

STATE OF GHANA'S ENVIRONMENT CHALLENGES OF COMPLIANCE AND ENFORCEMENT

ABSTRACT

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, to the west by La Cote d'Ivoire, Burkina Faso to the North and to the South by the Gulf of Guinea.

The country 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 an attempt to safeguard the environment from being abused by enacting and including in appropriate legislation environmental care. The best result from all these attempt is the establishment of an organisation solely responsible for the environment – 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 permit 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 at the last resort, legal action.

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

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, to the west by La Cote d'Ivoire, Burkina Faso to the North and to the South by the Gulf of Guinea.

The total land area of Ghana is 238,533 km² with an Exclusive Economic Zone (EEZ) of 110,000 km² of the sea, which forms the territorial area of Ghana. Ghana has a coastline of 550km². The country is under the influence of the tropical humid climatic conditions and experience two major seasons, namely the rainy and dry seasons (harmattan).

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%. Life expectancy at birth has improved from 45 years in 1984 to 55 years in 2000. About 37.4% of the population live in urban areas as against 32% 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 can boast of 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 plants and animals species are believed to be rare for instance, the leopard and golden cat are rare carnivores; the rufous 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.

State of the Environment

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 CO₂. The CO₂ sinks in the forested and the reforested land. The trend of the total CO₂ equivalent removals, however, shows a significant decline of about 49% from 1990 to 1996. There is fear that the rate of deforestation will offset net CO₂ removal as forests, which serve as sink for excess CO₂, are being depleted. Ghana's programme under the Montreal Protocol (control of CFCs) is progressing smoothly. In 1997, UNEP rewarded Ghana's efforts with an award for her exemplary efforts to implement the Montreal Protocol.

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 conditions prevalent in Ghana as far as biodiversity is concerned.

Forest Resources

It has been estimated that over 90% of Ghana's high forest have been logged since late 1940s. The rate of deforestation is 5% in off-reserves and 2 % in on-reserves. The off-reserves have been seriously degraded and fragmented to about less than 5% of the forested area 83,489km². The current deforestation rate is about 22,000ha per annum. Ghana, therefore, may face future export deficits and there is the likelihood that the country's forestry sector will die out.

Fresh Water

Available data suggests that Ghana is not under water stress. Indeed surface water resources, including the Volta Lake constitute about 5% 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.

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.

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.

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 the project is expected to be completed in the next two years.

Major Pressures

Politically, Ghana experienced instability some years after independence to the early 1980s. Since 1992, multi-party democracy has been practised 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 environment issues and legislation has also contributed immensely to environmental problems in the country.

Responses

These notwithstanding, enormous legislation and institutional reforms have taken place within the past decade. Many regulatory institutions were established after 1990: Environmental Protection Agency, Water Resources Commission, Forestry Commission, Energy Commission, etc, which have been regulating the environment. Within the same period NGO 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.

Compliance and Enforcement Indicators

Compliance Indicators

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

Enforcement Indicators

1. Compliance Promotion

The Agency is working in this area largely through partnership with state organisations that have 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 of such strong link the Agency has established is that 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 regulation of their activities thereafter. EPA is now having 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, obtain first an environmental permit before their application for license is processed. The Commission has even gone a step further by 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, 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 pursuance 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.

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. Non-Compliance Response

This is done mainly by the Environmental Inspectorate and Legal departments (the two departments have been merged to form Legal, Compliance and Enforcement Department, January 2002) of the Agency. 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.

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.