CHAPTER 16: SAMPLE INSTITUTIONAL NEEDS ASSESSMENT FROM GHANA

This chapter is based on a pilot study in Ghana, “Targeted Collaboration Among Line Agencies, Local Communities, and the Ministry of Health.” The pilot sought to address the following issues: how can health, environment, and infrastructure agencies collaborate on a daily basis and with what benefits and costs? As a background for the pilot, the needs assessment was discussed at a workshop in October 1999, which is discussed in chapter 17. The needs assessment took place from July to October 1999 in Sekondi-Takoradi, one of the five largest cities in Ghana and also referred to as the Shama Ahanta East Metropolitan Assembly (SAEMA).

Environmental Health Needs Assessment from Ghana

Introduction and Objectives

The objective of the pilot study was to develop a methodology to define a parallel set of health priorities based on cost-effective interventions through infrastructure and environmental projects, rather than on typical morbidity and mortality data. An additional objective of the pilot would be to replicate analysis of the needs assessment and recommendations of the workshop for other cities in Ghana. The work was initially based on common “entry points” through which health, infrastructure, and environment agencies can agree on objectives. The three main entry points were selected after preparation of an “environmental health profile,” discussed chapter 15 (see chapter 5 for general methodology). The entry points for the pilot study included:

- Management of wastes from health care facilities
- Urban malaria and other vector-borne diseases
- Water, sanitation, and drainage.

The pilot was intended to build on a research report undertaken between April and August 1998 on development of collaborative linkages between sanitation infrastructure and public and environmental health in the context of the World Bank Urban Environmental Sanitation Project (UESP) in Ghana (Stephens and others 1998).

The pilot was divided into three parts:

Part one institutional needs assessment. This would consist of consultations and needs assessment on the Metropolitan District Assembly (MDA), private sector, and civil society to ascertain the opportunities and constraints of intersectoral collaboration and build on the “Consultative Assignment on Urban Public and Environmental Health in Ghana” report. (See “terms of Reference,” below.)

Part two, workshop. Plan and organize a workshop to present findings, propose next steps, and engage government officials and agencies and stakeholders in a dialogue.

Part three, summary report and recommendations. Produce a final report on the pilot workshop for replication of its findings to other cities in Ghana and possible Bank projects.
**Methods and Institutions Consulted**

A questionnaire was prepared to solicit response from approximately thirty institutions, including government agencies, the private sector, and civil society, for the needs assessment during two-and-a-half weeks in Sekondi-Takoradi. More than one person was contacted in some institutions (see table 16-1 for a list).

**Table 16-1: Institutions Consulted**

<table>
<thead>
<tr>
<th>Health Care Facilities</th>
<th>Public Departments</th>
<th>Private Sector</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effia Nkwanta Regional Hospital</td>
<td>SAEMA Administration</td>
<td>SNV</td>
</tr>
<tr>
<td>Kwesimintim Polyclinic</td>
<td>Works Department</td>
<td>Friends of the Nation</td>
</tr>
<tr>
<td>SAEMA Health Administration</td>
<td>Public Relations Unit</td>
<td>African Centre for Human Development</td>
</tr>
<tr>
<td>Western Regional Health Administration</td>
<td>Physical Planning Department</td>
<td>Community Development and Environmental Protection Association</td>
</tr>
<tr>
<td>Aunty Lily’s Maternity Home</td>
<td>Legal Department</td>
<td>Takoradi Market Association</td>
</tr>
<tr>
<td>Qui-Wal Private Hospital</td>
<td>Department of Community Development</td>
<td>An assemblyman for New Takoradi</td>
</tr>
<tr>
<td></td>
<td>Development Planning Unit</td>
<td>Unit committee chairman, Effia Electoral Area</td>
</tr>
<tr>
<td></td>
<td>Environmental Health Unit</td>
<td>A private water vendor at New Takoradi</td>
</tr>
<tr>
<td></td>
<td>Waste Management Department</td>
<td>A public toilet operator at Sekondi</td>
</tr>
<tr>
<td></td>
<td>School Health Education Programme</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Urban Environmental Sanitation Project</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Department of Urban Roads</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Environmental Protection Agency</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Community Water and Sanitation Agency</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ghana Water Company</td>
<td></td>
</tr>
</tbody>
</table>

Source: Authors’ data.

SAEMA was chosen instead of the cities of Accra, Tema, and Tamale, because:

(a) SAEMA has started a nucleus of collaboration and coordination under the leadership of the metro chief executive and the metro coordinating director. Assembly department heads meet every Monday morning to take stock of the previous week’s achievements and plan activities for the coming week. This approach appears to increase awareness among all the departments of the assembly and provides a good example of intersectoral collaboration, which could be developed along the entry points.

(b) Accra is already benefiting from a similar initiative sponsored by the Department for International Development of the United Kingdom (DFID-UK). This initiative, the Accra Metro Environmental Health Initiative (AMEHI), are intended to build meaningful partnerships among the Accra Metropolitan Assembly (AMA), organizations, and community to bring about improved protection and promotion of environmental health in the Accra Metropolitan Area. The key principles include:

- Intersectoral collaboration to improve the environment and health of communities
- Institutional capacity building in terms of required skills, personnel, policies, and systems
- Community participation in the design, planning, and implementation of initiatives
- Information for good management.
Geographic, Demographic, and Sanitary Background on SAEMA

SAEMA is one of the four district assemblies in the Western Region and one of three metropolita- 

tan assemblies in the country. SAEMA is located about 210 kilometers along the coast, west of 

Accra. SAEMA covers a land area of 334 square kilometers and is divided into three sub-metro 

district councils: Shama, Sekondi, and Takoradi. The twin city of Sekondi/Takoradi is both the 

regional and district capital.

The topography of the metropolis varies from sandy coastline in the south to low-lying areas in-

terspersed with ridges and hills (with altitudes ranging from 30–60 feet) in the north. The coast-

line has many bays with serious erosion problems around Shama, Essaman, Sekondi, Nkontompo, 

and New Takoradi. Low-lying areas (with altitudes of around 4.5 meters) can be found in the cen-

tral area of Takoradi. Consequently, Takoradi’s central market is in a flood-prone area. Due to the 

undulating nature of the topography, a number of muddy lagoons and swampy marshlands are 

common features of the landscape (SAEMA 5-Year-Development Plan).

Natural drainage channels. The metropolis is drained by a number of rivers. On the western bor-

der lies the Whim River with its main tributary, the Ayire, flowing through the Whim Lagoon on 

its way to the sea. On the east lies the Pra River. These two rivers flow throughout the year. The 

Kansawurado River flows into the Butua Lagoon past the Takoradi Polytechnic, creating coastal 

marshlands. The Essie Lagoon is another important lagoon. These lagoons and drainage channels 

create breeding places for mosquitoes and other vectors of diseases.

