

GA EAST MUNICIPAL ASSEMBLY



STRATEGIC ENVIRONMENTAL ASSESSMENT (SEA)

REPORT

MEDIUM TERM DEVELOPMENT PLAN 2014-2017

UNDER THE

GHANA SHARED GROWTH AND DEVELOPMENT AGENDA 2014-2017



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CHAPTER ONE

INTRODUCTION

The Ga East Municipal Assembly (GEMA) has prepared its medium Term Development Plan (MTDP) 2014-2017 under the Ghana shared Growth and Development Agenda (GSGDA) policy Framework. The plan was prepared by adopting authentic participatory approach with the principles of sustainable development as its core tenants. In line with these therefore, environmental issues as well gender diagnoses were mainstreamed from projects and programmes identification stages to the finalization of the plan.

The focus of the Strategic Environmental Assessment (SEA) is to check if the MTDP is likely to have any significant environmental effects. Recommendations are then made as to how the adverse effects can be reduced or avoided. Various Strategic Environmental Assessment tools were therefore adopted extensively to ensure that established environmental sustainability objectives are achieved. The four sustainability pillars are given as follows.

- Natural Resources
- Socio-cultural environment
- Economic environment
- Institutional considerations

The SEA tool used was the compound matrix, compatibility matrix and finally sustainability tests of the policies and programmes in the plan. Where environmental risks were identified, mitigation measures are developed to reduce the impact or completely halt the impact. The implication of these mitigation measures on the Annual budget of the Assembly as well as institutional capacity has been assessed to ensure effective and efficient management of the implementation processes.

1.1 Purpose of the Strategic Environmental Assessment of Policies, Plans and Programmes

The main purpose of SEA is to mainstream environmental concerns into the assembly's development efforts to ensure sustainability of Policies and programmes. The SEA will also assist the Assembly to refine interventions and introduce more sustainable solutions. The specific purposes of the exercise are:

- Assess the environmental implications of implementing the MTDP 2014-17, AAPs and proposing suitable interventions to mitigate negative impacts.
- Develop appropriate interventions to mitigate negative impacts and also optimize the positive ones.
- Ensure adequate Budget for mitigation measures by the Assembly
- Mainstream and identify new opportunities for promoting sustainable development in the municipality

1.2 Scope of the Strategic Environmental Assessment

The SEA focused on interventions in the Assembly's Medium Term Development Plan 2014-2017. The scope of the SEA concentrated on baseline conditions, key environmental concerns, sustainability objectives, sustainability assessment of the municipality's plan and measures to address impacts of developmental activities.

1.3 Methodology

The preparation of the report commenced after the completion of the MTDP 2014-2017. A 6-member team was constituted to facilitate the preparation of the SEA Report of the MTDP 2014-2017. The 6-member team prepared a work plan to facilitate its activities. In all five (5) meetings were organized. A validation workshop was also organized with the MPCU members and other stakeholders. The process started with the selection of Policies, Plans and Programmes (PPPs) for the SEA. The 18 key objectives, programmes and projects/activities that were to be subjected to the Strategic Environmental Assessment processes were finally selected and agreed upon.

The 21 key PPPs were taken through the Compound Matrix and Internal Consistency Matrix and the results noted. Finally the individual activities evolving from the programmes were taken through the Sustainability test. A draft report was produced and discussed after which a validation meeting was organized to finalize and adopt the report.

The following were members of the core team:

- | | | |
|------------------------------------|---|-----------|
| 1. Municipal Coordinating Director | - | Chairman |
| 2. Municipal Planning Officer | - | Secretary |
| 3. Municipal Budget Officer | - | Member |

4. Municipal Env'tal Health& San. Officer	-	Member
5. Principal Technician Engineer	-	Member
6. Assistant T&C Planning Officer	-	Member
7. Assistant Dev't Planning Officer	-	Member

1.4 Institutions and Regulatory Requirement

The preparation of the Municipal SEA report is within the framework of the following institutional and regulatory requirements:

- Medium Term Development Plan of Ga East Municipality which seeks to improve the quality of services to the people and promote growth in all sectors within the municipality by 2017.
- The Local Government Act, 462, Section 10 (3) (e) provides that the District Assembly shall be responsible for the development, management of human settlement and the environment in the District.
- The Environmental Assessment Regulations 1999, (Legislative Instrument 1652), requires all undertakings including plans and programmes which are likely to have significant environmental impacts to be subjected to environmental assessment. This is intended to ensure that natural resource issues are considered at par with socio-cultural, economic and institutional issues at the early stages of plan preparation and implementation and also consider the mitigation and management of those effects.
- The Strategic Environmental Assessment (SEA) of the Municipal Medium Term Development Plan was conducted in compliance with the requirements of the Ghana Shared Growth and Development Agenda (GSGDAII) this adopted the use of SEA as a means to institutionalize the mainstreaming of sustainable development principles in national development.
- Step 12 of the District Medium Term Development Planning Guidelines (2014 – 2017) provided by the National Development Planning Commission (NDPC) for the preparation of the District Medium Term Development Plans details the use of Strategic Environmental Assessment to mainstream environment at all levels of planning.

CHAPTER TWO

2.0 DESCRIPTION OF THE MEDIUM TERM DEVELOPMENT PLAN 2014-2017

The Medium Term Development Plan (MTDP) 2014-2017 is a strategic document that outlines the key issues, objectives and activities of the Municipality to be implemented within a four year period. The MTDP was prepared based on the Ghana Shared Growth and Development Agenda II and is in line with the National Development Planning Commission (NDPC) guidelines. A preparation of the plan was very participatory, in that stakeholders were extensively consulted at various stages of plan preparation. The prioritizations of needs in the plan were undertaken at the community level, zonal council level and at the sectoral /departmental levels. This was to ensure that the felt needs of the people in the community are captured and implemented. Strategic Environmental Assessment (SEA), gender, social protection and climate change issues were mainstreamed in the plan to ensure a holistic and sustainable development in the municipality. Projects and programmes in the MTDP are captured under the Six of the thematic areas of GSGDAII as follows:

1. **Ensuring and Sustaining Macroeconomic Stability**
2. **Enhancing Competitiveness in Ghana's Private Sector**
3. **Accelerated Agricultural Modernisation and Sustainable Natural Resource Management**
4. **Infrastructure, Energy and Human Settlements Development**
5. **Human Development, Productivity and Employment**
6. **Transparent and Accountable Governance**

2.1 KEY OBJECTIVE IN THE MTDP 2014-2017

There are various objectives in the MTDP which are to support the achievement of the Medium Term Development goal. The Goal is to **'improve the quality of services to the people and promote growth in all sectors within the municipality by 2017.'** For the purposes of producing this SEA eighteen (18) key objectives were selected from the thematic areas and subjected to SEA. This was to ascertain their impact on the environment during and after implementation to enable the Assembly develops the needed mitigation measures to ensure that they are environmentally sustainable. The Compound matrix will be used for this exercise. The 18 key objectives are:

Ensuring and Sustaining Macroeconomic Stability

1. To increase internally generated funds by 70% by 2017
2. Improved Fiscal Resource Mobilization

Enhancing Competitiveness of Ghana's Private Sector

3. Expand opportunities for Jobs Creation
4. Improve private sector competitiveness domestically and globally
5. Improve efficiency and competitiveness of MSMEs

Accelerated Agricultural Modernization and Sustainable Natural Resource Management

6. Improve Agricultural Productivity by 30%
7. Manage waste, reduce pollution and noise by 40%
8. Mitigate and Reduce National Disaster, Risk and Vulnerability and climate change

Infrastructure and Human Settlements Development

9. Promote a Sustainable spatially integrated and orderly development of Human Settlements
10. Increase Access to Safe, Adequate and Affordable Shelter
11. Create and Sustain an Efficient Transport System that meets user needs

Human Development, Productivity and Employment

12. Improve equitable access to and participation in quality education at all Levels
13. Expand access to and improve the quality of institutional care including mental health services
14. Develop targeted social interventions for vulnerable and marginalized groups

Transparent and Accountable Governance

15. Promote coordination, harmonization and ownership of the development process
16. Mainstream development communication across the public sector and policy cycle
17. Enhance Civic Society and Private Sector Participation in Governance
18. Empower Women and Mainstream Gender into Socio-Economic Development

2.2 KEY ACTIVITIES

For the purposes of this report, the team selected 25 activities for the SEA processes. An activity or a project each was selected from the key objectives stated above. This is to ensure that the sustainability test provides information on various development intervention including educational programmes, construction as well as capacity building issues. These activities will enable the team undertake the sustainability test. The key activities are given below:

1. Monitor and evaluate revenue collection system in the Municipality monthly
2. Sensitize the general public on the need to pay property and business rates
3. Organize Business Seminars, workshops for Traders on Business Plan preparation
4. Educate Women on business formation and Market strategies to meet intra-regional trade
5. Conduct 96 MDA, 1008 DDOs and 2304 AEAs field/home visits for extension delivery and ensuring the adoption of technologies.
6. Train 15 farmers in good animal husbandry practices & improvement
7. Train 25 farmers on environmental management and safe use of Agro chemicals
8. Prepare Site plans for public schools in the Municipality
9. Evacuate refuse heap annually
10. Organize Clean Up Exercise in the 10 Electoral areas annually
11. Support disaster victims annually
12. Organize sensitization programmes on climate change
13. Undertake PPP projects at Haatso Lorry Station and Market
14. Supply & install 500No.Street Lights annually
15. Supply & install Street Signages annually
16. Construction of 15 bed capacity Maternity/ Children's Ward at Abokobi Health Centre
17. Construction of 3 Unit Classroom block with ancillary facilities at Papao
18. Construction of Day Secondary School Unit Classroom block with ancillary facilities at Kwabenya
19. Completion of 3 No Shed with 72 lockable Shop at Dome Market
20. Extension works of exiting CHPs at Dome
21. Construct Phase I Office Block Annex- GEMA by December 2015
22. Mechanization of 2No. Boreholes annually

23. Train women groups in local governance and entrepreneurial skills
24. Grade roads and construct drains in selected communities annually
25. Upgrade 3km of road and drains in the Municipality
26. Organize 2 Public Fora annually

CHAPTER THREE

3.0 PROFILE OF THE GA EAST MUNICIPAL ASSEMBLY

3.1 Location and Size

The Ga East Municipal Assembly is located at the northern part of Greater Accra Region. It is one of the Sixteen (16) Districts in the Greater Accra Region and covers a Land Area of about 96 sq km. The capital of the Municipal Assembly is Abokobi. The Assembly is boarded on the west by the Ga West Municipal Assembly (GWMA), on the east by the La - Nkwantanang Municipal Assembly (LaNMA), the south by Accra Metropolitan Assembly (AMA) and the north by the Akwapim South District Assembly. The Municipality is sub divided into two administrative as Zonal Councils. Namely the Abokobi and the Dome Zonal Councils.

3.2 DEMOGRAPHIC CHARACTERISTICS

(i) *Population Size and Growth rate*

The 2010 National Population and Housing Census put the Municipal Assembly's population at 198,220 with an inter-censal growth rate of about 4.2%. The projected population for the planned period is estimated at **217,457**. The growth of the population is mainly due to the influence of migration inflows. The estimated population by the Municipal Planning Coordinating Unit (MPCU) is about 450,200 people.

The 2010 population figure yields a density of 1,214 persons per sq km much higher than the national density of 79.3 and the regional density of 895.5 persons per sq. km. This indicates a great pressure of population on land and resources or what the land can generate.

The structure of the population has about 51% males and 49% females with an average household size of 4.6. There are about 52 settlements in the Municipality with Abokobi, a well-known Presbyterian community as the Municipal capital. The population is concentrated mainly along the urban and peri-urban areas of the Municipality particularly along the border with AMA to the south. These include Dome, Taifa and Haatso among others.

