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WEST AND CENTRAL AFRICA ENVIRONMENTAL LAW STUDY

Submitted to:

**U.S. Agency for International Development
REDSO/WCA
Abidjan, Côte d'Ivoire**

Under

**USAID Contract No.:
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Submitted by:

***International Resources Group, Ltd.
1400 I Street, N.W., Suite 700
Washington, D.C. 20005***

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EXECUTIVE SUMMARY

This report surveys and assesses the state of environmental and natural resource laws and regulations in selected West and Central African (WCA) countries. Deficiencies in the design and implementation of these laws constitute a major hurdle to environmental protection and natural resource management. Baseline data on national, local, and customary laws thus represents a starting point in determining needs for revising current laws, promulgating new laws, or taking other steps for and effectively implementing laws.

One of the primary sources of environmental law in West and Central Africa is colonial law, which was derived generally from the application of early 20th century English, French, and Portuguese laws. These laws primarily deal with health and on sanitation issues and natural resource extraction to facilitate exploitation more than protection. Questions arise as to the capacity of these laws to deal even with traditional health and natural resource problems, let alone deal with new problems and needs not contemplated when the laws were originally enacted.

Many other complex factors also contribute to the failure of WCA countries to protect the environment and manage their natural resources effectively. Jurisdictional battles among ministries and among national and local governments create confusion as to what institutions have responsibility for environmental protection and natural resource management. Frequent shuffling and rearranging of ministerial portfolios fosters institutional instability. Limited institutional capabilities and resources pose related problems; WCA institutions charged with environmental protection have lacked, or have not applied, sufficient funds or human or technological resources to undertake their responsibilities properly.

The lack of political will to address these problems presents a well known stumbling block. Environmental issues do not always command a high priority in light of the grave economic, political and social problems and pressing needs of most of these countries. Moreover, the people do not always have confidence in government institutions owing to endemic problems of corruption and favoritism.

These institutional and political problems are faced by many developed countries also, but they are often more serious, especially in the context of their relative economic and environmental development needs.

The failure to consider customary law and practices as they relate to natural resource use represents a major impediment to the sustainable use of natural resources in WCA countries. People will not, by our observations comply with laws that fail to reflect their economic conditions, and customs, values and immediate needs. For example, forestry legislation prohibiting the felling of trees in an area where tree felling is an age-old practice and where forest products meet pressing requirements are not likely to be observed. Without local acceptance and participation in the process of formulation and implementation, policies and laws requiring behavioral changes are doomed to fail.

This report recommends a variety of actions that could be taken to address the impediments to effective environmental protection and natural resource management. Such actions require a clear sense of priorities and entail legal and policy reforms, institutional strengthening, the promotion of public participation, and education and training initiatives.

1. INTRODUCTION

Deficiencies in the design and implementation of laws constitute a major hurdle to environmental protection and natural resource management in the West and Central African (WCA) countries. Before changes in individual laws, broader coverage of laws, or model regional laws can be proposed, it is necessary to obtain baseline data on the existing laws, policies, codes, and regulations which are environmentally related and their implementation. The U.S. Agency for International Development (USAID) undertook an activity titled "Environmental Law Study in WCA Countries," to survey and assess the state of environmental law and regulations in selected WCA countries.

USAID contracted with International Resources Group (IRG), Ltd., to perform this study. The first IRG legal team consisted of two legal specialists: J. Eugene Gibson, the team leader, is an international attorney with experience in the area of environmental law and a thorough knowledge of common law legal systems. Gibson visited Ghana, Nigeria, The Gambia, and Cameroon. The second member, Jean-Claude Laurent, is an attorney with substantial environmental expertise and a thorough knowledge of civil law legal systems. Laurent visited the Cote d'Ivoire, Mali, Niger, and Sénégal. They were in each country for approximately one week. After visiting the countries, the team spent approximately one month drafting the report. This mission was undertaken in the Fall of 1991 and Winter of 1992; consequently, some of the information on these countries may be dated.

In the Fall of 1993, IRG fielded a second legal team to complete the study. Ivon d'Almeida Pires Filho is a Brazilian attorney with substantial environmental and comparative law experience in Africa and Latin America. Pires visited Benin and the lusophone countries of Guinea Bissau and Cape Verde. Barry Hager has extensive experience in international environmental and economic issues and is well versed in civil law systems. Hager visited Burkina Faso, the Congo, Gabon, and Guinée. Scheduling problems prevented a trip to the Central African Republic (CAR), and the information on CAR is based on a desk study. Gibson undertook research and consultations in Washington and at the International Union for the Conservation of Nature (IUCN), Environmental Law Centre in Bonn, Germany. He prepared the majority of the overview material at the beginning of the report and the recommendations at the end. The report has an extensive bibliography, which provides full citations for the short footnote citations. The cited material prepared by Faith Halter proved especially valuable in preparing the report's recommendations. Halter also works as a consulting environmental attorney with IRG, and has experience in the WCA countries.

The report that follows is based on discussions with government officials from the WCA countries, officials from bilateral and multilateral aid agencies, representatives from non-governmental organizations, attorneys in private practice, law professors, and a summary review of the WCA countries' national and state laws and rules, case law, customary law, National Environmental Action Plans, and legal treatises. The report may contain omissions or statements based on incomplete information; it does not purport to be a comprehensive review of all the environmentally related laws of the WCA countries. The team, however, believes most of the main laws have been identified. This report is intended to serve as an introductory guide to facilitate more detailed study in the West African region.

The approach taken by this analysis, and USAID's underlying concept for this project, are region-specific, but they have broader implications for practical approaches to environmental law, policy and management relevant to other parts of the world as well. We hope that this report will be helpful in stimulating further regional analyses of environmental law by government, international donor, academic, and private sector institutions that can lead to improved environmental and economic development results.

This report consists of six sections:

- Section Two, "Effectiveness of Environmental and Natural Resource Laws," provides an overview of the design, implementation, and compliance issues pertaining to environmental and natural resource laws. The issues discussed in this section are more-or-less germane to all the countries studied.
- Section Three, "Legal Framework," provides a comparative review of common law, civil law, and customary law systems, followed by country specific comments on the legal regimes in each country. This section also lists the international environmental conventions, to which the WCA countries are signatories.
- Section Four, "Environmental and Natural Resource Management," examines the institutional framework for environmental protection and natural resource management in the WCA countries, the National Environmental Action Plans these countries are preparing, the role of non-governmental organizations (NGOs) and international organizations, and the status of environmental impact assessment requirements.
- Section Five, "Legal Sectoral Issues," provides a base line sectoral survey on the status of environmental and natural resource laws and their enforcement.
- Section Six, "Recommendations," discusses policy and legal reforms; environmental impact assessment; compliance mechanisms; standard setting and regulatory approaches; dispute resolution; institutional strengthening; public participation; education, training and public awareness; and legal technical assistance. These are generic recommendations and will have to be tailored to the needs and conditions in each country.

The survey was designed to identify deficiencies and make recommendations as to how environmental laws in West Africa could be improved. Therefore, although Sections Three, Four, and Five provide specific institutional and sectoral discussions of each WCA country, the report is not organized by country; sections are organized to facilitate comparisons of the laws and institutions in each country and to provide a basis for evaluating alternative approaches, regional coverage, comparative adequacy, and possible future options.

2. EFFECTIVENESS OF ENVIRONMENTAL AND NATURAL RESOURCE LAWS

The various WCA governmental bodies charged with environmental protection and natural resource management experience considerable difficulties carrying out their mandates and have had limited success. Constraints on enforcement and compliance are numerous. Many laws are old and fail to address today's problems, or in some cases – no law exists. Furthermore, environmental laws are often too vague to apply effectively. Vague laws may lack specific guidelines, recognizable authority, and provisions for implementation and administration. The absence of specific subsidiary legislation¹ also contributes to implementation problems. For instance, Ghana's mining law states:

The holder of a mineral right shall in the exercise of his right under the license or lease have due regard to the effect of the mineral operations on the environment and shall take such steps as may be necessary to prevent pollution of the environment as a result of such mineral operation.²

To regulate effectively the pollution arising from mining activities, the legislation must include environmental standards and quality control requirements coupled with scientific monitoring of pollutants in the environment. Subsidiary law regulating the level of pollutants permissible in the air, water, and soil from a mining operation's liquid and solid waste discharges does not exist. This presents a legal problem in bringing an enforcement action since no specific standard can be shown to have been violated. The enforcement agency can only make the vague claim that the licensee failed to take "such steps as may be necessary to prevent pollution of the environment." In such situations there would have to be an egregious case of pollution in order to prevail. The lack of subsidiary legislation is prevalent throughout the WCA countries.

In the absence of subsidiary legislation, a ministry or agency will sometimes tell a foreign investor to follow the environmental standards in the investor's country or to follow World Health Organization (WHO) standards. The ministry or agency will probably not know what the specific standards are in the investor's country to determine the investor's compliance. Moreover, if each foreign investor follows a different set of standards, the enforcement agencies face a regulatory problem in determining compliance.

While non-statutory standards are difficult to enforce owing to the large element of subjectivity, they do have one advantage over statutory standards. The latter standards are difficult to alter when the need arises and in theory non-statutory standards could provide a more pragmatic, responsive approach to pollution control.

A related problem occurs if a country lacks the technology and/or infrastructure to facilitate compliance. Adopting environmental laws from developed countries with only minor modifications can pose compliance problems. Unrealistic laws do not engender respect for the legal system.

¹ Subsidiary legislation, also known as subsidiary instrument or delegated legislation, is law enacted in the exercise of powers given by a statute. It consists of rules, orders, regulations, by-laws, and other instruments made under the authority of statutes. An enabling statute refers to a statute under which subsidiary legislation is made.

² The Minerals and Mining Law, 1986 (PNDCL 153), S. 72.

Moreover, people will not observe laws that do not reflect their socio-economic conditions and customs and values.

An additional problem can arise if a WCA country copies a specific environmental law from a developed country introducing the developed country's complementary environmental laws. For example, a Ghanaian water law tracks British water pollution control legislation, but the sanctions against offenders are not balanced by complementary provisions in the public health law which give relief to these sanctions.³ Consequently, implementation and compliance prove problematic.

All of these countries have undergone economic crises and many still experience severe economic problems. Governments are reluctant to crack down on people barely eking out a subsistence livelihood, or on alleged polluters when this would result in a company's bankruptcy. Furthermore, the natural resource extraction industries constitute a major source of export earnings and the governments fear that taking steps to vigorously regulate these industries might curtail this revenue flow. Governments may also turn a blind eye to pollution problems generated by parastatals. The old canard that state enterprises are in a better position to address externalities of distribution, environment, and participation than private-sector ventures has not been borne out in practice.

Stringent environmental laws are unlikely to receive political consent or acceptance. Even if initially approved, their ineffectiveness becomes apparent when hard measures have to be implemented. Governments are generally unwilling to move against influential groups and persons who comprise the social strata close to those in government.

Nevertheless, instances exist where WCA governments have taken action to implement and enforce environmental laws. For example many countries have banned the import of hazardous wastes. The catalyst for such government action usually comes from the environmental press and/or non-governmental organizations (NGOs), which galvanize the public to demand governmental action. Consequently, in addition to drafting better laws, strategies that foster should be pursued an environmental consciousness, public participation, and respect for the rule of law.

³ The Ghana Water and Sewerage Regulations of 1979 (LJ 1233) resemble The Rivers (Prevention of Pollution) Act 1951 of England and Wales. The public health authorities in England and Wales control elaborate sewerage systems and sewage treatment plants, while River Boards control river pollution. If the effluents fail to meet discharge standards, industries may discharge them into public sewers for treatment at sewage works. Ghana, however, only has a few scattered sewerage systems and sewage treatment plants - none of which are designed for industrial wastes. Moreover, these plants are not adequately operated or properly maintained. Ghanaian industries are left with no choice but to discharge pollutants into water courses. Industries would face multitude of problems in treating the effluents before discharge. See S. B. Akuffo, "Pollution Control in a Developing Economy: A Study of the Situation in Ghana."

3. LEGAL FRAMEWORK

3.1 Comparative Law Background

The environmental and natural resource laws of the WCA countries derive from a number of sources, specifically: English common law, French and Portuguese civil law, national and state legislation, international law, customary law, and to a limited degree – case law. This section provides a brief overview of the organization, terminology and methodology used in the francophone⁴ and lusophone civil law countries which are markedly different from that of the anglophone common law countries.

The term, "civil" law has multiple meanings. First, it may be used to distinguish between common law and civil law. In general, the former colonies of England – such as, Australia, Canada, India, Malaysia, and the United States – follow the common law system. This report examines the common law countries of Ghana, Nigeria, and The Gambia. These former African English colonies "received" the common law, the doctrines of equity, statutes, and subsidiary legislation that were in force in England on a specified date (Ghana, formerly known as the Gold Coast in 1874, Nigeria on 1 January 1900, and The Gambia in 1888). Although local legislation gave effect to the received English law, the British Administration in each colony passed this legislation – not indigenous institutions. The British Parliament also "extended" English law to the former colonies.

Most countries in the world tend to follow the civil law model; this includes not only continental Europe and French, Spanish, and Portuguese-speaking Africa, but also Japan, Latin America, Taiwan, and Thailand. Even socialist nations built their socialist legal structures upon a base of civil law. The application of French law throughout francophone Africa, however, was neither complete or automatic. France's codes and legislation only applied to the extent specified by decree. Decrees or other similar regulatory measures brought into force particular rules in specified portions of francophone Africa. A similar system was followed in lusophone Africa. This report examines the civil law countries of Benin, Burkina Faso, Cape Verde, the Congo, Côte d'Ivoire, Gabon, Guinée, Guinea Bissau, Mali, Niger, and Senegal. Cameroon is a mixture of civil law and common law systems.

The term "civil" law, within both systems, is also used to differentiate between civil and criminal law. Also, within the Neo-Roman or civil law system, the phrase "civil" law is a term of art used to distinguish certain rules from "commercial law". Typically, civil law is placed in one code and commercial law in another.

In general, the common law represents a body of law that develops through judicial decisions, as distinguished from legislative enactments. A fundamental tenet of the common law is the doctrine of stare decisis. This doctrine holds that when a point of law has been settled by a court decision, it forms precedent which is not afterwards to be departed from, and while it should ordinarily be strictly adhered to, there are occasions when departure is rendered necessary to

⁴ The francophone countries follow the code civil derived from the civil law of France. Promulgated in 1804, the name was changed to "Code Napoleon" when Napoleon became Emperor. The terms "Code Napoleon" and "Code Civil" are both used in the francophone countries.

vindicate plain, obvious principles of law and remedy continued injustice. In a broad sense, the common law can also refer to those principles, juristic theory, rules of action relating to the government and security of persons and property which do not rest for their authority upon any express and positive declaration of the will of the legislature.

Although this is an oversimplification, the heart of the civil law system is a set of codes.⁵ The common law system extracted its principles out of plethora of judicial decisions handed down over centuries. In civil law countries, the courts take more of a black letter interpretation to legislative enactments. Civil law courts are not instruments of law-making to the same extent as common law courts. Nevertheless, many civil law jurisdictions examine decisions of leading judges as a source of valuable experience in formulating and applying norms.

The codification process is conceptually different in these jurisdictions. Civil law is cast in terms of an a priori, rationalized system. Common law, on the other hand, is not predicated on any such organized system. The substantive nature of the codes in the two systems bear little resemblance to one another. A civil law code is intended to be complete and to cover, within its purview, all possible situations which may arise now and in the future. Of course, people recognize that amendments and updating are required at times, but, in theory, a code should completely cover a given subject or legal field.

Common law codes in theory make no such claim of comprehensiveness; rather they are mere skeletons which must be fleshed out by the case law. Common law codes, however, frequently cover a narrow range of material with great specificity and detail. Furthermore, extensive and detailed sets of legal codes exist in many common law jurisdictions -- such as the United States. On the other hand, civil law codes are written in broad general terms; abstractions predominate. Solutions are obtained by deductively reasoning down from great principles.

The division of legal material is totally different in the two systems -- which can cause enormous confusion. A civil law system is basically divided into public and private law; private law in turn subdivides into primarily civil law and commercial law. Common law, in contrast, is separated into torts, contracts, property, business associations, trusts and estates, etc. These topics are also covered in civil law, but within one of the larger categories of civil or commercial law.

Finally, the vocabulary of the two systems is again quite distinct. Terms that seem obvious to a civilian, such as "juridical act" or "obligation," have no meaning to a common law trained lawyer. Likewise, the terminology of the common law, such as "torts" or "consideration," are mysteries to the civil law jurist. Worse, often the two systems use the same word to mean quite different things. For instance, "labor law" in the United States, which consists of collective bargaining procedures, bears little resemblance to the elaborate labor codes and rules of individual labor contracts and obligations in a civil law system.

While case law represents a large source of environmental law in some common law countries, very little environmental litigation has occurred in the WCA countries. In the United States, for

⁵ In civil law countries a code implies a major organization of prior statutes in any given legal field -- such as civil law, criminal law, tax law, or environmental law. All separate or sparse laws and decrees are compiled and reorganized anew in the codified law, which attempts to preempt all previous legislation and add new provisions that have not been considered before. The code, as a new comprehensive law, thus revokes previous statutes of the same subject-matter.

example, the vast majority of environmental litigation involves disputes with government agencies – rather than disputes between private parties. Such litigation usually arises in two forms.⁶ A cause of action may claim that an agency, such as the U.S. Environmental Protection Agency, acted improperly in implementing an environmental statute. The second cause of action arises from a claim that an agency has improperly threatened the environment. Both kinds of claims raise general issues about the procedural restrictions on suits against the government. Some of the WCA authoritarian regimes, however, prohibit the courts from considering the validity of any legislation that the regime has passed – clearly a chilling effect on potential litigation.

Where there has been some environmentally related litigation in the WCA countries, it generally occurs in the areas of water rights, land tenure and the tort laws of negligence, nuisance, and trespass. As a practical matter, few private individuals have the financial and technical resources to prove their cause of actions, let alone afford the cost of bringing the action in the first place.

Much of the environmental law in the WCA countries is still derived, for the most part, from English, French, and Portuguese laws of the early 20th century. These laws, transposed onto the WCA colonial territories, appear to reflect a perception within the colonial administrations of a need for regulation in two environmental areas: public health and sanitation; and, the extraction of mineral and other natural resources.

Whether or not the colonial laws were sufficient to cover the recognized environmental issues of that era, the weak and sporadic evolution of environmental law in the WCA countries has hampered environmental protection and natural resources management. Nevertheless, common law attorneys must exercise extreme care when referencing over to any common law experience or institution. What an individual from a common law tradition may perceive as a sketchy law may be quite adequate when viewed within the civil law context. Because of the way in which civil law operates with general norms, even application of early 20th century codes or laws that are decades old may be less deleterious than an outsider might think.

The anglophone, common law countries, particularly Ghana and Nigeria, have usually been more legislatively active than the francophone, civil law countries. Of the francophone countries, Sénégal has been the most legislatively active.

Customary law⁷ provides another level of complexity to the legal systems in the WCA countries. Customary law, which is unwritten, consists of the aggregate of customary practices, usages, mores, and norms accepted by members of a community as binding among them. Since a substantial portion of the population in WCA countries follows customary law, the influence of customary practices in formulating and applying environmental and natural resource law must not be disregarded. Customary law primarily bears on environmental issues to the extent that it

⁶ Federal and state environmental regulatory agencies in the U.S. usually enforce environmental statutes and regulations through administrative adjudications governed by either the federal Administrative Procedure Act (APA) or various state APAs. An adjudication is a broad residual category that includes the great majority of agency decisions affecting private parties. Formal adjudications, sometimes called "evidentiary hearings," "full hearings," or "trial-type hearings" are similar to court trials - but with some significant differences. Formal adjudications comprise only a small proportion of agency decisions. Courts in the U.S. have developed doctrines such as unreviewability, standing, and exhaustion of administrative remedies to determine whether they will undertake judicial review of agency decisions.

⁷ For additional information on customary law see Rene David, "Major Legal Systems of the World."

addresses land tenure, land use, and water rights issues. However, customary law will not be able to address the very technical and multidisciplinary nature of environmental law owing to the usual lack of trained human resources in the areas where customary law prevails.

Several customary law systems can exist in a country since each ethnic group has its own separate system. This diversity of customary law systems poses difficulties in determining uniformity of customary law systems in a country. Two features characterize customary law: first, its recognition as law by members of the ethnic group who accept it as reflecting usage and practice and second, the law can change from time to time so as to reflect changing social and economic conditions.

Customary law can exist side by side with either common law or civil law systems. The usual test for determining the validity of customary law in a common law system is whether the customary law is repugnant to natural justice, equity, and good conscience.⁸ Additional tests formulated by some countries are whether the customary law is incompatible either directly or by implication with any law currently in force, or whether it is contrary to public policy.

It is in regards to procedures for resolving disputes that customary law differs most markedly from common law or civil law systems. Custom may provide rules, but often these do no more than establish the basis for discussion from which an appropriate mechanism will emerge for dispute resolution. Justice will not always consist of what common law and civil law systems consider applicable substantive rules. Customary law seeks to bring about an amicable settlement between the parties rather than to see the enforcement of their "rights." Searching for an agreement is all the more necessary in view of the lack of procedures for the enforcement of judgments.

Moslem law is somewhat related to customary law. Moslem law, based on the Moslem faith, is principally in written form and only applies to members of that faith.

Environmental law-making in the WCA countries often reflects a reactive as opposed to proactive approach, with governments responding incrementally to environmental and natural resource issues. The impetus for new law, in many cases, comes from an environmental crisis or the donor community. The interest in environmental law provides a unique opportunity to harmonize, incorporate, and merge concepts from different legal systems and technological requirements to meet the needs of the WCA countries.

⁸ The phrase "natural justice, equity and good conscience" has come to be known as the repugnancy doctrine and its interpretation the subject of numerous treatises and cases. The term "equity" has a broad and popular meaning and a narrow technical meaning. The popular meaning is practically equivalent to natural justice or morality and the technical meaning to the jurisdiction of Chancery. In this circumstance, the broad meaning is followed. The term "natural justice," like equity, has a technical meaning. In this circumstance, natural justice is synonymous with natural law. "Good conscience" refers to a philosophical and theological conception of conscience. Basically, there is no precise meaning to the phrase "natural justice, equity and good conscience," and a liberal and flexible interpretation should be adopted, rather than a technical interpretation of each word.

Benin

Benin, known as Dahomey until 1975, is experiencing the democratic and legal reform widespread in Africa at this time. A significant aspect of law reform is the general trend toward elevating the legal status of environmental concerns to the constitutional level, developing unified or comprehensive environmental codes, and the parallel preparation of a national environmental action plan (NEAP) to provide a formal framework for enhanced efforts to protect the environment.

In Benin's case, as well as other WCA countries, the new attention to the environment has arisen in conjunction with the move to more fully democratic regimes. Like several of these nations, Benin has undergone a political transition featuring a new Constitution, approved by referendum in 1990, and installation of a new government.

Several articles in the current Benin Constitution address the environment. In particular, article 27 declares that "Every person has the right to a healthy, satisfactory and sustainable environment and the duty to defend it. The State is responsible for protection of the environment."

At the statutory level, Benin is also considering a new, comprehensive environmental code. It was drafted at their request in September 1993 by a United Nations Development Program (UNDP) consultant and has not yet reached the stage of active legislative consideration. If enacted, the new code would again typify the trend toward unified or comprehensive environmental codes and would contain some interesting innovations in encouraging public hearings and participation in legal decision-making and in environmental impact assessments.

At present, however, Beninois law on the environment, like that of other Francophone WCA countries, remains marked by the French legal tradition as it was applied in French West Africa, despite its independence from France since 1960. Relevant laws in effect include land use legislation, forestry, mining and water codes, protected areas and species legislation, and regulation of hazardous and dangerous activities and wastes. These substantive laws will be analyzed in the sectoral section.

Burkina Faso

Burkina Faso is one of seven nations which comprised French West Africa during the colonial era. Its legal traditions generally and its environmental laws specifically have been marked by the French legal and administrative system.

At the same time, a separate significant influence on the legal structure of Burkina Faso has been the recent experience, from 1983 to 1992, of a government that was avowedly one of revolutionary socialism. While obviously quite different, both systems have reinforced an approach to law which is highly structured and statist, endowed with formal, comprehensive legal codes and complex administrative structures.

In the environmental area, this is reflected in the major texts governing all the significant sectors of the Burkinabe environment. Four should be cited, with their sector-specific provisions discussed in the relevant sections of this report.

First, the current Constitution, dated 2 June 1991, contains several formal references to the environment. Of prime significance to current government officials charged with enforcing environmental laws is article 101 which formally elevates protection of the environment to Constitutional legal standing. In addition, article 39 declares a popular right to a clean environment and article 30 provides a Constitutional right of action by petition against any actions which threaten the environment or national patrimony.

Of most importance to sectorial environmental issues, however, may be articles 14 and 15. Consistent with both the statist French colonial tradition and the revolutionary socialist approach, article 14 proclaims that the nation's national resources belong to the people. In a change which reflects the current effort to restore the private sector and free enterprise, article 15 nevertheless provides for limited property rights for the exploitation of natural resources.

The second legal document remains the core law governing environmental matters in Burkina Faso: the 1991 Agrarian and Land Tenure Reorganization. That extensive code, in turn is based on a major 1984 text of the same title, in fact covers virtually all of the environmental sectors. It contains the governing law not only for urban and rural land use, but also the water code, the forestry code, the wildlife or protected species code, the fishing code, the mining code, and the legal regime controlling pollution and nuisances. As of December 1993, this law, known popularly as the "RAF" (Reorganisation Agraire et Foncière), is thus the major, and quite comprehensive, environmental law in Burkina Faso.

Despite the existence of the RAF, however, a third major environmental text, a "projet-loi," or proposed law, has been prepared through a complex inter-ministerial process and is now awaiting approval by the National Assembly. This is a proposed "Code de l'Environnement," which is, as its first article states "establish(es) the fundamental principles intended to manage and protect the environment against all forms of degradation."

The Environment Code is expected to be adopted prior to a planned January 1994 "round table" of the Burkinabe donor community and government environmental officials to assess the completion and implementation of Burkina's National Environmental Action Plan (NEAP, Plan d'Action National pour l'Environnement, PANE French acronym). The Code has not been without controversy, however. The contention that it is partly redundant to the RAF is a source of criticism, as are its stringent environmental impact assessment requirements (see EIA section).

Nevertheless, adoption of the Code is considered to be one of the key steps in implementing Burkina's NEAP. Since the government and donor community commitment to Burkina's NEAP seem quite strong, this report assumes eventual passage of the comprehensive environmental code.

The fourth major comprehensive document now governing environmental matters in Burkina Faso is the NEAP. It has already been through two iterations, the current one completed in September 1993. While technically not a law, it is being treated by the major environmental authorities (and by the donor community) as a guiding instrument, and its implementation in fact takes legal form in the existence of a separate Secretariat, lodged in the Ministry of Environment and Tourism, for its ongoing adjustment and implementation.

Beyond those major legal texts are a series of specific sectoral and administrative laws and regulations, noted in the bibliography and the sectoral discussions of this report. It should be noted that the overall structure of laws, and of promulgation of laws, in Burkina, again reflects the code-oriented approach familiar both in the French Napoleonic legal system and in the socialist command economies.

Laws are established in a clear descending hierarchy of Constitution, law, decrees, regulations or by-laws, and administrative instructions. At present, as under prior French colonial and non-socialist independent regimes, those categories are known by the French terms. Under the socialist Sankara regime, laws were known as "Zatus" and decrees as "Kitis", and those remain the formal statutory names.

Promulgation of laws is related to that hierarchy. Laws must be proposed by the Cabinet-level Council of Ministers, after preparation by inter-ministerial groups reflecting the various ministries with affected jurisdiction. Once approved by the national Assembly, they are signed into law by the President. Decrees or Kitis can be promulgated by signature of the responsible Ministers, again on an inter-ministerial basis, without approval by the Assembly. The lesser regulations can be put into force by signature of the single minister, or in some cases a subordinate authority, with responsibility for the subject area.

Finally, it must be noted that all of this formal legal structure exists alongside a customary, village and tribe-based legal system. The customary law system is outside the scope of this study, but its impact is significant, especially in land tenure and land-use areas (see land tenure section). As noted in the recommendations section, a project of considerable merit would be to undertake at least case studies of the customary law system in countries such as Burkina. Given a very high level of illiteracy and limited availability either of physical copies of laws themselves or educational opportunities for the general population to be informed of their content, it is not surprising that customary law is more widely understood and adhered to, absent forcible state intervention, than is formal modern law.

Cape Verde

Similar to Benin's, the 1990 Cape Verdian Constitution provides for environmental protection and the national legislature has enacted a National Environmental Policy Act, which calls for the creation of a central environmental protection institution and the elaboration of a NEAP.

Since its independence from Portugal in 1973 and its separation from Guinea Bissau in 1980, this small archipelagic nation has strived to overcome its natural adversity and to improve the quality of life on the islands.

At the statutory level, their natural resources laws concerning land use and tenure, forestry, fisheries, water, and protected areas, including the aforesaid national environmental policy act, were enacted since the mid-eighties, most of them in the nineteen nineties, and maintain the Portuguese civil law tradition.

Congo

The Republic of the Congo during the colonial era was part of French Equatorial Africa, subject to a separate administration from French West Africa, but under the same legal and regulatory regimes. As with the other francophone countries covered in this report, the Congo's laws and regulatory structures reflect the French colonial legal tradition.