Climate. Like other parts of southern Ghana, the metropolis experiences an equatorial type of 

climate with high temperatures ranging from 22°C to 33°C. Precipitation occurs mainly from 

March to July (70 percent) and between late September and November (30 percent). The dry sea-

sons are short, occurring from August to early September and December to February.

Population and settlement patterns. The population of SAEMA in the last census (1984) was 

249,371 and reached an estimated 357,431 in 1996, representing a growth rate of 3.5 percent a 

year. The population density also grew from 746 persons per square kilometer in 1984 to 1,069 in 

1996. The largest communities are concentrated in Sekondi and Takoradi, which continue to 

grow due to the high levels of services available. Other large communities with major increases 

are Shama, Effia-Kuma, Kwisimintim, Adiembra, and Nkotombo. The Shama subdistrict has 

dispersed communities exhibiting rural characteristics. Much inequity exists in the service deliv-

ery system: curative facilities are available in urban areas, whereas rural poor lack access to 

health care. Areas that lack basic infrastructure have more environment-related health problems.

Occupation. Current information on occupation and employment are not available. The 1984 cen-

sus figures indicate that retail trade is the major occupation in SAEMA, employing more females 

than males. Retail trade is followed by the following primary occupations: agriculture, forestry, 

and fishing. The manufacturing industry, especially processing of primary products, such as wood 

and food, is next in line. Many wood-processing industries exist due to the tropical rain forest 

location and variety of timber species.

Solid waste. The assembly collects only 43 percent of total refuse generated monthly, approxi-

mately 4,500 metric tons. Business and industrial establishments must dispose of their own waste, 

but only a few have the capacity to do so. A huge backlog of refuse exists, therefore, creating 

spontaneous dumps in the communities. The situation is worsened by uncovered refuse trucks 

littering the streets. The assembly operates two disposal grounds. Dump sites in other communi-

ties have become places for indiscriminate defecation, creating environmental hazards. SAEMA 

has introduced door-to-door collection of refuse in high-income areas with good roads, using pri-

vate contractors, and SAEMA continues to collect refuse in the other parts of the city.
**Liquid waste.** SAEMA produces an estimated 1,750 cubic meters of liquid waste a month. SAEMA is responsible for dislodging all liquid waste, except for that of the Ghana Ports and Harbours Authority and Ghana Armed Forces. With the limited holding capacity of its equipment, SAEMA can only handle 50 percent of the total volume generated. Many septic tanks are consequently left unattended when they are full, creating environmental hazards and nuisances.

**Toilet facilities.** About 60 percent of the total population use private toilet facilities. The remaining 40 percent either depend on public toilets or do free-range defecation. The metropolis has 101 public toilets, which are flush, aqua privy, or KVIPs (Kumasi ventilated improved pit). The use of pan latrines is also widespread. Night soil and effluent are discharged untreated into the sea.

**Health care facilities.** Table 16-2 shows health care facilities in SAEMA:

### Table 16-2: Health Care Facilities in SAEMA

<table>
<thead>
<tr>
<th>Facility</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government hospital</td>
<td>2</td>
</tr>
<tr>
<td>Private hospital or clinic</td>
<td>31</td>
</tr>
<tr>
<td>Government health center</td>
<td>5</td>
</tr>
<tr>
<td>Community and maternity clinic</td>
<td>5</td>
</tr>
<tr>
<td>Doctors</td>
<td>57</td>
</tr>
<tr>
<td>Nurses</td>
<td>248</td>
</tr>
<tr>
<td>Auxiliary health staff</td>
<td></td>
</tr>
<tr>
<td>Hospital beds</td>
<td>211</td>
</tr>
<tr>
<td>Population per doctor</td>
<td>4,012</td>
</tr>
<tr>
<td>Population per nurse</td>
<td>922</td>
</tr>
<tr>
<td>Population per hospital bed</td>
<td>500</td>
</tr>
</tbody>
</table>


**Environmental Health Findings from the Need Assessment Survey**

**Top Ten Diseases in SAEMA**

Table 16-3 shows the top ten causes of morbidity reported to health institutions for SAEMA within 1997 and within 1998.

### Table 16-3: Top Ten Diseases in SAEMA

<table>
<thead>
<tr>
<th>Rank</th>
<th>Disease</th>
<th>1997 Number</th>
<th>1997 Percent</th>
<th>Disease</th>
<th>1998 Number</th>
<th>1998 Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Malaria</td>
<td>62,304</td>
<td>36.1</td>
<td>Malaria</td>
<td>70,030</td>
<td>37.4</td>
</tr>
<tr>
<td>2</td>
<td>Upper respiratory tract infection</td>
<td>10,222</td>
<td>5.9</td>
<td>Upper respiratory tract infection</td>
<td>12,724</td>
<td>6.8</td>
</tr>
<tr>
<td>3</td>
<td>Acute eye infections</td>
<td>7,733</td>
<td>4.5</td>
<td>Acute eye infections</td>
<td>11,212</td>
<td>6.0</td>
</tr>
<tr>
<td>4</td>
<td>Diseases of skin</td>
<td>7,201</td>
<td>4.2</td>
<td>Diseases of skin</td>
<td>8,872</td>
<td>4.7</td>
</tr>
<tr>
<td>5</td>
<td>Diseases of oral cavity</td>
<td>4,813</td>
<td>2.8</td>
<td>Diarrheal diseases</td>
<td>6,797</td>
<td>3.6</td>
</tr>
<tr>
<td>6</td>
<td>Diarrhea diseases</td>
<td>4,203</td>
<td>2.4</td>
<td>Accidents</td>
<td>5,324</td>
<td>2.8</td>
</tr>
<tr>
<td>7</td>
<td>Accidents</td>
<td>3,777</td>
<td>2.2</td>
<td>Diseases of oral cavity</td>
<td>5,237</td>
<td>2.8</td>
</tr>
<tr>
<td>8</td>
<td>Ear infections</td>
<td>3,761</td>
<td>2.2</td>
<td>Ear infections</td>
<td>3,774</td>
<td>2.0</td>
</tr>
<tr>
<td>9</td>
<td>Intestinal worms</td>
<td>2,070</td>
<td>1.2</td>
<td>Pregnancy related diseases</td>
<td>3,513</td>
<td>1.9</td>
</tr>
<tr>
<td>10</td>
<td>Rheumatism, joint pains</td>
<td>1,631</td>
<td>0.9</td>
<td>Rheumatism and joint pains</td>
<td>3,012</td>
<td>1.6</td>
</tr>
</tbody>
</table>

*Note: a. Outpatient Department.
Source: SAEMA Metro Health Department (1999).*
Total outpatient attendance at health institutions within SAEMA in 1997 and 1998 were 172,659 and 187,053, respectively. Malaria has consistently remained the top reason for seeking medical treatment at outpatient departments of all health institutions from year to year. In 1997 and 1998 malaria accounted for 36.1 percent and 37.4 percent, respectively, of all hospital attendance in SAEMA. Table 16-4 shows some of the statistics.

