detailed design, preparation of tender documents including bill of quantities and the cost estimate i.e. the contract sum for the particular project. The contract sum is then ratified by the tender board and approved by the Executive Committee. Based on the field visits carried out during the mission, it can be confirmed that the three senatorial districts of the State have benefitted from the implementation of road projects.

Water and Sanitation

571. Table 4.24 shows the budget and expenditure from the State Government alone while Table 4 shows the combined budget and expenditure of the State Government, EU-UNICEF, MDG and Counterpart Cash Contribution to externally funded WSS projects. From Table 4.24, it can be seen that the actual expenditure as a percentage of the proposed expenditure has been very low. From Table 4.25, the contributions from the donor agencies and MDG improved the amount budgeted and expended on water and sanitation projects in the State.

Table 4.24: Allocations to Water Sub-Sector by the State Government

Year	Proposed Expenditure (N'm)	Actual Expenditure (N'm)	Actual Expenditure as a percentage of proposed expenditure (%)
2007	805,000,000	N.A	N.A
2008	1,950,000,000.00	368,493,000.00	18.9
2009	1,790,000,000.00	56,603,000.00	3.20
2010	1,640,000,000.00	111,731,000.00	6.81
2011	818,000,000	139,152,000.00	17.01

Table 4.25: Overall Allocations and Actual Expenditure by the State Government and Others ¹

Year	Total State Budget (N)	Amount Budgeted for WSS(N)	Amount Utilized (N)	Amount Utilized as a percentage of Amount Budgeted
2009	79.951b	2.215b	1.572b	70.8
2010	67.000b	2.70b	1.487b	55.07
2011	66.944b	2.905b	2.061b	70.95

¹ Source: State budgets, MDGs, GCCC, EU-UNICEF (GCCC –Government Counterpart Cash Contribution) and Accounts Department of MPUWRCD.

Power

572. Table 4.26 shows an increase of 49.1 per cent in the actual expenditure between 2009 and 2011. Also, the actual expenditure as a per cent of proposed expenditure increased from 23.4 per cent in 2008 to 64.66 per cent in 2011. This is an indication of the State Government's strong response to the requests from communities and LGAs for provision of electricity.

Table 4.26: Allocations to Power Sub-Sector

Year	Proposed Expenditure (N'm)	Actual Expenditure (N'm)	Actual Expenditure as a percentage of proposed expenditure (%)
2007	200,000,000.00	N.A	N.A
2008	1,445,000,000.00	337,769,000.00	23.4
2009	1,200,000,000.00	496,584,000.00	41.4
2010	1,064,000,000.00	624,606,000.00	58.7
2011	1,026,000,000.00	663,409,000.00	64.66

4.7.3 Infrastructure Performance Indicators

A. BASIS FOR UNDERTAKING INFRASTRUCTURAL INVESTMENTS

IS 1.1 Extent to which the State has laws, regulations and policies to regulate investments in infrastructure, including private and public/private partnerships

Roads

573. Currently there is no comprehensive policy and legal framework that guides road development in Anambra state. However, the Ministry of Works has produced a Strategic Framework which articulates the vision, mission, strategy to achieve the framework and provide output, outcomes and performance indicators. The Strategic Framework is used as a guide during the Ministry's budget preparation and presentation. Also, the State is guided by the ANIDS philosophy. The principle of continuity of road development and extending same to local government areas that are hitherto not covered and financed from the state annual budget also provided the basis for road development.
574. The State has a Law on Road Maintenance called, the Anambra State Road Maintenance Agency Establishment Law 2008.

Water and Sanitation

575. The State developed a state water and sanitation policy, which was approved by the Executive Council in 2009. The draft policy has been forwarded to the Ministry of Justice for vetting after which the policy will be sent to the State House of Assembly for passage into law.

Power

576. The state had no energy policy at the time of the TRM. However, in 2011 the UNDP assisted the State to produce an Energy Policy. But the policy is yet to be adopted and approved by the State Executive Council.