Table 1.1 Population Size and Growth

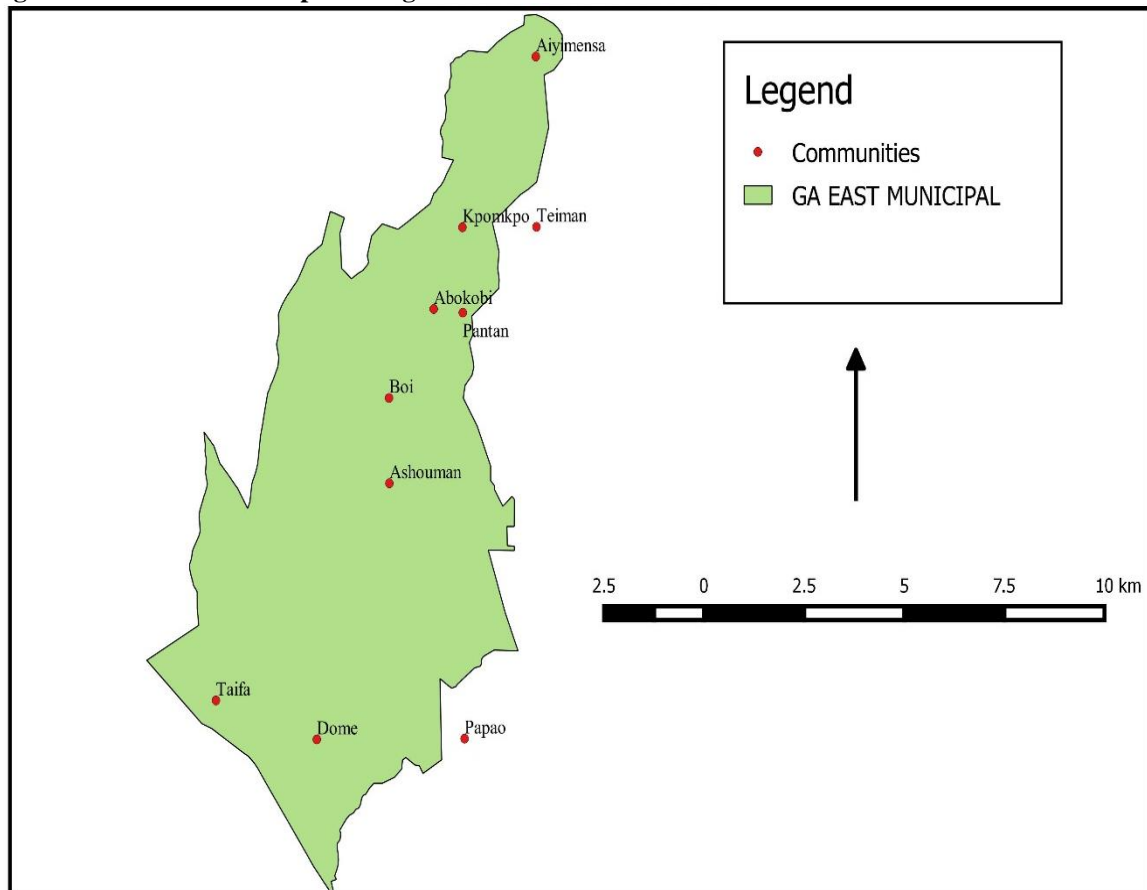
Name of Community	Base Year	Projected Population			
	2013	2014	2015	2016	2017
Dome	50094	56935	58786	60698	62671
Taifa	44221	50259	51893	53582	55323
Haatso	11996	13634	14077	14535	15008
Agbogbo	10545	11985	12375	12777	13193
Ashongman (Musuku)	7848	8920	9210	9509	7408
Kwabenya	5921	6729	6948	7175	8172
Papao (West Land)	6532	7424	7665	7915	5694
Christian Village	4159	4727	4880	5039	5203
Abokobi	4552	5173	5341	5516	5694
Aboman	502	570	589	608	5203
Atomic	1910	2170	2242	2314	2390
Abloradjei	205	233	240	248	256
Boi	847	963	994	1027	1061
Akporman	772	877	906	936	966
Adenkrabi	411	466	482	498	513
Sesemi	208	236	244	252	260
Total	172953	217501	176792	187629	196595-

Source: Extrapolated from the 2000 Population and Housing Census & GEMA Field Survey

The steady increases in population can be attributed to the fact that Ga East serves as a dormitory town for most people who have migrated from all over the country to seek employment in the service sector, industries and government institutions within the Tema-

Accra region. The situation has put a lot of pressure on the existing socio-economic infrastructure and utilities. This calls for good developmental policies and programmes to alleviate the social problems that have emerged as a result.

Figure 1.1: Ga East Municipal in Regional Context



3.3 PHYSICAL AND NATURAL ENVIRONMENT

A. Climate and Vegetation

The Municipality falls in the savannah agro-ecological zone. Rainfall pattern is bi-modal with the average annual temperature ranging between 25.1^{oc} in August and 28.4^{oc} in February and March. February and March are normally the hottest months. The District has two main vegetation namely shrub lands and grassland. The shrub lands occur mostly in the western outskirts and in the north towards the Aburi hills and consist of dense cluster of small trees and shrubs that grow to an average height of about five meters. The grassland which occurred to the southern parts of the municipality has now been encroached upon by human

activities including settlements. Figure 1.5 shows the reduction in the quantity of rainfall in 2013 in comparison to 2012.

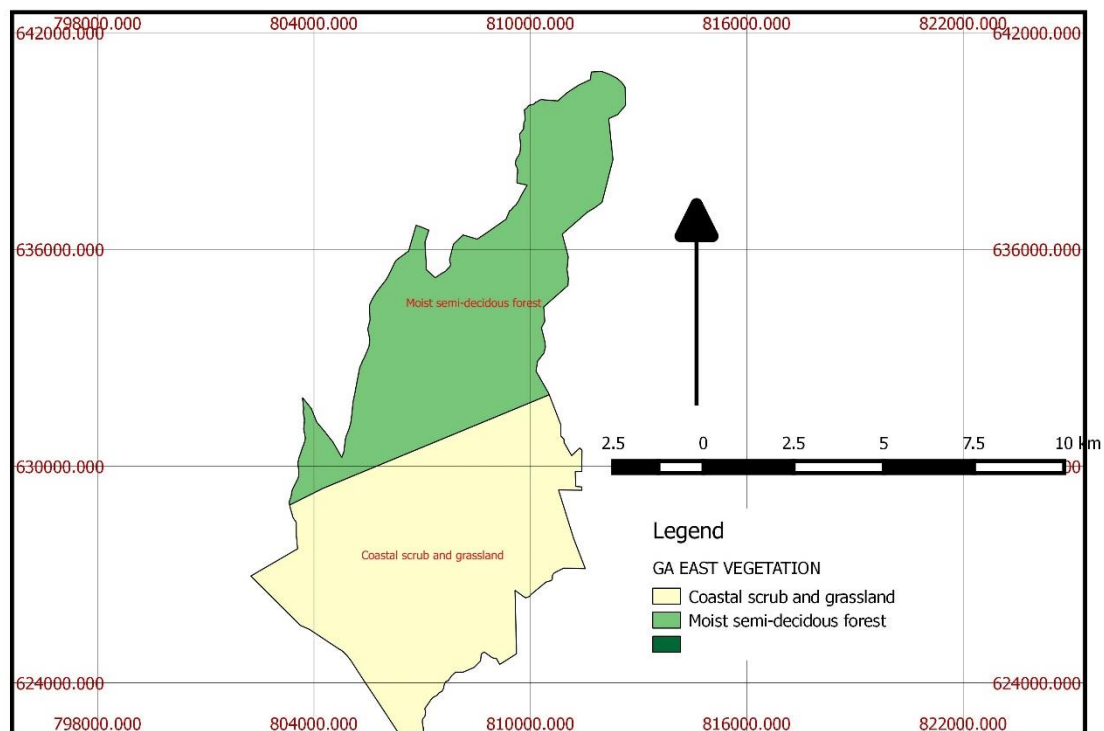


Figure 1.2: Vegetation Map of Ga East Municipal

B. Relief and Drainage

The Assembly's land area consists of gentle slopes interspersed with plains in the west. The Akwapim range rises steeply above the western end and lies generally at 375-420m north of Aburi and fall to 300m southward. There are a few rivers and seasonal streams most of which are threatened by human activities. This included the Siseme stream at Sesemi and the Dakobi at Ajako. Other small ponds exist at Abloradjei, Sesemi, and Old Ashongman. Most of these ponds are also threatened by human activities and the Assembly has to make conscious efforts to preserve them for agricultural use. The Municipality also has a lot of ground water which has been tapped to provide potable water for the rural communities and small towns.

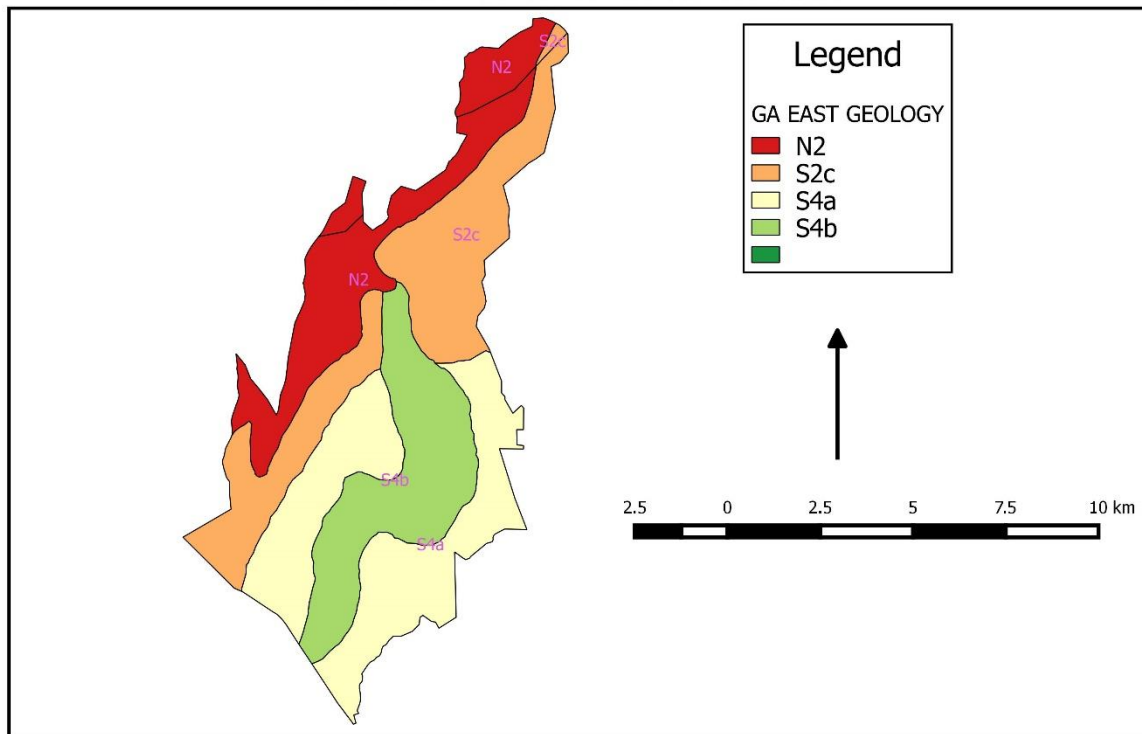
C. **Soil and Agricultural Land Use**

The table 1.3 below shows the various types of soils that can be found in the district and the crops that are suitable for them.

Table 1.2: Soil type and crops they support

No	Type	Location	Characteristics	Suitability
1	Fete Consociation	Gonten, Abokobi, Akporman, Adenkrebi, Kponkpo	Very shallow, excessively well drained, pale coloured sandy loam contains small pieces of rock on steep slopes.	Suitable for permanent forestry
2	Nyigbenya, Hatso Complex Associaton	Agbogba, Haatso, Kwabenya, Taifa, Dome	Well drained, red, sandy clay loam to clay with abundant rough stone concretions and quartz gravels	Suitable for permanent forestry.
3	Danfa-Dome Association	Danfa to Dome	Red well drained concretionary clay loam; deep, plastic concretionary clay; yellowish brown with lime concretions; deep black, calcareous cracking clays.	Irrigated rice, cotton, sugarcane, vegetables.
4	Fete Bediesi Complex Association	Sesemi	Consisting of yellow brown and alluvial sand; red, well drained sandy clay loam.	Good for forestry. The well drained deep soils are good for maize, cassava, yams, pineapple, cowpea, soyabean, sisal, sunflower and tree crops like cashew, mongo, citrus, teak, etc.

SOURCE: -MOFA, Ga East- 2013



**Figure 1.3 Geological Map of Ga East Municipal
Land Tenure System**

Land in the Municipality is owned by chiefs, clan or family heads who hold them in trust for their subjects. However, land could also be acquired through direct purchase, rental, leasehold and share cropping (nnoboa). The fact that these parcels of land could be inherited through parents or grandparents has led to a lot of sale and resale of land with its attendant land litigations and chieftaincy disputes. This situation has also contributed to the rapid loss of farm lands with its attendant unemployment and subsequent migration to the urban areas.

Condition of the Built Environment

The built environment in the Municipality leaves much to be desired. Building regulations are broken with impunity and it is posing very serious consequences for the land use pattern. Over 70% of developers used quality building materials and as such produce good housing quality. However, many Gutters are choked with garbage, creating stagnant water which breeds mosquitoes and floods the result is the high incidence of malaria and loss of life and properties during raining season.

Erosion is widespread in most communities in the Municipality due to lack of proper drainage systems, lack of settlement planning, excessive sewerage of the surrounding, lack of tree cover and landscaping are the main causes an areas.

Table 1.3 Projections for Schools and Teacher Requirements- Education

ACCESS		(Kindergarten) District					National	
		2013/14 Baseline	2014/15 Target	2015/16 Target	2016/17 Target	2019/20 Target	2019/20 Target	
Number of kindergartens	Total	94	102	106	112	117		
	Public	20	22	22	22	22		
	Private	74	80	84	90	95		
Number of pupils in all kindergartens	Total	5,155	4,538	5,058	5,663	7,179		
	Male	2,587	2,311	2,585	2,904	3,719		
	Female	2,568	2,226	2,473	2,758	3,460		
Number of pupils in public kindergartens	Total	1,541	1,320	1,429	1,554	1,795	75%	
	Male	773	672	731	797	930		
	Female	768	647	699	757	865		
Number of pupils in private kindergartens	Total	3,614	3,218	3,628	4,108	5,384	25%	
	Male	1,814	1,639	1,855	2,107	2,790		
	Female	1,800	1,579	1,774	2,001	2,595		
Percentage of pupils in private kindergartens	Total	70.1%	70.9%	71.7%	72.6%	75.0%		
Gross Enrolment Rate (GER)	Total	77.2%	64.0%	69.1%	75.1%	86.9%	100.0%	by 2015
	Male	74.4%	64.5%	69.9%	76.2%	89.0%		
	Female	75.5%	63.5%	68.4%	74.0%	84.7%		
Gender Parity Index (GPI) on GER		1.01	0.98	0.98	0.97	0.95	1.00	by 2012
Net Enrolment Rate (NER)	Total	55.2%	45.7%	49.4%	53.6%	62.0%	90.0%	
	Male	53.0%	45.9%	49.8%	54.3%	63.4%		
	Female	54.0%	45.4%	48.9%	52.9%	60.6%		
Transition Rate from KG2 to P1	Total	143.7%	110.8%	129.1%	121.9%	100.0%		
	Male	144.3%	136.9%	129.5%	122.2%	100.0%		
	Female	143.1%	135.9%	128.7%	121.5%	100.0%		

Table 1.3 Projections for Schools and Teacher Requirements Kindergarten Contd.

