

# STATE OF GHANA'S ENVIRONMENT – CHALLENGES OF COMPLIANCE AND ENFORCEMENT

TAMAKLOE, WILSON

Ghana Environmental Protection Agency

## ABSTRACT

The country of Ghana is in Western Africa, bordering the Gulf of Guinea, between Cote d'Ivoire, Burkina Faso, and Togo. Ghana has rich and diverse natural resources. These resources are exploited to meet the growing demands of the populace. The uncontrolled manner of utilisation of these natural resources has resulted in reversible and irreversible changes within the environment.

Ghana has a long history of attempting to safeguard the environment from being abused by enacting and including environmental protection in appropriate legislation. The best result from all of these attempts is the establishment of an organisation solely responsible for the environment – the Environmental Protection Agency (EPA).

The Ghana Environmental Protection Agency, since its establishment in 1994 as an Agency with powers to regulate the activities within the environment, has been using the Environmental Assessment Administration procedures as its major tool for achieving compliance with its legislation. The number of applications received for environmental permits within a certain time frame is used as a measure of environmental compliance.

To be able to enforce the environmental legislation, the Agency promotes compliance by working in partnership with other stakeholders, especially those state organisations with an equal mandate to enforce certain legislation. Compliance monitoring is done by the Environmental Quality Department of the Agency in collaboration with other departmental staff within and outside the Agency. Non-compliance response involves mainly using statutory notices, site visits, and, as the last resort, legal action.

The main challenges of compliance and enforcement are the political will to see the environment as a priority area, the lack of adequate resources for environmental management and the carrying out of compliance and enforcement activities. The other challenge is review of existing legislation to reflect the current trend of events and enactment of new legislation.

## 1 INTRODUCTION

Ghana lies between longitudes 3° 15' W and 1° 12' E, and latitude 4° 44' and 11° 15' N. The country is bordered on the East by the Republic of Togo, the West by Cote d'Ivoire, the North by Burkina Faso and the South by the Gulf of Guinea.

The total land area of Ghana is 238,533 km<sup>2</sup> with an Exclusive Economic Zone (EEZ) of 110,000 km<sup>2</sup> of the sea, forming the territorial area of Ghana. Ghana has a coastline of 550km<sup>2</sup>. The country is under the influence of the tropical humid climatic conditions and experiences two major seasons, namely the rainy season and dry season, brought about by the harmattan, a dry dusty wind that blows along the northwest coast of Africa.

The mean minimum rainfall is 900mm/annum occurring around the Southeastern part of Ghana (Accra-Aflao) while the mean maximum rainfall is about 2000mm/annum, occurring in the southwestern portions (Axim). Mean minimum temperature ranges from 21°C - 23°C and mean maximum temperature is from 30°C - 35°C. The mean annual evapotranspiration rate is low in southern Ghana (80mm) and higher in the north (190mm).

There are six vegetation zones in Ghana. These are the Savannah (Sudan, Guinea and Coastal), Forest-Savannah Transitional Zone, The Semi-Deciduous Forest Zone, and the Rain Forest Zone. Human activities and natural pressures have considerably changed the natural vegetation.

Ghana had a population of about 12.4 million in 1984. This figure increased to 18.8 million in 2000 with an intercensal growth rate of 2.6 percent. Life expectancy at birth has

improved from 45 years in 1984 to 55 years in 2000. About 37.4 percent of the population live in urban areas as against 32 percent in 1984. The economy of the country is based on the export of cocoa, minerals (gold, diamond), timber and few non-traditional products/produce.

Ghana is rich in biodiversity. The country boasts a wide variety of birds, including migratory birds, reptiles and animals with unique habitats; a wide range of plants and flowers abound in the country. A large number of plant and animal species are believed to be rare; the leopard and golden cat are rare carnivores; the rufus fishing owl and white-breasted guinea fowl are endangered birds while the giant butterfly *Papilio maesseni* are found only in the Likpe area of Volta Region.

There are also major tourist attractions in the country. These include the Kakum, Bia, and Mole national parks; the Paga Crocodile Pond; beautiful beaches, forts, and castles; and many other important national heritage sites.