The current fundamental law⁹ of the Congo is the "Constitution de la République du Congo," endorsed by the incumbent government on 20 December 1991, and submitted to popular referendum on 16 February 1992. This document is less statist than the French tradition, although fully in keeping with the separate French and Anglo-Saxon legal tradition of the rights of man. The Constitution contains several environmental provisions. In particular, article 46 states that "Each citizen has the right to a clean, satisfactory and sustainable environment, and the duty to defend it. The State is responsible for protection and conservation of the environment." A national conference held in 1991 provided the impetus for the constitution's environmental provisions.

The Congo, like a number of other WCA countries including Guinée and Gabon, is now going through the difficult transition to genuine electoral democracy, in which open, contested, and fair elections determine who governs and under what constitutional framework. A national constitutional conference, as elsewhere, proved crucial in this process. The environmental provisions reflect a growing national consciousness about environmental issues. The specific environmental actions of the 1991 National Conference were the passage of five Acts which, among other Acts, have the status of organic law, and were relied upon in drafting the Constitution. The following five Acts, all approved on 21 June 1991, reflect the environmental positions taken by the Conference.

Require constitutional mention of environmental rights.

Require the transitional government to devise a plan for dealing with land erosion and flooding.

Require the transitional government to take steps to protect the environment and specifically to enforce a "polluter pays" principle in requiring indemnification by mining, forestry and industrial companies for environmental damage.

Call for the creation of a new Environmental and Natural Resources ministry, for a new plan to protect the marine environment and coastal zone and creation of a Fund for protection and management of the marine and coastal environment.

Demand reparations of Elf-Congo and AGIP Recherche Congo for damage caused by oil drilling exploration in 1989, 1990, and 1991, including indemnification for health damages and rehabilitation of beaches and soiled coastlines.

⁹ A fundamental law is the law which determines the constitution of government in a nation, and prescribes and regulates the manner of its exercise.

As with other francophone WCA countries, much of the legislation affecting the environment continues to be in the form of specific sectoral codes, adapted from time to time from past iterations beginning with the early French colonial sectoral codes. The Congo has such major codes or overall legal regimes for forestry, land tenure, wildlife and marine pollution. Of particular note is the overall environmental law, Law for the Protection of the Environment, Law No. 023/91, which while not nominally a code is a comprehensive and quite legally stringent document. It was passed before the Acts of the National Convention, but during that same time period of apparently acute environmental sensitivity, on 23 April 1991.

Gabon

The Republic of Gabon's (ROG) legal traditions reflect the same French colonial heritage found elsewhere in WCA. Today, Gabon is undergoing the transition to a more open electoral democracy seen elsewhere in WCA and the rest of Africa. Genuinely contested elections were held on 5 December 1993. The results were close and in dispute, and the reelection of incumbent President Omar Bongo was not announced until a week after the election.

The formal structure of the government and its laws are essentially the same as elsewhere in francophone WCA. The Constitution is the organic law of the land. The National Assembly passes laws, typically upon proposition by the council of ministers (Cabinet) of the government, but occasionally by proposition from the Assembly to the government. In the latter case, the government must review the law proposed by the Assembly and resubmit it to the Assembly for final passage.

Ordinances can on occasion be promulgated, and have the full force of laws, by the President acting without Assembly approval if the Assembly is not in session and the matter is urgent. The Assembly, however, must reenact the ordinance when it reconvenes. The descending legal hierarchy includes decrees, which are implementing texts issued at the ministerial level, "arretes" which are lesser implementing regulations, and circulars, analogous to administrative guidelines.

With respect to the environment, Gabon has several formal codes, like other francophone WCA countries, covering land use and tenure, forestry, mining, and hunting and fishing. Gabon also has several laws governing industrial and toxic wastes and their disposal.

The most important recent legal development was the passage of a comprehensive Environmental Code. Le Code de l'Environnement, Loi. No. 16/93 de 26 août 1993, was passed too recently to have yet been fully implemented through promulgation of supporting regulations. It represents, however, a comprehensive environmental protection law covering all media: soil, air, surface and subsurface water, and the marine environment. The new law also covers wildlife and protected areas and industrial and toxic pollutants.

Field interviews suggest that passage of this environmental law was a part of the conditionality attached to a World Bank loan to Gabon. Interviews further suggest that despite many problems, the ROG intends to pursue implementation of this new law, particularly in recognition of the importance the Bank and the donor community attach to such legal reforms regarding the environment.

Overall provisions include the general environmental protection mandate of article 3. This article characterizes the environment as the "national patrimony," and declares that "protection and amelioration of the environment is a responsibility of general interest and a preoccupation to be taken systematically into account in all national economic development, social and cultural plans."

Article 4 spells out the various responsibilities, in thematic terms, of the Ministry of the Environment, including a public participation objective in article 4(5) to educate and popularize environmental issues in order to encourage citizen participation and the creation of citizens' environmental groups.

Ghana

The current military regime suspended the Constitution, dissolved Parliament and operates under a Proclamation issued by the Provisional National Defense Council (PNDC). The Proclamation defines broad executive and legislative powers. The essential character of the PNDC is that no substantive limitation exists on its lawmaking power. In regards to environmental and natural resource legislation, working groups comprised of bureaucrats from the appropriate government agencies prepare a draft law with the legal assistance from the Ministry of Justice. After ministerial approval, the legislation goes to the PNDC for final approval.

The previous civilian constitutions provided for judicial review of legislation; whereas, the Proclamation severely curtails this exercise of power. The Proclamation maintains the judicial system "with the same powers, duties and functions" as it had before, only it is now subject to any laws that the PNDC may make. The PNDC has also established the Peoples Court or Public Tribunal, which deals with vaguely defined economic crimes. The Ghanaian Bar Association takes the position that members of the Bar should not appear and represent clients in such proceedings.

Guinea Bissau

Portuguese law, as of the date of independence of Guinea Bissau from Portugal in 1973, remained in effect in the country, except to the extent it was inconsistent with the constitution, or subsequently enacted legislation. The Portuguese – and by inheritance, the Guinean – legal system is based on neo-Roman law as reflected in the Napoleonic Codes of the early 19th Century and modified by later German thinking.

The hierarchy of laws in Guinea-Bissau consists of Constitutional provisions, acts of the People's National Assembly (ANP), acts of the Council of State, Presidential decrees, acts of the Council of Ministers, and executive decisions from Ministers and Secretaries of State.

The Constitution may be reviewed and amended by a two-third majority vote of the ANP. The National Assembly, not the Judiciary, also decides on the constitutionality of laws and all other legislation.

Besides its general law-making powers, the ANP may enact laws on the specific matters listed in article 56 of the Constitution, such as: authorizing the process for constitutional amendment, authorizing a popular referendum, approving the national development plan, and granting amnesties. The election of members to the Council of State, decisions on constitutionality of

laws, approval of international treaties submitted by the Government, and deliberation upon martial law or state-of-emergency, among other issues, are approved as resolutions of the ANP.

Article 62 of the Constitution provides that the Council of State may issue decree-laws and deliberate on several other specific issues, as well as the President of the Council of State (article 67), and the Council of Ministers (article 72). The declaration of martial law and state-of-emergency; the creation and termination of ministries; and the exemption and commutation of penalties; for example, are decided as decree-laws of the Council of State.

Presidential decrees are issued to appoint and discharge ministers, secretaries of state and the governor of the Central Bank; to appoint and remove Supreme Court Justices and the Attorney-General; to appoint and recall ambassadors; and to grant honorary titles and other state honors.

The Council of Ministers may issue a decree to approve the bill of a "law" or a "decree-law" prior to submission to the ANP or the Council of State for enactment. This has caused significant confusion as to when a bill becomes law. Quite often simple drafting of a bill within a ministry or another administrative office is taken as imminent "law", and it is certainly considered as such after approval by the Council of Ministers, even though it only enters into force when enacted by the ANP or the Council of State, and after publication in the official press.

Because of the complexity of the system, the Council of State issued Decree-Law No. 1-A, of 2 February 1985, to harmonize the format of legislative acts, as shown in the following outline:

LAW MAKING PROCESS

Political Body

Powers

ANP
(People's Nat. Assembly)

Constitutional Revisions (Arts. 99 to 102)

Law (Art. 56, #1,3,4,7,9,12)

Resolution (Art. 56, #2,5,6,8,10,11,13)

Council of State

Assumes ANP functions and powers in-between sessions, except constitutional revision. May issue decree-law on any subject except revoke previous law on equal matter.

Decree-law (Art. 64, #1, F, G, K)

Resolution (Art. 64, #1, B, C, D, E, H, I, J, L)

President of Council of State

Presidential decree (Art. 67, #4,5,6,7)

Council of Ministers

Decrees: (Political and administrative acts of general nature)

(Regulations)

Orders (Administrative acts of specific nature)

Ministers
Secretaries of State

Executive Decisions

Guinée

Guinée is emerging from a difficult political and economic period associated with the Sekou Toure Marxist regime. At the time of this report, the first major contested elections were in progress and associated civil unrest and conflict make political and economic conditions in Guinée, particularly in the capital of Conakry, unpredictable.

As part of the evolution toward a genuine multi-party electoral democracy, Guinée promulgated a series of organic laws to implement their fundamental law. This package of laws, including Laws L/91/02 through L/91/16, 23 December 1991, constitute together the operative Constitution of Guinée.

With respect to environmental issues, Guinée, as a part of the former French West Africa, continues to have a number of sectoral codes which reflect the French colonial legal heritage. These include a Maritime and Fishing Code, a Forestry Code, and a Wildlife Code.

In 1987 Guinée adopted a comprehensive environmental code, the "Code for the Protection and Enhancement of the Environment," promulgated as Ordinance No. 045/PRG/87, 28 May 1987. This comprehensive code contains provisions governing the protection of all environmental media, including land, subsoil and mineral resources, coastal zones and marine resources, continental surface and subsurface waterways, and air. It also covers wildlife protection, incorporates the system of "classified establishments" typical in former French Colonial Africa and other measures to control industrial and toxic wastes, and provides for EIA. Implementation remains incomplete, even at the level of promulgation of implementing legislation. At the end of 1993, several "textes d'application" were under consideration at the level of the National Council of Ministers.

Noteworthy provisions of the comprehensive code include articles 87-89, which establish a "Fund to Safeguard the Environment." This fund serves as the repository of dedicated monies for environmental protection from fines for environmental violations, regular budgetary commitments, and external grants and donations. Its mandate is broad, but article 89 does explicitly mention the need to find new measures to control bushfires and to encourage reforestation.

Nigeria

Law-making is a comparatively easy exercise. It does not involve publication of bills or heated debates in legislative Houses. A Decree is made when signed by the Head of the Federal Military Government and an Edict is made when signed by the Military Governor of a State. The technocrats at the ministries will draft the environmental and natural resource laws with legal drafting assistance from the Ministry of Justice.

The Constitution, while not explicitly providing for environmental protection, does contain two environmentally related provisions. Section 16(2)(b) provides that the country shall direct its policy towards ensuring that the material resources of the community are harnessed and distributed to serve the common good. Section 17(2)(d) provides that the exploitation of human and natural resources in any form whatsoever for reasons other than the good of the community shall be prevented.

The Government of Nigeria (GON) seldom if ever resorts to the judicial process to enforce

environmental laws. Furthermore, the courts are not entitled to inquire into the validity of Decrees or Edicts or any subsidiary legislation made under a Decree or Edict. What little environmentally related case law exists is based on tort negligence and nuisance actions and the rule in Rylands v Fletcher.¹⁰ Standing issues also present a roadblock to environmental litigation.¹¹ Despite this lack of environmental case law, Nigeria is the most litigious country in West Africa and the Nigerian courts will likely be on the cutting edge of formulating environmental law in the WCA countries. Common law courts in the other WCA countries find Nigerian case law persuasive.

The Gambia

The Gambia is unique among the WCA countries. With the exception of an aborted coup d'etat in 1981, it has enjoyed relative peace and stability. This has led to the label of The Gambia as the Switzerland of Africa. The country has a multi-party parliamentary democracy. D.K. Jawara leads the majority People's Progressive Party (PPP) and has served as Prime Minister since 1962.

The usual law-making procedure involves the preparation of a cabinet paper by the Permanent Secretary discussing the current law, its deficiencies, and the need for new law. Actually, bureaucrats in the Department with primary jurisdiction over the particular subject matter prepare the paper. A working group may be formed, comprised of bureaucrats from other departments and ministries claiming jurisdiction or an interest in the proposed legislation. From the Department it goes to the Minister who will present the paper to the Cabinet. If the Cabinet approves the paper, the Permanent Secretary forwards the paper to the Attorney General's Chambers to prepare draft legislation.

From Chambers, the draft law goes to Parliament. Notice of the pending legislation will be published in the Gazette and several readings will take place in Parliament. When the proposed law arrives at the Parliament, the opportunity for public debate and examination arises. As a practical matter, relatively little debate occurs. The members of Parliament do not have committee staffs with specialized expertise to review and draft legislation and the members defer to the bureaucrats at the various ministries. Furthermore, PPP members of Parliament would not likely challenge legislation coming from the Prime Minister and party leader. Members of the public seldom take advocacy positions regarding legislation. After Parliament passes the legislation, it goes to the Prime Minister. This process can take up to two years.

¹⁰ To prevail on a negligence cause of action, the plaintiff must prove that the alleged environmental delinquent, be it an individual or a company, has been negligent. The plaintiff has the heavy burden of proving that the defendant owed the plaintiff a duty of care and that this duty has been breached. A nuisance cause of action offers another remedy -- if the plaintiff can prove he has suffered damage. Private nuisance actions are easier to bring than public nuisance actions. A plaintiff bringing a public nuisance action must prove that he has suffered damage peculiar to himself which is different from that suffered by others. This is a difficult task since public nuisance usually affects all or part of the community. The rule in Rylands v. Fletcher, (1866) L.R.1. Exch. 265, affirmed (1868) L.R. 3 H.L. 330, requires that the plaintiff establish that the defendant brought on the plaintiff's land something that is "likely to do mischief" which escaped while under the control of the defendant who is using the land in a non-natural manner. Questions arise as to the meaning of non-natural user of land. Furthermore, there are numerous exceptions to the rule.

¹¹ Standing refers to the doctrine that a plaintiff seeking to bring a claim demonstrate that he is a proper individual to challenge the government action, and that the issues he is raising are issues that the court is authorized to consider. The Nigerian Supreme Court relaxed the standing rule -- somewhat, in Fawehinmi v. Akilu.

The Judiciary is independent and will rule against the Government. Problems arise, however, in studying the courts' decisions since cases are not recorded. To circumvent this problem, attorneys cite cases from other jurisdictions. While not binding, Gambian Courts find such cases very persuasive. The Gambian Courts are particularly receptive to Nigerian case law. Nigeria has a well developed body of case law, but more important – several of the judges in The Gambia are Nigerian. The Gambia is the only common law country in Africa where appeals are still made to the Judicial Committee of the Privy Council in England.

The Gambia does not have a law school; consequently, Gambian attorneys usually go to another African country or England for their legal education.

The Law Reform Commission will soon release a report on the customary laws in The Gambia. This marks the first ever recording of their customary laws. After reviewing the customary laws, the Commission may recommend that Parliament codify the laws. This report could have a bearing on natural resource issues to the extent customary law focuses on land tenure.

3.2 International Conventions

Many of the WCA countries are signatories to various international environmental treaties and conventions. Signing these treaties and conventions prompts the countries to consider environmental issues and pass domestic legislation so as to conform to their international obligations. Instances exist, however, where many of the countries have yet to enact domestic implementing legislation. In deciding whether to become a signatory, a country should consider its environmental priorities, its financial and technical capacity, and possible benefits.

There are numerous international environmental treaties, conventions, and agreements. The primary ones are: the United Nations Convention on the Law of the Sea, Convention for the Prevention of Pollution of the Sea by Oil, Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), African Convention for the Conservation of Nature and Natural Resources, Convention Concerning the Protection of the World Cultural and National Heritage, Convention on the Conservation of Migratory Species of Wild Animals, the Convention on Wetlands of International Importance Especially as Waterfowl Habitat (Wetlands or Ramsar Convention), Convention on the African Migratory Locust, and Phyto-Sanitary Convention for Africa.

CONVENTIONS SIGNED BY WCA COUNTRIES	BENIN	BURKINA FASO	CAMEROON	CAPE VERDE	CENTRAL AFRICAN REPUBLIC	CONGO	CÔTE D'IVOIRE	GABON	GHANA	GUINÉE	GUINEA-BISSAU	MALI	NIGER	NIGERIA	SENEGAL	THE GAMBIA
<i>1992 U.N. Framework Convention on Biological Diversity</i>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓
<i>1992 U.N. Framework Convention on Climate Change</i>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓
<i>African Convention for the Conservation of Nature and Natural Resources</i>		✓	✓		✓	✓	✓		✓			✓	✓		✓	
<i>Convention on the African Migratory Locust</i>	✓	✓	✓				✓		✓	✓		✓	✓		✓	✓
<i>Convention Concerning the Protection of the World Cultural and Natural Heritage Sites</i>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	
<i>Convention on the Conservation of Migratory Species of Wild Animals</i>	✓	✓	✓						✓			✓	✓	✓	✓	
<i>Convention for Co-operation in the Protection of the Marine and Coastal Environment of the West and Central African Region</i>			✓		✓	✓			✓	✓				✓	✓	✓
<i>Convention on Fishing and Conservation of the Living Resources of the High Seas</i>		✓												✓	✓	
<i>Convention on the High Seas</i>		✓			✓									✓	✓	
<i>Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)</i>	✓	✓	✓		✓	✓		✓	✓	✓	✓		✓	✓	✓	✓
<i>Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter</i>			✓	✓			✓	✓						✓		
<i>International Convention for the Conservation of Atlantic Tunas</i>	✓			✓			✓	✓	✓	✓					✓	
<i>International Convention for the Prevention of Pollution of the Sea by Oil</i>						✓	✓		✓	✓				✓	✓	
<i>Phyto-Sanitary Convention for Africa</i>	✓					✓							✓			
<i>Treaty Banning Nuclear Weapons Tests in the Atmosphere, in Outer Space, and Under Water</i>	✓			✓	✓		✓	✓	✓		✓		✓		✓	✓
<i>Treaty on the Prohibition of the Emplacement of Nuclear Weapons and Other Weapons of Mass Destruction on the Sea-bed and Ocean Floor and in the Subsoil Thereof</i>	✓			✓	✓	✓	✓		✓		✓		✓			
<i>United Nations Convention on the Law of the Sea</i>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<i>Vienna Convention for the Protection of the Ozone Layer</i>		✓	✓						✓					✓		✓

4. ENVIRONMENTAL AND NATURAL RESOURCE MANAGEMENT

4.1 Institutional Framework

Some WCA countries have established ministries whose primary responsibility is environmentally related matters. The more common situation is to house environmental functions in a ministry with jurisdiction over a variety of matters -- such as community development, energy, forestry, housing, mining, tourism, etc. A secretariat, council, or commission represents another option. Such entities usually have representatives from other ministries serving on their board and are often housed in the office of the Head of State. They coordinate ministerial actions and play advisory roles, but usually do not have implementation or enforcement authority.

When the environment portfolio is attached to another portfolio arguably at odds with environmental protection, such as mines or energy, a conflicting agenda exists for the ministry of how to maximize the economic exploitation of the natural resource under its jurisdiction. On the other hand, if the environment portfolio exists as a freestanding ministry, it may rank as a very junior ministry in terms of ministerial clout -- compared with the revenue generating ministries.

Institutional instability contributes to ineffective environmental management. Governments, over relatively short periods, will shift responsibility for environmental management from different units and levels of government, thus losing the benefits of accumulated experiences and institutional learning. For instance, in the Congo, the environmental portfolio has been shifted among 17 different configurations of ministries in the past 18 years. In recognition of how environmental responsibilities can easily shift, some WCA countries, rather than designate a particular ministry to enforce a law, provide the following definition for "Minister" in the definition section of the statute: "Minister means the Minister of the time being charged with responsibility for administering this Act." In recognition of this fact, when examining jurisdictional responsibilities in this report a reference to a "environment ministry" in lower case signifies that the statute does not identify a specific ministry.

Jurisdictional conflicts and overlaps among ministries and among national and local governmental bodies also contribute to enforcement problems. Environmental problems sometimes will not receive attention either because they are not seen as falling within the jurisdiction of any particular ministry or because so many ministries conceivably have jurisdiction -- none of them take the initiative to address the problems. This invites abuses of privilege and a lack of accountability. As these countries move toward decentralized government -- a positive trend -- the jurisdictional issues will magnify and have to be worked out.

Even with well drafted laws and subsidiary legislation and clear jurisdictional mandates problems arise. The governments lack the institutional capability to enforce the law. The ministries seldom have the technical capability to conduct oversight and monitoring, or the legal expertise to bring enforcement actions.

The lack of political will to enforce the law presents a major stumbling block. Several factors contribute to this lack of will. Environmental issues do not always command a high priority with the governments, even though several countries have established environmentally related ministries with competent staff. Morale and productivity at the ministries can sometimes be a problem, however. Staff are underpaid and do not have adequate resources to perform their

duties. Periodically, some WCA countries face long stretches where they cannot pay their workers or fulfill other budget commitments.

In many WCA countries, society largely operates through personalities rather than institutions. Even though laws and by-laws exist, personalities tend to be more powerful than the institutions and laws. A law-breaker can avoid punishment if he knows the right influential person to approach. Such a person can bring pressure to bear on the enforcement agency to be lenient or forgiving. Society is still orientated toward and works more through personal and informal ties rather than formal laws. Highly personalized networks, rather than institutionalized relationships, control operations.

Corruption represents another impediment to good governmental administration. In addition to not solving the environmental problems, pervasive corruption causes the public to lose confidence in the government and the legal system. This speaks to the need to perform government activities in an open and transparent manner.

Benin

After the 1972 United Nations Conference on Development and the Human Environment held in Stockholm, Benin formed a National Environmental Commission pursuant to Décret No. 74-60 to address pollution problems. This national inter-ministerial commission meets twice a year but, in general, those interviewed questioned its effectiveness.

Subsequently, Décret No. 78-180 created the National Committee of Man and the Biosphere, to support the UNESCO program which fosters scientific research and the application of scientific information to the rational management of natural resources. This program trains individuals and transfers information to decision makers and the population at large to ensure environmental conservation.

Government institutions that have environmental responsibilities consist of the Ministry of Rural Development; the Ministry of Planning and Economic Reorganization; the Ministry of Public Works and Transportation; the Ministry of Commerce and Tourism; the Ministry of Interior, Security and Territorial Administration; the Ministry of Energy, Mines and Hydraulics; the Ministry of Industry and Promotion of Small and Medium Enterprises; the Ministry of Public Health; the Ministry of Justice and Legislation; the Ministry of Education; the Ministry of Foreign Affairs and Cooperation; and the Ministry of Finances.¹²

The Ministry of Rural Development and its divisions, such as the Directorate of Forests and Natural Resources, Directorate of Fisheries, and the Directorate of Rural Legislation and its research institutes, seems to be the most important ministry as far as natural resource management is concerned. Its responsibilities range from forestry to rural land and fisheries.

In 1992, the Council of Ministers passed Décret No. 92-17, which created the Ministry of Environment, Housing and Urbanization (MEHU) to facilitate the coordination of environmental activities and implement a national environmental policy. This Ministry consists of four divisions:

¹² For a detailed list of the responsibility of each ministry, see Benin. MEHU, 1993.

an Environmental Directorate, an Urban Sanitation Directorate, a Housing and Construction Directorate, and a Land Management Directorate.

Prior to the creation of this Ministry, the Ministry of Planning (MP) housed the environmental division and the land management division. The Environmental Directorate represents a small component within MEHU.¹³ Its staff consists of approximately 25 people, of which less than 10 are upper level. The Housing and Construction Division is the largest. It was part of the Ministry of Public Works and Transportation before being moved, along with the urban sanitation division, to MEHU.

Article 1 of the decree provides that MEHU has the primary responsibility of establishing the national environmental policy; the policies for housing, urban sanitation, and land management; as well as the promotion and control of the management of renewable resources. According to article 2, the MEHU also implements decisions and guidelines from the government concerning the environment, housing, and urban sanitation.

The environmental division consists of five offices: the research and legislation service; the planning and coordination service; the information and education service; the natural resources control service; and an administrative and financial service. Article 20 provides that the environmental division has the coordination responsibility over all environmental activities, and control of the implementation of renewable resources management.

Several agencies, including the National Geographic Institute were placed under the control of MEHU. Pursuant to article 40, the MEHU also has responsibility for implementing the NEAP.

Although MEHU primarily serves a coordinating function, while implementation falls upon the line ministries, it will likely take on other responsibilities as it develops in-house capability. NEAP implementation may serve the function of a transition mechanism to build institutional capability. However, disputes among government institutions to control environmental projects, as an opportunity to receive external financial support, has proven counterproductive to fostering an integrated approach to environmental protection.

Burkina Faso

The current institutional framework for environmental protection reflects the historical tendency to rely on centralized, statist approaches, but a wide awareness exists within the involved ministries and active NGO community of the need for finding more successful methods of harnessing public participation and local, village administrative systems on behalf of the environment.

In addition, the overlay between the current structure envisioned in Burkina's NEAP (see below), and that under consideration in the proposed Environment Code suggests a high degree of administrative complexity, both now and in the future. That complexity appears to reflect at least some inter-ministerial competition, but in fairness it also reflects the simple fact that Burkina is

¹³ The total MEHU staff was estimated around 200 public servants.

attempting to look at these environmental issues from a sweeping inter-sectoral perspective which necessarily implicates many ministries and jurisdictional competencies.

As noted, the principal ministry is that of the Ministry of Environment and Tourism (MET), the current legal basis for which is the Décret No. 92-213 of 24 août 1992. This decree sets forth the internal organization of the MET, including establishment of the Direction Générale de l'Environnement, which in turn comprises sub-Directions of village forestry, pollution prevention and amelioration of quality of life, hunting and wildlife and fishing. The decree also sets forth the ten regional divisions of the MET in Burkina.

Since independence, the basic environmental responsibility has been moved institutionally and renamed on several occasions, having begun in 1960 as a Ministry of Animal Husbandry, Water and Forests, then a Ministry of Rural Economy, then in 1966 a Ministry of Development and Tourism, then in 1967 a Ministry of Agriculture and Animal Husbandry, in 1974 a Ministry of Planning, Rural Development Environment and Tourism, then since 1976 it has had the current designation of the Ministry of Environment and Tourism.

Even though the MET has primacy in the environmental area, several other ministries are also involved, leading to very complex structures and some criticisms about inter-ministerial conflicts. For example, Arrêté No. 010 of 11 février 1993, which creates a coordination group for the National Environmental Information Program (see NEAP discussion), was signed by five ministers, reflecting the inter-ministerial nature of the project: Environment, Agriculture, Public Works, Planning and Education. The arrêté, at a minimum, attaches this coordination group to the Environment Ministry.

By contrast, one of the most significant potential institutional conflicts appears to have been created by the structure governing the NEAP. Décret No. 92-233 of 31 août 1992 is the current legal basis for the NEAP effort. As noted, it lodges the administration of the NEAP effort in a permanent secretariat attached to MET. However, the decree also creates two Cabinet-level supervisory committees, a follow-up or oversight committee, and a technical coordination committee.

The "Suivi" or oversight committee is chaired not by the Minister of the MET but by the Minister of Finance, with participation by the Minister of the MET and three other Ministers. This arrangement has been strongly criticized by a recent consultant's report, by Mr. Pierre Kabore, done in preparation for the early 1994 round table on the NEAP. He points out that this situation "carries the germ of conflict and antagonism between the two ministries," and offers as proof the difficulty experienced to date in achieving final passage of the Environmental Code by the Assembly.

He attributes that delay in part to concern about the strength and effect of the Code's requirements for EIAs on all major new investments (see EIA section), which in turn pose a potential obstacle to the attraction of such investments, which is a primary mission of the Ministry of Finance.

A less direct problem may be posed by the composition of the other committee created by the decree creating the NEAP structure, the technical coordination committee. That committee is

composed of twelve Ministers, again reflecting both the sweep of the NEAP effort and the administrative tendency toward complex, inter-ministerial approaches.

That approach clearly is reflected again both in the NEAP document itself and in the proposed Environment Code. In the Code, three entities are created for environmental protection and management:

Inter-ministerial Environment Committee. This appears to be a recreation of the inter-ministerial committee structure, but placed under the MET and with other modalities of operation left to be decided by implementing legislation.

National Environment Committee. This commendable innovation would create an overall public/private entity to comment on and participate in environmental decisions. The Code calls for formal participation in the committee not only by government ministers, but also by union representatives, environmental associations (NGOs), business representatives and environmental experts. This committee would have an advisory role and would be expected to offer its comments on significant national environmental policies or projects. In addition, as a continuing effort to decentralize government control, a counterpart environment committee would be created in each Burkinabe province.

Bureau of Environmental Impact Assessment. This commendable proposal would create a new entity specifically charged with fielding a team of environmental specialists capable of analyzing and assessing the environmental impact studies called for in the Code (see EIA section).

The institutional provisions of the NEAP itself continue to call for the structure currently existing, that is with MET being the lead ministry and housing the permanent secretariat, but with the "suivi" or oversight committee chaired by the Minister of Finance.

It would appear that legally speaking, the Code, if and when enacted, would supersede the NEAP and the current RAF, but the differences among them suggest an ongoing bureaucratic dispute.

Cameroon

The Ministry of Planning and Territorial Administration has responsibility for environmental management. The Department for Territorial and Environmental Planning, within this Ministry, monitors services and organizations for quality of life and the environment. The Under-department of the Environment and Human Establishments implements environmental policy, but suffers from a shortage of funds and personnel.

The absence of a well-defined NEAP poses difficulties in carrying out environmental policy. However, the Government of Cameroon (GOC) is drafting a report on environmental issues in Cameroon for the United Nation Conference on Environment and Development (UNCED), which could form the basis for a NEAP.