QUALITY		District					National	
		2013/14 Baseline	2014/15 Target	2015/16 Target	2016/17 Target	2019/20 Target	2019/20 Target	
Number of teachers in all schools	Total	221	180	186	194	205	18,800	
	Male	25	20	20	21	21		
	Female	196	160	166	173	185		
Percentage of female teachers		88.7%	88.9%	89.1%	89.3%	90.0%		
Number of teachers in public schools	Total	62	53	57	62	74		
	Male	4	6	6	7	7		
	Female	58	47	51	56	66		
Number of teachers in private schools	Total	159	127	129	132	131		
	Male	21	14	14	14	13		
	Female	138	113	115	118	118		
Percentage of teachers in private schools		71.9%	70.6%	69.3%	68.0%	64.0%		
Percentage of trained teachers	Total	29.0%	33.5%	38.3%	43.1%	56.6%	95%	by 2015
	Public	89.0%	90.0%	91.0%	92.0%	95.0%		
	Private	5.0%	10.0%	15.0%	20.0%	35.0%		
Pupil Teacher Ratio	Total	23	25	27	29	35	35	by 2015
	Public	25	25	25	25	24		
	Private	23	25	28	31	41		
Pupil Trained Teacher Ratio	Total	80	75	71	68	62		
	Public	28	28	28	27	26		
	Private	455	254	188	156	117		

Table 1.3 Projections for Schools and Teacher Requirements Kindergarten Contd

PHYSICAL INFRASTRUCTURE		District					National	
		2013/14 Baseline	2014/15 Target	2015/16 Target	2016/17 Target	2019/20 Target	2019/20 Target	
Number of classrooms in public KG		44	45	46	46	46		
Pupil Classroom Ratio in public KG		35	29	31	34	39		
Percentage of classrooms in public KGs needing major repair		23.0%	20.8%	18.7%	16.5%	10.0%	0%	
Number of new classrooms needed in public KGs		0	-7	-5	-2	5		
Percentage of public KG with play/recreational facilities		88.9%	89.1%	89.3%	89.5%	90.0%		
Percentage of public KG with electricity		44.2%	45.5%	46.8%	48.1%	52.0%		
Percentage of public schools with	<i>Sanitation facilities</i>	57.0%	57.3%	57.7%	58.0%	59.0%		
	<i>Potable water</i>	59.2%	59.4%	59.5%	59.7%	60.2%		

Table 1.4 Projections for Schools and Teacher Requirements

ACCESS		(Primary School) District					National	
		2013/14 Baseline	2014/15 Target	2015/16 Target	2016/17 Target	2019/20 Target	2019/20 Target	
Number of primary schools	Total	101	107	113	119	104		
	Public	30	31	32	33	33		
	Private	71	76	81	86	71		
Number of pupils in all primary schools	Total	18,696	21,376	23,442	24,596	21,816		
	Male	8,985	10,335	11,366	12,030	10,969		
	Female	9,711	11,041	12,076	12,566	10,848		
Number of pupils in public schools	Total	9,376	10,358	10,963	11,087	8,727	80%	
	Male	4,406	5,008	5,316	5,422	4,387		
	Female	4,970	5,350	5,648	5,664	4,339		
Number of pupils in private schools	Total	9,320	11,018	12,479	13,509	13,090	20%	
	Male	4,579	5,327	6,051	6,607	6,581		
	Female	4,741	5,691	6,429	6,902	6,509		
Percentage of pupils in private schools		49.9%	51.5%	53.2%	54.9%	60.0%		

Table 1.4 Projections for Schools and Teacher Requirements Primary School Contd

ACCESS		2013/14 Baseline	2014/15 Target	2015/16 Target	2016/17 Target	2019/20 Target	2019/20 Target	
Gross Enrolment Rate (GER)	Total	101.6%	109.3%	116.2%	118.3%	95.7%	107%	
	Male	95.6%	106.7%	113.8%	116.8%	97.2%		
	Female	101.4%	111.8%	118.6%	119.7%	94.3%		
Gender Parity Index (GPI) on GER		1.06	1.05	1.04	1.02	0.97	1.00	by 2012
Gross Admission Rate (GAR)	Total	94.6%	84.3%	84.7%	85.0%	86.1%	100.0%	by 2017
	Male	90.1%	83.6%	84.3%	85.1%	87.3%		
	Female	93.6%	85.0%	85.0%	85.0%	84.9%		
Net Enrolment Rate (NER)	Total	79.2%	85.1%	90.6%	92.1%	74.5%	100%	by 2015
	Male	72.6%	81.0%	86.4%	88.7%	73.8%		
	Female	80.9%	89.2%	94.6%	95.5%	75.2%		
Net Admission Rate (NAR)	Total	82.3%	80.2%	80.6%	80.9%	82.0%		
	Male	77.6%	78.3%	79.1%	79.8%	82.0%		
	Female	82.2%	82.2%	82.1%	82.1%	93.0%		
Completion Rate at P6	Total	97.4%	107.9%	120.7%	131.7%	119.7%	100.0%	by 2015
	Male	97.0%	110.8%	120.9%	138.7%	124.6%		
	Female	97.8%	105.2%	120.5%	125.4%	115.3%		
Transition Rate from P6 to JH1	Total	118.8%	115.7%	112.6%	109.4%	100.0%		
	Male	120.0%	116.7%	113.3%	110.0%	100.0%		
	Female	117.7%	114.8%	111.8%	108.9%	100.0%		

Table 1.4 Projections for Schools and Teacher Requirements Primary School(Contd)

QUALITY		District					National	
		2013/14 Baseline	2014/15 Target	2015/16 Target	2016/17 Target	2019/20 Target	2019/20 Target	
Number of teachers in all schools	Total	761	764	747	707	485		
	Male	365	363	351	329	218		
	Female	396	401	396	378	267		
Percentage of female teachers		52.0%	52.5%	53.0%	53.5%	55.0%		
Number of teachers in public schools	Total	273	291	301	300	238		
	Male	67	138	141	139	107		
	Female	206	153	159	161	131		
Number of teachers in private schools	Total	488	473	446	407	247		
	Male	298	225	210	189	111		
	Female	190	249	237	218	136		
Percentage of teachers in private schools		64.1%	61.9%	59.8%	57.6%	51.0%		
Percentage of trained teachers	Total	44.0%	47.2%	50.9%	54.4%	64.3%	95%	by 2015
	Public	98.0%	98.3%	98.7%	99.0%	100.0%		
	Private	13.0%	15.8%	18.7%	21.5%	30.0%		
Pupil Teacher Ratio	Total	25	28	31	35	45	45	by 2015
	Public	34	36	36	37	37		
	Private	19	23	28	33	53		
Pupil Trained Teacher Ratio	Total	56	59	62	64	70		
	Public	35	36	37	37	37		
	Private	147	147	150	154	176		
Pupil Core Textbook Ratio in public schools		1	1	2	2	3	3	
Percentage of public schools with School Management Committee (SMC)		98.0%	98.3%	98.7%	99.0%	100.0%		
Percentage of public schools with functioning SMC		80.0%	83.3%	86.7%	90.0%	100.0%		

Table 1.4 Projections for Schools and Teacher Requirements Primary School Contd

		District					National	
PHYSICAL INFRASTRUCTURE		2013/14 Baseline	2014/15 Target	2015/16 Target	2016/17 Target	2019/20 Target	2019/20 Target	
Percentage of public schools with	Sanitation facilities	53.2%	53.5%	53.8%	54.1%	55.0%	75%	
	Potable water	31.0%	31.2%	31.3%	31.5%	32.0%	75.0%	
Percentage of public schools with electricity			0.0%	0.0%	0.0%			
Number of schools under tree	Total	0	0	0	0	0		
	Public	0	0	0	0	0		
	Private	0	0	0	0	0		
Number of classrooms in public schools		166	172	178	184	184		
Pupil Classroom Ratio in public schools		56	60	62	60	47		
Percentage of classrooms in public schools needing major repair		9.0%	7.5%	6.0%	4.5%	0.0%	0%	
Number of new classrooms needed in public schools		42	58	66	62	10		

Table 1.4 Projections for Schools and Teacher Requirements Junior High School

ACCESS		District					National	
		2013/14 Baseline	2014/15 Target	2015/16 Target	2016/17 Target	2019/20 Target	2019/20 Target	
Number of Junior Secondary Schools	Total	73	79	83	88	92		
	Public	29	30	30	31	31		
	Private	44	49	53	57	61		
Number of pupils in all schools	Total	8,185	9,581	10,827	12,014	15,173		
	Male	3,906	4,563	5,217	5,779	7,355		
	Female	4,279	5,018	5,610	6,235	7,819		
Number of pupils in public schools	Total	4,728	5,411	5,974	6,473	7,587		
	Male	2,182	2,577	2,879	3,114	3,677		
	Female	2,546	2,834	3,095	3,360	3,909		
Number of pupils in private schools	Total	3,457	4,171	4,853	5,541	7,587		
	Male	1,724	1,986	2,338	2,665	3,677		
	Female	1,733	2,185	2,515	2,876	3,909		
Percentage of pupils in private schools		42.2%	43.5%	44.8%	46.1%	50.0%		

Table 1.4 Projections for Schools and Teacher Requirements Junior High School (Contd)

ACCESS		2013/14 Baseline	2014/15 Target	2015/16 Target	2016/17 Target	2019/20 Target	2019/20 Target	
Gross Enrolment Rate (GER)	Total	95.2%	104.9%	115.0%	123.7%	142.6%	105%	
	Male	93.6%	106.0%	117.6%	126.4%	146.7%		
	Female	91.3%	103.8%	112.6%	121.4%	138.9%		
Gender Parity Index (GPI) on GER		0.98	0.98	0.96	0.96	0.95	1.00	by 2012
Gross Admission Rate (GAR)	Total	102.2%	109.5%	118.0%	128.3%	146.4%	100.0%	by 2012
	Male	101.7%	108.7%	120.7%	127.7%	148.5%		
	Female	99.5%	110.3%	115.5%	128.8%	144.6%		
Net Enrolment Rate (NER)	Total	56.2%	61.9%	67.8%	73.0%	84.1%	90%	by 2015
	Male	53.8%	61.0%	67.6%	72.6%	84.3%		
	Female	55.1%	62.7%	68.0%	73.3%	83.8%		
Net Admission Rate (NAR)	Total	56.0%	65.0%	70.0%	76.1%	86.9%		
	Male	56.0%	64.3%	71.3%	75.5%	87.8%		
	Female	56.2%	65.6%	68.8%	76.7%	86.1%		
Completion Rate at JH3	Total	80.1%	94.2%	106.4%	115.1%	134.1%	100%	by 2015
	Male	82.0%	95.0%	108.3%	116.7%	142.1%		
	Female	78.5%	93.5%	104.6%	113.7%	126.9%		
Transition Rate from JH3 to SH1	Total	6.2%	6.3%	6.3%	6.3%	6.3%		
	Male	6.5%	6.7%	6.7%	6.7%	6.7%		
	Female	6.0%	5.9%	5.9%	5.9%	5.9%		

Table 1.4 Projections for Schools and Teacher Requirements Junior High School(Contd)

QUALITY		District					National	
		2013/14 Baseline	2014/15 Target	2015/16 Target	2016/17 Target	2019/20 Target	2019/20 Target	
Number of teachers in all schools	Total	449	475	489	498	506		
	Male	306	317	320	319	303		
	Female	143	158	169	179	202		
Percentage of female teachers		31.8%	33.2%	34.6%	35.9%	40.0%		
Number of teachers in public schools	Total	185	195	199	202	202		
	Male	87	130	130	130	121		
	Female	98	65	69	73	81		
Number of teachers in private schools	Total	264	280	289	296	303		
	Male	219	187	189	190	182		
	Female	45	93	100	106	121		
Percentage of teachers in private schools		58.8%	59.0%	59.2%	59.4%	60.0%		
Percentage of trained teachers	Total	52.0%	52.1%	52.7%	53.3%	55.0%	95%	by 2015
	Public	98.0%	98.3%	98.7%	99.0%	100.0%		
	Private	19.0%	20.0%	21.0%	22.0%	25.0%		
Pupil Teacher Ratio	Total	18	20	22	24	30	35	
	Public	26	28	30	32	38		
	Private	13	15	17	19	25		
Pupil Trained Teacher Ratio	Total	35	39	42	45	55		
	Public	26	28	30	32	38		
	Private	69	74	80	85	100		

Table 1.4 Projections for Schools and Teacher Requirements Junior High School(Contd)