Table 16-4: Outpatient Attendance Due to Malaria

<table>
<thead>
<tr>
<th>Health Institution</th>
<th>Year</th>
<th>Total OPD Attendance</th>
<th>Percent Due to Malaria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kwesimintim</td>
<td>1997</td>
<td>30,011</td>
<td>32.0</td>
</tr>
<tr>
<td></td>
<td>1998</td>
<td>28,307</td>
<td>34.5</td>
</tr>
<tr>
<td>Effia Nkwanta</td>
<td>1997</td>
<td>28,324</td>
<td>33.7</td>
</tr>
<tr>
<td></td>
<td>1998</td>
<td>20,997</td>
<td>36.0</td>
</tr>
<tr>
<td>SAEMA</td>
<td>1997</td>
<td>172,659</td>
<td>36.1</td>
</tr>
<tr>
<td></td>
<td>1998</td>
<td>187,053</td>
<td>37.4</td>
</tr>
<tr>
<td>Western Region</td>
<td>1998</td>
<td>573,632</td>
<td>42</td>
</tr>
</tbody>
</table>

Source: Kwesimintim Polyclinic, Effia Nkwanta Hospital, SAEMA Health Department, Western Region Health Office 1999.

A word of caution. Health statistics either overestimate or underestimate the disease burden. As Dr. Linda Vanatoo, medical director of health services said, “It is important that reported data be interpreted carefully, because of the difficulties in obtaining accurate and reliable data.” Figures may be overestimated because:

- Almost all diagnosis of malaria is made without laboratory confirmation. In an endemic area, such as SAEMA, the real possibility exists of diagnosing every fever at clinics as malaria.
- Return attendance at the health institutions is usually not recorded. The system is also not designed to deduct previous diagnosis from the statistics, should a change occur in diagnosis on return.

Figures may be underestimated because:

- The reported figures do not include statistics from the private sector, the quasi-government health institutions, and traditional medical practitioners, all of whom treat malaria.
- Most people with a fever take a course of chloroquine by themselves and only report to the health institution if they do not recover.

Relationship between the Top Ten Diseases and Environmental Conditions

Health cannot be achieved by the health sector alone. The Ministry of Health recognizes this and, in its program of work, emphasizes development of broadly based approaches to public health, including collaboration between the other sectors and the public (Ministry of Health 1996). The ministry realizes that other MDAs control most determinants of health, especially environmental health, whereas members of the public play a significant role in causing disease through their actions. Table 16-5 summarizes the ten top diseases and their relationship to environmental conditions.
Table 16-5: Environmental Linkages of Top Ten Causes of Morbidity in SAEMA

<table>
<thead>
<tr>
<th>Disease or Condition</th>
<th>Comments (Linkage to Environmental Conditions, Required Interventions, and Other Factors)</th>
<th>In Last Five Years</th>
</tr>
</thead>
</table>
| Malaria              | • Anopheles mosquitoes breeding in accumulated brackish water, due to inadequate vector control, sanitation, drainage, and public awareness  
                       • All ages affected, but mostly children ages 0–15 years  
                       • Lower socioeconomic areas are most affected | Stable            |
| Upper respiratory tract infection | • Poor housing, indoor and outdoor pollution, crowding, and poor nutritional status  
                                    • Common among children 0–4 years and also workers and populations near quarries, cement works, and mines | Stable            |
| Acute eye infections | • High reported number of eye conditions, believed to be reduced due to support area receives from NGO Eye Savers on eye conditions  
                        • Inadequate supply of safe water and poor personal hygiene | Increasing, due to cases coming from outside SAEMA |
| Diseases of skin     | • Inadequate supply of safe water and poor personal hygiene  
                        • Includes ulcers | Stable            |
| Diarrheal diseases   | • Water and food contamination from poor solid and liquid waste management and poor personal hygiene  
                        • Common among fishing communities, especially during fishing season | Stable            |
| Accidents            | • Household and road traffic accidents and burns  
                        • The 15–45 year age group mainly affected | Stable            |
| Diseases of oral cavity | • Ignorance and poor personal hygiene and poverty  
                          • High numbers due to presence of dentists at some hospitals. Patients come from within and outside SAEMA, seeking health care for this reason | Stable            |
| Ear infections       | • Ignorance and poor personal hygiene and poverty  
                        • The reason for the high number of ear infections not totally clear | Stable            |
| Pregnancy-Related Diseases | • Inadequate antenatal care and inaccessible health care facilities  
                              • Also reflects the high total fertility rate in the area | Fluctuates        |
| Rheumatism and Joint Pains | • Mostly due to sickle cell disease, a common inherited disorder among Africans. Lack of premarital counseling services for sickle cell patients. | Fluctuates        |

Source: Data compiled for the study.

Perceptions of the Health Problems

All health institutions generally agree that no policy and operational guidelines exists for managing hospital waste in the city. Both private and public health institutions currently either bury or burn their waste. They concede that this is not hygienic and could lead to health hazards to scavengers, staff, and general public. The institutions observe that the absence of an operational or policy guidelines for managing and disposing of hospital waste is a fundamental issue to tackle and suggest the involvement of SAEMA’s Waste Management Unit.

Nonhealth institutions, particularly waste management, the UESP, and Ghana’s EPA, recognize the risk to both the community and health service staff and have recently begun investigating the issue. These actions are in the conceptual stage and may take some time to effect. The Western Regional Health Administration, which has the institutional responsibility for developing such a policy, should play the lead role in addressing the problem.

The health institutions are unanimous in their perception of the linkages among the ten top diseases and unsanitary environmental conditions in communities, demonstrated by accumulation of solid waste, indiscriminate defecation on beaches and in open spaces, choked gutters, and poor toilet management. Drainage in the metropolis is grossly inadequate, making the area susceptible
to flooding and stagnant water. The rainy season consequently records the highest frequency of environmentally related diseases, such as malaria and diarrheal diseases.

Nonhealth agencies attribute health problems to inadequate provision of basic facilities in both homes and communities. The head of the Physical Planning Department notes that topographic characteristics of the area combine with absence of proper land-use guidelines to contribute to flooding and formation of vector-breeding sites.