The lack of coordination among ministries hampers effective environmental and natural resource management. Moreover, the ministries focus more on natural resource exploitation than protection and management.

The communes manage local affairs under the direction of governors, prefects, and sub-prefects. Environmental policy is defined at the national level, while the communes are charged with implementing the policy. Community powers in the environmental area are limited to the approval of city planning, the application of commune's laws and regulations, and the adoption of regulations concerning police and highways.

Appointed municipal administrators govern the rural communes, whereas a mayor, elected by the municipal council, governs urban communes. This system leaves little opportunity for local citizens to select their leaders. To a limited degree some institutions are able to influence environmental policy. These institutions include private companies, cooperatives, consular chambers (chambers of agriculture, livestock, and forests), and chambers of commerce, industries and mines. Despite some rhetoric regarding decentralization, the decision-making process remains a highly centralized system.

Cape Verde

Environmental protection in Cape Verde is the responsibility of two ministries: the Ministry of Fisheries, Agriculture and Rural Extension (MPAAR, Portuguese acronym)¹⁴ and the Ministry of Infrastructure and Transportation (MIT).¹⁵ These ministries, however, are primarily concerned with development activities. In both ministries, the environmental office consists of a small subdivision with limited jurisdiction within a multipurpose department. The environmental office in the MPAAR is located in the Agriculture, Environment and Fisheries Division of the Office of Research and Planning.¹⁶ This office deals basically with reforestation, soil erosion, and the application of the forestry law. It also does follow-up of environmentally-related projects within the Ministry.

Other environmental activities of MPAAR include a 1992 awareness campaign for the protection of marine turtles (National Fisheries Development Institute); agricultural pests, animal diseases and food-quality controls; preparation of a National Forestry Action Plan; participation in the drafting of a new Forestry Law; organization of the First National Seminar on the Tropical Forestry Action Plan; execution of a voluntary reforestation campaign; joint participation in an environmental education project with the Ministry of Education and Sports (Department of Agriculture); development of a national parks and protected areas project (National Research and

¹⁴ MPAAR - "Ministério das Pescas, Agricultura e Animação Rural" replaced the former Ministry of Rural Development and Fisheries (Ministério do Desenvolvimento Rural e Pescas).

¹⁵ MIT - "Ministério da Infraestrutura e Transportes" replaced the former Ministry of Public Works (Ministério das Obras Públicas).

¹⁶ In the lusophone countries a Ministry is equivalent to a Department in the United States. Ministries are usually divided into several General Directorates, which in turn may be subdivided into Directorates or Divisions. Institutes are autonomous entities with a very specific mandate, similar to an agency in the U.S., but usually linked with a ministry or the presidency. The new organic structure of the MPAAR consists of the Directorate-General of Fisheries, Directorate-General of Agriculture, Directorate-General of Fisheries and Rural Extension, Directorate-General of Administration, Directorate-General of Cooperation, Office of Research and Planning, and several agencies, such as: the National Fisheries Development Institute, the National Research and Agrarian Development Institute, the National Water Resources Management Institute. See Cape Verde, MPAAR, 1993. See also Cardoso, 1993.

Agrarian Development Institute); publication of environmental information in the MPAAR magazine (Department of Fisheries and Rural Extension); and water supply and water-quality control (National Water Resources Management Institute).

Likewise, the environmental office of the MIT is one of three divisions within the Department of Territorial Organization.¹⁷ It basically provides environmental awareness and information to small projects under the responsibility of the ministry, whereas large projects require the approval of the Cabinet of the Prime Minister. According to this office, the environmental problems of Cape Verde are the supply of potable water to the islands, drainage, and sewerage.

Besides these two ministries, other governmental institutions, such as the Ministry of Education and Sports, which has developed a set of books on environmental education,¹⁸ and the Ministry of Tourism, through its National Tourism Institute, which has emphasized the development of ecotourism on the islands, are important actors as far as environmental protection is concerned.

According to those interviewed, it appears that the Prime Minister holds the final word as to environmental protection. His cabinet is perhaps the most important environmental institution these days, since the National Environmental Policy Act requires the creation of a new organization with specific environmental responsibilities. Thus, it remains unclear whether this new institution will be an inter-ministerial commission, a ministry, or an agency.

Central African Republic

The Central African Republic (CAR) presented a national report at the September 1991 United Nations Conference on Environment and Development (UNCED) which candidly discussed the institutional and administrative shortcomings of CAR's handling of environmental protection and natural resource management issues.

Two problems, familiar in WCA countries, were highlighted: frequent reorganizations and reshufflings of ministerial portfolios, with consequent loss of follow-through and institutional memory, and a broad dispersion of environmentally-related responsibilities among many ministries.

According to the CAR's UNCED report, both these problems have tended to be dealt with through the creation of additional, ad hoc committee structures in an effort to coordinate ministries. Regrettably, the report notes that "the common denominator of most of these structures is to never function. Those which do survive must overcome a thousand difficulties, as has the National Committee to Fight Bushfires."

¹⁷ Besides the Department of Territorial Organization, MIT consists of a Department of Infrastructure and several agencies with responsibility over Maritime Transport and Ports, Civil Aeronautics, Land Transport, and Housing.

¹⁸ The set consists of four volumes: one on environmental awareness, a student handbook, a student exercise book, and a teacher's guide. The project was financed by the EEC through CILSS (Comité Permanente Inter-Estados de Luta Contra a Seca no Sahel), and was coordinated by Dr. Victor Borges, director of the "Projecto de Formação e Informação para o Ambiente de Cabo Verde (PFIE).

One of the earliest CAR examples of the inter-ministerial committee approach came in 1975, when a national committee to manage the environment was created, composed of representatives from eleven ministries.

The responsibility for environmental protection in CAR in the fall of 1991 remained divided among at least twelve entities, including a Directorate of Health, Sanitation and Environment in the Ministry of Health; a Bureau of Soil Conservation and Protection in the Ministry of Rural Development; a Forestry, Fishing and Hunting Directorate in the Ministry of Water, Forests, Hunting, Fishing and Tourism; and a National Center for Wildlife Protection and Management. The importance of combatting bushfires was indicated by the direct attachment to the Office of the President of the Republic of the national committee favorably mentioned by the report to the UNCED.

Congo

Responsibility for the various sectors of the environment is dispersed among the following ministries: the Ministry for Fishing, Agriculture and Animal Husbandry; Ministry for Water and Forests; Ministry for Mines and Energy; Ministry for Urban Development and Habitat, and Ministry for Merchant Marine.

The lead responsibility for environmental matters today rests with the Direction Générale de l'Environnement (DGE), currently housed within the Ministry of Tourism and the Environment. This location for the DGE does not truly correspond to the organic legislation, Décret No. 90/599 of 26 octobre 1990, under which it was created. The legislation placed the DGE within the Ministry of Public Works. The lack of stability in the administrative structure presents a serious concern. Environmental responsibility has been shifted among 17 different configurations of ministries in the past 18 years. The NEAP team cited as a problem the lack of a clear, stable home for the environment portfolio.

The staff and technical resources available to the DGE are paltry. In all, the DGE has 65 personnel, of which 53 are in Brazzaville. This excessive concentration in the capital is typical of other ministries. Of this staff, only 7 have special expertise such as in mining, hydrology, or rural development. As for money, the sums allocated are remarkably small -- even in the context of a WCA nation with the economic woes the Congo experiences today. The budgeted amount was only one million Francs CFA for 1991, but in fact, given the government's difficulties in meeting its budget, only 453,880 FCFA were actually obligated and spent. In 1992, the sum obligated was greater, but still only 1,237,500 FCFA were actually spent.

This small amount of money reflects the lack of material means available to the environment ministry. Field interviews confirmed that the DGE has no vehicles to use for any sort of field investigations or actual site inspections, and no laboratory or other equipment for regular monitoring and analysis of actual environmental conditions. It has an office building with desks, rendering it indeed a paper agency rather than a genuine regulatory and law enforcement entity. Historically, the ministries in the extractive sector, such as the Ministry of Mines and Energy, have had more resources available, but today even they face similar financial constraints.

Several overarching political and economic factors were in play in Congo at the time of this mission further contributing to institutional instability. Disputes between the ruling and major

opposition parties have led to a stalemate in government activity and actual violence. The week prior to the mission visit to Brazzaville, armed conflict occurred in the streets involving the nation's military forces. Government offices and public offices consequently shut down and administrative functions ground to a halt for a few days.

Added to such civil unrest, it is widely understood in Brazzaville that the government's financial difficulties have resulted in a general late or non-payment of salaries of government officials. It is said that as of December 1993, government workers had not received salaries in ten months. Consequently, some government offices were not well-staffed, and activity appeared generally low.

Côte d'Ivoire

Environmental responsibility rests with the Ministry of Environment, Construction and Urban Affairs. The Ministry has an Environment Office and a Sanitation Office, which oversee the following Divisions: Management and Improvement of Natural Resources, Hygiene and Sanitation, Urban and Rural Conditions of Life, New Energy Resources and Soft Technologies, Legal Sub-directorate for Decentralized Cooperation, Social Mobilization and Multi-Sector Environmental Cooperatives. Several ministries share responsibility for natural resource management creating problems of overlap and numerous inter-ministerial conflicts.

The Government of the Côte d'Ivoire (GOCI), with World Bank assistance, will soon commence work on a NEAP. An autonomous secretariat has been established to coordinate this project and other inter-ministry environmental matters.

The Ministry of Interior and Security Affairs participates in the environmental field in matters relating to territory administration, local collectivities, and decentralized cooperation efforts. Two types of municipalities exist in Côte d'Ivoire: urban collectivities and rural communities. Under the authority of the prefect, they administer local matters and enforce national environmental policy. The Côte d'Ivoire seeks to promote rural development and involve local people in the management of natural resources by decentralizing governmental decision-making.

Gabon

Gabon's major natural resource assets are its equatorial forests, with unusual and valuable species of wood; offshore oil reserves along its southern coastline; wildlife; and fishing beds within its territorial waters.

The primary responsibility for environmental protection is vested in the Environment Directorate within the Ministry of Water and Forests. The 1993 Environment Code did not make any organizational changes related to management of the environment. The organic law of most significance to environmental protection is Law No. 1/82 of 22 July 1982, which created and organized the Ministry of Water and Forests.

The environment portfolio, as in other WCA countries studied, tends to be a subsidiary mandate, assigned to a ministry, such as water and forest, with other, traditionally more important, responsibilities. Indeed, the mandate to exploit forest resources for economic gain clearly represents the main thrust of Law No. 1/82. In light of the potential for conflict, some in the NGO

community and government believe a separate freestanding environment ministry should be created.

The frequent shifting of jurisdictional responsibilities, as in other WCA countries, contributes to institutional instability. The environment portfolio has been variously paired with the Ministry of Water and Forests, the Ministry of Education, and the Ministry of Tourism.

Finally, the omnipresent lack of material resources further contributes to institutional weakness. Field interviews and site inspections showed woefully inadequate material and equipment for environmental monitoring and enforcement. A site visit was made to the environmental monitoring laboratory of the Centre Nationale Anti-Pollution (CNAP), located in Libreville, the Gabonais capital. CNAP is intended to be the scientific analysis and research arm of the Environment Directorate.

That site visit disclosed that water quality sampling, that is supposed to be done on a regular basis in and around the Libreville area, has not been done for a period of at least several months due to a lack of chemical reagents in the laboratory. Consequently, the Environment Directorate can not state whether chemical, bacteriological or other contaminants are in the Libreville waterways and coastal zones. Likewise, inspectors and agents charged with surveillance of commercial establishments for environmental compliance noted that they lacked vehicles and any ready means of even reaching sites, let alone conducting monitoring or environmental inspections.

As a consequence, notwithstanding technically strict laws and regulations governing disposal of wastes in waterways and on urban spaces, garbage disposal within Libreville itself is demonstrably a problem, and the visual evidence suggests widespread pollution of waterways and the coastal zone.

Ghana

Several government bodies exercise executing powers for environmental protection; however, no one body is empowered to exercise oversight of the whole environment or even a significant portion of it. Problems thus arise for these agencies to exercise their powers and to determine their exact jurisdictional responsibilities. Environmental problems sometimes will not receive attention either because they are not seen as falling within the jurisdiction of any particular agency or because so many different bodies conceivably have jurisdiction, none of them take the initiative to address the problems.

The National Redemption Council (NRC) issued The Environmental Protection Council Décret, 1974 (NRCD 239), which established the Environmental Protection Council (EPC). The EPC serves primarily as an advisory and research organization, with the mandate to coordinate the activities of other governmental bodies. Lacking enforcement powers, the EPC serves as a meeting point for those agencies exercising power. Representatives from the Ministries of Health; Agriculture; Foreign Affairs; Lands and Natural Resources; Industries, Science and Technology; Local Government; Finance and Economic Planning; Works and Housing; along with representatives from other government agencies serve on the EPC. Furthermore, Section 3 of NRCD 239 specifies that two distinguished citizens with special interest and experience in environmental matters will serve on the EPC as representatives of the public interest.

EPC needs real enforcement powers. Environmental protection efforts require establishing certain quality standards and threshold measurements, and the ability to monitor these standards and measurements. Such a function should be centralized in one body and EPC can develop this technical capability.

The EPC currently coordinates the drafting of the NEAP, which will provide a coherent framework for interventions. The EPC recognizes the inadequacy of much of the existing environmental legislation. The EPC, in cooperation with the appropriate agencies, will prepare a comprehensive package of legislation to address the various sectoral environmental problems.

The Local Government Law, 1988 (PNDCL 207), implements the Government of Ghana's (GOG) decentralization policy. District Assemblies, established pursuant to PNDCL 207, will play a key role in implementing the NEAP. This reflects the GOG's belief that national environmental policies and programs can best be translated into action at the local and district levels. As regards the functions conferred on them, the District Assemblies are empowered to make by-laws and to impose penalties.

District Environmental Management Committees, with broad responsibility for monitoring and coordinating environmental protection and improvement activities, will be established within each District Assembly. The District Assemblies will carry out environmental programs at the town and village level through Community Environmental Committees (CECs). The CECs will mobilize the people and resources in a community, provide for environmental discussions, promote energy conservation, and serve as environmental watch-dogs.

Guinea Bissau

The Ministry of Rural Development and Agriculture (MDRA, Portuguese acronym) has significant influence in environmental matters since agriculture is traditionally the most important activity in the country. Increased farming and logging activities since 1985, both under MDRA responsibility, have also raised the awareness of imminent resource degradation by these same activities, in addition to the Sahel desertification process. For these reasons, within MDRA, the Directorate of Forestry and Hunting adopted a policy to protect flora and fauna and to combat bushfires. The ministries that have resource development responsibilities in Guinea Bissau, experience conflicts frequently over natural resource protection policies.

In order to guarantee that environmental concerns receive consideration by the many sectorial ministries, Décret No. 24/92 established a National Environmental Council ("Conselho Nacional do Ambiente" - CNA) to assist the government in establishing an environmental policy and providing for its implementation. CNA will propose a national environmental plan, suggest laws and preventive measures to protect the environment, promote public participation and environmental education, support the establishment of protected areas, propose enforcement action to other government agencies, guarantee the environmental component in economic development plans and projects and territorial organization, promote the environmental impact assessment of infrastructure projects and activities that may affect the environment, establish contact and promote joint action of similar organs, and propose the negotiation and signature of international environmental treaties and conventions.

This decree has been modified recently by the "organic law" of the CNA, yet to be published,¹⁹ which provides the powers of its components. According to the proposed organic law, the President of Guinea Bissau will preside over the CNA, which will have a political interministerial coordinating board, a permanent administrative secretariat, and a technical committee. The coordinating board will provide the linkage between CNA and other government agencies and will establish guidelines for CNA activities.

Article 5 of the proposed law lists the following government institutions as represented in the coordinating board: the Ministry of Rural Development and Agriculture, the Ministry of Natural Resources, the Ministry Public Works, the Ministry of Fisheries, the Ministry of Territorial Administration, the Ministry of Public Health, the Ministry of National Education, the Ministry of Commerce and Industry, the Ministry of Social Affairs and Woman Promotion, the Secretary of State for Planning, and the Permanent Secretary of CNA. Representatives from the environmental NGOs comprise the remaining members of the board. The President of the Council will nominate these entities based on recommendations submitted by the permanent secretary.

CNA is understaffed -- its staff consists only of the permanent secretary. Much needs to be done in this area, ranging from making the CNA operational to passing a series of basic environmental laws for Guinea Bissau. The institutional framework cannot function properly unless guidelines are established through a national environmental policy act, which should be complemented by a series of specific environmental laws. Existing resource-related laws, such as the water, forestry and fisheries laws, each under the jurisdiction of separate ministries -- Ministry of Natural Resources, Ministry of Rural Development and Agriculture, and Ministry of Fisheries, respectively -- ought to be revised to conform with the concept of sustainable development. Environmental impact assessment, environmental liability, and protected areas, for example, must be regulated accordingly.

CNA's intended action plan includes the development of a NEAP, starting as early as January 1994, and a review of existing forestry, fisheries and hunting laws, as well as to prepare or finalize laws on protected areas, land tenure and environmental impact assessment.

Guinée

Primary responsibility for environmental protection rests with the Ministry of Natural Resources, Energy and Environment (MNREE). A National Directorate for the Environment (NDE) within the MNREE administers the environment portfolio. These administrative arrangements are new, having been promulgated under Arrêté No. A/93/6291/MRNEE/CAB, 29 juillet 1993. A prior administrative decree, Décret No. 206/PRG/SGG/89 of 8 novembre 1989, governed the environmental function.

As suggested by the proximity of the dates of the two organic measures, the environmental portfolio has been subject to some of the same administrative instability seen elsewhere in WCA. Likewise, a potential conflict in missions exists within the MNREE, given the competing, if not conflicting, missions of economic maximization of mineral and energy-related resources.

¹⁹ Interview with CNA Secretary, Mr. Rui Ribeiro. See Guinea Bissau. Institutional Framework. Projecto de Lei Orgânica.

The lack of significant resources in the administrative structure, however, represents the major problem. As in other WCA countries, the ministry charged with environmental protection lacks staff, vehicles, laboratory facilities, and other means to monitor and conduct surveillance of environmental conditions, let alone engage in meaningful enforcement of environmental laws.

A field visit to the provincial capital of Dabreka, some 100 kilometers from Conakry, did, however, produce one positive observation. Interviews with local and regional officials indicated, that at the local administrative level, an understanding of environmental issues and a working effort to coordinate among local officials of the various ministries – including the Ministry of Agriculture and Animal Resources (MARA, French acronym). This is significant because historically the MARA has been the most strongly represented ministry at the local level. The local MARA officials and those from MNREE appeared to work well together.

With respect to the laboratory situation, as in other WCA countries, field work indicates inadequate resources and staff for environmental monitoring. However, the Canadian Development Assistance Agency has expressed interest in funding the laboratory and the Guinean officials responsible for the NEAP hope that resources increase and improve in the near term.

Mali

As a consequence of growing concern about the environment and the sustainable management of the natural resources, the Government of Mali (GOM) established an inter-ministerial committee on environment. The Ministry of the Environment and Livestock, which sets Mali's environmental policy, chairs the committee. The committee includes the following ministries: Public Health and Social Welfare, Public Works, Agriculture, Industry, Justice, Finance, Defense, Education, Territorial Administration and Basic Development, and Employment. The committee acts in an advisory capacity and lacks regulatory or legislative authority.

The Committee will undertake a review of all the major environmentally related laws concerning agriculture, livestock, and natural resource management and consider new legislation and an administrative reorganization of the environmental structures. The GOM currently seeks to reduce significantly administrative departments and block the creation of new public entities. In such areas as urban and industrial pollution there is very limited authority and inadequate governmental arrangements. The major focus of new legislation will likely be on soil erosion, natural resource management, decentralization, and land tenure.

The GOM, through the Division of Urbanization in the Ministry of Territorial Administration, sets the budget and provides the general plans for the Districts with the Governor of each District responsible for implementation. Districts are divided into communes, which are headed by a mayor. Each commune is subdivided into quartiers. Elected representatives of the political party run the communes and quartiers. It is at these levels that the community interacts with its civic leaders.

Title XII of the constitution, adopted by referendum in January 1992, seeks to promote decentralization by creating a High Council of Communities (Council). Article 99 charges the Council with advising on all policies for local and regional development and advising the GOM

on all matters pertaining to environmental protection and improvement of quality of life for the citizens in the communities.

The constitution confers significant powers on the Council. The GOM must file with the National Assembly a bill consistent with the Council's proposals within fifteen days of the proposal. Furthermore, the GOM must go to the Council for an opinion on all actions concerning the environment and the management of natural resources at the local level.

In light of the lack of environmental coordination and management, the GOM may wish to consider establishing a secretariat to coordinate environmental matters. The secretariat should be attached to a high level office such as the Head of State or the Prime Minister. The organizational structure of the secretariat should reflect the GOM's overall organizational structure. The secretariat could handle policy development and implementation, interagency coordination, and environmental monitoring.

A high level national environmental committee (NEC) could provide critically needed support for the secretariat. The Head of State or Prime Minister could chair the NEC, which would be composed of the ministers who have responsibility for the natural resources and those whose activities bear on environmental management. The NEC would enable the secretariat to have authority above that of individual ministries. To promote public/private sector cooperation a national environmental council could be established to advise the NEC. The Council would be composed of representatives from the business community and NGOs.

Niger

Various ministries share responsibilities for environmental and natural resource management. The two lead ministries are the Ministry of Agriculture and Livestock and the Ministry of Environment and Water Resources. The former ministry has a Permanent Secretariat of the Rural Code which sets policy on natural resource management and land reform. The latter ministry has an Environment Division, a Fauna, Fishing and Fishery Division, and several departments for the development of forestry, environment and environmental community administration, and planning.

The ministries' responsibilities overlap and compete. Moreover, no process exists for resolving intersectoral conflicts and joint planning. This vertical management inhibits the development of cross-sectoral approaches to environmental management. Recognizing these problems and the need to promote decentralization, the Government of Niger (GON) sponsored a national conference that recommended the following development strategies:

Be prospective, and inform decision makers and players on short, medium and long range actions to be taken.

Be multi-sectoral: all technical, economic and social sectors in a given geographic area will have to take part in drafting and implementing the development plans.

Be multi-functional: local structures in charge of a geographical planning area will have to involve experts and project beneficiaries capable of understanding the various aspects of an area's development (economists, legal experts, geographers,

agronomists, administrators, engineers, public officials, private companies, individuals, etc.).

Be participatory: all partners, whether private or public, associations, PVOs and NGOs must be involved every step of the way, from conception to implementation.

Be educational: teamwork by partners from various backgrounds and with various purposes implies common education and training efforts.

Involve the search for integration based on the structuring of that area in order to intensify internal links through regional specific and complementary characteristics.

Involve preservation and regeneration of development's structural bases (soil, vegetation, water) through their rational and optimal management.

After defining these planning policies, they should be reflected in the new responsibilities given to the regions and local collectives pursuant to the ongoing decentralization process. The conference further recommended that a legal and institutional framework be designed and implemented to carry out this new planning policy at the national, regional, and local level.

Nigeria

The Federal Environmental Protection Agency (FEPA) and the Natural Resources Conservation Council (NRCC) share environmental responsibilities. FEPA, for the most part, has responsibility for "environmental" issues and NRCC has responsibility for "conservation" issues. Potential jurisdictional conflicts relating to overlapping responsibilities could arise between FEPA and NRCC in such areas as reporting and monitoring of natural resource conservation and in managing water resources and coastal zones. Furthermore, FEPA and NRCC may compete for funds.

The Federal Environmental Protection Décret, 1988 (No. 58), encourages the states and local government bodies to establish their own environmental protection bodies. To facilitate cooperation and coordination between FEPA and the states, Section V of the National Policy on the Environment established the National Council on the Environment (NCE). FEPA will act through the NCE. The states in turn will supervise their state bodies, which include local government representatives.

With The Federal Environmental Protection Agency Décret and The Guidelines and Standards for Environmental Pollution Control, 1991 established pursuant to this Décret and The Natural Resources Council Décret, 1989 (No. 50), the Government of Nigeria (GON) is taking positive steps to update its laws and establish agencies to enforce these laws.

Sénégal

Responsibility for environmental policy rests with the Ministry of Tourism and Protection of Nature, which has a Department of the Environment established pursuant to the April 1990 Order. The Department consists of the Office of Judicial Affairs; the Office of Training; Information and Sensitization; the Office of Waste, Water, Noise, and Air Protection; the Coordination Division; and the Division to Prevent and Combat Pollution and Harmful Substances. The Ministry of

Transport Equipment and the Sea; the Ministry of Urban Development and Housing; the Ministry of Industry, Commerce and Artisans; and the Ministry of Rural Development and Hydraulics also have environmental responsibilities.

A serious overlap of responsibilities hinders environmental management. The National Committee for the Environment has failed to resolve intersector conflicts. Furthermore, the ministries have not engaged in joint planning and inter-institutional agreements. A national multi-disciplinary secretariat, national environmental committee and national environmental council as proposed herein for Mali may be appropriate.

Sénégal has undertaken a series of steps to promote rural development and decentralization. The French colonial legacy, however, continues to impact profoundly Sénégalaise administration and administrative practice, since Sénégal's administrative organization is very similar to French administrative organization. Initial efforts were aimed at community development through the establishment of an "animation rurale" service and the expansion of rural cooperatives. These programs gave way in the 1960's to specialized parastatals, which provided little opportunity for local participation or initiatives.

Since 1972, when the administrative reform law took effect, Sénégal has engaged in an effort to decentralize its administrative structures to promote rural development. This initiative led to the creation of locally elected councils in rural communities. Owing to the strong control from the prefect and sous prefect, who act on behalf of the Ministry of Interior, this initiative has achieved only marginal success. The Government of Sénégal (GOS) is now considering new reforms to make the system more responsive to the goal of decentralization.

The Gambia

The Ministry of Natural Resources and the Environment is the lead ministry dealing with the environment. The Ministry has four technical departments: Forestry, Water Resources, Fisheries, Wildlife Conservation, and the Environmental Unit (EU).

The Forestry Department has few professional foresters on staff. The field level forestry staff has both enforcement and extension responsibilities, which may reduce their effectiveness in working with NGOs and villagers. The majority of the staff at the Wildlife Department's two sections, administration and education/extension, have minimal educational backgrounds. The Wildlife Department lacks sufficient professional staff to supervise, control, and implement the new Kiang West National Park plan and create other wildlife refuges.

The EU reports directly to the Minister through the Permanent Secretary. The EU's responsibilities include: coordinating environmental matters at both national and international levels, providing technical assistance to both governmental and non-governmental agencies, participating in project design, establishing and maintaining an environmental information center, conducting EIAs, and regular monitoring of the impact of various projects on the environment. The EU has not been able to carry out these responsibilities owing to its small size and lack of resources.

The EU has effectively coordinated inter- and intra-ministerial actions related to natural resource management. In particular, the EU took the lead drafting the NEAP. All the government

institutions acknowledge the need for multisector integrated approaches to environmental degradation. With additional staff, resources and a clear mandate, the EU could spear-head this effort.

The GOTG policy calls for reducing planning at the national level and increasing the responsibility at the local level. Uncertainties exist as to what extent this delegation of responsibility is happening. The GOTG intends to develop a detailed plan for decentralization of government activities. Questions arise as to how the technical ministries will be represented and function in the field.

The Department of Community Development, located in the Ministry for Local Government and Lands, has field agents working with rural populations to stimulate self-help actions through the organization of village development committees (VDCs). While these agents have the potential to increase the success of local level planning efforts and mobilize the population, much depends on the personal interactions.

The VDCs, introduced in the 1975-81 Gambian Development Plan, are responsible for planning, programming, and implementing government and donor development projects. VDCs seek to eliminate some of the inequalities in the traditional authority structure which gives decision-making authority predominantly to the elder males, by mandating female and youth representation. The VDCs have met with mixed success. Critics point out that VDCs are not indigenous social/administrative structures and are superimposed onto traditional systems. In the villages where the VDCs exercise real authority, the VDCs will usually be composed of the traditional leaders and perpetuate the existing social hierarchy.

4.2 National Environmental Action Plans²⁰

A National Environmental Action Plan (NEAP) is defined "as a national government, demand-driven, participatory process which provides a comprehensive, institutional framework for integrating environmental considerations into a nation's economic and social development. While the World Bank, in collaboration with other donor agencies such as USAID and UNDP, have provided initial impetus and technical and financial support for NEAPs, they are in theory and practice in-country processes. The government and its people prepare and implement NEAPs.

NEAPs are designed to be flexible in organization, timing, and funding. Perhaps, most importantly, the preparation, analysis, documentation, and entire process is intended to identify environmental priorities and be action-oriented. NEAPs should lead to verifiable results reflected in policies, programs, and a wide range of development activities. Expected NEAP results include the internalization of environment into government; sensitizing decision-makers and the public to environmental conditions and trends; improved environmental assessment, legislation and policy-making; as well as enhanced donor coordination and development policy and investment guidance. In many instances the NEAP process, as intended, has galvanized public and NGO participation. People have had more contact with and influence over government officials than they typically have had in the past.

²⁰ For additional information on NEAPs see Talbott, "Public Participation in African Environmental Action Plans;" Talbott and Furst, "Ensuring Accountability: Monitoring and Evaluating the Preparation of National Environmental Action Plans in Africa."

Country specific NEAP discussions for the countries visited on the first mission are not provided, since the NEAP process at the time of the first mission was not as far along as it is now.