QUALITY Contd		2013/14 Baseline	2014/15 Target	2015/16 Target	2016/17 Target	2019/20 Target	2019/20 Target	
Pupil Core Textbook Ratio in public schools		1	1	2	2	3	3	
Percentage of public schools with School Management Committee (SMC) established		98.0%	98.3%	98.7%	99.0%	100.0%		
Percentage of public schools with functioning SMC		76.0%	78.3%	80.7%	83.0%	90.0%		
BECE pass rate by gender	Total	50.0%	53.1%	56.2%	59.3%	68.5%		
	Male	49.9%	52.8%	55.6%	58.5%	67.0%		
	Female	50.1%	53.4%	56.7%	60.1%	70.0%		
BECE pass rate by core subjects	Eng	85.6%	86.3%	87.0%	87.8%	90.0%		
	Math	67.4%	70.0%	72.6%	75.2%	83.0%		
	Science	76.1%	77.6%	79.1%	80.6%	85.0%		
	Social Study	79.3%	81.1%	82.9%	84.7%	90.0%		

Table 1.4 Projections for Schools and Teacher Requirements Junior High School (Contd)

PHYSICAL INFRASTRUCTURE		District					National	
		2013/14 Baseline	2014/15 Target	2015/16 Target	2016/17 Target	2019/20 Target	2019/20 Target	
Percentage of public JHS with	Sanitation facilities	64%	64.5%	64.8%	65.1%	66%	100%	by 2015
	Potable water	54%	53.8%	54.1%	54.3%	55%	75%	
Percentage of public schools with electricity		48%	48.3%	48.7%	49.0%	50%		
Number of schools under tree	Total	0	0	0	0	0		
	Public	0	0	0	0	0		
	Private	0	0	0	0	0		
Number of classroom in public schools		80	81	81	82	82		
Pupil Classroom Ratio in public schools		59	67	74	79	93		
Percentage of classrooms in public schools needing major repair		19.0%	17.5%	16.0%	14.5%	10.0%	0%	
Number of new classrooms needed in public schools		55	74	90	103	135		
Percentage of JHS with a computer teaching lab		5.0%	5.8%	6.7%	7.5%	10.0%	25%	

Table 1.5 Projections for Schools and Teacher Requirements Senior High School

SHS		District					National	
		2013/14 Baseline	2014/15 Target	2015/16 Target	2016/17 Target	2019/20 Target	2019/20 Target	
Number of senior high schools	Total	5	5	6	7	7	750	
	Public	0	0	1	1	1		
	Private	5	5	5	6	6		
Number of students in all schools	Total	439	527	620	718	1,046		
	Male	217	296	379	468	765		
	Female	222	231	240	250	281		
Number of students in public schools	Total	-	70	165	287	836		
	Male	-	39	101	187	612		
	Female	-	31	64	100	225		
Number of students in private schools	Total	439	457	454	431	209		
	Male	217	256	278	281	153		
	Female	222	200	176	150	56		
Percentage of pupils in private schools		100.0%	86.7%	73.3%	60.0%	20.0%		
Gross Enrolment Rate (GER)	Total	5.0%	5.9%	6.7%	7.5%	10.0%	100%	
	Male	5.4%	7.1%	8.9%	10.6%	15.8%		
	Female	4.7%	4.8%	4.8%	4.9%	5.0%		
Gender Parity Index (GPI) on GER		0.88	0.67	0.54	0.46	0.32	1.00	by 2015
Completion Rate at SH3	Total	1.8%	1.8%	1.7%	1.7%	3.7%	40.0%	
	Male	2.0%	2.0%	1.9%	1.8%	5.9%		
	Female	1.7%	1.7%	1.6%	1.6%	1.8%		
Number of teachers	Total		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		
	Public	0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		
	Private		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		

Table 1.6 Projections for Schools and Teacher Requirements (TVET)

		District					National	
		2013/14 Baseline	2014/15 Target	2015/16 Target	2016/17 Target	2019/20 Target	2019/20 Target	
Number of TVET schools	Total	0	0	1	1	1	40	
	Public	0	0	0	0	0		
	Private	0	0	1	1	1		
Number of students in TVET schools by gender	Total	-	-	100	120	123	96,400	
	Male	-	-	77	95	98	63,624	
	Female			23	25	25	32,776	40%
Number of students in TVET schools by type of school	Public							
	Private	-	-	100	120	123		
Percentage of qualified teachers	Total	0.0%	3.3%	6.7%	10.0%	20.0%		
	Public	0.0%	0.0%	0.0%	0.0%	0.0%		
	Private	0.0%	3.3%	6.7%	10.0%	20.0%		

Disaster Management

The organization national Disaster Management Organization (NADMO) has been involved in the education of the populace on disaster management and prevention in various communities and market places. The activities of the Organization have led to the identification of about (10) areas classified as flood prone areas. Residents of these areas are given intensive disaster management education and also encouraged to keep drains and culverts clean to facilitate free flow of water

Culture

The Ga East Municipal Assembly is a Municipality that wears a cosmopolitan hat. Almost all the ethnic groups in Ghana exist in the Municipality although Akans seem to have a slight majority over Gas and Ewes in that order. Others are Dagbanes and the Guans. This situation is especially true for areas like, Dome, Taifa and other urban communities. In the rural and peri-urban communities like Abokobi however, Gas form an overwhelming majority though other ethnic groups continue to reside amongst them. Though the Municipality has an Islamic presence especially in and around Agboba, Christianity remains the most dominant form of religion for the people of the district. Pockets of people however maintain they are traditionalists and Krishnas, whilst others profess no religion at all.

At the community level, authority is vested in traditional rulers and their elders or sub chiefs. The traditional chiefs continue to wield some amount of power hence their contribution to, and influence in the decision making process cannot be under estimated. Unfortunately however, their ability to organize and rally their people to support development programmes is being threatened by their involvement in various chieftaincy disputes and land litigations. The flash points for disputes in the district include Boi and Akporman and Kwabenya.

Spatial Analysis

Providing a well-designed physical development planning scheme are a desirable built-up environment where essential facilities and services exist is a priority for the Ga East Municipal Assembly. However, ownership of lands as well as land litigations serve as a major setback to such an important priority in the Municipality.

Settlement Pattern

The Ga East Municipal Assembly has about 52 settlements with about 82% of the population living in the urban areas. The remaining 18% occupies the rural areas. The Municipal capital Abokobi is approximately 29 kilometers from the country's capital city Accra. The Municipality's large towns include Haatso, Dome, Taifa and Kwabanya. The Municipality has other small towns which are linked to the trunk road via feeder roads. Despite Dome being the largest community, Abokobi, the Municipal capital is the highest ranked community as shown in scalogram analysis in the MTDP.

Municipal Economy

The Ga East Municipal Assembly has a great deal of opportunities for both private investment and joint venture ship with the public sector. This is due to the enabling factors for development coupled with the infrastructure set-up and the district's proximity to the nation's capital, Accra.

There are four main economic activities in the District which are commerce, agriculture, service and industry.

Industrial Sector

The industrial sector can boast of a number of industrial establishments particularly in the Dome area, example, Phyto Riker (GIHOC) Pharmaceuticals and Royal Aluminium Company among others.

Service Sector

The service sector appears to be one of the fast developing sectors of the local economy. Banking services are provided by the Ghana Commercial Bank, Ecobank Limited. The Rural areas are not left out. The Abokobi Area Rural Bank is performing very well and has an agency at Dome. An agency of the Shai Rural Bank, Pro-Credit Limited and a number of Micro finance companies are also located in the Municipality.

The Abokobi Presbyterian Women's Center provides one of the excellent conference facilities in the district. There are also hotels like Royal Gateway Hotel, BriHiny Guest House, Loving Blue Hotel and Tosway Hotel among others.

Construction Sector

The construction sector (estate development) is also fast growing. With the enormous deposits of natural building materials of high quality coupled with large tracts of undeveloped lands especially in the peri-urban sectors of the municipality, the Municipality has become a favourite area for estate development and the supply of sand, stone and laterite which are won indiscriminately all year round especially around Kwabenya. Currently a very wide range of housing units are being developed in Ashongman and Abokobi areas.

To preserve some of the agricultural farm lands, the Assembly will have to create land banks in selected areas which will include Abokobi and other areas. This will then be given out to farmers to ensure food

security and generate income to reduce poverty. The impact on the environment as a result of the activities of these estate developers and construction firms needs to be critically assessed and sustainable interventions developed to mitigate the effect on the environment.

Agricultural Sector

Farming is the major economic activity for about 55% of the economically active population. About 70% of the rural population depends on agriculture as their main source of livelihood with about 95% of them being small holders. The major agricultural activities are crop production and livestock production. Among the wide range of vegetables produced are pepper, tomatoes, cabbage, okra and garden eggs. Livestock production has a very good potential and the district is encouraging it. There are a number of poultry farmers in and around Abokobi, the Municipal capital. The major one is the Abokobi Agric Project and TK farms at Dravaga. Other livestock production includes the rearing of turkeys and cattle even though not on a very large scale like poultry. About seven (7) farmers are known in the district to be rearing rabbits and are located in Akporman, Boi, Ashongman and Abokobi.

The production of cash crops like maize, cow pea and cassava are also very encouraging. The women in the rural communities mostly farm and process cassava into Gari and Cassava dough this is predominant in Dravaga. This situation provides an enabling environment for the various agro-based modules selected for implementation under the youth employment programme in the Municipality.

A. Irrigation

Irrigation usually practiced by farmers located in Kwabenya, Ashongman, Haatso and Musuku is flooding. There are challenges with land earmarked for vegetable cultivation being sold for residential purposes. To ensure livelihoods of farmers are secured, the Assembly in collaboration with the Municipal Agricultural Directorate will have to zone the area as land for agricultural purposes and facilitate the acquisition of these lands.

B. Input Suppliers

Ultimate agro-chemicals is the main supplier of agricultural inputs in the municipality. There are also two smaller agro-chemical outlets located in abokobi and atomic near kwabenya. The inputs supplied include seeds, chemicals (N.P.K 15: 15: 15, Ammonia, Roundup, Ceresate).

2.5.6.5 Women in Agricultural Development

A. Nutrition Education

The women within the Municipality are educated on the importance and proper handling of fruits and vegetables. They are also educated on how to incorporate soya beans into local diet through demonstrations. The youth and women are also trained on income generating activities.

B. Agro-Processing

There are quite a number of agro-processing companies in the municipality. Most of them are engaged in the bagging and packaging of yams and are located at Agbogba. The goods after packaging are then exported. The packaging is done on large-scale basis. Pineapples are also processed into fruit juice and sent to the local market. It is however worthy to note that the raw material, pineapples are not produced in the district but are brought from Nsawam and its surrounding communities.

C. Feed Mill

The Municipality is well known for its poultry production and to complement this economic activity is the production of poultry and pig feed. The major centre where feed mills are located is Abokobi.

Markets

The Assembly's traditional market pattern has been towards the south in Dome, Haatso and Taifa through to the central business city of Accra. The rural areas to the north have no well-established markets. Dome is the major market center in the district with Haatso and Taifa playing complementary roles. Dome is a fast growing market which provides services to traders in and around the area. Haatso however has the potential of rivaling Dome in terms of provision of these services. The Dome market functions daily with Tuesdays and Saturdays as major market days. Items traded in these markets includes perishable and non-perishables like manufactured commodities, imported goods like cloth, utensils and a variety of spare parts. Other goods are cereals, livestock and second hand clothing.

The strategic location of these markets coupled with good accessibility has facilitated their growth leading to congestion and spill-off onto the nearby roads. There are however some uncompleted market facilities at Haatso and Taifa. These market needs to be completed to facilitate the decongestion of the Dome market. It is important therefore to improve infrastructure facilities in the Dome market.

Local Governance

The Ga East Municipal Assembly is the highest political authority in the municipality vested with the powers to deliberate, legislate, plan and develop the entire municipality through the preparation and

effective implementation of development plans and budget. Act 480 for 1994 the National Development Planning System entrusts the Municipal Assembly to formulate programme strategies and projects and see to their implementation, monitoring and evaluation using available resources. The Assembly can also be compared to parliament as a legislative body making bye-laws for the municipality

a) Structure of the Assembly

The Municipality consists of ten (10) electoral areas and represented in the General Assembly by elected and appointed Assembly members. The composition of the Assembly is made up of 10 elected members, 4 appointed members, one Member of Parliament representing Abokobi and Dome-Kwabenya constituencies and the Municipal Chief Executive. The General Assembly is therefore made up of 16 members. The electoral area are as follows:

- Taifa South
- Taifa North
- Abokobi
- Agbogba
- Kwabenya
- Haatso
- Atomic
- Dome East
- Dome west
- Ablahdjei

The General Assembly is headed by an elected Presiding Member with the Municipal Coordinating Director as the Secretary. The Assembly has two committees the executive headed by the municipal chief executive, chairman of the sub – committees and head of department and the public relations and complaints committee which is also chair by the presiding member To enable the Assembly perform its function of overall development of the municipality the following sub-committees and decentralized departments are established.

i) Sub-committees

- Development Planning Sub-committee
- Finance and Administration Sub-committee
- Justice and Security Sub-committee

- Works Sub-Committee
- Social Services Sub-committee
- Women and Youth Sub – committee

Social Services

Education

Distribution of schools in the municipality is quite even. There are about 3 privately owned secondary schools which include Perfect Senior High School, The Masters School and Maxvic School. The municipality however is yet to have a public Senior High School of its own. There are twenty-seven (27) public Junior Secondary Schools and a number of private schools which are sited mainly in the peri-urban areas of the municipality. Also, there are twenty-six(26) public primary schools with about fourteen (14) Early Childhood Development Centers (ECDC) that enrolls only 13.4% of children at that level. There are however a number of privately owned ECDCs. In all, there are 67 public schools in the municipality. Most of the schools lack libraries; ICT resource centers and recreational grounds. The table 1.4 gives details of education infrastructure

Table 1.7: Public and Private Schools As At September 2016

		No. of Schools	Total of Schools	Total
Early Childhood	Public	14	122	304
	Private	108		
Primary Schools	Public	26	104	
	Private	78		
Junior High School	Public	27	75	
	Private	48		
Senior High School	Public	0	3	
	Private	3		

Source: Ghana Education Service – Ga East Municipal Assembly 2016

It can be noted from the table above that privately owned schools at all levels are more than the public schools in the Municipality. Not surprising though, pupils in private schools have relatively better infrastructure than their public school counterparts in the municipality. The problems of inadequate and poor quality infrastructure in the public schools can be found throughout the municipality.