IS 1.2 Evidence that locations for infrastructure investment were in areas of greatest need

Road

577. The State does not have a road map that guides decision on the development of roads. The TRM was informed that decisions on road investment are based, amongst others, on the fulfillment of the State Governor's campaign promises. Requests for upgrading/ rehabilitation and construction of new roads are generated from the various communities through their respective town unions. These requests are collated by the Local Governments and forwarded to the Governor who, taking cognizance of inputs from the State Assembly, decides on which roads are priorities for implementation. However, there is ample evidence that the network of roads is fairly evenly distributed among the three senatorial zones in the entire State. For example:

- 8 Roads with a total length of 56.65 km were awarded in Anambra North Senatorial Zone.
- 13 Roads comprising 152.812 km were awarded in Anambra south Senatorial Zone.
- 17 Roads representing 130.521 km were awarded in Anambra Central Senatorial Zone.

Water

578. The demands for water facilities are articulated by the various communities through their respective town unions. The requests are collated and forwarded to the State Government by the Local Governments. The Ministry of Public Utilities, Water Resources and Community Development (MPUWRCD) has the responsibility of assessing the water supply needs of the communities and preparing options including cost estimates for the consideration of the Governor.

579. Under the EU assisted WSSSRP, needs assessments were conducted in 5 LGAs in the state. The Ministry of Public Utilities, Water Resources and Community Development, at the time of the TRM, was carrying out inventory and mapping of Water, Sanitation and Hygiene (WASH) and other socio-economic facilities throughout the State. The exercise was expected to produce information on the following: number of facilities, functionality, and distance of facilities from consumers, quality and coverage. The needs assessment would amongst others identify areas of the state with the greatest need for water and sanitation facilities so that government intervention could be channeled to such areas.

Power

580. The intervention of the State Government is dictated by the need to provide electricity to communities that are not covered by PHCN power supply. Communities through their respective town unions write to the State Government for assistance. The requests are forwarded to the MPUWRCD who carry out assessment of the power needs of the communities and proffer cost effective interventions in their recommendations to the Governor.

IS 1.3 Extent to which stakeholders, including women and vulnerable groups were involved in project identification/selection and implementation **Road**

581. The practice in the State is for road projects to be initiated from the communities through their respective town unions. The Local Governments facilitate town hall meetings where every segment of the communities come together to articulate their needs as far as provision of road infrastructure is concerned. The representatives (including female members) of various constituencies in the State House of Assembly are actively involved in project identification/selection. They also perform oversight function during the implementation of the road projects

Water and Sanitation

582. Between 2007 and 2011, reforms championed by EU assisted WSSSRP-SRIP brought about the involvement of all relevant stakeholders including CSOs, NGOs, WCAs/WASHCOMs, PSPs, women and vulnerable groups in project identification/selection and implementation through stakeholders workshops organized by MEPB and EU-UNICEF.

Power

583. Requests for State Government intervention emanates from the various communities. Therefore it can be inferred that all the stakeholders in the communities including women and vulnerable groups are involved in the decision to request for State Government assistance. These requests are passed through the Local Governments to the State Government for consideration.

IS 1.4 Evidence that community concerns were addressed before, during and after project implementation

Road

584. All the requests from communities through the town unions and the Local Governments are forwarded to the Ministry of Works. The Ministry thereafter carries out assessment of the roads and other related hydraulic structures and prepares a report which is then forwarded to the Governor for consideration and approval. After the approval a Consultant is appointed to carry-out the design, preparation of bid documents and EIA. The TRM found no evidence that the EIA reports were subjected to public hearing within the communities affected by the road projects.

Water

585. During the baseline-survey and formation of WCAs/WASHCOMs in the EU assisted WSSSRP in 5 LGAs, the community members were provided with adequate information on the available technology options, at the end of which the communities developed CAP (Community Action Plan) which indicated their options for facility construction (Water) and their willingness to pay their counterpart contribution. The community also participates in project implementation through supervision of projects and provision of security which ensures ownership and sustainability. The MPUWRCD is taking practical steps to replicate the process followed under the EU assisted WSSSRP in the remaining LGAs. This will ensure that community concerns are adequately addressed during and after project implementation.

Power

586. Communities in need of electricity extension as well as those that do not have electricity at all make requests to the State Governor. In compliance to the Governor's directive, the MPUWRCD collates such requests and when approved, undertakes inspection visits to such communities to ascertain their needs as well as determine what it will cost to provide electricity for them. After the provision of these facilities to benefitting communities, the Ministry goes further to entertain further community concerns; for example, their complaints are received and measures to address them are put in place.