**Box 16-1: Mr. Ampadu Adjei (Head of Physical Planning Department)**

“The topographic characteristics of the SAEMA area make environmental management a critical issue. There are a number of lagoons and water courses that need to be managed properly. The absence of proper land use guidelines in developing the areas around the lagoons has led to a fundamental problem and has adverse effects on health, for example, flooding and malaria control.”

*Source: Authors’ data.*

Housing development characterized by multiple-unit dwellings and overdevelopment has also had an impact on health and hygiene (ventilation, crowding, and lack of amenities and circulation spaces and inadequate provision of sanitation services within homes).

Another dimension of the problem has to do with apathy, attitudes, behavior, and ignorance of the people toward sanitation issues. The public believes that because they pay property rates and levies, SAEMA should alone be responsible for handling waste in the metropolis and the public carries no further obligation. Regulations and bylaws of the General Assembly are flouted and the courts are not able to prosecute offenders.

**Box 16-2: Market Women Association**

“We are aware of the poor sanitation that is in the markets, but we have no control or management role. It is the responsibility of SAEMA, because we pay market tolls.”

*Source: Authors’ data.*

In the rural area, poor health is the outcome of an inadequate supply of potable water and poor sanitation facilities, coupled with poor personal hygiene, which is directly related to poverty and ignorance.

Perception of the linkage between environmental factors and diseases exists at all levels. This perception, however, is not translated into action at the intersectoral level.

**Institutional Roles Regarding Entry Points**

*Health institutions.* Malaria and other vector-borne diseases are major causes of morbidity and mortality in SAEMA. Both private and public health institutions are responsible for providing curative care for patients. In the design of the health care delivery system, these health care facilities currently emphasize their curative more than preventive role, which is relegated to the public health sector. The public health institutions or units of health care facilities are responsible for the following:

- Health education for the public at health institutions and in communities
- Curative and preventive outreach services to the communities
• Monitoring the disease trends in the region and feeding information to lower structures
• Carrying out surveys on prescribing habits and training of prescribers in properly managing malaria and other vector-borne diseases
• Training others, for example, community-based health care workers, day care teachers, chemical dealers, and so on as primary care providers for malaria
• Liaison with other sectors at the SAEMA and Regional Coordination Committee levels for improved management of the environment to control vectors and sources of infections
• Organizing the Regional Malaria Awareness Program for the public
• Promoting screening of houses and use of insecticide-treated materials (ITM), for example, pyrethroid-impregnated bed nets for vector control.

In its supervisory and monitoring role, the District Health Administration collects and collates data on all diseases from public health institutions and sub-metro health management teams. These data are used in planning health service delivery, including public health education. The District Health Administration also assists in drafting the assembly’s bylaws on sanitation.

The District Health Administration serves as the link between the public and private health institutions and the nonhealth departments of SAEMA. It liaises with the Environmental Health Division, the Waste Management Department, and other stakeholders in maintaining sanitation and vector control. The administration, thus, plays an advocacy role at intersectoral levels to ensure incorporation of health considerations in planning and managing assembly projects. This is achieved by the Metropolitan Director of Health Services serving on a number of subcommittees of the assembly.

Box 16-3: Dr. Lynda Vanatoo (Metro Director of Health Services)

“In the current year, the department has actively worked with the Environmental Health Unit on the following:

• Weeding, spraying around houses and water bodies to control the breeding of mosquitoes
• House-to-house inspection to detect and enforce the control of breeding sites of the disease vectors
• Public education on personal hygiene and sanitation practices
• Routine cleansing of public and community drains.”

Source: Authors’ data

The private sector health institutions, private medical and dental practitioners, quasi-government hospitals, traditional herbal practitioners, and private maternity homes play important roles in the curative management of diseases in the metropolis.

Nonhealth Departments
The nonhealth institutions are responsible for providing and maintaining urban infrastructure and putting in place regulatory measures for using and managing these facilities. All departments perceive public health to be a problem and link disease causation to poor environmental conditions, low infrastructure provision, and lack of community participation and involvement in project planning and implementation. In managing urban malaria and other vector-borne diseases, the roles of the MDAs outside the health sector focus on controlling vectors of diseases by preventing formation and removal of vector-breeding sites and public education on environmental health. The following areas are particularly highlighted:
• The Physical Planning Department is involved in land use planning that considers environmental constraints and health needs. These enhance living conditions and improve personal hygiene and public health.

• The Works Department of the assembly is involved in approving building plans, development control and enforcement of building regulations, thus ensuring that environmental health is taken care of in physical developments. The Department also undertakes the design, construction, and supervision of assembly projects including toilets, drains and health institutions.

• The Public Relations Department conducts public education on issues of health, hygiene, and disease prevention. It undertakes community and stakeholder mobilization and acts as a mediator between the public and the departments of the assembly.

• The Legal Department is responsible for the formulation and implementation of policies, preparation of the bylaws, prosecution of sanitary offenders, regulation of demolitions that do not conform to building regulations, defending the assembly and education of legal implications of actions of Departments and how they relate to the community. The Department admits that the assembly has been very apathetic to its legal responsibilities and sanctions, which should help improve hygienic practices and public health. By its activities, the Legal Department contributes to both the removal of obstacles to proper drainage as well as public education to remove the breeding sites of vectors.

• The Environmental Protection Agency provides technical assistance to the assembly to enable it meet its responsibility for managing the environment. EPA works in partnership with all stakeholders to ensure implementation of environmental policy and planning to achieve long-term maintenance of environmental quality. The agency also carries out research and public education and awareness on environmental issues and enforces legal provisions on the environment, where necessary. One of the priorities of EPA is to minimize flooding and mosquito breeding. EPA is involved in assessing the impact of environmental nuisance that affect people, particularly waste management of industrial concerns in the city and proposed mitigating measures.

• The Metro Development Planning Unit coordinates and monitors implementation of all development projects of the assembly, including physical infrastructure. It also coordinates with other development agencies to improve infrastructure.

• The Waste Management Department is responsible for collection, transportation, and disposal of solid and liquid wastes; supervision of solid waste contractors for door to door services; and management of disposal sites.

• The Environmental Health Division plays a pivotal role in preventive measures for vector and disease control in SAEMA. The division carries out the following responsibilities:
  - Inspecting houses to ensure that basic household sanitation facilities are available to discourage disease vectors
  - Monitoring collection of garbage at communal sites by private waste collectors and the Waste Management Department
  - Undertaking water usage education and reporting burst pipes to the Ghana Water Company Limited (GWCL), which is responsible for producing and distributing safe water in adequate quantities for all purposes and rehabilitating and expanding the water supply system
  - Spraying and weeding around houses and water bodies
  - Educating the public through announcement vans on personal hygiene and sanitation practices
  - Routine cleansing of public and community drains
  - Assisting the Bank’s UESP program in promoting household toilets
  - Educating on food hygiene
  - Prosecuting sanitary offenders.
The Community Water and Sanitation Agency (CWSA) is involved in training and mobilizing CBOs and community education on hygiene, water, and vector-borne diseases. CWSA also conducts school and institutional hygiene programs in collaboration with the Ministry of Education hygiene education program. It educates on water usage, food and personal hygiene, and management of facilities; promotes development of household latrines; and encourages households to develop and manage soakage pits for domestic wastewater management.