STATUS OF NATIONAL ENVIRONMENTAL ACTION PLANS (NEAPS) IN AFRICA

COUNTRY	STATUS			
	NONE	IN FORMULATION	DRAFT	APPROVED
<i>Benin</i>				√
<i>Burkina Faso</i>				√
<i>Cameroon</i>		√		
<i>Cape Verde</i>	√			
<i>C.A.R.</i>	√			
<i>Congo</i>		√		
<i>Côte d'Ivoire</i>		√		
<i>Gabon</i>		√		
<i>Guinea Bissau</i>		√		
<i>Guinée</i>		√		
<i>Mali</i>	√			
<i>Niger</i>	√			
<i>Nigeria</i>		√		
<i>Sénégal</i>		√		
<i>The Gambia</i>			√	

Benin

Although Benin has had several environmental committees and study groups since the mid-seventies, it was not until 1990, when the country began implementing its structural adjustment program, that the international community prompted Benin to take a clear position as to environmental concerns. This resulted in the effort to produce a NEAP, which cost the donors (The World Bank, UNDP/UNSO, France, and Germany) US\$1,000,000 for its preparation.

Benin began preparing a NEAP in 1991. First, seminars were organized throughout the different regions of the country to identify the major environmental problems as perceived by the population. These seminars usually had about 50 participants drawn from NGOs, territorial administrations, and local representatives of the Ministry of Rural Development. Specially trained students spent about two months in each village performing population surveys. The results from these surveys were subsequently compared with the discussions from the seminars. This procedure, thus, considered public participation as a key element in policy development. In June, 1993, the Council of Ministers approved the "Plan d'Action Environnemental du Benin."

As a policy document, the NEAP constitutes a thorough inventory of the sectoral environmental problems that confront Benin, and is noteworthy for laying out an action plan in a three-stage timeline – one year, five years and fifteen years. Benin's NEAP cites as environmental priorities deforestation, soil erosion, water quality degradation, and urban environmental deterioration.

The legal obstacles to environmental progress cited by the NEAP are, as in other WCA cases, "the lack of transparency and the non-respect of existing regulatory texts," the failure in some cases to promulgate or clarify laws and regulations, and the "land ownership insecurity" resulting from the confusion and conflict over land tenure law.

The most significant legal reform objectives set forth in the NEAP are:

Promulgation of a framework environmental law to rectify the elements of incoherency and insufficiency of existing environmental law.

Promulgation of environmental directives by each government Ministry detailing the policy and legal changes to be made consistent with the NEAP commitment to environmental protection.

Long-term efforts to educate or "sensibiliser" the population to environmental laws.

On specific sectoral law issues, the NEAP proposes:

To address industrial pollution; environmental audits will be prepared for major existing industrial sites and appropriate enforcement actions taken.

In the energy sector, imposition of site selection criteria for power plants, the use of environmental impact assessments to screen investment decisions in this sector.

In the coastal, or marine sector, an effort to find new measures to safeguard against damage to coastal waters, specifically damage from oil exploration and production.

In the land tenure area, an effort to resolve the current land use conflicts in a manner conducive to a balanced use of Benin's land for agriculture, forestry, and animal husbandry.

The implementation of NEAP will strengthen the Ministry of the Environment, Housing and Urbanization (MEHU). In general, NEAP's policy provisions have been accepted and incorporated into the sectorial policies of the ministries. An environmental code was not considered as a useful legal tool from those interviewed, who preferred the integration of sectorial legislation within a broader framework law.

Burkina Faso

Burkina Faso now has an extremely complex, comprehensive, and ambitious NEAP. In nearly 400 pages in 2 volumes, it sets forth a complete statement of the evolution of attention to the environment in Burkina Faso from the early 1970's through the present, and describes a broad range of intended and current projects to protect the Burkinabe environment.

The antecedents of the current NEAP have evolved from the primary ecological challenge which has faced Burkina and its Sahel neighbor nations since 1970: the desertification process which has enlarged the Sahel desert and reduced the arable and livable land for a population which continues to grow at roughly 3.5 percent per year.

The problem of desertification and associated problems of destruction of forests and loss of arable land have led to a series of formal, internationally-supported efforts, among them:

The National Program of Struggle against Desertification in 1970.

Village Forestry Programs begun in the early 1980s, along with the first Agrarian and Land-Tenure Reorganization in 1984.

The "3 Struggles" campaign begun in 1985: against bushfires, wandering grazing animals, and excessive or "abusive" wood-cutting.

Adoption of a National Plan for the Struggle against Desertification (PNLcD) in 1986.

Adoption of a national land management program (PNGT) in 1992.

Throughout the evolution of this anti-desertification struggle, awareness has grown of the complex interrelations of land tenure, animal husbandry, water rights/control, and certainly forestry/agricultural practices in the desertification process. Burkina Faso's NEAP has grown from that consciousness.

The NEAP's formulation has emerged from a series of national and regional meetings and studies of the overall environmental picture, notably a national workshop held in Burkina's second largest city, Bobo-Dioulasso, in October 1989, the adoption of the first NEAP in September 1991 and further study and revision, based both on indigenous experience and on the Rio 1992 International Declaration of Principles.

Today, the NEAP's implementation is the primary responsibility of a permanent Secretariat lodged within the MET.

A major contribution of the NEAP document itself is its "diagnostic" or inventory and analysis of the current ecological/natural resource situation in Burkina Faso. Basic statistics, as best available, are included on water, land, forestry, mineral, endangered species and other resources are included, along with analysis of broad human sanitation and public works conditions affecting the overall environment.

The NEAP also sets forth five broad programs for long-term environmental protection and management. The first is the Program of Management of the National Patrimony (PCGPN). The PCGPN is an umbrella effort to enhance the husbandry of all Burkina's natural resources, and includes over a dozen subordinate sectoral projects such as Burkina's Tropical Forestry Action Plan, watershed administration plans, village forestry projects, rural planning and river basin mapping projects. These of course cover a range of government ministry jurisdictions (see institutional framework section).

The Land Management Program is the second program. This umbrella effort reflects the continuing struggle with how to achieve anti-desertification and forestry management goals consistent with village traditions and agricultural/forestry habits. Much of this project is an effort to find effective ways of involving villages and customary authorities at the village level in the land/environment management process, a goal which to date has clearly not been achieved (see land tenure section).

The Program for the Amelioration of the Quality of Life represents the third program. This category of NEAP efforts reflects the effort to mesh basic developmental objectives with environmental protection to mutual advantage. This program takes note of urban/rural distinctions and includes specific projects aimed at improving urban sanitation and garbage control, and addresses issues of waste and toxic waste disposal.

The context for this part of the NEAP is the fundamental observation that 90 percent of the people of Burkina still live below the poverty line, only 30 percent have had schooling and 30 percent of children between ages 5 and 15 suffer from malnutrition. Basic human health and sanitation services are, in this context, both necessary for protection of the environment and for the hard struggle toward basic human needs.

The fourth program deals with Public Education and Development of Environmental Expertise. The NEAP sets forth an elaborate plan of general public education, specific formal educational programs aimed at enhancing public understanding of environmental questions, and at training environmental specialists capable of doing the tasks envisioned in the other parts of the NEAP.

Again, this program takes note of the brutal realities: roughly 85 percent of Burkinabe citizens remain illiterate and there is a general scarcity of quality education or specially-trained individuals.

The NEAP envisions eventual inclusion of environmental training in primary and secondary education, media/public information campaigns, creation of a program to train environmental specialists, education programs aimed at the family and specifically at the role of women in the environment, support for the development of environmental NGOs and support for basic research.

The final program is the Environmental Information Program. This NEAP program is almost entirely prospective, aimed at improving the quality of information which exists on environmental issues and its eventual dissemination. It calls for stronger, more consistent approaches to collection of environmental data from industrial and other sources which have access to it, to improved research and analysis of such data and for better dissemination of environmental information. It notes that UNCED addressed this need, and cites Section 4, Chapter 40 of Agenda 21 in noting the international community's support for this objective. The NEAP also notes that eventual success in this area may be particularly linked to assistance from relevant international organizations and donors.

Having set forth those five broad categories, the NEAP also addresses institutional questions about how this is to be accomplished from a governmental, administrative standpoint. Since the proposed Environmental Code also has implications for the institutional framework, it is important to discuss the NEAP, the Code, and current government structures together (see institutional framework section above).

Cape Verde

Although Cape Verde does not yet have a NEAP, it recently enacted a National Environmental Policy Act. Law No. 86/IV/93, modeled after the 1987 Portuguese environmental policy act.²¹ This Act was drafted in collaboration with the Portuguese Environmental Institute, as part of the Cape Verde-Portugal cooperation agreement. The government will, eventually, have to prepare a NEAP to comply with article 27 of the Environmental Act.

Environmental concerns have become an issue in Cape Verde since 1990, as the country began preparation for UNCED. Its first comprehensive environmental assessment is contained in the national report prepared by a Cape Verdian inter-agency commission for the UNCED, which identified the country's natural resources and related resource-degradation problems, as well as environmental policies and institutions.²² This document provided a series of recommendations for the conservation of water, forestry, fauna, and soil resources; urban development; and environmental education. It also suggested the creation of a national environmental institution to establish and coordinate environmental policy, and support local governments in environmental protection and research. According to the UNCED report, the creation of NGOs should be encouraged and a comprehensive environmental legal framework established.

²¹ Interview with Mr. Januário Nascimento, ADAD's president.

²² See Cape Verde, UNCED 1992. In many WCA countries, a country's UNCED report will serve as a starting point for preparing a NEAP. The same people and institutions that prepared the UNCED report will likely prepare the NEAP.

The 1993 Environmental Policy Act addresses most of these concerns. It consists of 52 articles divided into 9 chapters. The first section provides general environmental principles and introduces the concept of sustainable development. Concepts such as public participation in the formulation and implementation of environmental policy; central coordination of inter-agency activities; international cooperation; best-available environmental action; resource degradation containment and recovery; and introduction of the polluter-pays principle (article 3). Modern concepts of mandatory environmental impact assessment (articles 27 (h), 30/32), protected areas (article 29), environmental licensing (article 33), and strict liability (article 42) are included in other sections of this law. All these concepts are pending subsequent regulation.

Existing natural resource/sectorial legislation becomes a part of this comprehensive framework as it relates to one of the sections dealing with air, light, water, soil and subsoil, flora, and fauna, as far as the natural environment (Section II, articles 6 through 16); or landscape, man-made patrimony, and pollution as far as the human environment (Section III, articles 17 through 26).

Article 39 of this act also provides for the creation of a new governmental organization with environmental responsibility. In addition, all municipalities must create, within one year, an environmental law commission to assist the local government in the implementation of this law (article 38). NGOs were given a prominent role. They now have standing to bring environmental suit on behalf of their members and are entitled to a seat in the aforesaid municipal commissions. Other privileges and guarantees include access to the media; government subsidy, exemption from paying court costs; tax benefits; and information from national and local governments concerning development plans, environmental impact assessment, and establishment and management of protected areas.

Congo

The NEAP process is well underway and should result in a full NEAP document no later than Spring 1994. Strongly supported by the World Bank and a number of international NGOs active in the Congo, the NEAP team has been at work since 1992 and has already reached preliminary, and strong, conclusions about the situation of environmental management in the Congo and the need to improve it.

These NEAP team views are included in a "Study of the Institutional Framework for the Environment in the Congo," just completed in early December 1993. The extensive work of local experts and NGO representatives on this study render it worthy of strong consideration for its overall analysis and recommendations. Its findings overall are that:

Expertise is in most cases insufficient to carry out the mandate of government institutions with environmental responsibilities.

Most government employees are unmotivated and discouraged for numerous reasons including insufficient financial resources and materials to do the job, government instability, and poor salaries.

There are holes and inconsistencies in the legal texts affecting the environment, there is no unified, coherent legal environmental structure, and there is a lack of regulatory texts to implement key laws.

There is a lack of public information and education ("sensibilisation") about environmental protection.

Field interviews suggest that the eventual NEAP document will recommend three basic types of improvement in environmental management and planning.

Administrative. The NEAP will recommend creation of a small cadre of top-level environmental administrators attached directly to the Prime Minister's Office to insure the priority of environmental actions. Their recommendation will not be to create a large new "EPA" type regulatory agency, since the financial means are not available and that would entail too much inter-ministerial conflict.

Legal. Since major environmental texts do exist in a number of key sectors, including an overall "environment law" and a law requiring environmental impact assessments, the NEAP will recommend focussing on developing the necessary implementing legislation, on finding ways of making the current laws more coherent and unified, and, perhaps most important, finding ways of popularizing and making understandable to the general public the actual content of environmental laws.

Participative. The NEAP team strongly expresses the view that both formulation and administration of environmental laws must be both decentralized and opened up to non-government participants, since "the State does not have the means to do it all and the environment is the business of everyone and not just public authorities."²³

Gabon

According to field interviews with government officials and multilateral organizations, the NEAP process in Gabon has begun, but is not moving forward well. Begun at least nominally in 1991, a national seminar has been held and some working groups established.

Mr. Jean-Marie Bengome, Directeur Adjoint de l'Environnement, the top official in the environmental section of the Ministry of Water and Forests, believes that little additional progress can be made on the NEAP given the lack of financial resources. Gabon is in a period of intense fiscal distress, occasioned in part by an alleged failure to profit from or reinvest well in its oil sector. Field interviews also suggested that the pendency of the national elections had generally delayed progress on the NEAP and other major government initiatives. The current administrative focus is on drafting and promulgating implementing texts for the new Environment Code.

Guinea Bissau

The proposed organic law for the National Environmental Council (CNA, Portuguese acronym) provides that the CNA should develop and propose a NEAP to the government. The permanent

²³ See "Etude sur le Cadre Institutionnel," p. 4.

secretary of CNA plans to start this process as early as January 1994, if financial support is available from international donors.

Several strategic plans have been developed by the international community in the last few years, such as the World Bank's Strategic Agenda for Environmental Management, IUCN's Coastal Zone Plan, and UNSO's Master Plan for Natural Resource Management.²⁴ These have not received formal endorsement from CNA, although they may serve as guidelines for the Council when developing its own NEAP.

Guinée

Guinée has undertaken a very aggressive and elaborate NEAP process. Begun in 1989 and accelerated in 1992, the NEAP has undertaken a series of workshops and meetings which entailed extensive collaboration with indigenous and international NGOs, commissioned sectoral studies, and produced a "provisional" first draft document in September 1993. This draft and additional papers were discussed at a major national workshop/seminar held in late November 1993. Based on the seminar's results, a final NEAP draft is expected by the end of 1993 or early 1994.

The preliminary draft of the NEAP and field interviews suggest that the final NEAP will emphasize the need for a cross-sectoral environmental approach; more institutional independence, stability and resources; and identify as environmental priorities reforestation and forestry management, rural land use, and massive cleanup efforts in the capital of Conakry. The NEAP will also emphasize, as other NEAPs do, the importance of public education and "sensibilisation" to environmental responsibility and protection.

4.3 Non-governmental Organizations and International Organizations

The impetus for environmental action often comes from the donor community or an environmental crisis. In recent years, however, non-governmental organizations (NGOs) have played an increasingly important role in bringing environmental issues to the fore in the WCA countries and developing an indigenous environmental consciousness. NGOs have gained prominence for the effective environmental/development work they do at both local and national levels. NGOs, with the advantage of freedom from bureaucratic problems which face government agencies, are able to gain access at the grassroots level to engage in environmental activities. This access enables NGOs to play a critical role in sensitizing the local population to environmental issues and involving them in managing and protecting the natural resource base.

In common law legal parlance an NGO is a non-profit, tax exempt organization. Many of the African common law countries derive their non-profit law from the British 1948 Companies Act, which permits the establishment of charitable companies.²⁵ The Companies Act primarily governs

²⁴ See World Bank, 1993; and IUCN, 1993.

²⁵ A note on legal terms of art whose definition in the Anglophone African countries differ from those used in the United States; the former use the word charity rather than non-profit and corporation often refers to a parastatal. Furthermore, a country's Companies registrar, often located in the Attorney General's Chambers, usually takes a very broad definition of charity that extends far beyond a narrow definition of simply affording relief from poverty.

the activities of commercial companies and only tangentially addresses charitable companies. When studying Anglophone African non-profit laws, researchers should determine if a country adopted British complementary laws such as the British Public Collections Act and the 1960 Charities Act. Unlike in civil law countries, no restrictions exist on a non-profit organization receiving charitable contributions and legacies. The donor usually receives a tax deduction and the gift is tax-exempt. Questions often arise, however, as to a non-profit organization's tax liability on any income from commercial activities.

Many of the francophone WCA countries base their non-profit law on the French Associations law of 1 July 1901. Non-profit associations, or in civil law legal parlance non-lucrative associations, may seek an official decree granting "reconnaissance d'interet publique," i.e., recognition that their work is in the public interest. This certificate of good character gives non-profit associations greater legal capacity and enables them to receive donations and legacies and special tax exemptions. Such status often proves difficult to obtain.

Benin

The most active environmental NGOs in Benin are: Association for Environmental Protection and Development (ASED, French acronym); Association for Nature Conservation (BENIN NATURE); Association of Ecologists of Benin; Forum 3 - Man, Development, and Environment; Education and Development Projects Experts Group (DEPED, French acronym); Excellence and Development Club; Pan-African Center of Social Perspective (CPPS, French acronym); International Research Center for Environmental Protection (CIRDESC, French acronym); and Center for Study and Research of Actions for Environmental Protection (CERAE, French acronym).

The NGOs complain that the Council of Ministers approves and the National Assembly passes environmental laws, but the government does not implement or enforce them adequately. Apparently, enforcement officers from the central government are not usually from the location where they must enforce the law and often do not understand the local problems.

People interviewed suggested that seminars could provide an important tool to instruct and select people to protect their resources and, thus, protect the environment as a whole. It has been noted that grievances from the population are not usually taken to the courts or NGOs, but to the local MRD office.²⁶ A new bill is now being considered that will provide mechanisms to allow NGOs to have standing in environmental cases.

The government usually does not invite NGOs to participate in the law-making process. However, recent legal developments sponsored by international organizations have sought public participation, and NGOs participated in the development of the NEAP. This provided a unique coordination exercise both among NGOs as well as between NGOs and government institutions.

To facilitate public participation, written laws should take into account customary practices. Customary law appears strong in the rural areas. In the south of Benin, for instance, forests have

²⁶ Interview with the World Bank representative.

been preserved not because of legal prohibition and government enforcement, but because voodoo priests designate the areas as sacred.²⁷

NGOs have only been formed in Benin in the last few years. Benin Nature, for example, approved its bylaws in 1989 and started operations in 1990. It has 1,000 members approximately, 700 of those are very young. Benin Nature started as a purely educational organization, which planned nature trips for school children, but now also has a reforestation program for village farmers. Three permanent volunteers organize the work. Funding comes from member contributions and the FAO and UNICEF have also funded specific projects.

The main international organizations doing environmental work in Benin are FAO, UNDP, UNEP, UNSO, and UNESCO; several francophone organizations; the Organization of African Unity; and some regional and bilateral organizations. Financial support comes from the World Bank, UNDP, and the French and the German Cooperation Programs.

The World Bank probably has the most thorough compilation of environmental laws in Benin, already divided by sectors and hierarchical order, and has financed and provided technical support to the NEAP initiative and to the Natural Resources Management Project. Multilateral and bilateral donor organizations provide financial and technical support to law making in Benin, as appears to be the case in other WCA countries.

Burkina Faso

International organizations, and to a lesser extent, NGOs, have played a significant role in Burkinabe environmental efforts, largely those surrounding the ongoing anti-desertification effort. Notable among those organizations is the Permanent Interstate Committee for Drought Control in the Sahel (CILSS, French acronym). That international/regional group has worked since its formation in April 1977 to fight desertification in the nine West African nations of the Sahel.

In so doing, CILSS' work has contributed to the growing awareness of the complex inter-sectoral nature of the problem, reflected in the Burkinabe NEAP and environmental programs. Examples of CILSS' work include a 1988 project which is an antecedent to this report, a multi-volume collection and analysis of legislation and regulations on natural resource management in the Sahel nations; a January 1993 workshop on Sahelian forestry laws held in Bobo-Dioulasso, and an upcoming March 1994 Regional Conference on Land Tenure and Decentralization in the Sahel to be held in Cape Verde.

The NEAP takes cognizance of the role of NGOs in the development of Burkinabe environmental law and discusses at considerable length the NGOs and international organizations consulted as part of the NEAP process, and by further listing for public information purposes the environmental NGOs, research and study groups operating in Burkina. Some 25 groups are included in that list. Of more importance are the mechanisms accorded NGOs to participate in the public policy process. NGO representatives are specifically identified in Arrêté No. 91-00557, 26 novembre 1991 as those to be included in the work of the rural land management organizations created under regulations implementing that program of the NEAP.

²⁷ Interview with Benin Nature.

Cameroon

In light of the GOC's problems in effecting change and protecting resources in local communities and nationwide, NGOs and private voluntary organizations (PVOs) are increasingly active at the grassroots level. The major international NGOs operating in Cameroon are: CARE, World Wildlife Fund (WWF), Catholic Relief Service (CRS), Association Bois de Feu (ABF), Institut Africain pour le Développement Économique et Social (INADES), Comité Diocésain de Développement (CDD), Union des Église Baptistes du Cameroun (UEBC), Save the Children Federation (SCF), HELVETAS, Rural Training Centre (RTC Mfonta) Heifer Project International (HPI), and International Council for Bird Preservation (ICBP). CARE, WWF, and ABF are the most active NGOs in environmental and natural resource projects. CARE works on agroforestry, water, and reforestation projects. WWF concentrates on parks development/conservation and biodiversity through buffer zone management. ABF researches the problem of firewood.

PVOs also support natural resource management activities. The Association Française de Volontaires de Progrès (AFVP), German Volunteer Service, Peace Corps, L'Association Néerlandaises d'Assistance au Développement (SNV), Organisation Canadienne pour la Solidarité et le Développement (OCSD) are very active in the field.

In the last two years the indigenous NGO community has steadily grown and now totals about 150. Several factors explain this growth. Rural populations and the donor community now see NGOs as more effective vehicles to deliver services than the government. Furthermore, as a consequence of the economic crisis the government can no longer afford its institutions and programs.

In order to share information and ideas and work together on projects, the NGOs are starting to form coalitions. In 1990 the National Association for NGOs Involved in Development in Cameroon (COPAD) was formed. The Federation of Non-governmental Organizations for Environmental Protection (FONGEC) was created 3 August 1991.

NGO growth, however, experiences some impediments. Previously, Law No. 67/LF/19 of 12 June 1967, relating to the Right of Association, required that for any association to exist it must be declared by the interested members and recognized and approved by the government. Furthermore, the law made no specific reference to NGOs -- only "cultural associations." The GOC sought to depoliticize NGOs and maintain supervisory control over them. Furthermore, the bureaucratic and legal requirements of Law No. 67/LF/19 pose problems for small NGOs with limited manpower and skills. International NGOs with their staff and resources have been more successful in gaining recognition.

In December 1990, the GOC passed legislation simplifying the requirements for associations to a simple declaration on the part of the group concerned. COPAD believes that additional legislative changes are necessary. The COPAD proposal emphasizes the need for the government to provide NGOs with legal status, specific provisions permitting accessing funds from any source and the elimination of the role of the Ministry of Territorial Administration.

Cape Verde

Two local NGOs are active in Cape Verde: Associação para Defesa do Ambiente e Desenvolvimento (ADAD) and Associação dos Amigos da Natureza (AAN). ADAD, founded in 1991, is located in the national capital city of Praia, Santiago Island. Its president, Mr. Januário Nascimento, also works for the Ministry of Fisheries, Agriculture and Rural Extension. Being a lawyer makes him the ideal contact to obtain legal information. ADAD activities raise environmental awareness with the public and sponsors environmental education projects.

The other local NGO is based in Mindelo, São Vicente Island. "AAN - Associação dos Amigos da Natureza" (Friends of Nature) was founded in 1979 and has been active in reforestation. ADAD and AAN are non-profit associations open to public membership, but neither have engaged actively in legal and judicial matters.

The Portuguese Cooperation Agreement provides for extensive legal assistance. The Portuguese funded the drafting of the national environmental policy act and provided a lawyer from the Environmental Institute of Portugal to work with a team of local experts. The Portuguese Park Service has also participated in drafting legislation to protect endangered species, national parks, and other protected areas.

FAO funded a Brazilian agro-economist and a Brazilian lawyer to provide an assessment of existing land-tenure issues and to draft a new agrarian law in cooperation with the Ministry of Fisheries, Agriculture and Rural Extension. The FAO has also been involved with the development of Cape Verde's Tropical Forest Action Plan since January, 1993. The First Forestry Congress took place in November 1993 with FAO support.

The European Community and the "Comitê Permanente Inter-Estados de Luta contra a Seca no Sahel" (CILSS) funded the preparation of educational materials. Dr. Victor Borges within the Ministry of Education and Sports, in collaboration with the Ministry of Fisheries, Agriculture and Rural Extension, coordinated the project. Belgium, Holland and Sweden (ASDI) have also funded public awareness projects. In addition, CILSS and the "Club du Sahel" are promoting a regional Conference on Land Tenure and Decentralization, to be held in Praia, March 21-25, 1994. This conference will endeavor to raise awareness of the current and future implications of these issues and the conclusions of the conference will be used as the basis for regional programs that will introduce participative, decentralized management of natural resources and public services in the region.

UNDP and World Bank projects depend on Cape Verde drafting a NEAP and passing EIA legislation.

USAID financed and supported a watershed development project, up until the end of 1991, to help protect and develop Cape Verde's limited soil and water resources through the construction of thousands of rock walls, checkdams, reservoirs, canals, pipelines, and other structures and through the planting of more than five million trees. A new Watershed Applied Research and

Development (WARD) Project has received authorization but it has yet to be activated, and is being redesigned to reflect GOCV reorganization and USAID restructuring.²⁸

Other bilateral donors include Belgium, France, Germany (GTZ), Holland, and Sweden (ASDI). The German development bank (KfW) has financed water and forestry projects, and vessel acquisition for inter-archipelagic transportation.

Congo

NGOs are active and take a particular interest in the Congo's special wildlife and unique ecosystems. In particular, Wildlife Conservation International has been active in the recently created wildlife preserve/protected area in the northern corner of the Congo, bordering Gabon and the Central African Republic, known as the Nouabale-Ndoki Forest. This preserve may be the most pristine rain forest in the world. The unique animal species in this area have had relatively little contact with human beings. USAID provides funding for this preserve.

International organizations are also active in Congo, and likewise have a strong interest in the country's unique equatorial biospheres. The Global Environment Facility (GEF) has just agreed to provide \$30 million for a wildlife conservation and management project in the tropical lowland forests of central Congo.

Côte d'Ivoire

The association law of 1901 fails to provide an appropriate judicial framework for the creation and development of NGOs. The associations must have a non-lucrative goal prior to the Ministry of the Interior granting authorization. Despite this difficulty, there is a growing NGO movement. The major NGOs are: Ivory Coast Nature specializing in flora and fauna, Green Cross, Ivory Coast Ecology, Environmental Africa, ESSO, and Health and Protection Line. The Environmental Network of the Ivory Coast (RECI) seeks to combine the growing NGO community into a coalition.

Gabon

Gabon shares with the Congo and CAR a special environmental heritage of rare equatorial biospheres housing both flora and fauna unique to tropical central Africa. Sparsely populated, the majority of the population resides in a few cities, notably Libreville and the oil-producing coastal area of Port Gentil.

Not surprisingly, the NGO environmental community and the international organizations have considerable interest in Gabon. As noted, the World Bank is engaged in lending to Gabon with environmental conditionality. The GEF is providing funding in Gabon, as in Congo, for the creation and management of the biospheres in protected areas, to preserve the biodiversity of the region. GTZ operates a forestry school and has undertaken a number of forestry protection efforts.

²⁸ See Cape Verde. USAID, 1988, 1991 and 1993.

World Wildlife Fund's efforts include a study of wild game hunting and its use in the diets of Gabonais. The study will produce recommendations about how popular, traditional use of game for nutrition can accommodate popular support for, rather than resistance of, laws protecting rare species of wildlife. The IUCN has also been involved in Gabon, notably in the area of forest conservation.

Ghana

NGOs, religious groups and professional associations play an increasingly active role at the national, regional and local levels. NGOs have been especially effective working at the grassroots level in sensitizing the local population to environmental issues. Some examples of NGO participation in environmental projects are the afforestation programs of the Amasachina - an indigenous NGO, the Adventist Development Relief Agency's Community Collaborative Forestry Initiative (CCFI) Project and the ANCEN village pilot project at Dawa.

The environmental press has been effective in spot-lighting environmental problems, and raising peoples perception and understanding of environmental problems. When NGOs and the environmental press attempt to work at the national level, they are sometimes viewed as "agitators" and their opinions are not always solicited or appreciated. Nevertheless, NGOs could contribute to the formulation of the NEAP and its subsequent implementation at all levels. In this regard, NGOs should have formal representation on the EPC.

Guinea Bissau

NGOs are just beginning to flourish in Guinea Bissau. ALTERNAG and TINIGUENA (Portuguese acronyms) are the two best known NGOs. ALTERNAG has been active for over one year and undertakes research concerning social, economic, and environmental issues. It has worked on forest protection issues and organized rural beekeeping and honey production associations. TINIGUENA is interested primarily in community awareness and environmental information.

The National Institute for Coordination of Non-Governmental Support (SOLIDAMIE, Portuguese acronym for "Instituto Nacional de Coordenação da Ajuda Não Governamental"), an agency within the Ministry of Foreign Affairs and International Cooperation, coordinates the various NGO projects in Guinea Bissau, including the work of local NGOs.

Several sectoral plans have also been developed by international donors in cooperation with governmental institutions.²⁹ These plans include a Forestry Sector Strategy, a Fishery Sector Master Plan, a Trade and Investment Promotion and Support Project (a USAID project with a strong legal and institutional building component), a Water and Sanitation Master Plan, a Strategy for Remote Sensing Center, Environmental Education Projects, and Community Based Projects.