## **2 STATE OF THE ENVIRONMENT**

### **2.1 Atmosphere**

Ghana generally enjoys 'clean' atmospheric conditions. However, emissions from point sources such as vehicles, industries, and dusts from untarred roads, etc. tend to create atmospheric pollutants within their immediate environments. The most abundant greenhouse gas produced and emitted in Ghana is CO<sub>2</sub>. There are CO<sub>2</sub> sinks in the forested and the reforested land. The trend of the total CO<sub>2</sub> equivalent removals, however, shows a significant decline of about 49 percent from 1990 to 1996. There is fear that the rate of deforestation will offset net CO<sub>2</sub> removal as forests, which serve as sink for excess CO<sub>2</sub>, are being depleted. Ghana's programme under the Montreal Protocol (control of chlorofluorocarbons) is progressing smoothly. In 1997, UNEP rewarded Ghana's efforts with an award for her exemplary efforts to implement the Montreal Protocol.

### **2.2 Biodiversity**

Ghana's rich biodiversity is gradually being depleted due to a variety of factors. Prominent among them are poaching, habitat loss, deforestation, etc. It is indisputable that there is a pressing need to domesticate the Biodiversity Convention. This is in view of the precarious biodiversity conditions prevalent in Ghana.

### **2.3 Forest Resources**

It is estimated that over 90 percent of Ghana's high forest have been logged since the late 1940s. The rate of deforestation is 5 percent in off-reserves and 2 percent in on-reserves. The off-reserves have been seriously degraded and fragmented to less than 5 percent of the forested area 83,489km<sup>2</sup>. The current deforestation rate is about 22,000 hectares (ha) per annum. Ghana, therefore, may face future export deficits and there is the likelihood that the country's forestry sector will die out.

### **2.4 Fresh Water**

Available data suggests that Ghana is not under water stress. Indeed surface water resources, including the Volta Lake constitute about 5 percent of the total land area. There is, however, a serious problem of uneven distribution of water, leading to perennial water shortages in many parts of the country, especially during the dry season. Inadequate industrial and domestic wastewater management has resulted in the pollution of most surface water resources in the country. Prominent among these are the rivers that flow through urban areas.

### **2.5 Environment and Human Health**

There has been some overall gain in health over the past 30 years. Life expectancy at birth has improved from 45 years in 1984 to 55 years in 2000. Many water-borne and water-related diseases are however on the rise due to poor domestic environmental

management and industrial pollution. Malaria remains endemic in the country despite several control measures. Incidences of cholera are also recorded every year especially during the rainy season.

## 2.6 Land Resources

Agricultural land availability has reduced from 1.56ha in 1970 to 1.11ha in 1984 to 0.74ha in 2000. This shows that there has been pressure on the country's land resources over the past three decades. The pressure on land available in urban areas is largely due to rural-urban migration.

## 2.7 Coastal Zone and Marine Environment

The coastal zone of the country is under intense pressure due to high concentration of human activities within the zone. The major industries in the country are located within the zone. Marine fishing serves as a source of livelihood for the majority of the people living along the coast. Although coastal erosion points have not increased in number in the past decade, the magnitude of the problem has increased considerably in certain areas. This is the case for the Volta Delta at Ada and Keta. Extensive restoration is ongoing in Keta and is expected to be completed in the next two years.

## 2.8 Major Pressures

Politically, Ghana experienced instability some years after independence to the early 1980s. Since 1992, multi-party democracy has been practiced, with a change in government in 2000. The unstable political climate in the past made it impossible for past governments to carry through their programmes. In addition there has been an increasing rise in poverty, which has impacted negatively on the environment and vice versa. Illiteracy coupled with lack of awareness of environmental issues and legislation has also contributed immensely to environmental problems in the country.

## 2.9 Responses

These pressures notwithstanding, significant legislative and institutional reforms have taken place within the past decade. Many institutions for regulating the environment were established after 1990 including, Environmental Protection Agency, Water Resources Commission, Forestry Commission, Energy Commission, etc. Within the same period, nongovernmental organization activity has also increased, with the implementation of many programmes aimed at the provision of sanitation and potable water; control and prevention of loss of biodiversity, etc.

# 3 COMPLIANCE AND ENFORCEMENT INDICATORS

## 3.1 Compliance Indicators

Ghana has a long history of attempting to safeguard the environment from being abused by enacting and including environmental protection in appropriate legislation. The best result from all of these attempts is the establishment of an organisation solely responsible for the environment – the Environmental Protection Agency (EPA). As outlined in a policy statement, Environmental Protection in Ghana is to be guided by the preventive approach so as to avoid the creation of environmental problems. This in, practice is, being done through the Environmental Assessment Administration Procedures. These procedures were derived from the main Environmental Legislation, Environmental Protection Agency Act, Act 490, and Environmental Assessment Regulation, LI 1652.