The situation in the urban areas of the municipality such as is Dome, Haatso, Taifa and Kwabenya is compounded by overcrowding with an average of about 120 pupils per class. This means the number of classes exceeds the number of classrooms and therefore the children are overcrowded. This situation is affecting the quality of education and increasing concerns about the competence of our public schools. Unlike the situation in the urban and peri-urban areas enrolment is low in the rural areas especially Adenkrebi. The same trend applies to staffing.

The introduction of the CAPITATION grant and the School Feeding Programme has increased enrolment in the 20 participating schools. Adenkrebi, one of the rural communities however need serious attention to improve enrolment.

1.5.9.2 Health Service Delivery

The Ga East Municipal Health Management Team (MHMT) is responsible for all health service delivery in the entire municipality. The municipality is divided into four sub municipals for the organization and distribution of primary health care services. These subs municipal are namely Abokobi, Dome, Taifa and Haatso.

Each sub municipal health management team has the responsibility for the delivery of health services to defined areas, population and has a center with either one or two community clinics. There are trained TBAs and other care providers such as chemical shop dealers, maternity homes, traditional healers etc in the municipality. The Doctor to population and Nurse to population ratios are given as follows:

- Population to doctor ratio is 1 : 40,246
- population nurse ratio is 1 : 2,012

Even though Tuberculosis is one of the priority diseases in the country the case detection rate is low due to reasons like stigmatization, misconceptions about the disease among others. It is important to note that malaria continues to be the major cause of Out-Patients Department (OPD) attendance. It accounts for about 40.8% of morbidity. Frequent outbreaks of cholera in the municipality are also of great concern. Sporadic cases have also been recorded in other parts of the Municipality. Poor environmental sanitation is a major contributory factor. The top 10 diseases in the municipality are given in table 1.9

Table: 1.8: Municipal Top Ten Disease for, 2011, 2012 And 2013

2011			2012			2013		
Malaria	14158	34	Malaria	15730	29	Malaria	13741	25
ARI	4649	11	ARI	4203	8	ARI	5725	11
Hypertension	2121	5	Hypertension	2383	4	Hypertension	2636	5
Skin disease	1529	4	Gynecological condition	2364	4	Diarrhea	1739	3
Diarrhea	995	2	Skin disease	1850	3	Skin disease	1601	3
Eye infection	521	1	Pregnancy related conditions	1437	3	Typhoid fever	1223	2
Gynecological condition	464	1	Home accident	942	2	Pregnancy related conditions	1206	2
UTI	435	1	Anaemia	794	1	Rheumatism	1157	2
Diabetes	390	1	Diabetes	783	1	UTI	1123	2
Ear infection	388	1	Eye infection	645	1	Gynecological conditions	981	2
TOTAL CASES	25650	62	TOTAL CASES	31131	57	TOTAL CASES	29926	55
All other disease	15869	39	All other disease	23744	43	All other disease	24818	45

Source: Municipal Health Directorate, 2013.

A. Reproductive Health Service

The following are the reproductive health services in both public and private facilities in the municipality

- Antenatal care (ANC)
- Supervised delivery
- Post-natal care
- Family Planning
- Child welfare clinic
- Adolescent health

Free maternal health services are available in all public and National Health Insurance Scheme (NHIS) accredited facilities. Taifa and Dome communities access services from government health facilities outside the district as there is no NHIS accredited facility in these 2 sub municipalities. A total of 7570 (61.7%) pregnant women accessed antenatal care services in 2009. The low ANC coverages in Taifa and Dome greatly affect the achievement of the Municipality. Supervised deliveries also mirrored the low ANC with coverage of 31.7 % (3885). Institutional maternal mortality, which has hitherto been zero since 2007, recorded 1 in 2009. Thus maternal mortality ratio (MMR) in 2009 was 98 per 1000 Live births. Three hundred and seventy-two 372 (9.6%) Caesarean sections were performed in 2009. These were performed in private facilities as there are no public hospitals in the municipality.

B. National Health Insurance Scheme (NHIS)

All the government health facilities are rendering services to NHIS clients; however, the municipality does not have a separate scheme to manage NHIS. The Municipality is managed by the Ga Mutual Health Insurance Scheme at Amasaman. Although the municipality has agents, processing of documents is handled by the scheme at Amasaman. This greatly affects access to service delivery. There is the need to create a separate scheme in Ga East Municipality to manage the community members. Some of the problems in the health sector are:

- Lack of office accommodation for the Municipal Health Directorate. It is accommodated in rented premises.
- Lack of a municipal hospital
- Lack of public facilities at Dome and Taifa sub municipality
- Lack of NHIS secretariat in the municipality
- Inadequate space in the facilities
- Inadequate logistics.
- Lack of some caliber of staff.
- Low maternal health indicators

- Low BCG coverage
- Low TB detection rate

C. BIRTHS AND DEATHS REGISTRATION

The Assembly' Department of Births and Deaths is in charge of registration of the occurrence of deaths and births. The department currently operates two registries at Abokobi and Kwabenya. Both centres register births but deaths are registered only at the Abokobi centre. There is therefore the need to open additional centres to ensure acceptable coverage. Another challenge is the non-registration of deaths by the Muslim communities. Strategies are therefore to be adopted to ensure registration by Muslims and also open more centres for the registration of both births and deaths.

Water and Sanitation

Potable water supply in the urban/peri-urban areas of the municipality has been a major challenge to the Assembly, especially when the Assembly has no direct control over urban water supply. Areas like Dome, Taifa, Agbogba and Ashongman Musuko have limited or no access to pipe-borne water. Others depend on tanker services and a few hand dug wells. In general therefore, the price of water is fairly high in these urban communities. The situation is further worsened by the steadily increasing population through the influx of skilled and unskilled labour from the rural areas. To improve this situation the municipal Assembly will support and facilitate government strategies to accelerate the provision of safe water in the urban areas, especially the inclusion of rain water facilities when building.

In the peri-urban areas and small towns however, the Municipal Assembly is responsible for water supply. The Assembly is currently managing two small towns' piped schemes through Water and Sanitation Development Boards (WSDD). These are Abokobi-Oyarifa-Teiman-Sesemi scheme, and Pantang Area Pipe scheme. The two schemes cover fifteen communities. This places an obligation on the Assembly to ensure that the facilities are managed in a sustainable manner. The water and sanitation coverage in the municipality is given in table below:

- % of household with private toilet :32%
- % of population using public toilet :37%
- % of population with access to potable water : 42%

Waste Management

The rate of waste generation and management in the municipality is a matter of concern to the Assembly. With the increasing influx of people and the rapid urbanization, huge amounts of human and industrial waste are generated at an alarming rate. It is estimated that about 385 tonnes of solid waste is generated monthly out of

which 261 tonnes are collected which represents 67%. This leaves a substantial amount of backlog that creates various kinds of inconveniences including health hazard to people in the municipality. Out of the 261 tonnes collected the private sector collects about 81% through door-to-door collection.

Apart from the door-to-door collection, waste are collected in containers placed at vantage points by the Assembly. The absence of proper engineered final disposal site is a major constraint.

Housing and Development Control

Access to adequate housing is an important ingredient in the Municipal Assembly's efforts to improve the livelihood and environmental sanitation of the people living in the Municipality. The lack of sufficient housing units, especially in the urban areas of the Municipality has among other things contributed to overcrowding, development of illegal structures, conversion of commercial facilities to residential use, streetism and pressure on social facilities and amenities. This has resulted in the development of slums in areas like Dome, Taifa, Kwabenya and Haatso.

The result of these is the creation of an insanitary environment with no drains and properly demarcated sanitary sites. Waste is therefore disposed-off indiscriminately and liquid waste flows freely on the already poorly demarcated streets.

Tourism Development

Even though tourism has become one of the main sources of income and employment generation sector in the country, the Municipal Assembly is yet tap the existing potentials. There are a number of tourist sites that has the potential of rivaling some of the well-known tourist sites in the country. Though largely undeveloped, these sites hold the key to the area's development if steps are taken to explore the large potential they present.

Undeveloped sites include the slave fort at Kponkpo which need to be reconstructed to attract the needed tourist activities. The development of the site would however be capital intensive and therefore the Assembly would lobby investors and donors as well as the Ministry of tourism to facilitate its development. Other sites that need attention include the African Village near Sesemi, the historical origin of the headquarters, Abokobi as a settlement for Presbyterian missionaries and their cemetery. Besides these, potentials exist for ecotourism. The reconstructed Royal Danish Plantation Frederiksgave (Danish Slave Fort) built in 1832 by King Frederik VI at Sesemi, is currently being visited by a few people.

The Assembly in collaboration with the people of Sesemi and the Department of Archaeology, University of Ghana would have to market the center to attract tourists. The reconstruction was funded by the Augustinus Fund and technical support from the Department of Archaeology, Legon as well as

Architects from the national museums in Ghana and Denmark respectively. The Assembly will support the development and marketing of its tourist sites to attract tourists and also serve as a source of employment to the youth in the communities and the municipality at large.

Vulnerability Analysis

In the Ga East Municipality the vulnerable and excluded include the disabled, peasant farmers, the aged, rural women and children, people living with HIV/AIDS, orphans and street children. Peasant farmers are the most vulnerable of all farmers especially the majority who depend on rainfall for production. This situation, coupled with the increasing loss of farm lands represents dominant shocks that affect incomes, availability of food and wealth accumulation. Children and other dependents find themselves in difficult situations as a result of these shocks.

Besides these, some children find themselves in difficult circumstances as a result of circumstances such as death of parents, abandonment and separation due to mental problems of parents. These shocks send children and other dependents onto the street with its attendant vulnerability to social vices. Child labour is therefore prevalent in the municipality. Children living and working on the streets are engaged in trading activities which include selling ice water and chewing gums, portering of heavy loads (kayayo), truck pushing and working as driver's mates. They are mostly found in the urban communities like Haatso, Dome and Taifa. In the rural areas however, children are engaged in hazardous work such as stone quarrying. These negatively affect their physical and mental development. The Assembly will fully support the implementation of the Livelihood Empowerment Against Poverty (LEAP) programme to ensure that the vulnerable benefit.

In addition to the above, the aged, HIV/AIDS infected and affected, street children and the disabled are left without or with very little safety nets. This situation calls for appropriate strategies to cover their needs. Adequate and disaggregated data on the vulnerable in the municipality need to be collected, analyzed and the appropriate inter-sectoral interventions implemented to mitigate the impact of the shocks. The department of social welfare and community development would have to be supported to coordinate activities to improve welfare. Also, effective programmes aimed at mainstreaming HIV/AIDS into development programmes will also receive utmost attention to reduce the socio-economic impact on the affected and infected.

Institutional Care for the Vulnerable

Even though there are not enough safety nets for the vulnerable, currently there are six privately owned orphanages and child care Homes operating in the Municipality. The others like the aged, disabled and peasant farmers depend on informal social security like support from relatives and borrowing. The Assembly's participation in the LEAP has provided safety nets to some families who are benefiting. The residential homes in the municipality is:

- Handix Vangelism Ghana – Haatso

The Municipality will have to cooperate with these institutions to continue to support children. Also, the Department of Social Welfare, Commission for Human Rights and Administrative Justice (CHRAJ) and Community Development will have to be supported to deliver effectively.

The Department of Social Welfare in 2009 closed down one children home for operating below standards and the children in the facility were transferred to the Osu children's home in Accra.

Gender Analysis

Development planning has often been judged as neutral, which means that development programmes and projects that are implemented as a result of planning are assumed to benefit all stakeholders equally. These include men, women children, the disabled and the aged. A critical interrogation of this assumption through gender analysis and diagnosis bring to the fore the fact that certain segments of society by way of their subordinate position do not benefit in development at all or are even made worse off.

It is against this background that the MPCU has adopted mainstreaming gender into its development efforts by ensuring that programmes selected for implementation are gender sensitive. To understand the various gender issues in the municipality the MPCU adopted the Harvard Analytical Framework (HAF) tool to collate activities profile, access to and control over resources as well as the influencing factors.

Some of the gender issues that need to be addressed include:

- No gender machinery
- Non availability of gender disaggregated data
- Low women's participation in local governance and development
- No scholarships targeting skills training for girls
- Gender insensitive physical infrastructure
- Inadequate sensitization programmes on gender mainstreaming

The analysis was undertaken separately for the rural and also the urban communities. This is to ensure gender specific policies and programmes. At the end of the analysis, issues identified are summarized in tables 1.11 and 1.12 below.