The European Commission, Germany (GTZ), Holland (SNV), Sweden (ASDI), Canada (CECI), France, USA (USAID), CILSS, U.N. organizations (FAO, UNDP, UNSO) and IUCN have ongoing environmental projects in Guinea Bissau.

²⁹ See World Bank, 1993. See also Hanchett, 1993.

Guinée

NGOs are active in Guinée. It is particularly noteworthy that a local NGO, Guinée Ecologie, has the lead responsibility for preparing the NEAP. Originally a government ministry was to prepare the NEAP but after achieving little progress, Guinée Ecologie assumed this responsibility. The group is headed by an experienced environmental expert and activist. Moreover, the group achieved some prominence by its successful efforts to expose and prevent a plan to dispose of toxic municipal wastes from Philadelphia, U.S.A. on an island in Guinean coastal waters.

International NGOs active in Guinée include World Resources Institute, which has been involved in the NEAP process, and Africare, which works on a project to enhance the urban Conakry environment. The latter project seeks to create a "green space" in a coastal park near the main Conakry hospital.

International organizations are active, including the World Bank, the European Community, and the Canadian and Nordic development agencies.

Mali

Malian PVOs and NGOs have not been involved in the conservation of biodiversity and in sustainable natural resources management. They concentrate on rural development and do not specifically link projects to the protection of natural lands or the environment. Nevertheless, a broad range of NGOs operate at the grass-roots level. The GOM should consider revising its development strategies and creating a better environment and opportunities in which NGOs, PVOs, and village associations could operate.

Niger

NGOs, PVOs, religious groups, and professional associations effectively work at the grass-roots level and are increasingly active at the national and regional levels. They work in the areas of integrated rural development, agroforestry, irrigation, soil fertility, reforestation, agriculture, and parks development. Their size and approach differ according to philosophy, financial resources, and technical and institutional capacities. Outdated government policies and legislative framework constrain their development.

Nigeria

Nigeria has a large and growing NGO community. A few of the major NGOs are: National Universities Council (NUC), Manufacturers Association of Nigeria (MAN), Nigerian Academy of Sciences (NAS), Forestry Association of Nigeria (FAN), Green Environmental Movement (GEM), Nigerian Environmental Study/Action Team (NEST), Nigerian Environmental Society (NES), National Chamber of Commerce and Industries (NCCI), and the Nigerian Conservation Foundation (NCF).

Several of these NGOs participate in environmental policy operations and legal issues. The NCF played an active role in the formulation of the National Conservation Strategy and the National Conservation Education Strategy and serves on the NRCC. The legislation establishing the NRCC specifically states that the NCF shall serve on the NRCC. GEM attorneys engage in

environmental policy advocacy and education efforts and serve on government advisory committees. NES has many members from the petroleum industry and lobbies on issues pertaining to the petroleum industry. NEST prepared a comprehensive survey of environmental problems in Nigeria.

Sénégal

As in the other WCA countries, NGOs and PVOs (local, national, and international) are increasingly active as economic constraints reduce the governments' resources. The GOS, historically, took a paternalistic approach to development through government organizations. This tendency is changing, however, as international and local NGOs and village associations take on more activities.

Over fifty-seven major NGOs currently work in Sénégal. Most NGOs work in integrated rural development activities, however, a few work in managing and conserving biodiversity and natural resources. Several NGOs working at the national level formed a federation known as the Fédération des Organisations Non-Gouvernements Sénégalaises (FONG). At the local level, NGOs have also formed coalitions. The Federation des Associations du Fouta groups several associations under the same umbrella.

The Gambia

A broad range of NGOs have long played an active role in The Gambia, especially at the grass roots level. International NGOs complement and generally work closely with The Gambian NGOs. The NGO community formed a coalition, known as The Association of Non-governmental Organizations (TANGO), which puts out the quarterly newsletter "TANGO Talks".

NGOs serve as a catalyst for change in the society. They are pushing at the boundaries of the national and customary law. They do not engage in advocacy work per se, but bring about change through their field work. The law may change to reflect a program that the NGOs have pursued which proved successful.

Although the GOTG and NGOs work together, the relationship can be strained. The GOTG believes that NGOs have their own agenda and that NGOs need direction, coordination, and some policing. NGOs believe that their views are not always taken into consideration by the GOTG. Mechanisms need to be formulated to enhance better communication and cooperation. TANGO could perhaps serve as a clearing house and liaison between the NGO community and the GOTG.

Success in the field of NGOs depends not only on cooperation from GOTG but also with local and village leaders. The Alkalo and the village elders usually administer a village. The Alkalo is usually the oldest male member of the oldest patrilineage in the village. The village elders, the religious leader, (the Imam) and the community of Muslim believers form the village council.

Women are usually excluded from participating in the village council and consequently engage in local development through kafos. NGOs frequently target kafos as agents to implement rural development efforts. While kafos are recognized by customary law, the national law does not provide legal status for kafos. The Friendship Society Act, provides for legal recognition of

charitable, non-profit organizations but the law is not really applicable to kafos, which are economic organizations. The customary law should be codified to give legal status to kafos.

4.4 Environmental Impact Assessments

Environmental impact assessments (EIAs) provide a systematic procedure for informed environmental decision making so as to ensure a proper balance between the expected economic benefits and the environmental and social costs of a project. EIA frequently offers the first new environmental legal regime with potentially major, widespread impact. It can serve as a flexible tool in both common law and civil law countries for improving planning, generating awareness, and gathering environmental information.

An EIA is a written document submitted to a designated agency or decision-making body describing the environmental impact of a proposed construction activity. EIA usually consists of the following elements: (1.) preliminary activities, (2.) delimitation of probable direct and indirect impact (scoping), (3.) baseline study of the physical, biological, and socio-economic environments within the areas of probable impact, (4.), identification and assessment of probable environmental impacts, both on the ecosystem and humans, with the implementation and operation of the proposed project or action (the assessment should qualify the impact, its intensity, temporality, and reversibility), (5.) mitigation measures for adverse impacts and compensation for unavoidable environmental damages, (6.) assessment (comparison of alternatives), (7.) documentation, including analysis of applicable legislation and the viability of the proposed action or project from a legal standpoint (8.) decision-making, and (9.) post project auditing and monitoring.

In recent years, many WCA countries have passed EIA legislation and several of the others have begun to formulate EIA guidelines and consider EIA legislation. Some countries lacking specific EIA legislation, may require EIA in some instances as part of a quasi-legal administrative permitting or licensing practice. Those countries which have passed EIA legislation usually still need to adopt EIA subsidiary legislation and develop the technical capabilities to administer EIA. The WCA countries often have some familiarity with EIA owing to requirements of some multilateral and bilateral development agencies. These agencies usually specify that the projects they finance, that may have diverse and significant environmental impacts, require EIA.

Benin

EIA is not available as a legal requirement, but government is considering a bill that will require EIAs for large projects.

Burkina Faso

The proposed Environment Code of Burkina Faso gives high priority to EIAs, or in French, "Etudes d'Impact sur l'Environnement." Title II, Chapter III of the Code would create a Bureau of Environmental Impact Studies within the Environment Ministry. The mission of this unique bureau would be to create a specialized environmental team capable of assessing impact studies, as well as independently assessing environmental impacts of projects.

The sweeping language of the Code's requirement for EIA says "Those activities likely to have a substantial effect on the environment are required to have the prior authorization of the Ministry

of the Environment. This authorization is to be granted based on an environmental impact study." Title III, Chapter I of the Code.

The code makes clear that both public and private actions would require EIAs, directing the MET to establish implementing regulations listing the types of actions and even planning documents which cannot go forward without an EIA. While the MET is given broad discretion to require an EIA at anytime, it is specifically instructed to publish regulations listing environmentally vulnerable zones, resources particularly likely to be harmed and major environmental problems such as soil erosion which are of concern. Chapter III, Arts. 10-11.

Article 12 of the Code gives a detailed description of the required contents of the EIA, including the need for consideration of alternatives of lesser environmental impact. Article 15 provides that private entities can select their own consultant to do an EIA and submit it to the Bureau of Impact Studies, while EIAs for government projects are to be done by the Bureau itself.

Finally, article 13 calls for a public hearing on any EIA, with private experts and "all interested groups or individuals" as well as government entities offering comments. A delay of at least 30 days after such a hearing would then be required before any decision on the EIA would be taken. Such an eventual decision is to be in writing, with a rationale and suggestions for minimization of environmental damage, and should be communicated to all those "interested."

While those specific procedural steps would constitute impressive innovations and would firmly establish the EIA requirements, they are not without precedent. The 1991 RAF already contemplates EIA, using some, but not all, of the language now incorporated in the proposed Code. The RAF, which is in effect now, generally makes the EIA an advisory matter, saying that any activity likely to impact the environment must be subject to a prior "opinion" of the MET, based on an EIA. Any such opinion rendered must be written and communicated to any person "requesting it." RAF: Kiti No. AN VIII-0328 Ter/FP/PLAN-COOP, 4 June 1991, Articles 555-557.

It should also be noted that legally, the RAF requirement for an EIA, despite its similar sweeping language about "all activities" potentially affecting the environment, is contained in a separate chapter of the Kiti which constitutes the implementing regulations for the RAF: the section on management of pollution and diverse nuisances (see sectoral discussion). Arguably, that limits its impact to pollution/environment issues covered by that category.

By contrast, the placement of the EIA requirement in a separate chapter at the beginning of the proposed Code makes clear the legislative intent that it cover the full range of governmental and private actions that may impact the environment.

Based on the brief field work of this report, it does not appear that the currently binding RAF requirement for an EIA and a Ministry of the Environment "opinion" has been regularly applied as a matter of actual practice.

In terms of sanctions for failure to conduct EIAs, the Code does not specifically assign fines or other penalties. However, in the general enforcement powers provided to MET and other designated government officials in article 88-92 of the Code, those officials are given plenary authority to investigate infractions of the Code and to engage in preliminary injunctive actions, as well as to initiate legal process against those they allege to be in violation of the Code.

Cameroon

No law currently requires EIAs. The GOC, however, recognizes the need for EIAs and may soon address this issue.

Cape Verde

Articles 30 through 32 of the recently enacted 1993 National Environmental Policy Act provide that plans, projects and activities that may affect the environment, the territory and the human quality of life, as a result of public or private initiatives, must include an EIA. This act also determines that the assessment must contain an analysis of the project's planned location and of the environment, a study of the changes that the project might cause, and the measures to eliminate, mitigate, or compensate the adverse impact on environmental quality.

Nevertheless, these are general provisions that await regulations to establish the conditions under which an EIA will be required, its contents, and the agencies that will be responsible for the review process and licensing. The Portuguese Environmental Institute will likely provide legal assistance in developing these regulations. Such regulations will meet the requirements of international organizations, such as the World Bank, but questions arise as to whether sufficient in-country capability (human and financial resources) exists to perform the required impact assessment and its review. Developing regulations tailored to the needs and capabilities of Cape Verde will require a significant amount of in-country training to develop the local expertise and institutional capacity to review the EIAs.

Congo

The Congo has a freestanding decree, Décret No. 86/775 of 7 juin 1986, requiring environmental impact assessments on "every proposal for managing, equipping, constructing or operating an industrial, agricultural or commercial plant" in the Congo. In addition, the overall environmental law, Law No. 023/91 of 23 avri 1991, at article 2, states: "Every economic development project in the Republic of the Congo must be accompanied by an environmental impact study."

Décret No. 86/775 is one of the most fully articulated EIA laws encountered in the francophone countries studied in this report. It has a number of notable features. Article 1 sets forth the requirement that every significant project must submit an EIA, which must be reviewed and approved prior to commencement of the project. The language as to what projects will trigger an EIA, however, may be too broadsweping. Article 2 stipulates that the proponent of the project pay for the EIA. Articles 3 and 4 describe the appropriate contents of an EIA, including required descriptions of the likely impact on the environment, planned measures to reduce or compensate for such impacts and the rationale for environmentally-related choices made in the proposed project.

Articles 6-10 contain procedural rules -- including the requirement that the Ministry of the Environment make a decision on the EIA application within 30 days, unless it has asked for additional information, which extends that deadline. The legislation fails to specify the consequences of government inaction. Article 11 adopts the polluter pays principle, by requiring that the developer of the project must pay for damage done to the environment by the project. Articles 12 and 13 provide enforcement powers, including both injunctive relief to block a project

and fines where an EIA has not been done, or the completed project fails to conform with the criteria and commitments made in the EIA as approved.

The actual enforcement to date of this sweeping law has been lax. Instability owing to recent political turmoil and the frequent shifts in ministerial responsibility has resulted in a failure to promulgate any "textes d'application" or implementing regulations in the two and a half years since its enactment -- a fact widely criticized by those in the Congo aware of environmental law developments. During field interviews, copies of the draft texts of implementing regulations were obtained, and they appeared in most cases to be legally well crafted. Apparently, little likelihood exists of near-term promulgation of any regulations to implement fully this environmental law.

Côte d'Ivoire

While no law requires EIAs, large foreign investors -- particularly in the road building or mining sectors -- have prepared EIAs. They believe that Côte d'Ivoire may eventually require EIAs, and that it is more cost efficient to undertake such activities initially than to have to adopt them later.

Gabon

Gabon has had, since 1979, a law requiring EIAs. That law, Arrêté No. 00199 of 28 juin 1979, requires an EIA for any industrial projects and the submission of an EIA to the environment ministry. See article 1.

The Arrêté's technical annex, in sections A-H, indicates that potential impacts on all media are to be assessed, including soil morphology, potential impacts on water sources and quality and impacts on vegetation and wildlife. Fiscal and property value implications are also required in the environmental assessment pursuant to sections O-T of the annex, and section X requires an estimate of the impact on energy utilization. Finally, section Z mandates a description of the measures proposed for reduction or elimination of environmental impacts.

The new Environment Code, in articles 67 and 69, also requires EIAs prior to any public or private project which will have a substantial environmental impact. Such studies must be submitted to the ministry with the environment portfolio. Article 69 directs that a list be promulgated indicating precisely what types of projects must have an EIA, and that regulations be promulgated describing the procedures for submitting such studies. As noted above, the implementing regulations for this law had not been issued as of November 1993. Moreover, field interviews suggest that the 1979 law requiring EIAs has been only sporadically enforced, and that little capability exists in the Gabonese ministries to compel compliance.

Ghana

No law requires preparation of an EIA to establish a factory, mining operation, or other large project. The EPC, however, serves as the focal point for a systematic environmental review procedure to decide whether to issue an environmental impact certificate. The EPC has prepared draft EIA guidelines. Sometimes large foreign investors, particularly in the mining sector, will have to prepare EIA in order to receive a concession.

Guinea Bissau

EIA is not required by law in Guinea Bissau, although article 2 of the proposed organic law for the National Environmental Council charges the CNA with the general responsibility to promote EIAs for infrastructure projects that might affect the environment. The CNA plans to propose EIA regulations in 1994 and in this regard some activities were included in CNA's 1993/1994 work plan.

Usually EIAs are conducted by international organizations that provide project financing, such as the World Bank (i.e. a Natural Resources Management Project) and the African Development Bank (i.e. hydroelectric power plant). According to the World Bank 1993 report "Towards a Strategic Agenda for Environmental Management," numerous constraints exist to conducting EIA in Guinea Bissau. In the near term, the country must rely on external expertise, given the reduced in-country human resources capability. In this regard, many countries have found that encouraging the local private sector to conduct EIA offers the most cost-effective method, since the environmental or the licensing agency only has to review the EIA.

In any case, some of the options that can be pursued include (a) developing EIA capacity within a single government institution, such as INEP or CNA; (b) developing EIA capacity within individual ministries; (c) encouraging local private EIA capacity; (d) providing review capacity within a licensing authority; (e) participating in a regional effort, which would have private EIA capacity to conduct EIA of projects anywhere in the region; and (e) relying on external EIA expertise.

Guinée

EIAs are required by articles 82 and 83 of the Environment Code, Ordinance 045/PRG/87. These articles state that any installation, construction, or other project that might affect the environment must give rise to an EIA, to be submitted to the environment ministry. The EIA must include an analysis of the initial state of the environment, the likely consequences of the planned project or activity, intended measures to reduce environmental impact, and any alternative solutions.

Two implementing texts have been issued governing EIAs: Décret No. 199/PRG/SGG/89 of 8 novembre 1989, and Arrêté No. 990/MRNE/SGG/90 of 31 mars 1990. Taken together, they provide an explicit list of those economic activities requiring EIAs and a description of the appropriate contents for an EIA. Article 10 of the arrete specifies that the environment ministry must act on the EIA within 3 months. Article 11 provides authority for the environment ministry to use injunctive relief to block further activity on any project not in conformity with the EIA requirements. Field interviews suggest that MNREE lacks the means for active enforcement of the EIA requirements.

Mali

While EIAs are not currently required, the GOM is formulating EIA guidelines as part of the proposed Environment Code and will soon send a forestry service team to gather sample environmental laws from neighboring countries, with support from USAID/Mali.

Niger

EIAs are not required. Furthermore, the GON lacks the capacity to analyze and review EIAs.

Nigeria

At this time Nigeria does not require EIAs or have comprehensive programs for monitoring the environmental and social impacts of large projects. FEPA is in the process of formulating EIA guidelines.

Sénégal

While EIAs are not currently required, acts 52-56 of the proposed Environment Code provide EIA guidelines.

The Gambia

The Gambia does not require EIAs at this time. The EU, while informally tasked with conducting EIAs, has not been able to – owing to lack of resources. The EU has requested sample EIA documents from USAID to develop their own process.

5. SECTORAL REVIEW OF ENVIRONMENTAL LAWS

5.1 Land³⁰

Land tenure and use issues often involve entrenched long-standing rights and behaviors in a society's legal systems. Common law, civil law, and customary law regimes all reflect such rights. When dealing with land use and land tenure issues outside urban areas, customary law proves particularly important. Institutions with jurisdictional responsibilities can exist at the national, regional, and local levels. The extent to which they exercise this jurisdiction usually proves problematic.

Powerful, entrenched interests must be overcome when tackling land tenure and use issues. Land tenure issues, which connotes land reform in some peoples' minds, prove more difficult to resolve than land use and land management issues. From an environmental/natural resource perspective, the key issue is land use and management. Land use planning potentially encompasses all aspects of environmental management and can include all the other sectoral activities discussed herein.

The conventional wisdom on land tenure regimes holds that private land ownership is critical for land stewardship. When common resources are exploited by individuals maximizing their private utility, individuals will overuse the resources. The costs of overuse are shared collectively, whereas all profit is privately accumulated. This proposition, however, requires fine-tuning. To implement successfully tenure and use legal regimes, individual members of a group must be able to negotiate freely with others, to make laws and rules concerning resource use and to create institutions to enforce the laws.

When examining land use law, a primary concern is to determine how land use decisions are made. A starting point is to determine if decisions rely on a data base. If so what type of base and does the law prescribe some minimum data collection elements. Attempting to reach a consensus by incorporating economic, environmental, and social concerns in the decision-making process represents a critical element in a land use regime. How a regime incorporates views from the national, regional, and local levels in the decision-making process poses enormous challenges. If decisions are made by a national office in the capital city, the regime likely will not work — unless a very strong enforcement mechanism exists. If the regime provides for public participation at the land user level, the system will likely work better.

A regime must balance a broad, long term perspective for an area's development plan with more immediate local land use decisions — such as whether a farmer can plant a crop next season, and if so, what type of crop. A general plan can set out national or regional objectives, with a detailed plan for implementing the objectives formulated at the local level. Also, there needs to be mechanisms to ensure consistency with national and regional objectives.

Implementation strategies can vary widely. For instance, a regime could provide for a system of zoning or issue development permits. A permit system with applications, hearings and review

³⁰ See Wilkinson, "The Role of Legislation in Land Use Planning for Developing Countries" and "The IUCN Sahel Studies, 1989".

procedures may have some viability in urban areas where people are literate. In rural areas, reaching a consensus at the village level or with tribal leaders will prove more effective.

Benin

Land Tenure and Use. In Benin land tenure and use intertwines with forestry law. Three laws govern land ownership in the urban context: Law 60-20 of 13 juillet 1960, Law 65-25 of 14 août 1965, and one French colonial law, Décret No. 55-580 of 20 mai 1955. The latter law was retained at the time the first two laws were passed shortly after Benin (then Dahomey)'s independence.

These laws build on the French colonial concept of land ownership by the State, with private rights of use or limited ownership in certain cases. Law 60-20 establishes a system of habitation permits for which one may qualify. Preconditions include matters of legal status such as Beninois (with qualified exceptions) citizenship and adult age, financial status (such as demonstration of sufficient means of making a living and maintaining the land), and paying certain fees and taxes.

Law 65-25 establishes the system of property ownership and relies heavily on the antecedent colonial property code of 1932. This law again sets forth both status requirements and procedural steps to follow, in order to acquire title to property. The law further sets forth the procedures for public notice of the request for title to real property, including a stipulated delay of three months to permit public comment.

Neither Law 62-20 nor Law 65-25 is significantly followed. The general bureaucratic complexity and the cost associated with both, plus certain failures of these laws to take into account cultural norms, means that even the urban populations ignore these laws.³¹

As a consequence, even in the urban context, comparatively little land ownership security exists. Indeed, even for those endowed with these limited forms of land title, having matriculated through the legal process, the two laws in question fail to provide solid guarantees against State taking of property. The governing law, Décret of 25 novembre 1930, as modified, gives the State substantial power, albeit limited by procedural requirements, to expropriate property for reasons of public need. In the rural context, given the ecology of Benin, the forestry law governs land ownership and use issues.

Customary law provides less security to rural population, from the government perspective, since limits are not reliable and demarcation rules vary from one region or ethnic group to another. On the other hand, rural people distrust property rules based on French law, which require land registration of ownership title. These procedures, as established by a 1965 decree, are long, costly, and complex. The Ministry of Rural Development is working on a compilation of land

³¹ See Benin. HOUNKPODOTE, 1993.

tenure laws,³² which should be ready by January 1994, to resolve conflicts in the many statutes that pertain to this matter.

Bushfires. Law No. 93-009 of 2 juillet 1993, "Portant Régime des Forêts in République du Bénin," which governs forestry, also addresses the prevalent problem of bushfires. Articles 56 and 57 declare, as other WCA countries have attempted to do, that uncontrolled bushfires are forbidden. Furthermore, articles 94-96 specify fines of up to 500,000 francs and imprisonment of up to three years.

Burkina Faso

Land tenure and use are at the heart of the environmental threats facing Burkina Faso. Despite the efforts of the regional and international community, major problems of forest destruction, agricultural abuse, and desertification remain. Certain aspects of the formal legal system and the customary law system, contribute to the intractability of these problems.

Land Tenure. The written land tenure law of Burkina today is the Réorganisation Agraire et Foncière (RAF), Zatu No. AN-VIII-0039 Bis/FP/PRES du 4 juin 1991; Kiti d'application No. AN-VIII-0328 Ter/FP/PLAN-COOP du 4-6-91, which retains the crucial core notion that all property belongs to the state, subject to the possibility of private use under certain conditions, and private ownership in even more limited, principally urban, situations.

This legal approach to land tenure and use is strongly at odds with Burkina customary law, as it is with customary law in many WCA countries. The statist approach of Burkina's formal land tenure law has its roots in the colonial law, notably the work of the French Water and Forestry agents who began operating in French West Africa in 1924. The colonial law, which was codified in the decree of 4 July 1935, likewise began with the assumption of state (colonial) ownership and control, and established a system of classified and protected forests and the rights of usage by individuals.

The 1984 RAF, enacted under a socialist regime, and its 1991 successor, now the law in effect, are based on the creation of a *Domaine Foncier National* which includes all property within the physical territory of Burkina Faso. This *Domaine Foncier* is declared by Title I, article 2, of the RAF, to be by legal right the property of the State.

The current RAF was modified in order to permit greater latitude for private exploitation of land, and to clarify the land ownership and titling process in the urban context. However, crucial

³² In civil law jurisdictions, a compilation is an organized (chronologically and by subject-matter) collection of existing legislation in a given legal field, such as labor law, tax law, environmental law. It provides immediate access to available statutes and regulations, and sometimes it includes cross references. Consolidation of existing legislation goes a step further than simple compilation, because it provides for elimination of conflicts and inconsistencies of existing legislation. The codification process goes even further by redrafting existing legislation according to the framework established by the code and also provides for new provisions. Contrary to the notion that a code petrifies the law in civil law countries (this is an oversimplification of the reality) and although codes intend to cover any given legal field extensively, they are amended by subsequent sparse legislation whenever necessary, or interpreted by the courts according to changing societal behavior. In any case, written laws will provide a more reliable source of law than unwritten customary practices, but one should always bear in mind that written law should reflect and take into consideration the customary law of any given society. This was certainly the case of codification in the European continent in the 1800s with the Napoleonic (French) Civil Code and the German Civil Code.

problems remain in the rural context. First among those is the fact that long-term land ownership in the rural context is highly limited by the RAF. Short-term agricultural, extractive and hunting/fishing uses are contemplated, albeit subject to a complex system of licensing of the land for such uses by the State and with the clear reservation of a right of eminent domain generally without compensation. See articles 88-105, RAF: Kiti No. AN AIII-0039, 4 June 1991.

Long-term, clear title to real property is conditioned on fiscal and bureaucratic requirements for purchasing title to the land from the State that render such clear title acquisition impracticable for most rural citizens. Articles 206 and 207 of the RAF requires any person wishing to acquire title to land from the State to present two copies of the request, one with appropriate legal stamp, a financial statement, personal or corporate identity documents and documents indicating their past legal permission to use the land. In addition, the State must be paid for the land by prices set as ratios of the taxes for certain uses of the land -- in the case of agricultural use, 100 times the applicable usage tax.

While both the documentation and the cost might be reasonable in the context of more developed economies, they plainly operate as an obstacle to land title acquisition in the Burkinabe context. As the CILSS 1993 study commented, rural citizens "in most cases have only the right to the use of the land" and lack the security of land ownership. Successfully changing that reality, in CILSS' view, is "the price of rural development."

An example of an environmentally perverse result of the land tenure legal situation was cited in a number of field interviews. That is, while crop planting might be permissible and reasonable economic activity for a rural land user, tree planting would not be in cases where the concept prevails that tree planting implies a long-term, ownership relationship to the land which does not obtain in the case of the particular individual. Any long-term building on or improving of the land without clear land title, even under one of the formal licenses to use or exploit the land, is forbidden pursuant to article 94, RAF: Kiti No. AN-VIII-0039. In an area where reforestation is and has remained a consistent environmental policy goal for over twenty years, any such practical/legal inhibition to tree planting is clearly counter to the environmental good.

Likewise, field interviews suggest that land tenure is a key area where customary law is in fact being applied in many cases, in a context of a formal modern law system which is widely viewed rurally as alien and unfair. Customary law allows for traditional, family, and village-based determinations of land ownership and land use.

An understanding of customary law in the land tenure area goes beyond the scope of this report, but merits further study as a component of long-term legal approaches to land tenure in WCA.

Customary law, according to field interviews, also has its drawbacks, which need to be understood, in terms of human rights and specifically women's rights. For example, it is said that women may not generally own land under typical Burkinabe customary law. That is because land ownership implies and requires a long-term physical presence on and involvement with the land. Women are presumed to be potential brides of men who might be from other villages, and who in any event would require the women to displace themselves to the land of the husband -- a step incompatible with customary legal requirements for land ownership.

By contrast, the formal legal code of Burkina Faso, in article 17 of the Zatu No. AN-VIII-0039, 4 June 1991 – the current legal basis for Burkina Faso land tenure law, stipulates that title for the use or ownership of land, both urban and rural, is available without distinction to both sexes and to persons of all marital status, subject to the general conditions of land ownership. As discussed above, those conditions as a practical matter render clear land title ownership inaccessible to most rural citizens, but the formal modern legal code at least does not discriminate on the basis of sex.

Other conflicts also confuse the actual state of land tenure law in many parts of Burkina Faso. For one, the demographic fact is that internal migration has been a major phenomenon in Burkina for years, due to the desertification of the northern regions, population growth and other factors. Generally the migrations have been from north to south. New settlements in the populated Southern areas inevitably face land ownership and control conflicts with established villages. In some cases, the question even under customary law would be whose customary law, applied by which authority?

Such internal immigration problems had for a period of time been mitigated by the prospect of out-migration to Ghana and especially Côte d'Ivoire, where economic prospects were better. In recent years, Burkinabe have even begun to move back, faced with the cocoa-depressed Ivorian economy and other uncertainties.

Finally, Burkina Faso faces land use disputes familiar to all societies which attempt the transition from a grazing/herding economy to a settled agricultural one: the conflict between herders or shepherds and farmers. In many cases, both have colorable but competing claims to at least the use, if not the ownership, of the land. This issue is addressed further in the Protected Areas and Wildlife Section.

Cameroon

Land Tenure and Use. The primary land tenure and land use ordinances are: Ordonnance No. 74/1 du 6 juillet 1974, fixant le régime foncier, modifiée par l'ordonnance 77/1 du 10 janvier 1977, which addresses land tenure issues; Ordonnance No. 74/2 du juillet 1974, fixant le régime domanial, modifiée par l'ordonnance 77/2 du 10 janvier 1977, which addresses the public domain land regime; Ordonnance No. 80/22 du 14 juillet 1980, portant repression des atteintes à la propriété foncière et domaniale, modifiée par la loi 81/21 du 27 novembre 1981, prescribes penalties for the non-respect of land tenure rights and the public domain; and Loi 85/09 du 4 juillet 1985, relative à la procédure d'expropriation pour cause d'utilité publique et aux modalités d'indemnisation.