B. PUBLIC ACCESS TO INFRASTRUCTURE

IS 2.1 Good Paved Asphalt Road link from state capital to all local governments' headquarters

587. Good Paved Asphalt Road Link from the state capital Awka to all the 21(Twenty one) LG Headquarters has been achieved (Box 4.7). One can traverse the state

from Mmiata in Anambra North via Awka (Anambra Central) to Uli in Anambra South in just an hour.

588. However, the road network linking Awka to other States, particularly federal roads in the network, are in a deplorable condition.

Box 4.7: Best Practice – Good Asphalt Road Linking the State

Anambra State is one of the few States that have good network of roads linking the State Capital to all the LGAs. The capital, Awka, is linked by a network of asphalt roads to all the Twenty one Local Government Headquarters. The current administration has so far constructed over 500km of asphalt roads particularly in the rural areas. These roads are providing accessibility and mobility, leading in turn to increased transport operations, economic activity, and rural transformation.

IS 2.2 Daily per capita liters of water supply and Awareness creation for Sanitation & Hygiene

589. There was, at the time of the TRM in the state, an on-going inventory and mapping of WASH and socio-economic facilities in the State by the Ministry of Public Utilities, Water Resources and Community Development. The aim of the exercise was to determine the number of water facilities available, their functionality, the population covered, quality and the distance from consumers. Water supply in the State is classified into Urban, Small towns and Rural. The State Water Corporation has responsibility for urban water supply, while water supply in the small towns is mainly handled by the private sector operators, communities and to some extent the State Government. The Rural Water Supply and Sanitation Agency (RUWASSA) is responsible for rural water supply and sanitation.
590. There are 7 urban water supply schemes in the State. Table 4.27 presents the existing urban schemes, capacity, functionality and problems:

Table 4.27: Urban Water Supply Schemes

S/No	Name of Scheme	Capacity	Functionality	Problems
1	Nnewi	100m ³ /hr	Partially	Unstable power supply
2	Udoka	30m ³ /hr	Functioning	
3	Amawbia	70m ³ /hr	Functioning	
4	Obizi-uga	200m ³ /hr	Not functioning	Erosion problem, vandalization of armoured cable
5	Onitsha	42m ³ /day	Partially	Unstable power supply
6	Awka	-	Not functioning	On- going Rehabilitation
7	Ihiala	-	Not functioning	Intake problem

Source: Ministry of Public Utilities, Water Resources and Community Development.

591. A total of 186,103 and 67 rural water schemes were constructed by MDG, RUWASSA and the MPUWRCD in rural communities of the State. The MDG schemes comprised a borehole, an overhead tank (capacity: 500 gallons), limited reticulation and provision of 10 No. stand pipes in schools/health centres and the remaining in the communities. These schemes are solar powered. The RUWASSA schemes are similar to the MDG schemes except that some of the schemes are powered by generating sets and 6 service stand posts are provided at the base of the tank. The schemes constructed by the MPUWRCD consist of hand pumps, while the remaining are generator powered schemes with stand posts at the base of the tank.
592. The success rate of these schemes is about 50 per cent as half of the schemes were not functioning at the time of the TRM. The reasons for the non-functionality of the schemes were:
- Effect of lightening on the solar panels. The panels were not installed with thunder arrestors
 - Communities' inability to procure diesel for the generating sets
 - Lack of technical know- how within the communities.
593. The foregoing explains the situation of water supply in the State. The gap in water supply delivery is filled by private sector operators and individuals who construct boreholes/deep wells in their premises and sell water to members of the public. Due to paucity of data on the different water sources, quality and quantity of water supplied by the different players in the water sub-sector, the TRM found it difficult to determine the per capita consumption of water in the State. However, there is ample evidence that a large per cent of the people have access to potable drinking water through the efforts mainly of private operators.

594. A novel approach adopted in the State for household sanitation and hygiene is the creation of awareness and sensitization of the people to trigger them to attain the ODF (open defecation free) status. This is known as the Community Led Total Sanitation (CLTS). (See Box 4.8).