The School Health Education Programme (SHEP) under the Ghana Education Service handles production of education materials in schools and lectures to pupils and teachers on personal environmental hygiene, nutrition, social public health issues, and community involvement in school affairs.

UESP was set up as a unit under SAEMA. Besides providing hardware for sanitation, this Bank project is assisting SAEMA by:

- Improving internal management of the Waste Management Department
- Building human resource capacity of the department in supervising and monitoring the private waste contractors
- Developing modalities and strategies for improving waste management service delivery, including handling of hospital waste and support for logistics
- Developing basic infrastructure, including water supply, toilets, solid waste disposal points, and an upgrading package in two low-income communities in SAEMA
- Planning, designing, and developing a landfill site for proper disposal of solid waste (provisions are being made for handling hospital waste)
- Initiating action to collect data to design a program that would address absence of a policy guide in managing hospital waste.

All the nonhealth departments are aware of the link between disease causation and poor hygiene and liquid waste management, inadequate supply of safe water, lack of sanitation facilities, and ignorance. They all would like to do more to prevent the situations and conditions responsible for creating an environment for mosquito and vector breeding in the city.

Civil Society
The general public, particularly in poor areas, contribute significantly to disease causation and prevention. Most of the environmentally related diseases seen in SAEMA can be directly attributed to public attitudes and practices, which can be behavioral, cultural, or traditional. They include:

- Open defecation along beaches, even where toilets exist
- Poor personal hygiene, leading to outbreaks of cholera and yaws in Shama
- General apathy to sanitation and the environment
- Lack of community initiative, due to lack of leadership initiatives, often complicated by chieftaincy disputes, for example, in the New Takoradi Area
- Direction of untreated effluent from soakage pits and liquid waste into drains
- Superstition and belief in spiritual causes of diseases
- Preferences for traditional sources of water, such as streams and rivers, compared with piped water.

To reverse the trend and bring about improved management of the environment and personal hygiene, a number of NGOs and CBOs have sprung up. These organizations play an important role in making people aware of the consequences of poor personal hygiene and environmental practices. They are involved in education on the need for a high level of personal hygiene and intensive public education intended to bring about attitudinal change.
The thrust of their programs is to remove barriers to changing attitudes and behavior. Some NGOs are involved in information dissemination on urban malaria, that is, creating awareness of the health situation and prevention. Some of their activities to maintain a clean environment include cleanup campaigns, desilting of drains to maintain free flow and avoid stagnation of wastewater. Examples of such NGOs are SNV, CODEPA, and a CBO in New Takoradi.

The Weak or Missing Link in the Management of Urban Malaria

The management of urban malaria and other vector-borne diseases is a continuum of activities that begins with preventing formation of breeding sites for vectors and continues through treatment of patients affected by these diseases. These roles actually fall under different MDAs, each of which may perform to the best of its ability, but have weak linkages with the rest of the chain of measures to control malaria.

The role of the various MDAs in managing urban malaria and other vector-borne diseases is not always clear to all stakeholders. Although it is usually obvious to the health sector that the causative factors of the diseases presented to health institutions are the responsibility of other MDAs, those MDAs are most of the time not aware of their roles in disease prevention. Rather, they see the service they render as an end in itself and not a means to an end. For example, although the city administration may see clearance of refuse to clean up the city as an end in itself, the health sector sees it as a way to decrease factors causing diseases. In effect, each MDA may render its services to the best of its ability, but leave undone “gray areas,” because of the absence of effective collaboration in bridging gaps between curative and preventive services.

Institutional Priorities and Objectives

Decentralized departments under SAEMA. Priorities and objectives of the assembly are generated through the assembly mechanism, that is, subcommittees with full participation of the department heads. These are forwarded through the Accra Metropolitan Authority (AMA), which is the executive arm to the General Assembly. The subcommittees, which are comprised of assemblymen, heads of departments, and co-opted members, are responsible for collating and deliberating on issues to assist and guide policy formulation of the Executive Committee and the General Assembly. The outcome of General Assembly deliberations are compiled into annual and five-year development programs.

The various departments under the assembly adhere to the assembly’s policy guidelines. Before year end, departments are requested to present action plans and budgets to the authority for the following year that are in line with the assembly’s policy. These are then compiled into annual development plans. For all departments under SAEMA. Decisionmaking is limited to day-to-day administration, done in consultation with the coordinating director.

Other environmental priorities for SAEMA are contained in the district environmental management plan for district assemblies of Ghana, Report on Training Workshop 1996, prepared by the Environmental Protection Agency.

In the case of UESP, the priorities and objectives are predetermined in the project documents. Management actions and daily decisions are taken by the project manager in consultation with the coordinating director. Other issues, requiring further consideration are referred to the project coordinator and chief director at the Ministry of Local Government and Rural Development.

Nonassembly departments. For agencies not directly under the assembly, the objectives and priorities are based on the agency’s mandate. The main priorities are national and regional in character. These decisions are taken at the management level and passed down to the regions and district offices. The local level priorities are intended to achieve improvement in service delivery.
and efficient management. The decisionmaking and financial autonomy of these agencies are limited either by financial sealing on projects that can be initiated by them, purchasing, contracts and recruitment limits, or day-to-day management decisions.

Health institutions derive their priorities from Ministry of Health policy guidelines, which are further developed into localized priorities to suit prevailing conditions of the district or clinic. These are determined by the local health management teams of the various institutions.

CBOs and NGOs. The priorities of CBOs and NGOs are determined through community needs or by the mandate of the head offices of these agencies. Some CBOs and NGOs carry out needs assessments in communities to determine what actions to take to fulfill their mandate.

Reporting

Reporting by the agencies under the assembly is clearly outlined. All correspondence (letters, memos, and monthly reports) to the department are routed from the metro chief executive through the coordinating director and vice versa. Reporting and discussions on roles and assignments are also undertaken at the various meetings, that is, the management team meeting, subcommittee meetings, and planning and technical subcommittee meetings. Reports are also made at the weekly management meetings. All these meetings are covered by minutes. The heads of departments also have verbal discussions with the director and metro chief executive when necessary.

In cases where ties with the regional and national offices are close, some decision and reporting are also forwarded to higher levels of government with or without recourse to the assembly.