The decrees addressing land use and tenure are: Décret No. 76/165 du 27 avril 1976, fixant les modalités d'obtention du titre foncier; Décret No. 76/166 du 27 avril 1976, fixant les modalités de gestion du domaine national; Décret No. 76/167 du 27 avril 1976, fixant les modalités de gestion du domaine privé de l'État; Décret No. 87/1872 du 16 décembre 1987, portant application de la Loi 85/09 du 04 juillet 1985, relative à l'expropriation pour cause d'utilité publique.

Laws and regulations promulgated by the GOC and customary law at the village level determine land rights. In this regard, two laws governing the process of land registration warrant discussion. The Law of 9 January 1963, establishes the registration system and outlines the conditions for

individuals to acquire definitive concessions from the government. The Law of 7 July 1966 as amended, specifies the procedure for registering land titles. The registration procedure entails the compilation of a file listing current land use, location and limits of land, names of adjacent landowners, names of all persons who helped bring the land into production, and other contracts affecting the land. Other procedural steps include demarcating the borders by all interested parties and filing the demarcation with the Prefect.

Few families or individuals, however, have formalized their land claims pursuant to these procedures. Rural residents tend to follow customary practices governing ownership and user rights and rarely follow national laws. Those citizens who register land are usually literate, aware of the registration ordinances, and tend to register primarily homes and businesses in urban areas. Approximately 2.4 percent of the owned land is held by land title. Moreover, the GOC lacks sufficient personnel to administer this system.

Problems arise when different members of a lineage claim the same parcel of land. A tribunal comprised of various ethnic groups in the area settle such disputes.

The conflict between national and customary law, common to most of the WCA countries, and the colonial legal heritage generate insecurity for land users -- particularly women. The Régime Domanial and land use regulations vest ownership in the national government of all unappropriated lands and serve to reinforce the uncertainty, which characterizes land use management. The land use laws focus on occupied lands as instruments of production and fail to consider the sound management of land resources.

Bushfires. Many rural activities traditionally use bushfires, resulting in severe soil erosion. To address this situation, the law and decrees providing for the national system of forests -- Law No. 81/13 of 27 novembre 1981; article 77 of Décret No. 83/169 of 12 avril 1983; and article 75 of Décret No. 83/170 of 12 mai 1983 -- subject fire setting to strict regulations.

Cape Verde

Land Tenure. The basic Agrarian Reform Law in Cape Verde was enacted in 1982, Law No. 9/II/82. This law was subsequently amended by Law No. 78/III/90 and Law No. 5/IV/91.

A recent FAO study concluded that these laws have failed to change significantly the pattern of land tenure in Cape Verde, as far as land distribution is concerned.³³ A new law has been drafted and is presently under discussion. Although it does not consolidate existing provisions, the bill broadens the concept from agrarian to "rural" law, and also considers environmental concerns and not just property titles and land redistribution.

This bill consists of 48 articles divided into ten chapters. Article 1 establishes that the State has the duty to protect the environment and to preserve biological diversity, as well as provide for the adequate use of water resources and the soil. In addition, the State must recover areas damaged by predatory use and provide protection for its renewable natural resources.

³³ See Cape Verde. FAO/MPAAR, 1993.

Any Cape Verdian citizen or resident, pursuant to article 3 of the bill, has standing in court to request the State to honor the duties set forth in the bill and to nullify administrative acts contrary to the public interest.

Article 5 charges the Ministry of Fisheries, Agriculture and Rural Extension (MPAAR, Portuguese acronym) with responsibility for planning rural land use. In doing so, MPAAR must consider environmental characteristics, such as special geographic and climatic conditions, and consult with the local population.

Articles 6 through 18 classify land as public and private. Individuals or companies may own land. Foreigners residing in Cape Verde, as individuals, have the same rights as nationals. Land ownership, whether public or private, must meet social, environmental, and economic functions. The MPAAR may declare land abandoned if it is not used for economic purposes, such as planting or ranching, for five years. The State has the power to expropriate abandoned land and use it for agrarian reform or environmental conservation.

An individual may acquire land by adverse possession, if the individual occupies and works on the property continuously for five years. The lots may not be greater than one hectare for irrigated lands and five hectares for dry lands. The individual must obtain a court order to register title to the property.

Rural property must be registered at the MPAAR, which should establish a national rural property registrar service, besides registration at the Real Estate Registrar. Articles 19 through 27 provide the procedure for registration and transfer of title.

Articles 28 through 41 guarantee access to the courts and establish special judicial procedures. Although legal representation is not required, whenever an attorney represents one of the parties, the judge must assign an attorney to the other party if he or she does not have one. The Public Ministry will oversee all cases to guarantee the correct application of the law.

This rural land bill, articles 45 and 46, further provides for the creation of a land fund, to be regulated at a later date, to finance rural workers in the acquisition of their own private lots. Article 47 does not revoke prior agrarian law specifically, but provides that all contrary provisions to the new law are revoked. For this reason, one must compare and assess whether provisions from prior agrarian law will remain in force.

Land Use. The National Assembly is considering a new land use law (Lei de Bases do Ordenamento do Território e do Planeamento Urbanístico da República de Cabo Verde). The Ministry of Infrastructure and Transportation (MIT) of Cape Verde and the Portuguese Economic Cooperation Institute drafted the bill as part of a cooperative agreement.³⁴ The new bill covers urban and rural land use and occupation, whereas the current legislation primarily covers urban development.

³⁴ See Cape Verde. Ordenamento. 1993.

The MIT serves as the lead institution in coordinating the various government agencies. For instance, MIT receives input from the MPAAR in regard to fundamental rural land issues, such as soil aptitude, and the definition of forestry zones, parks, and protected areas.

The bill guarantees public participation in the planning process, although the municipalities will be responsible for licensing. MIT's coordination will involve other national institutions and local governments. Information concerning this bill indicates that natural resource protection must be considered and balanced against regional development and territorial organization measures.

Central African Republic

Land Tenure. Land tenure law in CAR relies on a concept of public lands or public property somewhat different from that seen elsewhere in the WCA countries, but similar in its statist assumptions. Law No. 63-441 of 9 January 1964 defines public property as including all properties which should be "by their nature" used for public or communal good. (See article 1) All waterways and riparian lands as well as all public works are included as public lands.

Land Use. Law No. 61/263 which relates to urban planning vests considerable power in the State and its planning agencies to determine what may be built, and within what time periods, consistent with the urban plans in force for each city and region. Forfeiture of land to the State or to another property developer, pursuant to article 18, can be the penalty for failure to construct within the time frame the types of constructions to which agreed.

These approaches are consistent with an extensive colonial law, Law No. 56/1106 of 3 November 1956, which created a system of classified sites of historical or national interest worthy of protection and preservation. This law was enacted for all of France's overseas territories, and appears to remain in force in CAR.

Congo

Land Tenure and Use. Relevant to land tenure issues, article 30 of the Constitution guarantees the right of private property and indemnification in cases of eminent domain. Three land use laws prove significant. First, the overall environmental protection law, No. 003-91, has two pertinent provisions: article 37 says that any construction, landscaping, or other work that could damage soil conservation, cause erosion, cause the loss of arable land, or pollute the soil or sub-soil is subject to prior authorization by the environment ministry. Article 38 is another of the provisions of Congolese law instituting the "polluter pays" principle, saying that "anyone guilty of polluting the soil must pay the resulting damages."

Second, Law No. 021/88 of 17 September 1988, on Land Management and Urban Planning, sets policies and procedures for land use and management, particularly in the urban areas. That law, consistent with the French tradition, states in article 1: "the state has the full disposition of the land." That so, "the State intervenes with the intent to insure its rational utilization, to guarantee the protection of natural spaces and the sound management and improvement of the quality of life of the population."

This law, pursuant to articles 3-26, vests the power of urban planning in a Ministry of Urbanism and Housing, and directs the creation of urban and zoning plans to control all types of land use

in urban and newly-settled areas. Articles 27-29 require a permit for any construction, remodeling, rebuilding, or demolition. Even construction of fences and enclosures technically requires a permit. Article 33 sets forth penalties for violation of the law, including fines of from 10,000 to 300,000 CFA, and injunctive action ordering cessation of construction under penalty of 500 to 5000 CFA daily fines.

Third, Congo has a full Code for land ownership and use, Law No. 52/83 of 21 April 1983, the "Land Ownership Code of the Congo." The clear legal premise of article 1 states: "The land is, throughout the territory of the Republic of the Congo, the property of the People represented by the State." Article 3 reiterates this legal corollary: "Individuals and legal entities only have a right of use of the land," although private ownership of whatever is erected or growing upon or affixed to the land is permitted. Further emphasizing the law's statist nature, articles 7-32 specify State ownership of not only all land, but all subsoil and mineral resources beneath it, all waterways and mineral and other resources found in riverbeds and in coastal zones. Article 177 abrogated and superceded the colonial land tenure and use laws, including the colonial decrees of 1899, 1939, and 1955.

The land use code contemplates several levels of rights to occupy and use land. These rights range from a simple, provisional right to occupy land to a long-term lease of land with plenary powers to cultivate, improve, and use it. The law, pursuant to articles 39-124, describes the procedural and fiscal requirements for each status of land use permission.

Articles 128-141 represent the Congo's approach to the difficult problem of meshing written, or "modern" law with customary, village-based laws of land tenure and use. This section of the code establishes the rights of villages, village members, and "collectives" organized for farming and similar purposes, to use the land and to pass on their rights through direct inheritance. Such village-based rights of use, however, do not give rise to the right of alienation of that use, by sale or lease to another individual not granted such collective or village-based rights of use by the State under the terms of this code. See article 138.

Determining whether this land-use approach resolves successfully the conflicts over rural land use is beyond the scope of this study. This issue did not arise in field interviews as a major problem, as it did in other WCA countries. Congo, like Gabon, is sparsely populated, with only two million inhabitants, more than half of whom reside in the major urban areas. The rural land use conflicts are therefore less intense than those found in Burkina Faso, Benin, and elsewhere.

Côte d'Ivoire

Land Tenure. Both traditional and modern land tenure systems apply in the Côte d'Ivoire. The land tenure system, based on colonial laws, consists of scattered statutes and lacks a coherent framework. Land can be acquired by two means: inheritance or by developing the land. Problems arise, however, in implementing the latter method since the law is not always clear as to whom property should belong after development efforts and infrastructure investments. Parties lack motivation to follow good natural resource management programs if they are not confident of benefitting from their labor.

The delimitation of government private lands is determined pursuant to portant réglementation des biens vacants et sans maitre, 15 novembre 1935 and portant réglementation de l'expropriation

pour mise en valeur de la terre law, 12 juillet 1971. The Décret of 15 November 1935, provides that the government can acquire ownership of traditional lands upon providing proof that the land has been vacant for over ten years. The Law of 12 July 1971, provides for the expropriation of rural lands that have not been developed adequately. A determination of whether the land has been adequately developed is based on the level of development of other land in the region and whether the land has been worked in the proceeding ten years. A committee, under the supervision of the Prefect, makes this determination.

The expropriation procedure concerns traditional lands in temporary concession occupation and land with an occupation permit attributed to the administration. The law has been criticized for not being enforced in a consistent manner and for not paying fair and adequate compensation in a timely manner. Furthermore, the restoration procedures, for all practical purposes, are inoperative.

Since 1900 the national government has claimed all vacant land and land to which no one else claims title. This conflicts with the customary law by which individuals can claim title. Rélatif aux procédures domaniales et foncière, Décret No. 71/74 of February 1971, further clarifies land tenure procedures. Article 2 of this law provides for customary land use rights and specifies that customary rights cannot be sold, given, or inherited. Article 5 provides that a land conveyance is null and void, unless notarized. However, there are only two notaries outside of Abidjan and improper conveyances are the rule rather than the exception.

Gabon

Gabon inherited largely its land tenure and use laws from the French colonial regime. Nevertheless, the Land Use Code, Law No. 15/63 of 8 mai 1963, was enacted during the period of early independence. While Law No. 15/74 of 21 January 1975 made some modifications, the former law has not been modified significantly since independence in a manner relevant to environmental issues.

The land tenure and use laws, to the extent enforced or honored at all, have largely to do with the urban areas and the process of land titling for real property in such areas. The Forestry Code is the broader legal text affecting land use in Gabon.

Ghana

Land Tenure. A major facet of land management problems in Ghana revolves around ownership and tenure issues. The land tenure system includes many arrangements: outright private ownership, long-term lease, short-term rental (including share-cropping), and community and open-access. Clear, undisputable rights to land ownership -- including the right to bequeath to one's descendants, to sell, and to transfer ownership rights of use to others -- serve as incentives to ensure responsible resource management. However, formal land titles appear to be rare. When people are certain about the extent of their land ownership and tenurial security they are more likely to assume responsibility to prevent abuse. A comprehensive study on the extent to which tenure arrangements allow effective ownership would afford a good starting point to address this issue. The next step entails strengthening the legal and administrative mechanisms for land acquisition and tenure.

Land Use. The Land Planning and Soil Conservation (Amendment) Act, 1957 (No. 35), read as one with The Land Planning and Soil Conservation Ordinance, 1953 (No. 32), proposes the better utilization of land in designated areas by land planning and soil conservation through preserving land, reclaiming land, and protecting water resources. Committees established in designated areas by the Minister of Agriculture are charged with implementing the Act. Coordinating committees will coordinate the work and policy of two or more committees. The committees may promote, for the purpose of the Act, other land use by proper methods of land cultivation and soil conservation.

The committees have the authority to enter upon land in a designated planning area and construct and maintain works for protecting water sources, controlling water, preventing and mitigating erosion, reclaiming land, and utilizing swampland. The committees also have the authority to relocate someone using land for agriculture and animal husbandry from one area to another within the planning area when the land becomes exhausted or inadequate. The Minister may make regulations for the following purposes:

Prohibiting, regulating and controlling the breaking up or clearing of land for cultivation or any other purposes, grazing or watering of livestock and firing, clearing or destruction of vegetation.

Requiring, regulating and controlling afforestation or reforestation of land, protection of slopes, banks of streams and rivers and of dams, construction, repair and maintenance of contour banks, ridges, terraces or other anti-erosion barriers, repairing of gullies and maintenance and repair of artificial dams, reservoirs or other water conservation devices.

Seven areas have been designated as planning areas; however, little if any plans or projects have been effectuated. The Act, while apparently adequate to regulate land management, should also require comprehensive land use planning as a prerequisite for particular land use decisions. Furthermore, land use planning should be extended to the whole country. A centralized national institution could coordinate this function since confusion arising from a multiplicity of agencies, each with its own mandate, has impeded effective land management.

Few restrictions exist on controlling urban development. The Department of Town and Country Planning³⁵, at least in the urban areas, has plans for land use. This Department and the Ministry of Industries, Science and Technology, which approves the establishment of industries, have failed to coordinate their activities.

The Towns Ordinance, 1892 (Cap 86), The Rivers Ordinance, 1903 (Cap. 226) as amended 1935, The Mining Health Areas Ordinance, 1925 (Cap. 150) as amended 1935, The Town and Country Planning Ordinance, 1945 (Cap 84) as amended 1969 (Act 33), and various building regulations passed by local authorities pursuant to local government laws provide the substantive laws on the planning, development, improvement, and management of human settlements. The Towns Ordinance, based on the British Public Health Act, 1848, and The Mining Health Areas Ordinance, while still in force, have been rendered obsolete by a series of local government laws. These

³⁵ The term "Town and Country Planning" is adopted from England and refers to land use planning.

laws regulate town planning on a piecemeal basis by controlling individual building operations, whereas, The Town and Country Planning Ordinance provides for a system of advance planning so as to guide the growth and development of settlements on a comprehensive basis.

The Town and Country Planning Ordinance vests authority for local planning in the central government and fails to provide a role for local authorities. As a practical matter, plans can not and should not be prepared without the active participation of regional and local authorities. The provisions of this Ordinance may have been transferred to the District Assemblies pursuant to The Local Government Law, 1988 (PNDCL 207).

Local authorities generally follow Model Building Regulations issued by the Ministry of Works and Housing. These regulations generally tend to: be based on foreign norms, regulate against or discourage the use of some indigenous materials, institute costly unrealistic standards, and may stifle self-building of cheaper low income houses.

Bushfires. Bushfires represent the most degrading environmental factor in Ghana. More than any other event, the ravaging bushfires during the draught in 1983-84 served to raise public awareness of environmental degradation.

The Control and Prevention of Bushfires Law, 1990 (PNDCL 229), prohibits setting fires and prescribes penalties for illegal burning that include fines, imprisonment, and community labor. However, authorized staff may use burning as a management tool in an established forest or wildlife conservation area, or with proper authorization a person can burn farm slash, grass, herbage, and deadwood if controlled and confined within specific boundaries.

The law provides for the establishment of Bushfire Control Subcommittees in each District Assembly. The subcommittees are charged with: drafting by-laws on the prevention, control, and monitoring of bushfires; specifying burning periods; and setting up town, area, and unit Bushfire Control Committees which will establish volunteer fire squads and educate residents on the dangers of uncontrolled fires. The law is especially noteworthy because of the roles assigned to the local communities to foster public participation.

Guinea Bissau

Land Tenure. Law No. 1/73, enacted by the People's National Assembly immediately after the Constitution of 1973, provides that the Portuguese legislation at the time of Guinean independence would continue to apply in Guinea Bissau, as long as not contrary to national sovereignty, the new constitution, new laws, and the principles and objectives of the Party (PAIGC, Portuguese acronym). For this reason, many of the former colonial laws continued in force locally, including the regulations for occupation and concession of lands in the former Portuguese provinces, Décret No. 43,894/61.

Subsequently, Law No. 4/75 established that the soil in the national territory of Guinea Bissau, whether urban or rural, was under public domain of the State and could not be subject to private ownership. Buildings, plantations, and any other improvements remained private as long as they reflected actual occupation and added value to the land.

The revolutionary 1973 Constitution was replaced by the 1984 Constitution, which is presently in force as amended by Constitutional Acts Nos. 1/91 and 1/93. Article 12 of the 1984 Constitution maintained the ban on private ownership of land. It provides that the soil, subsoil, waters, mineral, forest, energy resources, and public infrastructures are property of the State. Nevertheless, pursuant to article 13, cooperatives and other juridical persons can receive a government concession to exploit these resources.

Although private ownership of urban and rural land has been banned, this has not barred individuals from selling and leasing "properties," since the ban on private ownership of land does not include buildings and other improvements. Thus, ads often appear for the sale of rural farms, called "pontas", even though the land itself is not private. People sell the "improvements" to others, who then obtain the transfer of the concession from the government.

By appropriating all natural resources for the state, and only allowing their exploitation by third parties under concession, the Constitution fails to clarify which legal regime would apply to the customary use of land by traditional villagers.³⁸ Strictly speaking, these populations are also required to obtain concessions to use the land.

The procedure to legalize a concession requires the beneficiary to file a formal request indicating the location of the land; a statement from the local village committee declaring that the land in question does not belong to anyone else and that no local objection to the concession exists; and a detailed plan of exploitation, if the area is greater than twenty hectares. After checking into possible conflicts of interest and publishing a public notice of the claim, a license of occupation is granted.

Only a few villagers have sought to legalize the plots they have traditionally planted. Most often, they are usually not even aware that land they considered to be within their territory may have been taken away through concession. Local committees do not always consult villagers as the law requires.

Economic growth in the last few years increased the demand for intensive use of agricultural land -- primarily for fruit production. The availability of easy agricultural credit to the private sector exacerbated this land rush. Although credit has been suspended, the potential does exist for displacement of tabanca communities as concessions become incrementally utilized. A more recent concern comes from the expectation of eventual land privatization. If it happens, those that obtained free concessions would accrue a windfall profit by selling their land as private property.

An executive order dated 12 August 1992, signed by the Minister of Rural Development and Agriculture (MDRA); the Minister of Public Works, Construction and Urbanization (MOPCU); and the Prime-Minister, established a fiscal and occupational regime for RGB rural land. This ministerial order provides that any request for a concession greater than 30 hectares must meet the approval of a commission formed by members of MDRA and MOPCU. Maximum sizes are 100 hectares for individual requests, and 1,500 hectares for associations. The latter must have the joint approval of both ministers from MDRA and MOPCU.

³⁸ For a review of land tenure issues and conflicts between customary practices and a national land law, see Crowley, 1991.

Previous concessions of rural land greater than 30 hectares, as well as existing concession requests, will be subject to annual taxation according to values based on the estimated productivity of Guinean land. The commission has the power to reduce requested concession size. Furthermore, subsequent requests can only be granted if proponent has met the objectives of the previous concession.

This executive order seeks to restrict inordinate access to land by establishing objective criteria. It also intends to reduce large concessions by taxing land concessions. Tabanca family units and land occupied by liberation war veterans up to 5 hectares; military training grounds and quarters; state buildings; protection and conservation areas; and all land designated to forestation or reforestation are exempt from taxation.

The merits of this Ministerial Order are based on attempts to facilitate the process of registration for smaller concessions (less than 30 hectares), and place limits to individual and corporate concessions. The bases for the proposed sizes are not clear. The order also provides for the creation of a Land Commission, formed by members of both MDRA and MOPCU, which shows an attempt at collaboration among government agencies.

Finally, the government has formed a ministerial commission and a technical commission to assess existing laws and regulations and draft a new land law for Guinea Bissau. The work of this commission has had the support of USAID and technical assistance from the Wisconsin Land Tenure Center.³⁷ The draft produced by the technical commission will be vetted throughout the various sectors of the country for input from all those affected by this proposed law. The commission expects to have this process finalized in 1994.

Guinée

Land Tenure. As of the Fall of 1993, Guinean land tenure law remained in flux. A draft land tenure code has been through several iterations and is near adoption. The current effort to refine Guinean land tenure law arises against a familiar WCA backdrop: the clash of the different legal approaches to land tenure. These approaches include colonial, post-colonial statist, and rural/communitarian or traditional land use laws. The traditional or customary land tenure laws in Guinée are interwoven with traditional agricultural methods. Given the nature of the arable soil, traditional agriculture practices involve constant rotation of cultivation among several plots of land on a multi-year cycle, with plots lying fallow between periods of cultivation. Since land cultivation is done on a communal basis, the traditional system of land ownership had to be, in effect, communal, by being inherited patrilineally through a system that amounted to primogeniture, but without any right of alienation.

During the French colonial period, an effort was made to institute private, individual land ownership on a freehold basis. As elsewhere in WCA, the French enjoyed limited success. After independence in 1958, the government of Sekou Toure instituted the statist approach, declaring all land the property of the state, and limiting land ownership rights of individual citizens to leasehold use. The extremely negative experience of the Toure regime in terms of the drop in

³⁷ See Guinea Bissau. Pires-Filho, 1990, 1992 and 1993; and Smith, 1993. For a copy of the draft, see also Guinea Bissau. Land. Ante-Projecto, 1993.

agricultural production led the post-Toure regime to struggle with providing incentives to the rural population through a more communal approach to land tenure and use.

This effort continues today in the form of the development of a land tenure code and a major, seven year World Bank-supported program on management of rural resources is now underway. USAID and FAO have also been actively involved in the development of the proposed code.

Land Use. The Omnibus Environmental Code, Ordonnance No. 045/PRG/87, addresses land use, but it has not yet been implemented by a "texte d'application." Such implementing regulations are pending before the National Counsel. Articles 15-20 comprise the title of the Environmental Code which addresses land use.

Article 15 of the Environment Code establishes the general legal principle that all land and the resources it contains, both agricultural and mineral, are to be protected from degradation and be rationally managed. Article 16 authorizes local authorities to promulgate regulations controlling the use of bushfires.

Article 18 vests in the Ministry of Rural Development the power to control the use of agricultural pesticides and other chemicals, subject to the advice of the environment ministry. Article 19 grants the environment ministry concurrent authority with other ministries having the relevant jurisdiction over a broad range of land use questions with environmental implications, including rural agricultural use, industrial development, and urban land use planning. Finally, article 20 of the Environment Code grants joint authority to the environment ministry and the Ministry of Mines to implement the provision of the mining code which requires restoration and reforestation of quarried lands.

Mali

Land Tenure. The primary land tenure laws are: No. 82/122/AN-RM of 4 February 1983, which establishes the fundamental principles concerning the attribution of the private lands of the government; No. 85/39/AN-RM of 22 June 1985, which modifies No. 82-122/AN-RM of 4 February 1983, prescribing regulations for the transfer of land ownership; and Décret No. 134/PG-RM of 30 July 1975, which repeals and replaces Décret No. 37/PG-RM of 10 February 1963, also prescribing regulations for conveying land.

The French Code Domanial et Foncier of 1932 and 1955-56 establishes a land registration system, whereby people claiming title to land pursuant to customary law can "legitimize" their claim. Individuals and businesses can apply for permits to inhabit and occupy parcels in urban areas. However, these laws are not followed and few people register their land. Pursuant to these laws, the State claimed all the forest resources held under customary law. Subsequent revisions to these laws strengthened, rather than diminished, national control over the land. Post independence land tenure laws further sought to compel people to register their land claims -- to little or no avail.

No. 86/91/AN-RM of 12 July 1986, warrants particular attention. This law concerns the "Code Domanial and Foncier" and governs the public and private domain of the state and local collectives, mandates compulsory service, and reaffirms state control over the land. Furthermore, this law specifies the procedures for distributing unused and unregistered land. No. 86/91/AN-RM

repeals the previous regulations, but fails to resolve the conflict between customary and modern law.

On most land, natural resource ownership is closely linked to land ownership. As a rule, a person who owns a parcel of land also owns the natural resources on the land. Land ownership carries with it the right to plant, prune, and cut down trees, as well as the right to harvest fruits, bark, and leaves.

As a rule, rural residents tend to follow customary practices governing ownership and use rights. Complications arise from simultaneous claims by different user groups to the different natural resources. The village headman or the village council usually exercises control over the village territory. The headman allocates unclaimed land, settles land and resources disputes, and decides on the utilization of communal fields, forests, fishing grounds, and grazing lands.

The Land Clearing Code, No. 86/65, contains at least one section which particularly hurts natural regeneration and biodiversity maintenance. The Code taxes the land, if it has been fallow more than five years. Farmers respond by clearing land in three years.

Bushfires. The Fire Code, Law No. 60/4, which seeks to control bushfires, is currently being revised. Drafters may maintain the ban on bushfires for Sahelian and bourgu pastures. In the Sudanian zone, however, there would be a three year rotation system which would include a single year of early dry-season burning. The Fire Code also addresses the bearing of firearms and munitions.

Niger

Land Tenure. Laws and regulations promulgated by the government and customary law imposed at the village or fraction level define land tenure rights. Few families or individuals, however, have formalized their land claims pursuant to the process mandated in the Domanial and Foncier Code. Rural residents tend to follow customary practices governing ownership and user rights and only resort to state procedures in extreme circumstances.

Pursuant to customary law, each village has a certain geographical space or territory, in which rights to land and other resources are allocated to various members of the village or faction and outsiders. The degree of control that a village or fraction exercises over its territories varies considerably, depending on how it originally gained control of the land, and its political and social relations with other communities and resource users. The village headman or the village council control the village territory. The headman, acting in concert with the village council, allocates land, settles land and resources disputes, and decides on the utilization of communal fields, forests, fishing grounds, and grazing lands.

Extended families or individuals usually manage cleared land. Families and individuals generally obtain access to land through inheritance, gifts, and borrowing arrangements. Individuals may obtain land through leases with a government entity. While land purchases, sharecropping, rentals, and land pledges exist -- they are very rare. Women obtain land through borrowing or temporary gift arrangements, while immigrant farmers borrow land and/or receive gifts of land.

Land Use. To conform with the goals of the National Charter, in 1984 Niger initiated the drafting of a Rural Code to reorganize natural resource management. The Code recognizes the importance of secure ownership and private investments on land in the management of natural resources -- such as wild "game" ranching, tourism site management, fisheries, agriculture, and forestry management. The Code revises the status of forest classifications and the hunting and fisheries regulations.

Décret No. 69/007/PM of July 1989, created the National Committee to implement the Rural Code. The Minister of Agriculture, the Minister of Animal Resources and the Interior Minister serve on the Committee, with the Minister of Agriculture presiding as President. To implement the Rural Code, the Committee relies on directions made by the National Seminary of Guidir, general and specific principles of the Rural Code S.P.C.N.R. of January 1991, and recommendations made by the International Union for the Conservation of Nature. The main objectives of the Rural Code are:

Equality and social justice for all citizens, men and women, with access to land and use of natural resources, regardless of whether this right is claimed pursuant to customary or modern law.

Guaranteed security of producers, compatible with the sustainable management of natural resources and the environment.

Sustainable management of land and natural resource obligations. Pursuant to the Rural Code, an owner who fails to comply will not necessarily lose his land ownership, but will be obliged to designate another farmer to work the land.

Land distribution subject to public investigation.

Nigeria

Land Tenure and Use. The Land Use Décret (No. 6) of 1978 and later retitled as The Land Use Act (LUA) 1980 (cap. 202), vests all land in each state of Nigeria in the military governors of the states. The governors have sweeping powers and can revoke a right of occupancy on several grounds -- including an undefined "overriding public interest." The LUA thus supersedes the different forms of land ownership and tenureship existing prior to the issue of this law, namely community ownership or communal land, family land, individual land, and public land. The LUA seeks to make land accessible to every Nigerian for development purposes in any part of the country.

The LUA provides for statutory rights of occupancy over urban land and of customary rights of occupancy over rural land, via certificates of occupancy. Individuals, groups, institutions, and government entities can apply for and obtain land in rural or urban areas. The LUA specifies the maximum land sizes an applicant can receive for various purposes, for instance: crop farming (500 hectares) and livestock grazing (5,000 hectares). Furthermore, the LUA unequivocally forbids the surrender or alienation of rights of occupancy or the certificates conveying those rights, except under stringent conditions. Sections 21 and 22 prohibit the sale or transfer of any right of occupancy without the prior consent of the government. When the holder of a statutory right

of occupancy dies, his land or the rights thereto "shall not be divided into two or more parts," except with the Governor's consent.