Table 1.9 HAF Tool Gender Analysis – Urban Areas

No.	Gender role/Issue	Women/Girls	Men/Boys
1	<u>Activities Profile</u> <ul style="list-style-type: none"> <i>Productive activities including agric, petty trading and employment in the formal sector</i> 	Most women/girls are into employment in both the formal and informal sectors	Mostly in the formal sectors of the municipal economy
2	<ul style="list-style-type: none"> <i>Reproductive activities of fetching water, child care, preparing food and fuel wood</i> 	Women and girls still prepares food and manages the homes	Men are also involved in child health care
3	<ul style="list-style-type: none"> <i>Community activities of communal labour, meetings and helping others in times of need</i> 	Like the rural areas very few attend meetings	Men attend meetings and contribute very much
4	<u>Access to and control of resources</u> <ul style="list-style-type: none"> <i>Resources like land, equipments, labour, finances and education</i> 	Most women have access to education, land and limited finances	Men have access to land, finances and education as well as paid labour and control
5	<ul style="list-style-type: none"> <i>Benefits outside income, policed power and prestige</i> 	Very few women benefit from income outside their own, no political power nor prestige but benefit from basic needs like	Benefit outside income, has power and prestige

		food and shelter	
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Source: MPCU 2014.

The analysis above brings to the fore women's invisibility in the development of local governance processes. The low representation was confirmed during the community level planning programmes where not more than 5% of participants were women. The influencing factors for the above mentioned gender based situation as identified in the preceding tables include the following.

1. Cultural
2. Economic
3. Environmental
4. Political
5. And legal among others

The factors represent potentials, opportunities or constraints for the formulation and implementation of specific gender sensitive interventions. The MPCU has also noted that the Municipal Assembly does not have the gender machinery to prosecute the mainstreaming agenda which need to be addressed over the plan period. The MPCU will adopt addressing practical gender needs as entry point to achieving strategic gender needs.

Some of the gender issues that need to be addressed include:

- No gender machinery
- Non availability of gender disaggregated data
- Low women's participation in local governance and development
- No scholarships targeting skills training for girls
- Gender insensitive physical infrastructure
- Inadequate sensitization programmes on gender mainstreaming

Cooperatives

The department of co-operatives exists to facilitate the development of vibrant cooperative enterprises that are capable of contributing to sustainable employment generation, poverty reduction and community development, co-ordination, monitoring, evaluation and regulation based on our beliefs in cooperative ethics.

The importance of co-operatives and other economic groupings in the socio-economic development of the municipality cannot be overemphasized. The Municipality has about thirty-five (35) co-operative societies. Apart from forming and registration, monitoring and inspection, sensitization and skills training, conflict resolution and auditing, we also liaise with institutions in providing micro- credit facilities to the societies/groups. It also provides economic interdependence and safety nets for its members. Most of these groupings/societies/unions/associations are the potential source of revenue to the Assembly as well as the betterment of their own standard of living .These societies contributes immensely to the development of the Assembly's local economy but have constraints and challenges.

Disaster

The Municipality is bedeviled with two main kinds of disasters namely; flooding and occasional fire outbreaks. While the Dome market has received occasional fire outbreaks kwabenya, Agbogba, Ashongman undergo seasonal flooding. Among the principal causes of disasters in the municipality include inadequate drainage facilities; sand winning; indiscriminate disposal of households' solid wastes; illegal electricity connections, and cooking at market places in the municipality. The effect of this is that resources that could have otherwise been committed to developing other crucial development needs are channeled to relieving victims.

CHAPTER FOUR

4.0 MAJOR ENVIRONMENTAL CONCERNS

The key environmental concerns identified are given under the four sustainability pillars as follows.

A. Natural Environment

- Extinction of water bodies
- Pollution (Air and water bodies)
- Flooding
- Settlement erosion

B. Socio-Cultural

- Poor sanitation practices
- Land disputes
- Development of unauthorized structures
- Low participation of women and the physically challenged in local governance

C. Economic issues

- Inadequate Internally Generated Fund (IGF)
- Unemployment
- Inadequate credit facilities
- Undeveloped tourist sites
- Inadequate data on businesses

D. Institutional

- Logistics constraint
- Low motivation of Human resource
- Boundary disputes
- Poor coordination

4.1 SUSTAINABILITY OBJECTIVES

The Municipal Assembly has developed sixteen (16) sustainability objectives under the four sustainability pillars. The objectives will help in the sustainability test to ensure that environmental risks are identified and mitigation measures adopted. The objectives are provided as follows.

Natural Resources

- Discharge of pollutants and waste products into the atmosphere, water bodies and land should be avoided
- To protect and retain the natural characteristics of rivers and water bodies in the Municipality
- Promote resilient urban infrastructure development to addresses issues like seasonal flooding and settlement erosion

Social and cultural conditions

- To improve upon sanitation and waste management practices of the populace
- To promote social cohesion and reduce incidence of land litigations
- Reduce the development of unauthorized structures and promote effective development control
- Promote participation of women and the physically challenged in decision making

Local Economy

- Encourage and facilitate investment in tourism and local economy
- Promote and encourage strong and stable conditions for growth of Small and Medium Scale Enterprises (SMEs)
- Create job opportunities for the youth
- Update data on businesses

Institutional Issues

- Enhance the effective and efficient functioning of Zonal councils and unit committees
- Provide adequate logistics and capacity for service delivery
- Ensure the enforcement and compliance of regulations
- Encourage collaboration and public, private partnerships
- Ensure adequate office accommodation for staff

CHAPTER FIVE

5.0 KEY POLICIES AND PROGRAMMES

Some key policies and programmes for the SEA of the MTDP were selected to enable the team compare ways in which different programmes interact with each other, the impact of the various policies on key environmental issues and poverty concerns. This exercise will help the Municipal Assembly identify policies/programmes that are mutually supportive and those that work against each other. The Compatibility and Compound matrix were used for the exercise. The programmes/policies are given as follows.

Policies

- Promotion of total sanitation with special emphasis on the household
- Promote effective and efficient revenue mobilization strategies
- Policy of gender mainstreaming and women's involvement
- Quality education for all children of school going age through provision of school infrastructure and protection of school lands
- Promote spatially integrated hierarchy of settlements and prevention of slums
- Policy of transparency and accountability in financial management
- Sustainable access to safe drinking water especially in the urban areas
- Policy of preventive health care and extending coverage through provision of health facilities
- Skills training and employment generation focusing on women and the youth
- Multi- sectoral disaster management and prevention
- Policy of citizens participation and involvement in local governance
- Policy of greening the environment through tree growing and landscaping

Programmes

- Revenue mobilization programme
- Capacity building training programme
- Upgrading and opening up of road infrastructure
- Construction of household sanitation facilities
- Construction of new classroom blocks and rehabilitation of existing blocks
- Gender mainstreaming

- Development Control and prevention of slums
- Disaster management and control
- Domestic tourism promotion
- Citizens' participation and involvement in local governance
- Greening the environment and tree growing
- Effective public expenditure management programme
- Construction of health care facilities
- Promote agricultural production and productivity
- Skills training and employment generation
- Effective waste management and disposal practices

5.1 COMPATIBILITY TEST – PROGRAMMES

The compatibility matrix was used to determine ways in which the various programmes being pursued in the MTDP interact with each other. That is, whether programmes are supportive, work against each other or are neutral. The major focus was however on those programmes that work against each other and how best the various implementing departments can come together and refine the conflicting programmes.

After matching the programmes as provided in appendix 1 (Compatibility Matrix), it was realized that none of the programmes worked or conflicted with each other. It was therefore concluded that, the various programmes can be implemented to achieve sustainable development.

5.2 COMPOUND MATRIX - POLICY IMPACT ON KEY POVERTY CONCERNS

The compound matrix was used to analyze the above mentioned policies against key poverty environmental concerns under four pillars viz livelihood, health, vulnerability and institutional concerns. The MPCU first identified twelve major poverty alleviation objectives, four each under a pillar. The policies were then matched against each objective as given in appendix 2 (Compound matrix for Analysis of Policies against Poverty-environmental concerns).

It came to light at the end of the exercise that most of the policies will impact positively on poverty and therefore should be pursued. Only one policy, which is Promotion of domestic tourism was identified as having the potential of increasing HIV/AIDS infection. The required interventions will therefore be put in place to reduce the risk.

5.3 COMPOUND MATRIX - Policy Impact on Environmental Issues

Even though most of the policies performed well in relation to the major environmental concerns as indicated in appendix 3 (Compound matrix for Analysis of Policies against Key Environmental concerns), some had negative implications on the environment which need to be addressed to refine them. These include policy on roads, tourism and livestock production.

The negative impacts were in the areas of Natural resources and socio-cultural conditions. The mitigating measures are provided in subsequent chapters.

CHAPTER SIX

6.0 SUSTAINABILITY TEST

Sustainability test was conducted for the twenty-five (25) strategic actions selected from the six thematic areas used in the MTDP. The objective was to test the overall sustainability of the project or strategic action. This is to support the Assembly goal of sustainable and all-inclusive development of the municipality. The sustainability test was then conducted on the individual projects against each criterion and the performance scored and shaded according to the scale and colour code. The detail test is given in appendix 4. The environmental issues identified are however summarized in table 6.1 below

Table 1.10 Summary of Sustainability Test

No.	Strategic Action (Project)	Environmental Issues Identifies
1.	Monitor and evaluate revenue collection system in the Municipality monthly	<ul style="list-style-type: none"> Activity is sustainable
2.	Sensitize the general public on the need to pay property and business rates-	<ul style="list-style-type: none"> Activity is sustainable and have good impact on local economy
3.	Organize Business Seminars, workshops for traders on Business Plan preparation	<ul style="list-style-type: none"> Activity is sustainable and have good impact on local economy
4.	Educate Women on business formation and Market strategies to meet intra-regional trade	<ul style="list-style-type: none"> Activity is sustainable and have good impact on local economy
5.	Conduct 96 MDA, 1008 DDOs and 2304 AEAs field/home visits for extension delivery and ensuring the adoption of technologies	<ul style="list-style-type: none"> The activity is very sustainable
6.	Train 15 farmers in good animal husbandry practices & improvement	<ul style="list-style-type: none"> The activity has some negative impact on the natural environment but supports very well the development of the local economy
7.	Train 25 farmers on environmental management and safe use of Agro chemicals	<ul style="list-style-type: none"> The activity is very sustainable
8.	Evacuate refuse heap annually	<ul style="list-style-type: none"> This activity supports good environmental sanitation

9.	Organise Clean Up Exercise in the 10 Electoral areas annually	<ul style="list-style-type: none"> • This activity supports good environmental sanitation
10.	Prepare Site plans for public schools in the Municipality	<ul style="list-style-type: none"> • It performed very against all the sustainability pillars
11.	Supply & install 500 No.Street Lights annually	<ul style="list-style-type: none"> • Have negative effects on energy but supports social cohesion
12.	Supply & install Street Signages annually	<ul style="list-style-type: none"> • The activity is sustainable and supports social cohesion
13.	Grade roads and construct drains in selected communities annually	<ul style="list-style-type: none"> • Have negative effects on the natural environment and also access to urban water supply. • Will temporary affect social cohesion • It will however promote local economic development
14.	Upgrade 3km of road and drains in the Municipality	
15.	Construction of 3 Unit Classroom block with ancillary facilities at Papao	<ul style="list-style-type: none"> • The activity performed on three environmental pillars but works against the natural environment objectives
16.	Construction of day secondary School Classroom block with ancillary facilities at Kwabenya	<ul style="list-style-type: none"> • The activity performed on three environmental pillars but works against the natural environment objectives
17.	Completion of 3 Unit 72 lockable Shop at Taifa Market	<ul style="list-style-type: none"> • The activity performed on three environmental pillars but works against the natural environment objectives
18.	Construct Phase I of Office Block Annex-GEMA	<ul style="list-style-type: none"> • The activity performed on three environmental pillars but works against the natural environment objectives
19.	Train women leaders in local governance and entrepreneurial skills	<ul style="list-style-type: none"> • Project is environmentally sustainable
20.	Support disaster victims annually	<ul style="list-style-type: none"> • Environmentally sustainable
21.	Organize sensitization programmes on climate change	<ul style="list-style-type: none"> • Environmentally sustainable

22.	Undertake PPP projects at Haatso Market Station, Abokobi Market and Dome	<ul style="list-style-type: none"> • Works against the natural resource objectives but favours institutional and economic issues
23.	Construction of 15 bed capacity Health at Abokobi	<ul style="list-style-type: none"> • The project works against all the natural environment objectives as well as sanitation and access to urban water supply
24.	Extension works of exiting CHPs at Dome	<ul style="list-style-type: none"> • The project works against three of the objectives under the natural environment pillar • Access to urban water supply is also likely to be affected due to the demand for water for construction
25.	Organise 2 Public Fora annually	<ul style="list-style-type: none"> • The activity is sustainable and promote social cohesion

6.1 MEASURES TO ADDRESS IMPACT

As summarized above in the sustainability test, some of the strategic activities have no negative impact on the environment and therefore can be implemented with virtually no alternative intervention or programme to mitigate the negative impact. This notwithstanding, other projects work strongly against the various sustainability objectives. Especially in the areas of natural resources and socio-cultural conditions.