Box 4.8: – The Community Led Total Sanitation (CLTS)

Presently, about 10 small towns and 130 communities in 5 LGAs piloted under the EU assisted WSSSRP had been triggered. The exercise is on-going and RUWASSA is leading the campaign in the various communities and to date additional 416 communities and villages have been triggered. Also, about 593 toilet facilities have been constructed mostly in secondary schools, primary schools and markets throughout the State. They were funded by the EU, UNICEF and MDG while the State provided the counterpart cash contribution. Furthermore, all the 21 LGAs now have a WASH unit and there is a move to upgrade them to departments in the respective LGAs. About 204 WASHCOMs have been formed in the various communities and 34 of them have been trained. With the on-going efforts of MPUWRCD, sanitation coverage will tremendously increase in the State.

IS 2.3 Connectivity to Power (National Grid and Rural Electrification)

595. Data available showed that about 95 per cent of the communities and villages have been electrified through the State's Rural Electrification Programme. Between 2006 and 2010 about 300 transformers were distributed and installed in various communities and villages. Also, between 2010 and 2011 about 208 transformers were distributed and installed in 179 communities.

596. In summary, 20 out of 21 LGA headquarters are connected to the National grid. This translates to 95 per cent compliance.

IS 2.4 Telecommunications coverage in the State

597. There is ample evidence to show that the State is well covered by most of the service providers in the telecommunication sector. TRM visits to various parts of the State confirmed this point. Network of the various services are available though in varying degrees throughout the State.

C. SUSTAINABILITY AND MAINTENANCE

IS 3.1 Extent to which the state has laws, regulations and policies to ensure/guarantee sustainability and maintenance of investments in infrastructure.

Roads

598. The State has a Law cited as the Anambra State Roads Maintenance Agency (Establishment, etc.) Law, 2008 which came into effect on the 29th August 2008. Part III, SECTION 11 "Functions and Powers of the Agency", charged the agency with the function of ensuring the efficient and effective maintenance of all existing State roads or such other roads as may be declared from time to time as State roads by the Governor pursuant to the Roads (Classification and Management) Law, 121, Revised Laws of Anambra State, 1991. In addition, there is the Department of Maintenance and Engineering Services of the Ministry of Works that has oversight function on the agency.
599. The State is in the process of enacting a law to establish a Building and Civil Engineering (Construction) Materials Quality Control Laboratory. A bill to that effect had been presented to the State House of Assembly at the time of the TRM, while the building to house the laboratory was nearing completion then. There is no doubt that with the passage of the law by the House of Assembly and the subsequent take-off of the laboratory, the quality of materials used for road construction/maintenance would be adequately monitored and controlled, and would go a long way to ensure the delivery of durable roads.

Water and Sanitation

600. By the time of the TRM, the State had developed a Water Supply and Sanitation Policy, which had been approved by the State Executive Council and, thereafter, forwarded to the Attorney General for vetting after which it would be sent to the House of Assembly for passage in to law.
601. The policy deals with issues of institutions, sustainability, decentralization, gender mainstreaming, monitoring and evaluation and performance evaluation. Also, the roles and responsibilities of the State Government, Local Governments and Communities are adequately spelt out in the policy. The policy envisaged the establishment of new legal entities that will be responsible for water supply and sanitation activities in the urban, semi-urban and rural areas of the State. Existing government agency will be transformed into these new entities. According to the policy the proposed new institutions are:
- Anambra State Urban Water Asset Holding Corporation (AnSUWAHC)
 - Small Town Water Supply and Sanitation Agency
 - Rural Water Supply and Sanitation Agency (RUWASSA)

602. At the Local Government level, the policy recommended the establishment of WASH departments that will be responsible for assisting, monitoring and mentoring communities to establish WASHCOMs and WCAs in their respective communities.
603. The policy clearly, supports private sector participation in water supply and sanitation delivery. Various types of private sector participation were suggested in the policy. With the policy in place in the State and with commitment of stakeholders including the State Government, the water and sanitation sub-sector will be better organized and service delivery enhanced.

Power

604. Completed electricity projects are handed over to PHCN after commissioning. PHCN is responsible for maintenance of the system and also collection of tariff from consumers. However, most often, the state government partners with willing communities to rehabilitate/re-activate non-functional electricity projects thereby ensuring sustainability. Communities also contribute towards the maintenance of these facilities.