The LUA, while interpreted to mean the control of land uses and the preservation of natural resources, in reality fails to provide effectively for proper land use. Massive development occurs in most states without proper planning, coordination or due consideration given to environmental concerns. Private sector land agents actively execute land transactions with very little monitoring. Licenses are obtained freely, and state and local governments exercise little control over land use, and the less influential citizens experience difficulty securing land.

The LUA needs modifying so as to facilitate the ability of Nigerians to acquire land. In many cases the informal, traditional land tenure system provided an effective mechanism for managing natural resources. Consequently, such informal tenure systems need to be identified and supported when designing land use schemes.

One example of a viable communal tenure system occurs in the rural secondary and primary forest zones where community councils sometimes rent forest lands to outsiders with the funds going to community coffers. Traditional hunting and gathering rights continue to be respected and the community councils collect royalties on the forest products from the outsiders.

The Town and Country Planning Ordinance, 1946, modeled on the British Town and Country Planning Act, 1932, also contains specific provisions for proper planning of urban areas. In theory, the right of occupancy system the Ordinance prescribes should facilitate integrated development, since grants are supposed to be made on terms consistent with the state's planning and zoning arrangements. The Ordinance has proved to be an ineffective tool for controlling urban development, since it restricts the activities of the planning authorities to estate development and building control. The Ordinance is applied piece-meal and largely curative rather than preventive. Although, the Ordinance can impose the ultimate sanction of compulsory land acquisition for noncompliance, this is seldom done since the Ordinance is cumbersome and difficult to administer.

There should be more interaction between the Ordinance and the LUA, so as to facilitate effective physical planning and to prevent the development of slum areas. The LUA fails to contain provisions for the automatic inclusion of development conditions on all rights of occupancy. Nevertheless, the case of Azie v. Commissioner of Lands (1960) 5 F.S.C. 221 provides a noteworthy example of enforcing grant terms. In Azie, the applicant fulfilled his building obligations but constructed additional buildings without planning permission.³⁸ The court granted relief against forfeiture on condition that the lessee demolish the unapproved buildings. Examples of how the Ordinance and the LUA can work together are found in the states of Bendel and Rivers, where grants and certificates of occupancy contain user clauses.

Various state, town and country planning laws empower state governors to establish Boards and Authorities to carry out planning operations, including the provision of public health facilities, latrines, water supply, markets, garbage disposal, and the regulation of games and businesses injurious to health. For example, The Lagos Town Planning Ordinance established the Lagos

³⁸ See also Attn. Gen of Kwara State and Ors. v. J.O. Ogunlade no.FCA/R/115/78.

Executive Development Board to formulate town planning schemes for Lagos and the surrounding areas.

The Nigerian Standards Organization Act, 1971 (No. 56), establishes the Standards Organization of Nigeria whose primary functions include advising the Federal government on national policy standards, standard specifications, quality control, and metrology. This Act also contains provisions for preventing eco-system pollution.

Soil Erosion. Soil erosion represents one of the most serious environmental problems facing Nigeria. Anti-erosion measures vary widely in scope and effectiveness. Practically every state has legislative provisions prohibiting such erosion-inducing activities as bushfires, farming in erosion-sensitive zones, quarrying in certain regions, and unapproved road construction designs and procedures. Despite clearly worded, unambiguous laws, enforcement remains problematical owing to a lack of political will. Moreover, most people have no idea that such laws exist.

Sénégal

Land Tenure. The colonial law of 1935, as in the other WCA francophone countries, vested the government as the primary land owner. Post independence laws steer a middle course between full individualization of title and nationalization of title, so as to encourage "free cooperation" between the public and private sector. The National Domain laws of 1964 and 1972 vest all unregistered property with the national government and forbids future registration; however, the law provides for formal recognition of occupancy rights. This reflects an attempt to unify customary, colonial, and Muslim land tenure systems.

These laws provide for the replacement of traditional authorities with local councils charged with planning and supervising land use, distributing land, settling land disputes, and drawing up land registries. In only a few instances, however, have land registries been prepared. While the National Domain Law and the 1972 Communité Rurale Law sought to grant the Rural Community Councils authority to manage the natural resources within a designated Rural Community area, these laws have been undermined by subsequent legislation, presidential edicts, and governmental policy.

Land allocation problems abound. Instances are reported of people demolishing houses on land they were allocated, but had not previously occupied. These disputes reflect "illegal occupation" since Sénégalaise law considers "squatting" a criminal offense. Such infractions are common since the National Domain Law of 1964 fails to recognize customary land rights or unregistered conveyances.

The Gambia

Land Tenure. Land tenure regulations critically impact on the use and management of natural resources. Little economic incentive exists for activities that produce long rather than short term gains for individuals. For people to practice soil and water conservation or tree planting and other agroforestry techniques, tenure rights and the potential economic benefits must be clearly defined.

Customary land tenure arrangements in rural Gambia, which have been influenced by Islamic property law, do not recognize private ownership of land for agricultural purposes. Traditionally,

the person who first clears a plot establishes permanent user rights and control over the land. The control over unused and unclaimed village land is vested in the village chief or Alkali. The Alkali usually allocates fields. At the compound level, land is divided between communal fields and those controlled by individuals.

An important facet of the land tenure system originates from Islamic property law. The legal conception of land as a resource is confined to the physical solum. Any objects – buildings, trees, etc.– affixed to the soil are generally regarded as the property of the party whose labor produced the objects, rather than the authority in whom control rights are vested or the person entitled to immediate access to use the soil.

The Alkali allocates, on a year to year basis, the communal land used by kafos. Problems have arisen, however, where women's kafos have lost control over places, equipment, and materials which they were initially given as a group. Furthermore, Akalis have asserted control over land and wells dug for a kafo. Women gain use rights to the majority of their land through marriage or in some instances they inherit land from their mothers.

Changing patterns of land and natural resource use due to population pressure and changing climatic patterns have impacted on village negotiations for land access and use rights. Government interventions to promote more secure tenure in hopes of providing more economic incentives have often benefitted the household or compound head, while reducing security for other household members. A recent report by the Wisconsin Land Tenure Center, while recognizing certain constraints on the existing land tenure system, discourages large scale land reforms which would include individualization of tenure. The current system appears flexible enough to evolve in response to changing socio-economic needs. Nevertheless, reforms to address discrimination against women may be necessary. The current structure of customary tenure discourages women's involvement in agroforestry/tree planting or other activities that have no secure guarantee of economic benefit.

The Ministry for Local Government and Lands (MLGL) has responsibility for land tenure issues and land use planning. Statutory tenure rights are described in Part III of The Land Provinces Act and can be granted in the form of a leasehold. The person with control over the land and the district head must both consent to a leasehold's creation. The Divisional Commissioner must also approve of land disposal. The Commissioner will decide whether to forward the matter to the MLGL, depending on the purpose of the leasehold, the size of the area, and the requested duration. Leaseholds can be established for up to 99 years, with the right of extension. A leasehold affords the opportunity to enter the land into the land register. Allocation of land pursuant to customary law, however, has the advantage of being steeped in tradition and thus possibly being better accepted than statutory law.

The recently enacted State Lands Act, 1990 (No. 2), seeks to introduce a unitary title system in designated areas.

5.2 Forestry³⁹

Of all the natural resources in the WCA countries, the forests are probably the most threatened. The governments of the WCA countries recognize this, and the forest laws are perhaps the most developed of any of the laws examined. Moreover, forestry laws historically received greater interest during the colonial period than other laws.

In the common law countries, the British colonial administrators followed the pattern of reserving forest lands. The laws provided for "permanent forest estates." Only the highest authority in the land could amend an estate's boundaries and use. This legal framework failed to integrate forestry law and policy with the laws and policies of other sectors such as agriculture and urban development.

Civil law countries pursued similar legal mechanisms to control and reduce the rate of forest destruction. Forestry law in the francophone countries can be traced back to the Décret of 4 juillet 1935, which established the Forest Code for the Africaine Organisation Francophone (AOF). This Code considerably diminished individual and community rights to forests. Under the Code, the government essentially claimed all forest resources on land held under customary tenure and established an extensive system of classified and protected forests and the rights of usage by individuals. The Code vested sweeping police powers in the Forest Service and required permits for most commercial and extractive uses. Agroforestry was not practiced, since domestic wood requirements were met by natural forest production.

The Inter-African Forestry conference at Abidjan in 1951, emphasized the need to constitute and preserve permanent forest estates -- "Domaine classe." Such forest estates were totally protected against forest clearance, but certain traditional users' rights were permitted under strict control. Governments would permit species timber harvesting pursuant to licensing agreements, but strictly forbid clearing for agriculture.

Both common law and civil law forestry regimes failed to win local support for reservation mechanisms. While a forest reserve represented an asset to the country and posterity, the local people viewed it as either a liability or an untapped resource. After independence, some governments handed over gazetted forest lands to farmers. The forestry sector in the WCA countries has suffered from not ensuring that both the total size and distribution of a forest estate is adequate for the needs of the WCA countries.

When evaluating the forest laws and institutions, a first step is to determine whether a forest administration is housed within a ministry with mixed responsibilities or is an autonomous entity. Forest administrations can be found in ministries with the following responsibilities: agriculture, rural development, tourism, natural resources, industry, water, and energy. A ministry with responsibility for water probably makes the most logical fit and a ministry with responsibility for agriculture represents the least desirable option.

³⁹ See FAO, "Management of Tropical Moist Forests in Africa," Hill, "The Effectiveness of National Forestry Administration in Africa: a Test of the Ministerial Autonomy Hypothesis."

Many of the WCA countries forestry laws share similar problems. The existing laws are often unduly complex and timber fees are often below what the concessionaires should pay. Additional problems include very low collection rates, arbitrary allocation of concessions, failure to use market mechanisms with an emphasis on prohibitions, lack of forest management, waste of wood, and financial irregularities.

In recent years forestry laws have sought to foster community forestry projects. The need for fuelwood, building material and the integration of forest and agriculture functions on the same land has pushed such projects to the forefront of wise forestry policy. Community forestry establishes critical linkages between a community's well-being and sustaining a forest.

Benin

Law No. 93-009 of 2 juillet 1993, "Portant Régime des Forêts en République du Benin," governs forestry in Benin. Given the law's recent enactment, regulations or subsidiary laws have yet to be promulgated to implement it.

The new Forestry Code is another in a long-running struggle by Benin, during and since French colonial rule, to accommodate customary land ownership and use with modern, Napoleonic Code-inspired notions of State and private property ownership. Articles 4, 5, and 8 of the new Forestry Code define the vast majority of forest land as belonging to the State, subject to its management and licensing, but article 7 does recognize a limited right of private ownership.

Article 10 of the Code divides all State forest lands into those that have an established special status, such as classified forests, national parks and reforestation areas, and all the others, which are still designated as "protected." Articles 13-22 delineate the procedures for both classification and declassification of forests.

Articles 23-37 set forth the rights of use for forest lands, including the conditions for cultivation, replanting, and harvesting trees and tree products. Articles 38-49 provide the administrative structure for Benin's program of forestry management and reforestation, while the complementary articles 50-55 establish the conditions and limitations on commercial forestry.

Articles 60-62 set forth the administrative procedures for pursuing communal or cooperative, forestry and cultivation.

Overall, the new Forestry Code appears susceptible to the criticisms that have been lodged in the past regarding the forestry/rural land ownership situation in Benin. It remains the case that the State reserves the right, as it has legally in various ways since the French colonial laws, to determine who owns or can utilize the rural lands. Rural Beninois have not accepted that derogation from customary law and local control over land ownership questions. Those conflicts have historically not been resolved, leading in Benin as elsewhere to confusion over land ownership and usage rights.

Deforestation and soil erosion are the main environmental problem. ADB/OPEC have financed replanting firewood species rather than native trees. The government and the private sector have replanted 5,300 hectares since 1985. The loans are to be paid back by collecting logging taxes.⁴⁰

Burkina Faso

Burkina's Forestry Code is found in articles 271-322 of the 1991 Kiti (RAF). Once again, the overarching concept is that of state ownership, subject to permission or licensing of specified uses. It is of note that technically, virtually all arable land is classified as forest, since the term, defined in article 271, includes land where there are trees and land where there are none but where there is intended to be reforestation.

The Code defines the conditions for the classification and declassification of forests, for commercial exploitation and for limited traditional use of forests by established village populations. Generally, administrative discretion is given to the Water and Forestry Service in MET to determine the detailed rules of such use, but the Kiti itself stipulates that any cutting, transport or sale of wood for burning can only be done by those individuals or companies having the appropriate license from the forestry service. This is a substantial limitation, given the prevalent use of wood in small grills and heaters for cooking and household purposes in all of Burkina, urban as well as rural. See articles 297 and 289.

With respect to the continuing problem of bushfires, the current law remains clear: article 314 states that all bushfires are forbidden throughout the extent of the national territory. The law does permit very limited agricultural and traditional fires in forest areas, subject to administrative permission and cautionary steps such as fire-breaks of a specified size (20 meters). See articles 315-318. Every person ordered by either village or government authorities to assist in putting out a bushfire must obey and do so pursuant to article 320.

Despite an apparent softening of actual enforcement, the legal penalties for infractions of the Forestry Code remain considerable. Article 322 stipulates that any infraction of the code can be punished by a fine of 10,000 to 1,500,000 francs or imprisonment of from one month to three years. In addition, restitutions and reforestation efforts can be required as penalties.

Intimately linked to land use questions, these forestry laws and issues they raise are likewise at the core of the environmental situation in Burkina Faso. Given the ecology of Burkina Faso, the primary preoccupation of the French colonial regime, beginning in 1924, was forest classification and use. Likewise, the premier ecological campaigns of contemporary Burkinabe regimes, in both political and sometimes legal terms, have been with reference to forestry and wood use.

The period of the 1970s and the initial fight against desertification saw various national and international efforts to discourage the cutting and burning of trees and to encourage reforestation. Faced with an apparent lack of success, the Sankara regime in the 1980s launched what appears to remain the most noted effort of its tenure: the "trois luttes," or three struggles, against bushfires, wandering animals, and the "abusive" cutting of wood.

⁴⁰ Interview with ASSED and the Ministry of Rural Development.

Legally, this took the form of strong penalties, including some imposed against villages qua villages in cases where bushfires had occurred in their area. According to interviews, such draconian approaches were resisted by some in the Burkinabe judicial system based on its deviation from the basic criminal law notion of individual responsibility. According to others, the authoritarian period of the "trois luttes" saw an actual diminution of uncontrolled bushfires and excessive cutting of forest trees. Today, under less authoritarian pressure, environmental consultants such as Pierre Kabore report that bushfires have again become a major environmental problem in Burkina Faso.

Cameroon

Ordinance No. 73/18 of 22 May 1973, represented the first modern forestry law applicable to the whole territory of Cameroon. This law was replaced in 1981 by a more comprehensive law – Law No. 81/13 of 27 November 1981, portant régime des forêts, de la faune et de la pêche. While following the lines established in the former law, Law No. 81/13 stresses management of natural resources and includes provisions related to national parks establishment, hunting and wildlife, and fisheries. Décret No. 83/169 of 12 avril 1983, provides general forestry regulations to implement Law No. 81/13.

Part I of Law No. 81/13 provides for the joint application of land tenure and government lands legislation as well as the forest law in determining the system of forest ownership. This part also defines forests and forest lands; prescribes general rules for the use of forests, wildlife and fishery resources on public and private land; lists provisions related to the applicable system for collecting duties and taxes; and the status of the national forests and wildlife administration.

Part II of the law addresses the forest domain categories: forest utilization and management, and the promotion and marketing of timber and other forest produce. The definition of forestry domain, however, is ambiguous and subject to abuses. The law defines forest to include all vegetated lands capable of furnishing wood or non-agricultural products, or of providing habitat for wildlife, or of affecting soil, climate, or hydrology. This definition includes natural grasslands and shrublands, which are not tropical forests in an ecological sense.

Chapters 1 and 2 of Title II determine the objectives of forest regeneration, the exercise of certain customary rights in state forests, the procedure for constituting reserved forest areas and for subsequent changes in land-use, the preparation of forest inventories and management plans in state forests and the applicable rules for timber harvesting in such forests. The general regulations, Décret No. 83/169, are principally concerned with forest exploitation and fail to consider sound management practices. Forestry management practices are driven by GOC revenue requirements.

Pursuant to the Forestry Law, "naturally growing trees are owned by the government while trees planted by man belong to whoever planted them." Rural people cannot understand why the government owns trees found on their land, regardless of how they came to be there. This law discourages tree cultivation by farmers.

The fragmentation of responsibilities among the governmental entities with responsibility for the forestry sector leads to waste of resources, implementation delay, and uncoordinated actions. Furthermore, the inclusion of wildlife and fisheries in the law, with no coordinating structure, leads

to a multiplicity of authorities and jurisdictions. The proposed forestry legislation should resolve the jurisdictional conflicts and address the relationships among the forest, the arable soils which the forest produce and retain, and the subsistence needs of peasant farmers. The World Bank is assisting the GOC to reform its forestry and wildlife laws and policies. Furthermore, the United Nations Development Program implemented a study on this subject in the Fall of 1991.

The lack of procedures to include local populations in natural resource management programs represents a serious oversight. The GOC should provide legal responsibilities to local communities for managing forest resources. The Tropical Forest Action Plan (TFAP) that the GOC prepared several years ago was roundly criticized for not taking the needs of the local populations into consideration. The TFAP also failed to engage NGOs and PVOs, to consider biodiversity seriously, and focused too heavily on commercial extraction.

Cape Verde

Cape Verde's forestry law, Décret No. 62/89, differs from most other WCA forestry laws since it is primarily concerned with reforesting a country that is basically void of natural vegetation. One should bear in mind that Cape Verde is a dry archipelagic country with a irregular and short rainfall season (August/September).

Central African Republic

CAR is rich in tropical forests, and is the repository of an exceptionally broad range of forest species. Donor community interest and NGO activity have therefore been strong in this area and have focussed on preservation of this bioasset. As a consequence, CAR's forestry laws have been more fully articulated over time than the laws of any other environmental/natural resource sector.

CAR's forestry law today is encompassed in a Forestry Code, Law No. 90.003, enacted 9 June 1990. This law incorporates provisions from previous codes enacted in 1987 and 1961, respectively: Ordonnance No. 87.037 and Law No. 61.273.

As elsewhere in CAR law, the presumption of the Forestry Code, as specified in articles 1-3, is that of State ownership, but allowances are made for customary village or traditional use with some limited private ownership.

Article 4 establishes 7 categories of public forest lands, ranging from the most protected forest reserves to forests intended for logging under public auspices. Article 13 calls for reforestation for each instance of tree-logging, and article 14 directs the forestry ministry to create and administer forest management plans.

Articles 15-26 provide for regulated customary and "artisanal" use of forests and forest lands. Those provisions appear designed to accommodate the traditional uses of rural citizens, such as the cutting of trees to make pirogues, or river dugout boats, but to oversee such uses and limit them strictly to prevent excessive cutting or burning or commercial exploitation by villagers.

Articles 27-42 govern commercial, or industrial, exploitation of CAR forests, strictly limiting such activities to those legal entities having received appropriate permits from the State, and having produced the requisite forest management plans for their logging activities.

Article 44 provides for full protection of certain species to be identified by a list published by the forestry ministry. Articles 45 and 46 deal with two of the endemic WCA problems, bush fires and wandering livestock. Both are prohibited without special official permission.

Articles 62-67 set forth the procedure by which forest areas are classified, consistent with the 7 categories specified in article 4. Noteworthy is article 65, which requires a public hearing/participation process prior to final classification of a forest area. This process is triggered upon approval by the council of ministers (Cabinet) of the proposed classification. After such approval, for a period of up to 6 months, the forestry ministry must publish by radio and on posters in potentially affected areas, the proposed classification; schedule a public meeting to provide information and receive comments; and designate an official mandated to collect written and oral public comments and to render an advisory opinion.

As article 66 specifies, this process is only advisory, since the Council of Ministers retains the eventual power of decision, but it must take the article 65 opinion under advisement.

The balance of the forestry code provides for taxation of different kinds of logging and forest product activity, and for enforcement penalties. Criminal penalties of up to 10 years imprisonment are provided for certain infractions. (articles 96-100).

Congo

The Congo possesses a rich variety of tropical woods. Timber production and exportation, along with offshore oil production, represent the country's most significant economic assets. The Congo therefore has an extensively developed legal structure for regulating the forestry sector.

The principal law governing forestry is the Forestry Code, Law No. 32/82 of 7 July 1982. This Code extensively amended the prior Forestry Code, Law No. 004/74 of 4 January 1974. Décret No. 84/910 of 19 octobre 1984 is the primary implementing regulation in force pursuant to the Forestry Code, superseding in turn Décret No. 74/188 of 6 mai 1974, which implemented the 1974 Forestry Code.

Three other laws relate to forestry, two of which encourage reforestation and renewal of trees as a natural, and an economic, resource. The first law, Décret No. 89/042 of 21 mai 1989, creates and describes the organization of the National Reforestation Service. This government entity is charged with reforestation efforts throughout the Congo. The second is Law No. 062/84 of 11 September 1984. This law designates March 6 as National Tree Day, on which day every Congolese citizen must plant a fruit or forest tree. Finally, Décret No. 85/728 of 17 mai 1985 sets forth the organization, responsibilities and powers of the Ministry of Forestry, the lead ministry responsible for the forestry industry and enforcement of the Forestry Code.

The Forestry Code itself, Law No. 32/82, and its implementing legislation, Décret No. 84/910, are generally designed to set the terms upon which forest products can be exploited and by whom, which is consistent with the economic importance of the forest products industry to the Congo. Article 1 of the law clearly declares State ownership of forests. The law includes provisions

relating to the classification and protection of certain geographical areas and certain species. Article 3 creates three categories of forests: forests of production, forests of community development, and protected forests. Article 11 also provides that the Prime Minister, upon a proposal by the Ministry of Water and Forests, can create by decree national parks and natural reserves.

Articles 12-14 set forth limited rights of traditional use, such as wood-gathering and harvesting of forest products for village or individual food and traditional uses. Articles 15-21 place additional limits on the cutting or destruction of certain protected species of trees and limit rights of use in national parks and protected forest areas. Article 22 prohibits fire-related activities that pose a risk to forests, such as abandonment of a lighted fire.

Articles 23-46 detail the procedures and policies governing the commercial exploitation of forests, including provisions to maximize the amount of Congolese value-added in forest products destined for export and procedures for acquiring exploitation rights.

Articles 47-57 prescribe the investigative and enforcement powers of forest rangers and other police officers and the procedure to allege violations and enforce the Forestry Code.

Enforcement can include seizure of illicitly produced forest products, as provided for in articles 58-62. The balance of the Code, articles 71-101, is enforcement-related, largely specifying the size of fines and, in certain cases, the length of prison terms for various violations. Of particular note, article 97 provides for derivative liability of parents and teachers in charge of minors or students who commit infractions which damage or illegally exploit forests.

Côte d'Ivoire

The forestry laws are contained in Law No. 65/425 of 20 December 1965, portant code forestier and Décret No. 78/231 of 15 mars 1978, fixe les modalités de gestion du domaine forestier de l'État. The latter law establishes management regulations for the government's forestry lands. The laws differentiate between registered forests and protected forests. While the law prohibits clearing registered forests, such forests can be declassified -- usually for conversion to agriculture. Décret No. 78/231 provides for permanent forestry property and rural forestry property. Permanent forestry property permits both afforestation and harvesting. While the forestry laws are technically adequate, they have not been rigorously enforced.

Gabon

The same organic law creating the Ministry of Water and Forestry, Law No. 1/82 of 22 July 1982, also includes the Forestry Code. Title II of this law, the "forestry domain", including articles 9-31, constitutes the Forestry Code. This code, like other WCA codes examined, basically focusses on sound economic regulation of forestry as an industry. The new Environment Code does not significantly modify the Forestry Code.

Articles 11 and 12 of Law No. 1/82 provide for the creation of classified and protected forests, subject to implementing regulations. Décret No. 184/PR/MEFCR of 4 mars 1987 provides implementing regulations for classification and declassification of forests. This decree constitutes an effort to include rural, community-based participation in forestry management decisions. Article

1 creates a commission in each province with the responsibility to make forest classification and declassification decisions. Article 2 specifies the composition of those commissions, including the requirement that village chiefs serve on the commission. Article 5 provides for formal procedures of public notice and comment on proposals to classify forests. It should be noted, however, that the provision requires written public comments, a severely limiting restriction in the context of Gabon.

Ghana

The forestry legislation is contained in several ordinances, acts, and decrees. The Forestry Ordinance, 30 March 1927(Cap. 157), supplemented by the Forest Reserve Regulations, 1927 (L.N. 31), represents the principle sources. The Trees and Timber Ordinance, 1950 (Cap. 158) and The Protected Timber Lands Act, 1959 (No. 34) complement The Forestry Ordinance. Both texts were replaced by The Trees and Timber Décret, 1974 (NRCD 273); however, several provisions remain in force.

NRCD 273, as amended by PNDCL No. 70, seeks to control the cutting and removal of trees and timber. The Décret mandates the registration of property marks and marking and numbering of stumps and logs as a means of tracing a log to its stump, the locality in which it was felled, and the person claiming title to the tree, and on whose behalf it was felled.

The Trees and Timber Ordinance prescribes minimum girths below which named species of timber trees may not be felled for conversion into timber or bought, sold, or exported unless exempted by the Chief Conservator of Forests. This law is inadequate since only a few species are covered and the legal girth limits do not correspond with or are often lower than the minimum limits the Forestry Department would want to impose for management purposes. The Forestry Department attempts to remedy this situation by providing for stricter terms in timber lease agreements.

The Trees and Timber (Control of Measurement) Regulations, 1960 (L.I. 23), as amended by The Trees and Timber (Control of Measurement) - Amendment - Regulations, 1976 (L.I. 1090), require a Log Measurement/Grading Certificate (LMC) to validate a timber in the round transaction and to transport and export logs. The LMC provides the basis for freight payment and helps in maintaining the quality controls required for logs pursuant to The Trees and Timber (Control of Export of Logs) Regulations, 1961 (L.I. 130). Timber companies with processing capacity have been able to circumvent this law.

The Concessions Act, 1962 (Act 124) provides for the Head of State, acting as trustee for the customary landowners, to grant a tenurial system of leases and licenses for timber exploitation. Since the promulgation of the 1969 Constitution of the Republic, a Lands Commission has exercised this power on behalf of the Head of State. Revenues that accrue from forestry lands and rights on timber and trees are to be collected by the government and disbursed in accordance with the provisions of The Administration of Lands Act, 1962 (Act 123). The Timber Leases and Licenses Regulations, 1962, and The Forest Fees Regulations, 1976 (L.I. 1089), were enacted pursuant to The Concessions Act.

The Timber Leases and Licenses Regulations seek to ensure that the centralized decision-making authority receives information from the region and locality and that the Forestry Department has

the opportunity to comment and advise. These procedures, however, result in a time-consuming, cumbersome lease renewal process. Rather than follow the procedures, some people elect to illegally harvest trees and will commence large scale farming without approval. Furthermore, the Forestry Department performs very little monitoring as to lease compliance. The Forestry Department should also ensure that timber leases prohibit selective logging, which results in the over-exploitation of the better known timber species and the selective removal of the best looking trees. In addition, lease fees should be increased to reflect the true value of the timber to be harvested. Moreover, the GOG's Economic Recovery Program has resulted in an influx of persons into the timber trade and over exploitation of forest resources. The conservation of forests needs to be balanced against the need to generate foreign exchange.

The larger timber processing industries are subject to the provisions of the Timber Operations (Government Participation) Décret, 1972 (NRCD 139) and the forest industry as a whole is covered by certain provisions in The Investment Code, 1985 (PNDCL 116). The Timber Industry and Ghana Timber Marketing Board (Amendment) Décret, 1977 (No. 128) contains important provisions on log exports and on the commercialization of log and forest products. To deter the exploitation of the better-known species and to promote domestic value added in the wood processing industry, the GOG prohibited log form exports of eighteen tree species. This policy prompted the export of lesser known timbers – but has been controversial. The World Bank has proposed through its Forest Resource Management Project a study to review the ban and to look at alternative strategies.

In 1980, The Ghana Forestry Commission Act, 1980 (Act 405), reorganized the governmental agencies in charge of the forestry sector. This law was subsequently repealed in 1982 by PNDC No. 42, which provides for the Commission to act in an advisory nature.

Guinea Bissau

Décret-law No. 4-A/91 provides for protection of existing forests in Guinea-Bissau, from mangroves to dense sub-humid forests. Forest fires and soil erosion are two areas of concern in the law. It prohibits cutting trees in protected areas, such as along the margin of rivers, lakes and reservoirs, and provides for buffer zones to prevent forest fires.

Article 29 prohibits logging from sunset to sunrise. Tree cutting is permitted in agriculture lands or surrounding buildings, as long as the timber is not sold. Likewise, medicinal plants, fruits and firewood may be collected free of charge. Licenses and fees are required for commercial uses and timber exports.

Guinée

The Forestry Code, Ordonnance No. 081/PRG/SGG/89 of 20 December 1989 is further elaborated by a companion implementing regulation, Décret No. 227/PRG/SGG/89 of 20 December 1989. The code was the product of an extensive drafting effort conducted by the Guinéen Government, with the assistance of outside consultants supported by the FAO.

This comprehensive code begins with the legal assumption in article 1 that all forest lands belong to the nation. Articles 2-8 therefore mandates both national and regional forestry plans for the proper management of forest assets.

Articles 9 and 10 codify the institutional responsibility for forestry protection, vesting the administrative authority in the Ministry of Agriculture and Animal Resources (MARA, French acronym), and in the "Direction Nationale des Forêts et Chasse" within MARA.