The non-SAEMA agencies report monthly, quarterly, and annually through their regional offices to the head office. Because the head offices sign performance contracts with the State Enterprise Commission, the reports form the basis for measuring departmental performance.

NGOs report to their headquarters and donors, with whom they design a program of action by sending quarterly and annual reports and end-of-program reports. Quarterly reports are also submitted to the metro assemblies and other NGOs. The level and regularity of reporting by CBOs is not clear. Reporting across sectors is not common.

Legal framework. The basic legal framework for the decentralized departments under the assembly is the Local Government Law, 1993, Act 462, and the legislative instrument that established SAEMA. The act defines the functions and operational modalities for district assemblies. It also defines creation of the assemblies and subdistrict councils, election of members of the assemblies, and other issues connected with running the assemblies. One of the strong points of the law is that it provides arrangements to avoid duplication, rivalry, empire building, and waste of resources. The intention is also to promote and sustain coordinated and integrated planning and implementation and ensure complementarity of activities.

In practical terms, achievement of these ideals is thwarted, because professionals are not trained on how to achieve collaboration, mechanisms and processes are not created for collaboration, and provisions are not made in sector budgets for intersectoral collaboration.

In addition to Act 462, many of the decentralized departments are governed by laws and ordinances under which they were operating before promulgation of Act 462, particularly where these laws were not repealed by Act 462. Other laws that support Act 462 are National Development Planning Commission Law (Act 479), National Planning Systems Law (Act 480), National Building Regulations LI 1630, Criminal code Act 29 of 1960, and Sekondi/Takoradi City Council By-law of 1948.
The Town and Country Planning Ordinance Cap 84, EPA Act 490, and LI1652 are a few of the legal provisions for some of the other agencies.

Limited liability companies, such as GWCL, operate under provisions of the Companies Code (1963) and GWCL Law Act 179 of 1999. Until last year, the company used to be a government department operating under Act 310 of 1965 as the Ghana Water and Sewerage Corporation. The change occurred in part due to privatization of the department.

For the public health institutions, the legal provisions of the Ministry of Health, which establishes hospitals for the delivery of curative services, provides the legal framework for delivery of services.

Legal provisions for establishing private clinics and maternity homes provide the legal framework for delivery of curative services by the private sector.

Financial. The sources of funding for the General Assembly are mainly from the Common Fund, local revenue generated from property rates, levies, and services. The assembly can also get bilateral assistance or any other donor assistance funds under projects, such as UESP and the Urban Infrastructure Improvement Programs of the road sector.

All departments under SAEMA receive financing through the assembly budgeting and auditing mechanism, that is, the Treasury and Audit Departments. Department budgets are presented through the Finance and Administration Subcommittee to the General Assembly, and, when approved, these become the basis for disbursing the assembly’s funds for the year. Projects and programs that have gone through the subcommittee system and been approved are more likely to be financed and implemented than those developed by central government departments for the assembly.

Implementation capabilities of many of the departments are limited, as they all depend on the assembly to enforce and implement decisions. Due to financial constraints, many of the action plans are not undertaken.

Some central government departments, such as EPA, have their own funding sources; however, their projects must also be approved by the head office of the agency.

All the departments, especially decentralized ones, cited the problem of low financial support. The community development officer noted that, as a decentralized department, financial support is expected from the assembly but has not been forthcoming. This year, the department has received only ₋30,000 from the regional office and is, therefore, financially handicapped. The department also receives some assistance, usually in the form of transport allowances and leftover stationery and other logistics, from NGOs who work with the department.

Departments within the assembly that generate revenue pay these monies into the General Assembly Treasury and do not retain any percentage for their own use. All requisition for logistics must be approved by the coordinating director before the Treasury can release monies for purchase. A well-structured purchasing system is available under the assembly system.

Collaboration. As noted above, the Local Government Act provides for intersectoral collaboration for the decentralized departments in theory but, in practice, collaboration among most departments is weak. Some district assemblies are trying to secure collaboration. SAEMA is one such district assembly.

The degree of collaboration among departments under SAEMA is appreciable. Agencies visited under the General Assembly were all happy with their involvement in the functioning of other
agencies. The following avenues for collaboration have been noted: development office, through organization of the radio talk show and public education programs, Environmental Health Unit and their linkage with the Metro Health Management Team, core group meeting under UESP, statutory planning and technical committees, and project monitoring teams.

The assembly decisionmaking mechanism presents a platform for the necessary collaboration at the project formulation stage. It ensures that the contribution of all relevant agencies and decisions are based on consensus.

The central role of SAEMA’s coordinating director, through whom all correspondence passes, is a role that should be developed for collaboration and coordination. By coordinating all activities and reporting on them, the administration is aware of areas of duplication or gaps in activity and able to redirect activity accordingly. It puts the director on top of issues emanating from every department.

The greatest benefit of the weekly management meetings is to resolve conflicts and harmonize programs and plans before implementation. This is laudable, because officers whose actions and inability to deliver and draw back the assembly are made to sit up. These meetings have made every head of department aware of progress on all assembly projects and programs. The meetings can be used to link activities of nonhealth departments to disease causation and help find ways to bridge gaps. Although the meetings are meaningful, the fact that they sometimes take more than half a day is of concern.

Box 16-4: Robert Austin, Coordinator UESP

“These meeting are not just talking shop. Every Monday morning, members check on their schedules and make sure that they fulfill commitments and have some progress to report on.”

Source: Authors’ data.

Box 16-5: Deputy Coordinating Director, SAEMA

“You cannot joke with the Monday morning meetings. Heads of Departments are eager to attend every Monday. It is like a ritual. There is effective contribution from all heads.”

Source: Authors’ data.

Obstacles to effective routine collaboration between the health sector and other MDAs. In spite of the avenues for collaboration within SAEMA, attempts at collaboration for health have been ad hoc, that is, most active during epidemics or disease outbreaks and poor on a routine basis. A number of factors account for this:

• The Health Information System is not designed to link environmental conditions to health. Health data from health institutions are collated and passed on to regional and national levels and not routinely used to inform decisions on activities by other MDAs.
• Routine reporting among departments has no format. Infrastructure agencies do not routinely monitor the effect of infrastructure development on health; even though other MDAs may be aware of the linkage between their responsibilities and public health, they are not aware of the magnitude of the problem nor their potential contribution in disease prevention.
• Information flow from management to general staff levels is poor, because heads of departments do not have a platform through which they can explain issues discussed in
these meetings to their staff. This information gap should be closed to enable staff to understand their actions and get them involved in the day-to-day running of the departments.

- No system effectively supervises private sector health institutions, and monitoring of activities at these institutions is inadequate. General health statistics of SAEMA, therefore, do not incorporate data from the private sector, and health data are incomplete. The rate of returns on cases these institutions treat and send to the district health administration is also low, as is collaboration between private health and other sectors.