IS 3.2 Existence of institutions and organizations responsible for sustainability and maintenance of investments in infrastructure

Roads

605. Hitherto, the Ministry of Works was responsible for the sustainability and maintenance of investments in the road sector. But on 29th August 2008 the law establishing Anambra State Roads Maintenance Agency (ARMA) came into effect. The agency, with its headquarters located in Awka, the state capital, is now responsible for the maintenance of state roads. In addition to the agency, there is a Department of Maintenance and Engineering Services in the Ministry of Works. This department performs oversight functions on the agency.
606. Both the Ministry of Works and ARMA suffer from inadequate engineering professional and middle level cadre staff. This has had adverse effect on contract management issues as the available staff was not able to cope adequately with the volume of both construction and maintenance work on-going in the State. The following is the picture of the budget and release for ARMA:

Table 4.28: Budget and Releases for ARMA

S/No	Year	Budget (Nm)	Actual Release (Nm)
1	2009	650	Nil
2	2010	600	Nil
3	2011	600	45

607. From Table 4.28, it is glaring that funding of ARMA is an issue which the State Government has to address properly in order to safeguard the investment on roads and keep the roads in good conditions.

Water

608. The Ministry of Public Utilities, Water Resources and Community Development is charged amongst others with the responsibility of coordinating all water and sanitation related activities in the State. The Ministry controls the budget of the water and sanitation agencies in the State.

609. The Anambra State Water Corporation (ANSWC) is responsible for the sustainability and maintenance of investment for Urban Water systems. By the time of the TRM to the state, ANSWC was not fulfilling its mandate as most of the urban water schemes were not functioning. According to the law setting up ANSWC, it is required to generate revenue from water supplied to consumers, but this has not been happening. Because of poor revenue generation, ANSWC is not able to pay its staff members, who are owed over 60 months' salary arrears.

610. The Rural Water Supply and Sanitation Agency (RUWASSA) is responsible for sustainability and maintenance of rural water supply and sanitation infrastructure in the state. While the Water Consumers' Associations (WCA), and Water, Sanitation and Hygiene Committees (WASHCOMs) are responsible for small towns' water supply infrastructure. At the time of the TRM, 25 WCAs had been formed in the State. However, there is need to formalise their roles and responsibilities in the operation and maintenance of the Small Town Water Schemes that have been handed over to them to manage. WASH units, which are responsible for monitoring and evaluation of WASH activities in the communities, have been established in the LGAs. Presently, 21 of such units have been established.

Power

611. In the Power sub-sector, the Ministry of Public Utilities, Water Resources and Community Development (MPUWRCD) has the mandate for power development and maintenance especially rural electricity. The Power Holding Company of Nigeria (PHCN) has the overall mandate for electricity development, distribution and maintenance of assets in Nigeria. Community Development Associations (i.e.

town unions) also have some responsibility to maintain and protect the assets (such as transformers) installed in their communities against vandalism.

IS 3.3 Percentage of state budget earmarked for sustainability and maintenance of investments in infrastructure

612. The Ministries of Works and Public Utilities, Water Resources and Community Development meet their capital and recurrent expenditures from their annual budgets for all their activities. There is no separate budget for sustainability and maintenance of investments in infrastructure. However, provisions made in the annual budget for such sectors are used to address these issues

IS 3.4 Existence of cost recovery mechanism

Roads

613. There is no cost recovery mechanism in place for roads in the State. The State Government provides the funds required for new construction and rehabilitation/upgrading of roads.
614. Based on an agreement between the State and the Federal Government, the State is reimbursed on expenditures made in the Rehabilitation/Reconstruction of dilapidated federal roads, whose sorry state impedes the socio-economic wellbeing of the state.
615. The Local Governments through the Ministry of Local Government and Chieftaincy Matters provides 40 per cent of the cost of construction/reconstruction of any road designated as Local Government road and being awarded and executed by the State Government.