The procedures are as follows:

1. New developments are to register with the EPA, conduct an environmental assessment of their proposals and submit an environmental assessment report to the EPA for review. There are levels of assessment depending upon the type, scale and location of the activity. Environment Permit is granted for the development to start

when EPA is satisfied with the assessment conducted and the mitigation measures proposed for any environmental impact likely to be associated with the project.

2. Industries in existence before the legislation are to conduct an environmental assessment of their facility and propose ways and means of improving the level of performance of their set-ups. These Environmental Management Plans are then submitted to the EPA for review. The commitments made by the management of the set-ups are to be implemented and the goals achieved within three years, after which another plan must be submitted. The new industrial set-ups are also required to comply with this procedure after 18 month in operation.
3. Industries are also requested to submit monthly returns of their environmental parameters monitored to the EPA. Comments are also expected in cases where values exceed certain limits and what measures are in place to check the discrepancy.
4. Industries are also requested to submit Annual Environmental Report to the Agency, indicating how they have performed environmentally, what have been achieved, what went wrong and what needs to be done.

Using these instruments, the Agency is able to measure the level of compliance. For example, the number of Environmental Impact Assessment Reports received for a particular sector within a certain time frame is used as an indicator of the level of compliance, especially when the figures are compared with another sister organisation responsible for regulating that sector.

### 3.2 Enforcement Indicators

#### 3.2.1 Compliance Promotion

The Agency is working in this area largely through partnership with state organisations that have a similar task of ensuring compliance and enforcement of other legislation. In working in partnership, the Agency hopes to tap into their resources in order to achieve its compliance and enforcement goals. With this partnership approach, the Agency has begun forming strong ties with other state regulatory organisations that ensure that environmental legislation is complied with.

An example, the Agency has established this type of a strong link with the Energy Commission. The Energy Commission is the state institution responsible for ensuring that investment in the energy sector is properly controlled. The Commission is therefore responsible for licensing all investors in the energy sector and for regulation of their activities thereafter. EPA now has a good working relationship with the Commission. The Energy Commission now ensures that all investors in the energy sector of the country who are to be licensed by the Commission first obtain an environmental permit before it processes their application for license. The Commission has even gone a step further toward making an environmental permit mandatory for all applicants by including it in a new regulation (Petroleum Regulations) the Commission is about to send to parliament for enactment as a law. In this new regulation, the environmental permit is one of the items that must be submitted together with the application form for license. Failure to submit an environmental permit with your application means that your application cannot go further. Thus investment in the energy sector means compliance with LI 1652 and its parent Act.

In furtherance of this partnership approach, the Agency has stated a programme in which officers of the Agency, the Ghana Police officers, state Attorneys and Magistrates/Judges are brought together in a workshop. The main aim of the programme is to help the non-environmental experts in the group to understand and appreciate environmental issues, environmental management principles and environmental offences. The environmental officers in the group are also trained to understand evidence-gathering procedures, presentation of evidence in court and court etiquette. The other aim of the programme is for the environmental officers to establish rapport with these law enforcement experts so that whenever they need assistance in their work as compliance and enforcement

officers they can call on these experts. Mock trials (Moot Court) are also included as part of the programme.

### 3.2.2 Compliance Monitoring

This is achieved through the Environmental Quality department of the Agency. This department, in collaboration with officers from other departments within and outside the Agency, carries routine monitoring of certain environmental parameters, especially within the aquatic environment and industrial effluent. The results obtained, for example for the industrial set-ups, are used to crosscheck the monthly return values submitted by the industry.

### 3.2.3 Non-Compliance Response

The Environmental Inspectorate and Legal departments of the Agency (the two departments merged to form Legal, Compliance and Enforcement Department in January 2002) are primarily responsible for responding to incidents of non-compliance. By totalling the number of public complaints received, various legal actions carried out and number of site visits undertaken within a particular time frame, an indication is given as to the level of non-compliance issues.

## **4 CONCLUSION/CHALLENGE**

The future of Ghana's environment is thus not gloomy. The real challenge will be how to:

- Get the politicians to regard the environment as one of the national priority areas;
- Review existing and enact new legislation to reflect current trend of events; and
- Get financial and technical support from the international communities for regulating the environment.

This will ensure adequate allocation of resources for capacity building and utilisation in environmental management.