- A limitation noted by Ghana’s EPA is that some projects that are technically objectionable have been implemented, because they meet with the aspirations of the assembly, for example, developing KVIPs in the waterlogged areas of Effia Song.

- The interface between the public and private sectors is weak. The general public is seen as consisting of clients and not partners. In the few instances in which the traditional chiefs were used for identifying and acquiring sites for UESP projects, they were found quite helpful. These partnerships must be extended to other areas of development.

Although the health sector is conscious of the need to link closely with the nonhealth sector in preventive health care, the health sector is more immediately concerned with extending and expanding physical and curative health services. The health sector has identified promotional health roles and the need for collaboration as priorities, but collaboration between the health and nonhealth sectors is not given much importance. Health data are collected but not disseminated to nonhealth departments for use. Similarly, the format of data collection needs to be reviewed to make it usable to these institutions.

The main objective of the nonhealth sector is to provide physical infrastructure and services. Even though the sector perceives related health promotional benefits, they take them for granted and incorporate little activity into their programs and projects to achieve these benefits. Many cite recent experience with collaboration in the core group meeting on the School Health Education Programme and improving the health benefits of infrastructure as a great benefit that has improved health in communities.

The health sector has a role to play in supporting the decisionmaking process with the necessary health statistics. Health information is currently collected for use by health institutions alone, but must be structured to be relevant to the Environmental Health Unit and other nonhealth departments.

Table 16-6 is a matrix for linking the three entry points to the various MDAs; it shows the departments that can support and collaborate with each other on disease prevention.
<table>
<thead>
<tr>
<th>MDA</th>
<th>Role</th>
<th>Linkage</th>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Works</td>
<td>Supports all urban infrastructure development within SAEMA</td>
<td>Identification, implementation, supervision, and enforcement</td>
<td>Development office role widely accepted by other MDAs; direct contact with private sector; representatives at the submetro levels; reporting format for project monitoring and supervision</td>
<td>Staffing, financing, and logistics; no general reporting format, especially from the subdistrict level; low motivation</td>
</tr>
<tr>
<td>PRO</td>
<td>Focal point for information and complaints and forwards them to relevant MDA for resolution</td>
<td>Collaboration with all agencies for public education</td>
<td>Good rapport with all agencies and the press</td>
<td>Staffing, training, and logistics; staff with double allegiance to parent department and SAEMA</td>
</tr>
<tr>
<td>Physical planning</td>
<td>Land use planning and development control</td>
<td>Research, policy development and implementation, and regulation</td>
<td>Ability to collaborate under the statutory planning and technical committees; good community development skills; and a supporting legal instrument for action</td>
<td>Finance, logistics, training, and skill improvement; lack of technical and policy directive on technical issues</td>
</tr>
<tr>
<td>Legal section</td>
<td>Policy in terms of formulation of by-laws and procedures; enforcement through prosecution; implementation, e.g., performance contract design; education of the public on legal obligations</td>
<td>Providing legal assistance to MDA enforcement</td>
<td>Appropriate legal backing and capacity would enhance the work of all other sections, i.e., PRO, security, city guards, and so on come under one umbrella</td>
<td>Staffing and logistics, low development of local legal instruments, poor record keeping, poor support from the judiciary/courts system for prosecution.</td>
</tr>
<tr>
<td>UESP</td>
<td>Provision of community infrastructure</td>
<td>Policy implementation, strengthening the capacity of other MDAs, education, and community involvement</td>
<td>Financial support for project; technical support always available through additional consultancies; technical resources available; experience with stakeholders; and support of core group through allowance payments</td>
<td>Lack of staff; logistics and no enforcement powers and funding for activities</td>
</tr>
<tr>
<td>EPA</td>
<td>Education and enforcement of EPA laws on the environment</td>
<td>Policy, enforcement, regulation, and education</td>
<td>Legal backing for activities</td>
<td>Lack of bylaws under which to prosecute, lack of education materials, and lack of logistics</td>
</tr>
<tr>
<td>PHD</td>
<td>Education on environmental issues; enforcement and prosecution</td>
<td>Policy implementation; education</td>
<td>Enough staff at metro and submetro levels; ability to work with others</td>
<td>Lack of bylaws under which to prosecute, lack of education materials, and lack of logistics</td>
</tr>
<tr>
<td>WMD</td>
<td>Management of solid and liquid waste</td>
<td>Strong linkage with UESP</td>
<td>Support from UESP</td>
<td>Inadequate equipment, funding, and vehicles</td>
</tr>
<tr>
<td>CWSA</td>
<td>Support for communities obtaining water</td>
<td>Strong links with communities and donors</td>
<td>Staff, and donor support</td>
<td>Incentives for staff</td>
</tr>
<tr>
<td>GWCL</td>
<td>Provision of potable water</td>
<td>Policy implementation</td>
<td>City-wide coverage</td>
<td>Old reticulation system, staff, equipment, and seasonal variations in reservoirs</td>
</tr>
<tr>
<td>Civil society</td>
<td>Community education on environmental</td>
<td>Policy, education, and implementation</td>
<td>Autonomy to operate and access to donor</td>
<td>Not hindered by bureaucracy</td>
</tr>
</tbody>
</table>
MDA Role Linkage Strengths Weaknesses

<table>
<thead>
<tr>
<th>Health institutions</th>
<th>Role</th>
<th>Linkage</th>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Preventive and cure of diseases</td>
<td>No strong linkage with MDAs</td>
<td>Organized management system and good team work</td>
<td>Financial constraints and lack of policy on management of hospital waste</td>
</tr>
</tbody>
</table>

*Source: Authors’ data.*

**Conclusions**

The following conclusions can be drawn at this stage in fulfilling the objectives of the study:

- Environmental conditions in SAEMA have contributed greatly to causing disease in the metropolis. Five out of the ten top diseases are related to environmental conditions. Hospital waste is a potential danger, but no current evidence links any particular diseases to poor disposal of hospital wastes.
- Developing intersectoral collaboration between health and environmental initiatives remains difficult and underresourced. Many agencies have roles that can help overcome these problems, but financial and logistic restrictions have led departments to pay more attention to their primary role, leaving “linkage” roles in the background. Local institutions have the advantage of seeing the linkages clearly and how their involvement in total can help improve the conditions they seek to solve. Improving agency perception of the linkages will encourage them to collaborate and share tasks, facilitating their achievement.
- As noted by Stephens and others (1998), “The process of decentralization in Ghana has the greatest potential to facilitate collaboration of professionals of all disciplines that work at the level of local government. The merging of different vertical agencies with complementary themes has the potential to straighten intersectoral collaboration.”
- Some limitations have been experienced in achieving linkages and collaboration. Current approaches consist of basic reporting, mostly verbal and at meetings. Technical directives or procedures for further action have been blurred. No routine reporting format links all departments.
- Few legislative and administrative controls exist to ensure those involved will play their roles and their follow-up actions have not been well defined.
- Monitoring responsibilities are also unclear. Although SAEMA has recorded a number of instances of collaboration, these have not been fully structured and have coordinated sectors that are not of immediate concern.
- The interest of the assembly is to offer efficient delivery of services to prime areas. Prioritization and balancing of concerns between health and efficient urban services must be taken up as a main policy issue at the assembly and followed up through the various agencies of the assembly.
- Logistic and staffing requirements have limited the ability and capacity of agencies to perform complementary roles effectively. Except for UESP, which has external funding, many of the departments are financially constrained in performing and delivering on their mandates of incorporation.
- Decentralization and the state of the decentralized departments regarding budgeting, allegiance, and others is reinforcing separation and discontentment. Resources must be shared collaboratively to enable all departments to play their roles effectively.
- The linkages and the roles played by NGO, CBO, and the private sector have not been fully utilized. All indications are that they have not been getting needed assistance and support from the assembly and no supervision of their activities and impact.

**Terms of Reference for an Institutional Needs Assessment**

**Outline of the Needs Assessment**

The consultant(s) will conduct an institutional needs assessment to assess the opportunities and constraints of intersectoral collaboration and build on the “Consultative Assignment on Urban
Public and Environmental Health in Ghana” report. The needs assessment for Sekondi-Takoradi will be conducted for:

(a) National, regional, and district and subdistrict levels of government, which will target key government officials, agencies, and ministries in environment, health, infrastructure (roads, housing, water supply, sanitation, and drainage); local governments; government agencies in rural development; line agencies (Ghana’s Environmental Protection Agency [EPA] and others); and district assemblies that are involved with (or should be involved with) the pilot’s three “entry points”—that is, urban malaria, management of waste from health care facilities, and environmental health linkages among water, sanitation, and drainage—to learn their views on what they would need to improve service delivery.

(b) Selected private sector providers and stakeholders (NGOs, community-based organizations [CBOs], and professional associations, among others) that are involved with (or should be involved with) the pilot’s three “entry points” to learn what they provide as a (private sector) service and expect in terms of improved service (to stakeholders).

(c) All of the groups above to learn what they might be able to contribute in exchange for improved service.

The completed needs assessment will be analyzed to update the “Ghana Health Assessment” (a quantitative method of assessing the health impact of different diseases) and produce a preliminary issues paper and an action plan (of no more than forty pages) on public health, institutional and legal, decentralization, financial/incentive, capacity-building aspects, all of which will also be tackled at the workshop.

The consultant(s) will also gather data that will feed into developing a social map for Sekondi-Takoradi to help to ascertain data sources and contacts, relevant “hot spots,” both topically and geographically, and the perceived social causes that underlie and perpetuate observed patterns.

Content of the Needs Assessment

The needs assessment has two main sections:

- Public health
- Institutional and legal aspects, financing mechanism, capacity, and recommendations.

Public Health

Use Bridging Environmental Health Gaps checklists [1996 volumes] for integrating environmental health considerations into projects as background material:

- Define the main health problems in Sekondi-Takoradi.
- Describe in detail linkages to the three “entry points” (management of wastes from health care facilities, urban malaria and other vector-borne diseases, and water, sanitation, and drainage)
- Describe the full range of possible remedial measures in health, environment, and infrastructure sectors.

Institutional and Legal Aspects, Financing Mechanism, Capacity, and Recommendations

Background
Definition of institutions: sets of rules by which a ministry, agency, group, association, and so on functions to coordinate activities within (vertical) and between (horizontal) organizations (see chapter 3).

Institutions have three layers:

- Operational (laws and regulations)
- Governance (who makes and applies the rules and how this is done)
- Constitutional (rules that constrain rule making) (Not to be covered in this assignment)

The coordination mechanism, which is determined by the nature of the good and service (in our case, a public, toll, or common pool good for water, sanitation, and drainage and private or public good for hospital wastes) will allow for provision of goods and services by the public sector (hierarchy), the private sector (market), and/or stakeholders (collective action).

Assignment

**Institutional and Legal Aspects and Financing Mechanism.** Assess, clarify, or identify the set of rules that will help determine sectoral linkages at the national, regional, district, and subdistrict levels as well as the interface between the public, private sector, and stakeholders (PPS).

Operational aspects include:

- Institutional set up (provide an organization chart for line ministries and agencies and identify private sector participation and stakeholder involvement) and legal framework
- Levels of responsibilities for identification, planning, design, implementation, operations and maintenance, monitoring, evaluation, and reporting (to whom, how often, when, adherence, penalties, and rewards)
- Financial set up, that is, levels of financial mobilization for each ministry or agency
- Institutional collaboration (with whom to interface PPS, formal and informal relationships, and incentives and disincentives)
- Willingness to collaborate (examples of past collaboration and so on)
- Information management in a decentralized setting (horizontal, that is, national to subdistrict and vice versa, and vertical, that is, across): data flow, in general, and for monitoring, in particular.
- Portfolio (ongoing activities in each sector in Sekondi-Takoradi that are related to the three entry points)
- Environmental, health, and environmental health linkages, as identified by ministries and agencies
- Public, private, stakeholder interface, that is, who does what and the terms of these relationships.

Governance aspects (ownership of the decentralization process):

- Level of determination of objectives, priorities, and policies
- Level of the decisionmaking process: What are the “limits” and constraints? To what degree are they achieved locally without hierarchical or outside pressure? What are the incentives and disincentives?
- Level of appropriation of funds
- Accountability and transparency (financial, managerial, and result based as well as incentives and disincentives)
- Recent changes created by the decentralization process in institutional lines of responsibility, reflecting newly identified responsibilities and collaboration across/among different line ministries.

**Capacity**

- Technical resources (instruments, intervention policies, monitoring indicators, and others)
- Technical and managerial staff composition and capacity
• Staff needs, including training and recruitment
• Human health–related resources (capacity to identify, evaluate, and prioritize health problems outside the health sector, managerial skills, and so on).

Recommendations

• Recommendations to foster collaboration among PPS
• Action plan in terms of institutional, legal, and financing set up and training needs
• Expected outcomes from the collaboration in terms of equity, efficiency, sustainability, and accountability.

References

AMA (1998), Accra Metro Health Initiative (AMEHI) Briefing Paper, UK Department For International Development (DFID) in partnership with the Accra Metropolitan Assembly (AMA).


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