Water and Sanitation

616. ANSWC, whose statutory responsibility is provision of Urban Water Supply, suffers from lack of funds to maintain and sustain its activities. Even though ANSWC is expected to generate funds for its activities through collection of tariff from consumers, the corporation has not been successful in this regard because it is unable to provide services.
617. For the Small Towns water schemes, the State Government provides the infrastructure and hands them over to the communities to manage through the WCAs. This arrangement implies that the WCAs will generate funds for the maintenance of the schemes. The success rate of this arrangement, which was yet to be formalized at the time of the TRM was low because the schemes are not functional.

618. For the rural water supply schemes, emphasis is placed on community participation. Communities manage the facilities; generate funds through user charges which are used to maintain the facilities.
619. The MPUWRCD charges the public for scanning of boreholes using the Ministry's borehole camera.
620. Cost recovery in the water and sanitation sub-sector is addressed in the policy. This makes it more urgent for the policy to be passed into law in the State.

Power

621. There is no cost recovery mechanism as far as power is concerned. The State Government provides facilities i.e. transformers and other electrical accessories to the communities, after which they are connected to the National Grid. From there on the responsibility to provide power is that of PHCN which also has the responsibility to maintain the facilities and collect tariffs which do not go to the State.

Recommendations on Infrastructure Sector

622. The following recommendations are put forward in order for the State to sustain the achievements in the infrastructure sector and improve on those areas that have been identified:

Road

- The need to put in place a road policy for the State cannot be over-emphasised. The road policy should have as its main objective, the achievement of a safe, effective, efficient and innovative road transport sector that is sensitive to the environment and responsive to community requirements for economic growth and social equity.
- The Anambra Road Maintenance Agency (ARMA) should be adequately funded and provided with the right calibre of staff for it to function efficiently.
- There is a need to strengthen the planning, supervisory and management roles of the Ministry of Works. Apart from adequate budget provisions for roads, actual budget releases should be improved upon to avoid the problem of abandoned projects. Recruitment of new staff both at the professional and sub-professional cadre should be carried out as a matter of urgency.
- Efforts should be intensified by the State House of Assembly to expedite the passage of the law establishing the Building and Civil Engineering (Construction) Materials Quality Control Laboratory.

Water and Sanitation

- The MPUWRCD should be encouraged by the State Government to build on the foundation laid by the EU and UNICEF, so that there will be continuity; and lessons learnt can be applied to the State-wide water and sanitation activities.
- Efforts should be made to ensure the passage of the water and sanitation policy into law. The State should develop an implementation guideline for the policy.
- There is an urgent need to carry out an appraisal of the Anambra State Water Corporation with a view to articulating the problems and proffering solutions that will re-position the corporation for better service.
- The State should consider setting up a Small Towns Water Supply and Sanitation Agency, as recommended by the Federal Ministry of Water Resources, to redress the neglect of small towns in the provision of potable water. The agency will be responsible for the planning and management of Small Town Water Supply and Sanitation activities.
- In order to strengthen water and sanitation activities at the community and village levels, the WASH units in the Local Governments should be upgraded into a department and should be given the necessary support to perform their roles and responsibilities.
- The WCAs should be registered with the appropriate government agencies in order to make them legal entities. A Memorandum of Understanding (MOU) should be prepared and signed between the WCAs and the Ministry of Public Utilities, Water Resources and Community Development.
- The MPUWRCD should be provided with the necessary resources (financial and manpower) so that it can perform its functions. The Ministry should have a functional M&E department.
- There is a need to improve on the budget and the subsequent release of funds for water and sanitation activities in the State.
- The State should consider, as an important policy measure, the establishment of a water laboratory. In the interim, the MPUWRCD and its agencies should map out a programme to monitor the quality of water that is consumed by the people regularly and send water samples to the nearest Federal Government established water laboratory.

Power

- The Energy policy which the UNDP assisted the State to develop should be finalised. The State Government should constitute a committee of experts that to study the policy

report, fine-tune it to suit the State's situation and process it through the relevant government organs to become law.

- The power sub-sector in the MPUWRCD should be adequately staffed with professional and technical staff.
- The budget for provision of electricity in the State should be reviewed upward due to rising demand for electricity in the communities. Budget releases should also be timely and sufficient to meet the project needs for a particular budget year.
- The Local Governments and Town Unions should take up the responsibility of providing security for the installations in the different communities.