This section therefore focuses on identifying mitigating interventions that are directly or indirectly within the remit of the strategic project to ensure sustainable development. The mitigating measures will also set the context for the implementation of future projects. The table 6.2 gives the project, the environmental problem and mitigation intervention while table 6.3 provides the environmental Management plan.

Table 1.11 Measures to Address Impact

Activity	Environmental Problem	Mitigation Measure
Grade roads and construct drains in selected communities annually	<ul style="list-style-type: none"> • Grading will degrade the land and expose it to erosion • Air pollution due to dust • Pipelines will be affected 	<ul style="list-style-type: none"> • The drains will redirect the flood waters and reduce erosion • Watering will be ensured to reduce dust • Collaborate with residence and utility providers

	<ul style="list-style-type: none"> • Social cohesion will be affected during construction period 	<ul style="list-style-type: none"> • Directional signs will be provided.
Upgrade 3km of road and drains in the Municipality	<ul style="list-style-type: none"> • Air pollution due to dust and excessive noise due to earth moving equipment • Existing pipelines may be affected and reduce access to water • Movement of vehicles and pedestrians will be interrupted during construction period 	<ul style="list-style-type: none"> • Watering of the road to reduce the dust. Encourage working in the day when residents have gone to work • Effective collaboration with utility providers and residents to minimize pipe line bust. • Provide the needed diversions and directional signs to facilitate movement
Evacuate refuse heap	<ul style="list-style-type: none"> • Noise and air pollution from dust • Odour from evacuation • Liquid waste may be discharged into rivers and ponds 	<ul style="list-style-type: none"> • Sensitization of community members to cover items • Fumigation of site • Protective clothing for participants • Control of movement of liquid waste
Organise Clean Up Exercise in the 10 Electoral areas annually		
Train 15 farmers in good livestock practices & improvement	<ul style="list-style-type: none"> • Air pollution due to poor management of waste in the cages • Dumping of waste into rivers and ponds • Overgrazing and destruction of farms 	<ul style="list-style-type: none"> • Education and supervision to ensure that cages/pens are cleaned regularly • Encourage composting of waste • Supervised grazing
Supply & install 500 No.Street Lights annually	<ul style="list-style-type: none"> • Supply of electricity 	<ul style="list-style-type: none"> • Utilization of solar street lights
Construction of 15 bed capacity Health centre at Abokobi	<ul style="list-style-type: none"> • Pollution of the air due to dust and noise • Improper Dumping of construction materials • Access to water will be affected due to 	<ul style="list-style-type: none"> • Ensure intermittent watering site and use of proper equipment • Effective supervision by project management team
Extension works of exiting CHPs at Dome		

	competition between project and domestic use	<ul style="list-style-type: none"> • Provide mechanized Borehole
Construction of 3 Unit Classroom block with ancillary facilities at Papao	<ul style="list-style-type: none"> • Air and noise pollution • Safety of pupils 	<ul style="list-style-type: none"> • Ensure intermittent watering site and use of proper equipment
Construction of Health Directors Bungalow with ancillary facilities at Abokobi	<ul style="list-style-type: none"> • Access to water will be affected due to competition between project and domestic use • Improper disposal of Construction materials 	<ul style="list-style-type: none"> • Cordon off the area and watering • Provide mechanized Borehole • Monitor and supervise waste disposal
Construct Phase I of Office Block Annex- GEMA	<ul style="list-style-type: none"> • Improper disposal of Construction materials • Pollution of the air due to dust and noise • Safety of staff working in existing offices 	<ul style="list-style-type: none"> • Monitor and supervise waste disposal • Ensure intermittent watering site and use of proper equipment • Cordon off the area and watering
Completion of 3 No shed with 72 lockable Shop at Dome and Taifa Market	<ul style="list-style-type: none"> • Improper disposal of Construction materials • Pollution of the air due to dust and noise • Safety of existing traders 	<ul style="list-style-type: none"> • Monitor and supervise waste disposal • Ensure intermittent watering site and use of proper equipment • Cordon off the area
Undertake PPP projects at Haatso Lorry Station and Market	<ul style="list-style-type: none"> • Improper disposal of Construction materials • Pollution of the air due to dust and noise • Safety of existing traders • Intrusion by existing traders 	<ul style="list-style-type: none"> • Monitor and supervise waste disposal • Ensure intermittent watering site and use of proper equipment • Cordon off the area • Relocation of traders

Table 1.12 ENVIRONMENTAL MANAGEMENT PLAN

Mitigation measure	Implementing Department		Time Frame	Success Criteria
	Lead	Collaborating		
<ul style="list-style-type: none"> The drains will redirect the flood waters and reduce erosion Watering will be ensured to reduce dust Collaborate with residence and utility providers <p>Directional signs will be provided.</p>	Roads Engineer (DUR)	Contractors, Utility Service providers Resident Ass, Unit C'ttee	Plan period	<ul style="list-style-type: none"> Reduced dust pollution, Improved vehicular movement during construction
<ul style="list-style-type: none"> Watering of the road to reduce the dust. Encourage working in the day when residents have gone to work Effective collaboration with utility providers and residents to minimize pipe line bust. Provide the needed diversions and directional signs to facilitate movement 	Roads Engineer (DUR)	Contractors, Utility Service providers Resident Ass, Unit C'ttee	Plan Period	<ul style="list-style-type: none"> Reduced dust pollution, Improved vehicular movement during construction
<ul style="list-style-type: none"> Sensitization of community members to cover items Fumigation of site Protective clothing for participants Control of movement of liquid waste 	MEHO	MEHO-WM	Plan Period	<ul style="list-style-type: none"> waste management plan
<ul style="list-style-type: none"> Education and supervision to ensure that cages/pens are cleaned regularly Encourage 	Agric Dir	BAC, YEA Community Development ,	Project implementation period	<ul style="list-style-type: none"> Number of animals increased

composting of waste Supervised grazing				
<ul style="list-style-type: none"> Utilization of solar street lights 	MWE	Assembly members Urban roads	Project implementation period	Number of streetlights installed and maintained
<ul style="list-style-type: none"> Ensure intermittent watering site and use of proper equipment Effective supervision by project management team Provide mechanized Borehole 	MWE	Health department Planning unit	Project implementation period	Polyclinic operationalised
<ul style="list-style-type: none"> Ensure intermittent watering site and use of proper equipment Corden off the area and watering Provide mechanized Borehole Monitor and supervise waste disposal 	MWE	Health department Planning unit	Project implementation period	Shed utilized for OPD services
<ul style="list-style-type: none"> Monitor and supervise waste disposal Ensure intermittent watering site and use of proper equipment Corden off the area and watering 	MWE	Education department Planning unit	Project implementation period	Over Crowding Reduced
<ul style="list-style-type: none"> Monitor and supervise waste 	MWE	Assembly members,	Project implementation	Sites upgraded for sustainable

disposal <ul style="list-style-type: none"> • Ensure intermittent watering site and use of proper equipment • Corden off the area • Relocation of traders 		department Planning unit, Traders	period	commercial activities
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CHAPTER SEVEN

7.0 IMPLICATION OF THE MITIGATION MEASURES ON THE BUDGET

The mitigating measures identified were costed to ensure that they are captured in the annual budgets for implementation. It must be noted that the mitigating measures in the road sector will form vital component of the project during the award stage. In the case of the school projects, the site reinstatement will be considered integral part of the project cost. It should also be noted that not all the construction materials are won in the Municipality. As indicated in table 7.1 the total cost of the mitigating measures is estimated at GH ₵3,760,000.00. The sources of funding are from the Road Fund, DACF, IGF among others.

Table 1.13 Mitigation Measures Budget

Mitigation measure	Implementing Department		Time Frame	Estimated cost GHC
	Lead	Collaborating		
<ul style="list-style-type: none"> The drains will redirect the flood waters and reduce erosion Watering will be ensured to reduce dust Collaborate with residence and utility providers <p>Directional signs will be provided.</p>	Roads Engineer (DUR)	Contractors, Utility Service providers Resident Ass, Unit C'ttee	Plan period	1000,000.00
<ul style="list-style-type: none"> Watering of the road to reduce the dust. Encourage working in the day when residents have gone to work Effective collaboration with utility providers and residents to minimize pipe line bust. Provide the needed diversions and directional signs to facilitate movement 	Roads Engineer (DUR)	Contractors, Utility Service providers Resident Ass, Unit C'ttee	Plan Period	521,000.00

<ul style="list-style-type: none"> • Sensitization of community members to cover items • Fumigation of site • Protective clothing for participants Control of movement of liquid waste 	MEHO	MEHO-WM	Plan Period	545,000.00
<ul style="list-style-type: none"> • Education and supervision to ensure that cages/pens are cleaned regularly • Encourage composting of waste Supervised grazing 	Agric Dir	YEA Community Development ,	Project implementation period	95,000.00
<ul style="list-style-type: none"> • Utilization of solar street lights 	MWE	Assembly members Urban roads	Project implementation period	550,000.00
<ul style="list-style-type: none"> • Ensure intermittent watering site and use of proper equipment • Effective supervision by project management team • Provide mechanized Borehole 	MWE	Health department Planning unit	Project implementation period	435,000.00
<ul style="list-style-type: none"> • Ensure intermittent watering site and use of proper equipment • Corden off the area and watering • Provide mechanized Borehole • Monitor and supervise waste 	MWE	Health department Planning unit	Project implementation period	236,000.00

disposal				
<ul style="list-style-type: none"> • Monitor and supervise waste disposal • Ensure intermittent watering site and use of proper equipment • Cordon off the area and watering 	MWE	Education department Planning unit	Project implementation period	135,000.00
<ul style="list-style-type: none"> • Monitor and supervise waste disposal • Ensure intermittent watering site and use of proper equipment • Cordon off the area • Relocation of traders 	MWE	Assembly members, department Planning unit, Traders	Project implementation period	238,000.00
Total				3,760,000.00

7.1 IMPLICATION OF THE MITIGATION MEASURES ON INSTITUTIONAL CAPACITIES

The implication of the mitigating measures on institutional capacities is provided in table 7.2. The departments have been identified and their capacity needs analyzed in terms of training and logistics requirements. It should be noted that most of these logistics requirements has already been captured in the MTDP for implementation to strengthen capacity for effective service delivery.

Table 1.14 Summary of Capacity Requirement

No.	Implementing Department	Logistics Required	Capacity training
1	Department of Urban Roads	-	M&E
2	MEHO – Public Health	Office space and Equipment/ Furniture	M&E Sanitation Bye Laws Court Procedures etc.
3	Department of Agriculture	-	M&E Facilitation Skills
5	Works Department	Office accommodation Vehicle for Supervision Laptop Computers	Project management Supervision, M&E

CHAPTER EIGHT

8.0 INTRODUCTION

Monitoring and Evaluation (M&E) is currently recognized as a critical component of the planning and implementation processes. M&E activities allow the tracking and identification of deviations from planned activities and to ensure early correction measures to be taken. The chapter focuses on the highlights of the system for the monitoring of the implementation of the selected PPPs and sustainability objectives established.

This chapter is just the highlights because detailed issues will be captured in the comprehensive M&E Plan of the MTDP 2014-2017.

8.1 MONITORING AND EVALUATION

The M&E of the implementation of the 21 selected activities that were subjected to the sustainability test will be undertaken by the Assembly as well as the implementing department or agencies. The monitoring reports will be collated monthly by the implementing departments. The MPCU will however be interested in the quarterly monitoring reports which will then feed into the mid-year and Annual Performance reports produced by the Ga East Municipal Assembly.

The mid-year as well as annual review meetings will be used to disseminate the reports to stakeholders and also chart the way forward to ensure the achievement of stated objectives.

8.2 MONITORING INDICATORS

To ensure the effective tracking of the implementation of the PPPs towards the achievement of the sustainability objectives stated in the preceding chapters, twenty-two (22) indicators have been developed. These indicators will help the Municipal Planning Coordinating Unit measure the sustainability objectives. The indicators are as follows.

- 1) Number of people receiving sanitation education
- 2) Number of people supported technically to construct household sanitation facilities
- 3) Levels and amount of pollution; water, land and air
- 4) Rivers and ponds water levels and flows
- 5) Hectors of farmlands/land banks on map
- 6) Number of urban poor with access to potable water
- 7) Level of participation of women and the disabled in local governance

- 8) Incidence of land disputes and litigation
- 9) Amount of capital invested in the local economy
- 10) Number of new Small and Medium Scale Enterprises (SMEs) established
- 11) Number of business advisory centers established
- 12) Number and type of logistics provided for staff of the Assembly
- 13) Number of staff trained/capacity building
- 14) Number of departments/Units accommodated
- 15) Number of sanitary offenders prosecuted
- 16) Number of notices complied with

CHAPTER NINE

9.0 CONCLUSION

The mainstreaming of SEA in the preparation of PPPs cannot be over emphasized since it brings to the fore major environmental issues that help to fine tune development interventions to ensure sustainable development. The preparation of SEA report for selected MTDP objectives has revealed that various interventions interacts with the environment differently, vis natural resources, socio-cultural conditions, local economy and institutional establishments.

In the Ga East Municipality the environment affected most in terms of the SEA report is the natural environment and socio-cultural conditions. In view of this various mitigation measures have been earmarked for implementation. Some of the mitigation measures include:

- Land reclamation
- Provision of Litter bins and toilet facilities
- Watering of roads during construction
- Provision of directional signs
- HIV/AIDS education
- Landscaping
- Growing of trees among others

It can be concluded from the report that:

- ❖ All constructional activities will impact negatively on the environment particularly in the area of natural resources and socio-cultural conditions but can be suitably mitigated
- ❖ None of the programmes conflicted with each other and are therefore mutually supportive
- ❖ There is a strong link (positive impact) between the MTDP objectives and the major environmental concerns. Only two objects in the areas of upgrading and opening up roads and tourism promotion will conflict with some major environmental concerns. Measures to reduce the potential adverse effect have been proposed.

Management of the Assembly will have to be committed to the following:

- Effective supervision and monitoring of the various indicators
- Provide the needed logistic support to the implementing departments
- Undertake training of specific officers in the areas of M&E, Sanitation bye laws, data collection and others

9.1 LESSONS LEARNT

Various lessons and skills have been acquired by preparing the SEA report. These include the following:

- a. The use of the various sustainability tools. That is the compound matrix, compatibility matrix and sustainability test
- b. Different interventions interact with the environmental differently.
- c. The importance of mainstreaming the environment and climate change issues in development planning
- d. The need to collaborate with all stakeholders to achieve sustainable development

APPENDIX 1

COMPOUND MATRIX FOR ANALYSIS OF STRATEGY IMPLEMENTATION OBJECTIVES AGAINST MAJOR ENVIRONMENTAL CONCERNS

RURAL SANITATION MODEL & STRATEGY

No	PILLARS OF SUSTAINABILITY		NATURAL RESOURCES			SOCIO-CULTURAL				ECONOMIC ISSUES			INSTITUTIONAL ISSUES													
	Policy Objectives	Environmental Concerns	Pollution of water source	Land Degradation	Deforestation	Open defecation	Gender inequality / social exclusion	Climate change issues	Spread of sanitation related diseases	Negative socio-cultural beliefs and practices	Indiscriminate refuse disposal	choked gutter & refuse littering	Lack of partnership with the informal sector	Inadequate investment (funding) in Sanitation	Job creation	Poverty Reduction	Inadequate funding for disposal of waste and its management	Waste disposal and management	Financial inadequacy	Weak implementation and enforcement of policies and plans	Lack of designated dumping sites	Poor drainage system	Inadequate access to improved latrines	Lack of cesspool emptiers and inadequate waste collection system	Blockage in sewer lines	Poor location of toilet facilities

No	PILLARS OF SUSTAINABILITY	NATURAL RESOURCES				SOCIO-CULTURAL					ECONOMIC ISSUES				INSTITUTIONAL ISSUES												
		Environmental Concerns	Policy Objectives	Pollution of water source	Land Degradation	Deforestation	Open defecation	Gender inequality / social exclusion	Climate change issues	Spread of sanitation related diseases	Negative socio-cultural beliefs and practices	Indiscriminate refuse disposal	choked gutter & refuse littering	Lack of partnership with the informal sector	Inadequate investment (funding) in Sanitation	Job creation	Poverty Reduction	Inadequate funding for disposal of waste and its management	Waste disposal and management	Financial inadequacy	Weak implementation and enforcement of policies and plans	Lack of designated dumping sites	Poor drainage system	Inadequate access to improved latrines	Lack of cesspool emptiers and inadequate waste collection system	Blockage in sewer lines	Poor location of toilet facilities
1	Build consensus through effective advocacy for all stakeholders to be familiar with and committed to sustainable implementation of the RSMS at all levels			+	+/-0	0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

	PILLARS OF SUSTAINABILITY	NATURAL RESOURCES				SOCIO-CULTURAL						ECONOMIC ISSUES				INSTITUTIONAL ISSUES										
No	Environmental Concerns Policy Objectives	Pollution of water source	Land Degradation	Deforestation	Open defecation	Gender inequality / social exclusion	Climate change issues	Spread of sanitation related diseases	Negative socio-cultural beliefs and practices	Indiscriminate refuse disposal	choked gutter & refuse littering	Lack of partnership with the informal sector	Inadequate investment (funding) in Sanitation	Job creation	Poverty Reduction	Inadequate funding for disposal of waste and its management	Waste disposal and management	Financial inadequacy	Weak implementation and enforcement of policies and plans	Lack of designated dumping sites	Poor drainage system	Inadequate access to improved latrines	Lack of cesspool emptiers and inadequate waste collection system	Blockage in sewer lines	Poor location of toilet facilities	Enforcement of codes and bye-laws in relation to toilet facilities
2	Mainstream RSMS into the DESSAP and DMTDPs of all Districts assemblies, as a precondition for receiving related national and regional level support	+	+	0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

No	PILLARS OF SUSTAINABILITY	NATURAL RESOURCES				SOCIO-CULTURAL					ECONOMIC ISSUES				INSTITUTIONAL ISSUES												
	Environmental Concerns	Policy Objectives	Pollution of water source	Land Degradation	Deforestation	Open defecation	Gender inequality / social exclusion	Climate change issues	Spread of sanitation related diseases	Negative socio-cultural beliefs and practices	Indiscriminate refuse disposal	choked gutter & refuse littering	Lack of partnership with the informal sector	Inadequate investment (funding) in Sanitation	Job creation	Poverty Reduction	Inadequate funding for disposal of waste and its management	Waste disposal and management	Financial inadequacy	Weak implementation and enforcement of policies and plans	Lack of designated dumping sites	Poor drainage system	Inadequate access to improved latrines	Lack of cesspool emptiers and inadequate waste collection system	Blockage in sewer lines	Poor location of toilet facilities	Enforcement of codes and bye-laws in relation to toilet facilities
3	Identify and utilize appropriate financing models for sustainable implementation of RSMS		+	+	+	0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

No	PILLARS OF SUSTAINABILITY	NATURAL RESOURCES				SOCIO-CULTURAL						ECONOMIC ISSUES				INSTITUTIONAL ISSUES										
		Pollution of water source	Land Degradation	Deforestation		Open defecation	Gender inequality / social exclusion	Climate change issues	Spread of sanitation related diseases	Negative socio-cultural beliefs and practices	Indiscriminate refuse disposal	choked gutter & refuse littering	Lack of partnership with the informal sector	Inadequate investment (funding) in Sanitation	Job creation	Poverty Reduction	Inadequate funding for disposal of waste and its management	Waste disposal and management	Financial inadequacy	Weak implementation and enforcement of policies and plans	Lack of designated dumping sites	Poor drainage system	Inadequate access to improved latrines	Lack of cesspool emptiers and inadequate waste collection system	Blockage in sewer lines	Poor location of toilet facilities
4	Develop and implement incentive packages to attract private sector participation in the implementation of RSMS.	+	+	0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

	PILLARS OF SUSTAINABILITY	NATURAL RESOURCES				SOCIO-CULTURAL						ECONOMIC ISSUES				INSTITUTIONAL ISSUES										
No	Environmental Concerns Policy Objectives	Pollution of water source	Land Degradation	Deforestation	Open defecation	Gender inequality / social exclusion	Climate change issues	Spread of sanitation related diseases	Negative socio-cultural beliefs and practices	Indiscriminate refuse disposal	choked gutter & refuse littering	Lack of partnership with the informal sector	Inadequate investment (funding) in Sanitation	Job creation	Poverty Reduction	Inadequate funding for disposal of waste and its management	Waste disposal and management	Financial inadequacy	Weak implementation and enforcement of policies and plans	Lack of designated dumping sites	Poor drainage system	Inadequate access to improved latrines	Lack of cesspool emptiers and inadequate waste collection system	Blockage in sewer lines	Poor location of toilet facilities	Enforcement of codes and bye-laws in relation to toilet facilities
5	Develop human resource capacity for RSMS Trainer of Trainers (ToT) and facilitation at all levels	+	+	0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

No	PILLARS OF SUSTAINABILITY	NATURAL RESOURCES				SOCIO-CULTURAL						ECONOMIC ISSUES				INSTITUTIONAL ISSUES											
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6	Improve behavioural change in latrine usage , hand washing with soap/ash and safe drinking water handling	+	+	0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

No	PILLARS OF SUSTAINABILITY	NATURAL RESOURCES				SOCIO-CULTURAL					ECONOMIC ISSUES				INSTITUTIONAL ISSUES												
	Environmental Concerns	Policy Objectives	Pollution of water source	Land Degradation	Deforestation	Open defecation	Gender inequality / social exclusion	Climate change issues	Spread of sanitation related diseases	Negative socio-cultural beliefs and practices	Indiscriminate refuse disposal	choked gutter & refuse littering	Lack of partnership with the informal sector	Inadequate investment (funding) in Sanitation	Job creation	Poverty Reduction	Inadequate funding for disposal of waste and its management	Waste disposal and management	Financial inadequacy	Weak implementation and enforcement of policies and plans	Lack of designated dumping sites	Poor drainage system	Inadequate access to improved latrines	Lack of cesspool emptiers and inadequate waste collection system	Blockage in sewer lines	Poor location of toilet facilities	Enforcement of codes and bye-laws in relation to toilet facilities
7	Maximise synergy between improved sanitation and hygiene at homes and schools		+	+	0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

No	PILLARS OF SUSTAINABILITY	NATURAL RESOURCES				SOCIO-CULTURAL					ECONOMIC ISSUES				INSTITUTIONAL ISSUES												
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8	To develop and utilise communication channels and materials to improved sanitation and hygiene			+	+	0	+	-	+	+	+	+	+	+	+	+	+	+	+	+	?	+	+	+	+	+	+

No	PILLARS OF SUSTAINABILITY	NATURAL RESOURCES				SOCIO-CULTURAL					ECONOMIC ISSUES				INSTITUTIONAL ISSUES												
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9	Provide oversight responsibility for ODF status verification and recognition/celebration		+	+	0	+		+	+	+	+	+	+	+	+	+	+	+	+	?	+	+	+	+	+	+	+

	PILLARS OF SUSTAINABILITY	NATURAL RESOURCES				SOCIO-CULTURAL						ECONOMIC ISSUES				INSTITUTIONAL ISSUES										
No	Environmental Concerns Policy Objectives	Pollution of water source	Land Degradation	Deforestation	Open defecation	Gender inequality / social exclusion	Climate change issues	Spread of sanitation related diseases	Negative socio-cultural beliefs and practices	Indiscriminate refuse disposal	choked gutter & refuse littering	Lack of partnership with the informal sector	Inadequate investment (funding) in Sanitation	Job creation	Poverty Reduction	Inadequate funding for disposal of waste and its management	Waste disposal and management	Financial inadequacy	Weak implementation and enforcement of policies and plans	Lack of designated dumping sites	Poor drainage system	Inadequate access to improved latrines	Lack of cesspool emptiers and inadequate waste collection system	Blockage in sewer lines	Poor location of toilet facilities	Enforcement of codes and bye-laws in relation to toilet facilities
10	To facilitate formative research that will lead to the formulation of efficient models to be replicated in other districts	+	+	0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

	PILLARS OF SUSTAINABILITY	NATURAL RESOURCES				SOCIO-CULTURAL					ECONOMIC ISSUES				INSTITUTIONAL ISSUES											
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11	To support ongoing research and development of appropriate sanitation technology options and marketing strategies suitable to all	+	+	0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

No	PILLARS OF SUSTAINABILITY	NATURAL RESOURCES			SOCIO-CULTURAL						ECONOMIC ISSUES				INSTITUTIONAL ISSUES								
		Environmental Concerns	Policy Objectives																				
12	To secure funds and other resources for the implementation of the CLTS approach to attain ODF status		Pollution of water source	+																			
			Land Degradation	+																			
			Deforestation	0																			
			Open defecation	+																			
			Gender inequality / social exclusion	+																			
			Climate change issues	+																			
			Spread of sanitation related diseases	+																			
			Negative socio-cultural beliefs and practices	+																			
			Indiscriminate refuse disposal	+																			
			choked gutter & refuse littering	+																			
			Lack of partnership with the informal sector	+																			
			Inadequate investment (funding) in Sanitation	+																			
			Job creation	+																			
			Poverty Reduction	+																			
			Inadequate funding for disposal of waste and its management	+																			
			Waste disposal and management	+																			
			Financial inadequacy	+																			
			Weak implementation and enforcement of policies and plans	+																			
			Lack of designated dumping sites	+																			
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			Inadequate access to improved latrines	+																			
			Lack of cesspool emptiers and inadequate waste collection system	+																			
			Blockage in sewer lines	+																			
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13	To create and sustain 100% open defecation free communities, districts and regions by 2025	+	+	0	+	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
14	To improve sanitation coverage rate from 15% in 2013 to 54% in 2015	+	+	0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

	PILLARS OF SUSTAINABILITY	NATURAL RESOURCES				SOCIO-CULTURAL						ECONOMIC ISSUES				INSTITUTIONAL ISSUES										
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15	To harmonize and create synergies for sanitation and hygiene promotion approaches	+	+	0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
16	To increase access to improved, affordable, appropriate hardware for all aspects of ISH	+	+	0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

APPENDIX 2
COMPOUND MATRIX: - RECORD SHEET

No.....

Policy under review: RURAL SANITATION MODEL & STRATEGY

NATURAL RESOURCES	REASONS	SCORE
SOCIO-CULTURAL ISSUES	REASONS	SCORE
ECONOMIC ISSUES	REASONS	SCORE
INSTITUTIONAL ISSUES	REASONS	SCORE

1. Adam Bunbunke Yaw- Members
2. Hilda Dapaah Arthur- Chairman
3. Godson Amekuedzi-Member
4. Abraham Alex Otoo- Member
5. Zakaria Yakubu-Member
6. Paul Nutsugah-Member