Articles 11-16 define the system of national forests and their classification. This section of the code grapples with the conflict between the legal assertion of State ownership of all forest lands and the traditional view – widely followed in Guinée – that lands are communally held for local, tribal, and village utilization. The Forestry Code creates three categories of forest "domaines": pure State or National forests that can only be exploited by the State, either directly or under contract with a private party; forests which can be exploited by local villages or "decentralized collectives"; and forests which are not yet classified, and which therefore remain the province of the State to determine the use thereof.

Articles 17-24 set forth the procedural steps involved in classification of forests. Articles 27-54 detail the legal requirements governing the exploitation of forest lands, with detailed prescriptions for licensing of the various activities involved: cutting, transporting and warehousing of wood products. Articles 55-64 add requirements for affirmative actions to protect forests, including the mandate to identify fragile or rare species eligible for special protective attention, and a provision reinforcing those in the mining code and the comprehensive environment law requiring quarries and mines to obtain permits before deforestation of a mining site and subsequently to reforest the site. Articles 65-71 address bushfires and establishes the procedures whereby the Ministry of Forestry will permit fires and the preventive measures required of anyone starting such fires.

Articles 72-76 codify the reforestation programs of Guinée and include provisions to encourage rural villages to reforest by offering financial incentives from eventual harvesting of reforested areas. A field trip to Dubreka confirmed that at the local level, these incentives are being utilized to encourage villagers to participate in reforestation. In return for participating in the reforestation program, a portion of the reforested areas is explicitly available for harvest and sale, upon the trees' maturity, for the villagers financial benefit. In effect, the Government says that if local citizens do not cut down or burn certain protected areas or species, then it will help them raise a cash crop of trees in other specified areas. Fast-growing commercial species such as eucalyptus are being planted, to provide a rapid economic payout for participating villagers.

Articles 77-81 further address the traditional/modern law conflict by codifying certain traditional rights of usage of forest lands by rural citizens already living in or adjacent to forested areas. These usage rights are strictly limited to the basic domestic needs of those villagers, and are not extended to commercial exploitation of the forests.

Articles 82-86 create a national forestry fund, intended for forest preservation. The fund can accept both regular budgeted funds, gifts from private or foreign donors, or other funds.

The remainder of the Code, articles 87-115, concern enforcement and penalties for violations of the Code. The most substantial penalties, of up to 5 years in prison and 300,000 Guinean francs, are reserved for starting illegal forest or bush fires.

Mali

A concentration of power in the hands of the national government and the virtual disengagement of rural people from responsibility over tree management characterize the Forestry Code, No. 86/42. The rural population rejects this Code, believing that it severely restricts the customary rights that landowners and landusers have over the natural resources. The contradictions between the local tenure rules and national tenure laws discourages landowners from planting trees on their land. Landowners fear losing land ownership since the foresters, working for the national government, require them to contact the Eaux et Forêts prior to pruning or felling trees in their own fields and to pay for permits to fell these trees. The lack of secure access to trees, constitutes a disincentive for villages to protect and plant trees on their land and to fight against the desertification process. The Forestry Code fails to clearly designate what rights individuals and groups have to trees located outside of the national forest domain. The Forestry Code should be revised to provide incentives and eliminate disincentives, specifically:

Establish cutting limits by region.

Formulate restrictions governing the use of protected species at the regional level or according to ecological zone in order to take into account the ecological diversity.

Clearly define the public domain and private and village domains.

Reconcile usufruct rights with customary rights.

Introduce special regulations for sylvapastoral areas.

Establish long term government leasing of sylvapastoral areas mandating proper environmental management and reforestation.

Provide for local responsibility for forest management.

Law No. 86/42 requires fuel efficient woodstoves. This law, however, has been criticized as repressive and not containing sufficient incentives.

Niger

The principal forestry laws are: article 30 of 7 July 1935, which regulates forest clearance so as to control soil erosion; Décret No. 70/265, PRN/Dir-Cab of 11 décembre 1970, which charges the Ministry of the Rural Economy with forest and soil conservation; No. 74 of mars 1974, confirms state ownership of trees and land without official owners; and Décret No. 74/226, août 1974, which provides for forest clearance contracts.

The tree tenure rules conflict with the Forestry Code. Tree ownership is closely linked to land ownership. As a rule, a person who owns a parcel of land also owns the trees on the land. Land ownership carries with it the right to plant, prune and fell trees, as well as the right to harvest fruit, bark, and leaves. A key characteristic of local tree tenure rules is that field tree owners can harvest and dispose of their trees and products without obtaining permission from a higher authority. Another key characteristic of local tree tenure is that tree owners are not subject to any

taxes for the use of their products, regardless of whether the products are for domestic or commercial use. Although some villages have "protected" species, generally the only restriction on the use of protected trees or natural resources concerns the felling of live trees without prior approval from village authorities. Most of the time, the restrictions are self enforced and not regulated. Lessees' rights to trees and natural resources are very limited; they cannot for example plant or cut trees without prior authorization of the land owner.

The government's assertion of ownership over field trees represents a greater constraint to agro-forestry extension than the local tenure rules, which generally provide both field owners and borrowers substantial control over trees and their products. Furthermore, revisions since independence to the Forest Code of 1935 have strengthened, rather than diminished, government control over trees. Pursuant to the Forest Code, the government dictates the harvesting conditions for wood, fruit and other products.

Forest agents have considerable discretion in issuing permits. They are empowered to search for, as well as seize, illegally obtained forest products, without first obtaining a warrant from the court. In addition, forest agents can fine and arrest forest law violators.

Article 127 of the Domanial Code declares that all land held under customary tenure and not registered in the name of a non-government entity falls within the government's private domain. As a result, all unregistered land and resources on that land are subject to government regulation. If a person fails to register his land, he has no legal recourse to contest the government's taking of his land. For several reasons, however, people seldom register their land. The expense of registering the land and the lack of notaries contribute to the problem. Furthermore, the people do not believe it is necessary since they follow customary law.

The Ministry of Agriculture and Livestock issued Edict, No. 049 MAG/EL/CNCR of 16 mai 1991, allowing village communities usufruct and development rights to natural forests in the vicinity of their village. This edict represents a major step towards decentralizing the control of natural resources and empowering local populations to manage their resources. However, before this edict can go into effect a new Rural Code must be passed.

Nigeria

The Forestry Ordinance, 1937 (Cap 75); The Forestry Regulations promulgated pursuant to section 46 of the aforementioned Ordinance; The Forestry (Southern Provinces Native Authorities Rules, 1943; The Forestry (Northern Provinces Native Authorities) Rules, 1951; The Timber Revenue Collection (Native Authorities) Rules; as well as the state laws, govern Nigeria's forestry sector. Each Governor is vested with the power to constitute specific land areas within the states as forest reserves. Local governments are also empowered to demarcate their own reserves and establish "communal forestry areas." This legal overlap creates conflicting jurisdictions. As a consequence, abuses of privilege occur and a lack of clear responsibilities exists.

Some of the newly appointed state government Commissioners for Agriculture and Natural Resources have enacted specific regulations to monitor and control the cutting of natural forest for the timber trade. For example, the Commissioner for Agriculture and Natural Resources in Cross River State issued regulations deeming it unlawful for any person or association to deal in the timber trade and undertake or engage in retail trade in sawn timber of any size, unless they are registered with the Forestry Division in Cross River State.

These regulations contain penal provisions for offenders who traffic in illegal timber. The penalties include both fines and imprisonment, with the terms varying from state to state. Some state regulations include penal provisions for any Forestry Division staff who issues permits for the transport of illegal timber.

Nigeria is in the process of preparing a TFAP. Criticisms of Nigeria's TFAP are similar to the criticisms raised with TFAPs in other countries, specifically: too much emphasis on commercial forestry and not enough on community forestry and conservation, and the failure to consider adequately the role of forestry in the country's renewable natural resource sector.

Sénégal

Sénégal's forestry law, like that of other francophone WCA countries, can be traced back to the French colonial law of 1935. Two laws now provide the basis for forest management. No. 74/76 of July 1974, which repealed No. 65/23 of February 1965, provides the Forest Service with broad police powers and specifies punishments of fines and imprisonments. Décret 65/078, 10 février 1965, establishes definitions and methods of operation for the Forest Service to follow in implementing the Code. Décret No. 70/265, PRN/DIR-CAB of 11 décembre 1970, charges the Ministry of Rural Economy with soil conservation.

The Gambia

Tree tenure consists of a bundle of rights which may be held by different people at different times. In this regard, the following four major categories have been identified: the right to own or inherent trees, the right to plant trees, the right to use trees, and tree products and the right to dispose of trees. Consequently, a property of trees comprising all four categories of rights can only be obtained if the trees are a product of someone's labor and in conformity with Islamic property law.

The GOTG and the Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) GmbH have established the Gambian-German Forestry Project. This project has established three pilot community forestry projects, whereby common property rights have been conferred to local communities. To date this project appears to be a success, as evidenced by the fact that no bushfires have occurred in the pilot communities. The legal documents implementing this project could serve as a model for future community forestry projects.

The Forest Act, 1977 (No. 9) and The Forest Regulations, 1978 (L.N. No. 12) promulgated pursuant to Section 30 of The Forestry Act constitute the primary forest legislation. Part III of the Act prescribes the procedures the minister must follow to designate forest parks and protected forests. In particular, paragraph 10(d) provides for granting groups and communities extended tree tenure rights. Pursuant to paragraph 10(e) the minister shall appoint a Reserve Settlement

Officer (RSA) to determine the nature and extent of any property rights claimed in the designated forest park. For purposes of this inquiry, the RSA shall have judicial powers.

Part VI of the Act prescribes the legal proceedings to follow to enforce the Act. Forest officers and police officers have extensive police powers to enforce the Act. Convictions can result in fines, imprisonment, and forfeiture.

The Forest Regulations contain provisions on controlled burning, licenses to exploit forestry produce, permits, minimum girth sizes, and royalty per tree. Transit passes are required to transport forest produce; however, very little inspection takes place to determine if the transit passes are in order.

5.3 Protected Areas and Wildlife⁴¹

The concept of protected areas has grown far beyond the limited concept of a national park to now encompass a variety of distinct areas. Protected areas can provide land managers and decision-makers with a broad array of legal and managerial options for conservation management. The options for protected areas range from creating national parks and reserves with the objective of full protection for unique ecosystems, to areas of intensive use with no protection. In between these two extremes there can be a variety of uses -- such as wildlife, animal husbandry, and agriculture.

Protected areas in the WCA countries will have to play a far more intensive role in these countries social and economic development than is usually the case in the developed countries. Innovative mechanisms, such as the campfire program in Zimbabwe, need to be developed to involve local peoples in designing protected areas and ensuring that they benefit financially from the protected areas.

Each country will have to design a system of protected areas, which corresponds to its own resources and requirements. In defining protected areas, a country may find useful the ten categories developed by the International Union for the Conservation of Nature. These categories include: Scientific Reserve/Strict Nature Reserve, National Park, Natural Monument/Natural Landmark, Managed Nature Reserve/Wildlife Sanctuary, Protected Landscape or Seascape, Resource Reserve, Natural Biotec Area/Anthropological Reserve, Multiple Use Management Areas/Managed Resource Areas, Biosphere Reserves, and Natural World Heritage Sites.

Laws related to the protection and conservation of wildlife species should be complimentary with the laws for protected areas. The latter laws provide a useful tool for protecting species because of the habitat protection afforded. Wildlife law differs from protected area law, since wildlife law governs activity both inside and outside protected areas. Some countries may rely primarily on protected area legislation for wildlife protection.

Wildlife laws primarily address three issues: (1) the regulation of taking; (2) domestic trade, possession and transport; (3) international trade. The regulation of taking can include: total legal

⁴¹ See "IUCN Directory of Afrotropical Protected Areas;" and McNeely and Miller, "National Parks, Conservation, and Development: the Role of Protected Areas in Sustaining Society."

protection of species, taking with some regulation (i.e., hunting restrictions), and species which receive no protection. In regards to domestic trade, possession and transport, issues to consider are whether possession and/or national trade in that species is prohibited or regulated -- or whether an exception is made in the legislation as to the regulation or prohibition of national trade in or possession of animals belonging to a certain taxon.

The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and the African Convention for the Conservation of Nature and Natural Resources have served as catalyst to the WCA countries to pass wildlife legislation.

Benin

Law No. 87-014 governs protected areas and wildlife, by providing for habitat protection and hunting. This law seeks to safeguard sensitive ecosystems and vulnerable species. Wildlife management regulations are in the process of being formulated.

The 1993 Forestry Code, Law No. 93-009, specifies the terms for classification and declassification of forests (see forestry section). Articles 58 and 59 of this Code address the related problem of wandering or unpinned domestic animals, the presence of which in classified forests is forbidden. Parks and forest reserves have been created but implementation has proven difficult. Population pressure has caused the decrease in actual sizes from initial delimitation.

Burkina Faso

Protected Areas. Protected areas in Burkina Faso are in three categories: National Parks, Wildlife Preserves, and Classified Forests. The specific boundaries of the areas to be included in any of these categories are determined by administrative authorities pursuant to the Forestry Code, which is cross-referenced in the Wildlife Code (see forestry section).

At present, according to the NEAP inventory, Burkina now has a total of 3.8 million hectares of land in those three protected categories, with 390,000 hectares (10 percent of the protected total) in national parks, 2,545,000 hectares (67 percent) in wildlife preserves and 880,000 hectares (23 percent) of classified forests.

Wildlife. As with land and forests, under Burkina law all wildlife and fish are subject to a code of protection/exploitation characterized by state ownership of all such natural resources, subject to licensed use/taking by individuals.

Articles 323-382 of the RAF: Kiti AN-VIII-0038 constitute the Hunting and Wildlife Code. Again, all wildlife belongs to the state and its hunting or exploitation is subject to strict regulation.

Several distinctions are made in the regulations between types of hunting activities. Sport, subsistence, commercial, and scientific research hunting are distinguished. See articles 341-345. Methods of hunting are distinguished, and killing of young animals of specified ages is forbidden, as is night hunting. See articles 367-370, 382.

Three categories of hunting, corresponding to the protected nature of the species, are designated: small game, "medium" hunting, and big game hunting. It is noteworthy that article 347 provides

for three types of permits: one for Burkinabe nationals, one for resident foreigners, and one for tourists.

This segmentation of hunting licenses allows for the quota system which is now in place. The hunting authorities grant permits for specified numbers of animals to each of the three categories of permit-holders, during each hunting season, depending on the size of the available animal population. Field interviews suggest that there may, however, be an inadequate information base for the authorities to know the precise size of certain animal herds. In that case, over hunting could be permitted even under a quota system.

Penalties for hunting violations range from fines of 10,000 to 1,500,000 francs and imprisonment of from 3 months to 2 years, with provision for confiscations and restitutions as well. See article 381-382.

Cameroon

Protected Areas. Officially constituted state forests fit within the following categories: production, protection and recreation forests; integral nature reserves and national parks; wild animal and plant sanctuaries; and state game ranches. Local council forests are constituted by decree for the benefit of local councils, or originate from forest plantations made by these entities. Individuals may plant private forests on land owned in compliance with the applicable land tenure legislation. All other forests are communal forests. The forest produce in communal forests, with the exception of produce from trees planted by private individuals or local councils, belong to the government. The government, however, may grant timber harvesting rights, pursuant to conditions determined by the regulations, to the local population.

To protect habitats, the law provides for several types of legally protected areas: integral or total reserves, partial or special reserves, national parks, and wildlife preserves. Despite these categories, legally protected areas are limited. While there are nine wildlife reserves, two have been destroyed, one degraded over fifty percent, one open to timber concessions, and one is being declassified.

Wildlife. The GOC follows several strategies to protect wildlife, which is experiencing a serious decline. Part III of the Forestry Law, No. 81/13 of 27 November 1981, contains provisions regarding the exercise of hunting rights and wildlife conservation and management. The GOC controls hunting by: requiring a license, regulating the use of products derived from hunting, prescribing seasons, regulating the detention of wild animals, limiting customary hunting rights, and banning certain hunting procedures. Wildlife species are now classified into three categories, the first being totally protected.

Cape Verde

Protected Areas. Only a few uninhabited islets have received legal protection in Cape Verde. In 1990, Law No. 79/III/90 declared as natural reserves the islets of Rombo, Raso, Branco, Baluarte, and Curral Velho. This represented the first step toward the establishment and management of protected areas in the country.

INIDA has identified sixteen areas to receive immediate protection as natural reserves, because of their special scenic attributes and their endangered flora and fauna.⁴² Initiated in 1986, this effort included the participation of several other national institutions, such as the Ministry of Infrastructure and Transportation and the Ministry of Education, as well as local NGOs (ADAD and AAN) and municipalities. Financial and technical support have been provided by the International Council for Birds Preservation, the Institute of Taxonomic Zoology (University of Amsterdam, The Netherlands), the National Natural History Museum (Leiden, The Netherlands), and the Portuguese National Park Service (Serviço Nacional de Parques, Reservas e Conservação da Natureza - SNPRCN).

Project implementation commenced in January 1993 and will conclude in December 1995. This project proposes legislation to establish and to manage the protected areas that have been identified and to protect endangered species. INIDA has itemized a list of birds, reptiles, and plants for this purpose. An environmental awareness program for local communities represents an important component of the project.

Wildlife. The 1993 National Environmental Policy Act, article 4 (d) (e), includes as its objectives the preservation of biodiversity and habitat protection through the creation of parks and other protected areas. Articles 15 and 16 provide guidelines for subsequent specific regulations for flora and fauna conservation. These guidelines basically call for severe controls as to processes that hinder the natural recovery of the flora; protection of endangered species; recuperation of natural habitats; commercialization of terrestrial or aquatic animals; introduction of exotic species; and the use of substances that might cause wildlife damage.

Central African Republic

CAR has a Wildlife Protection Code, Ordonnance No. 84.045 enacted in 1984. Article 1 establishes the presumption of state ownership of wildlife, noting that wildlife is "an integral part of the national patrimony and it is the duty of each citizen to seek to preserve it."

Articles 2-22 codify three of the same seven categories of protected areas provided for in the forestry code (see forestry section). Article 18 vests the minister with jurisdiction over wildlife with the responsibility to hold a public hearing/comment process which is the same as that found in article 65 of the Forestry Code.

Articles 27-28 provide for full protection of certain species, listed in a published annex to the code. Article 29 likewise provides for listing of partially protected species, while article 30 stipulates that "ordinary game," listed in a third annex, can be hunted at will so long as the hunting is done in conformity with prevailing regulations.

Article 34 provides for full state control over hunting, stating that no hunting can be done except as licensed by the State or as traditional hunting subject to the traditional hunting limitations comprised in articles 35-39 of the code.

⁴² See Cape Verde. INIDA, 1992; and SNPRCN, 1993. Birdlife International and INIDA have recently published a booklet on "Aves de Cabo Verde" (Birds of Cape Verde) to raise environmental awareness and, thus, prevent further environmental degradation.

Articles 105-120 provide for enforcement, including penalties of up to a year in prison, fines, and confiscation of hunting proceeds.

Congo

The Congo has a series of laws governing the protection and, at the same time, the partial exploitation of its wildlife and special Equatorial biospheres. These laws, taken together, reflect the Congolese effort to reconcile the short-term commercial possibilities of a unique inventory of flora and fauna and their long-term preservation.

Administratively, the overall environmental protection law, Law No. 023/91, enhances the environmental emphasis in this area. Title II, articles 11-20 of this law, provides a chapter on protection of fauna and flora. Articles 11 and 18 mandate the creation of protected areas, identify partially or completely protected species, and charge the Ministry of Environment and the Ministry of Forestry with joint responsibility. Article 15 outlaws bushfires (already proscribed under the Forestry Code).

While the Forestry Code includes provisions relating to the creation of protected forests and national parks, the core law governing protection of wildlife is the Wildlife Code, Law No. 48/83 of 21 April 1983, "which define(s) the conditions for conservation and exploitation of wildlife." Article 1 of the Code, like other Congolese codes, sets forth the legal premise of State ownership of all wildlife of potential interest for tourism, hunting, or consumption. Article 2 establishes three classes of wildlife: completely protected, partially protected, and unprotected.

Articles 3-35 of the Code set forth the rules and conditions for all types of hunting, study, and photography of wildlife. Tourism and hunting are permitted pursuant to governmental control and with the revenue going to the state. Of particular note is the provision specifying that photographing and filming wildlife is considered a "provocation" to wildlife. Therefore, article 26 requires even those engaged in photographic safaris to obtain a hunting license and to be accompanied by a qualified hunter able to kill an animal that attacks any person. Proof of self-defense in the killing of an animal and the payment of the relevant tax for its taking is required in such cases.

Articles 36-47 outline the measures intended to protect wildlife. Article 36 assures wildlife protection by three means: classified hunting zones; quotas on the animals authorized for hunting; and the prohibition on certain types of hunting – such as hunting at nighttime, hunting with military weapons, using automatic or semi-automatic firearms, and exporting rare or endangered species.

Articles 48-79 elaborate the procedural and penal terms under which infractions of wildlife are categorized, pursued, and punished. Major infractions or "delits", pursuant to articles 60-61, carry fines of 10,000 to 5,000,000 francs CFA and two months to five years imprisonment. Articles 62-70 authorize the confiscation of illegally taken game and of arms, ammunition, vehicles, and other items used in such illegal hunting.

Of particular note, articles 80 and 81 of the Wildlife Code provide that a portion of the taxes on wildlife exploitation – including the fees from the sale of hunting licenses and permits, entrance fees from national park visitors, and special taxes for the taking of crocodiles – are to be deposited in the special natural resources management fund. This fund, created by Law No.

005/74 of 4 January 1974 and Décret No. 76/398, of 23 October 1976, provides a separate account for funds dedicated to the creation and management of special preserves for forests, wildlife, and fisheries.

Finally, a series of decrees over time have created and given the geographical delimitations of those special preserves in the Congo. The first such decree appears to have been Arrêté No. 3037 of 13 août 1938, under which the governor-general of French West Africa declared a reserve known as the "Patte d'Oie" forest within the commune of Brazzaville, an area of 240 hectares, to be a forest preserve. A portion of that preserve remains today as a zoological park in Brazzaville. The most recent proclamation of a protected area occurred during in the fall of 1993, with the creation of the previously discussed National Park of Nouabale-Ndoki.

Côte d'Ivoire

Wildlife. The Décret of 5 août 1965, protects fauna and prescribes restrictions on hunting. Order No. 3 of 20 February 1974, subsequently banned hunting nationwide. Hunting by tourists and administrative slaughtering for special reasons is still permitted. The ban on hunting has not been observed and Ivorian fauna has decreased drastically nationwide. The Government is currently considering new legislation to permit hunting in a sustainable manner.

Gabon

The basic legal code governing both protected areas and wildlife is Law No. 1/82 of 22 July 1982. The Wildlife Code, found in title III, contains provisions governing both the protection of wildlife and the creation and governance of protected areas such as national parks.

This law attempts to limit the taking of wildlife so as to ensure the long-term maximization of wildlife as a source of ongoing revenue – from taxes, permit fees, and potential tourism. Most of the Wildlife Code, articles 32-67, is devoted to detailing the regulatory aspects of the wildlife ecotourism and hunting. These regulations include limits on the type and amount of hunting, such as bans on night hunting, pursuant to article 52, and efforts, pursuant to article 51, to recognize the traditional rights of village-based hunting.

Articles 34-40 provide a legal definition of the various types of protected areas in Gabon, including wildlife reserves, wildlife sanctuaries, national parks, zoological gardens, and hunting preserves. Articles 42-46 prescribe the legal requirements surrounding the management and protection of wildlife in these protected areas.

The new Environment Code also addresses protected areas and wildlife. Chapter 5 of the Code, articles 22-26, refer to wildlife protection. Article 23 is particularly noteworthy. It prohibits, absent prior authorization of the ministry with responsibility for the environment – currently the Ministry of Water and Forests – any industrial, agricultural, or other activity which threatens wildlife or their habitat. The Environment Code also addresses protected areas in articles 27-29 and prohibits, pursuant to article 29, the undertaking of activities which might degrade or change the original nature of the countryside or the landscape.

Ghana

Protected Areas. The Wildlife Reserve Regulations, 1971 (LI 710), as amended, establish wildlife reserves by name and boundary description. The Ghana Forestry Commission Act, 1980 (Act 405), reproduces all previous provisions of this law with modifications as may be required according to the new Act (sections 8 to 12). These laws fulfill Ghana's obligations under the African Convention on the Conservation of Nature and Natural Resources to establish, maintain, and extend conservation areas.

The Regulations designate four types of reserves (National Parks, Strict Nature Reserves, Wildlife Sanctuaries, and Game Production Reserves) but fail to provide definitions. All reserves receive the same degree of protection relating to entry (subject to authorization by the Chief Game and Wildlife Officer), flora and fauna protection (hunting, capture, destruction, and collection prohibited except with the written consent of the Chief Game and Wildlife Officer) and protection of their amenities. Nevertheless, legal distinctions should be established for the reserves so as to provide protection against management authorities. For example, the authorities should not be able to de-reserve a National Park or Strict Nature Reserve as easily as a Game Production Reserve or introduce non-native animals into National Parks or Strict Nature Reserves, as can be done in Game Production Reserves.

Several problems arise with this law. People may not receive fair and adequate compensation for their land when it is expropriated to establish a reserve. Secondly, the law and related policies fail to provide roles for the local communities in managing the reserves. Funds generated by the reserves should go to the people in the community.

The Forests Ordinance, 30 March 1927 (Cap. 157), as amended by The Forest Protection (Amendment) Law, 1986 (PNDCL 142), prescribes the following procedure for establishing a forest reserve:

The Central Government must provide notification in the Gazette of its intention to create a specifically delineated forest reserve and appoint a Reserve Settlement Commissioner (RSC).

The RSC must publicize, in the vicinity of the proposed reserve, the Government's intention to create the reserve.

The RSC must hold a public enquiry to receive and consider evidence relating to the existence of rights over the proposed area.

The RSC must issue a judgment incorporating his findings and recommend areas to be constituted, the rights to be admitted and rights to be commuted for cash payment.

A final Order must be published in the Gazette delineating the forest reserve area and establishing the nature and extent of the admitted rights.

This procedure provides for limited public participation and considers property rights. Section 18 of The Forest Ordinance stipulates that the constitution of a forest reserve shall not alter the ownership of the land. It offers an option for the management of such reserves, either by the

owners under the direction of the forest service, or by the government for the benefit of the owners. Thus The Forest Ordinance provides for the involvement of local communities in managing the reserves. The Forest Improvement Fund Act, 1960 (No. 12) supports this policy and allows channelling of payments from timber harvesting and other fees, which are due to the customary land owners, as well as grants and other payments from the government, into the established forest improvement fund. However, the need for providing a greater role for peoples and communities in establishing forests and tree cover and in managing the forests should be emphasized.

The majority of The Forest Ordinance's offense-creating sections, sections 22-33, have been repealed and replaced by The Forest Protection Décret, 1974 (NRCD 243). The Forest Ordinance, nevertheless, still contains an important provision. Pursuant to section 16(8) of The Concessions Act, 1962 (Act 124), The Forest Ordinance "shall apply mutatis mutandis⁴³ to any land outside a forest reserve in respect of which rights relating to timber or trees have been or shall be granted." Actions that within forest reserves could be prosecuted as constituting offenses under NRCD 243 as amended by PNDC 142 (i.e. felling, removal, destruction of trees or timber without written authority of the competent forestry authority) have been successfully prosecuted when done in areas subject to timber leases and licenses outside forest reserves. In this regard, greater attention needs to be paid to tree and timber protection outside the reserves.

Pursuant to Part II of The Protected Timber Lands Act, 1959 (No. 34) certain timber-carrying lands have been proclaimed Protected Areas with protection similar to that given forest reserves, thus providing temporary protection to areas with a good stocking of timber trees.

Wildlife. The Wild Animals Preservation Act, 1961 (Act 43), provides the principal legislation governing wildlife conservation. The original spirit of the Act sought to preserve wild animals useful or inoffensive to man, to reduce nuisance or offensive species and to establish game reserves. The first schedule of Act 43 listed completely protected animals – such as elephants and birds used in the plumage trade. The fifth schedule listed nuisance species – such as lions, leopards, pythons, and crocodiles. Fortunately, the Act has been amended and these schedules replaced.

The regulation making powers contained in section 11 provided authority to steer the Act in a new direction. The Wildlife Conservation Regulations, 1971 (LI 685), as subsequently amended by LI 1284 of 1983 and LI 1357 of 1988, now focusses on conserving wildlife, i.e. flora and fauna, and the degree of threat or endangerment to the species and not whether the species is dangerous or offensive to humans. The regulations establish a system of permits and certificates for regulating international trade in endangered wildlife species so as to comply with Ghana's CITES obligations. The laws, however, overemphasize wild fauna and fail to provide adequate protection for wild flora. The schedules in Act 43 only cover fauna. Clear legal provisions authorizing flora protection are needed.

⁴³ Mutatis mutandis - (Latin) With the necessary changes in points of detail, meaning that matters or things are generally the same but to be altered when necessary, as to names, offices, and the like.

Section 11 also provides for establishing regulations to cover such matters as: hunting seasons; establishing reserves; and restrictions or prohibitions on the use of nets, pits or enclosures, guns, traps and snares, and explosives for hunting animals.

Act 43 charges game officers with enforcing the law. They may arrest without warrant any person whom they reasonably suspect to have violated provisions of the Act.

Guinea Bissau

Protected Areas. Guinea Bissau has no legislation concerning protected areas. Numerous drafts have circulated among different organizations as basis for developing a National Park and Protected Areas Bill. These provide for definition of different types of protected areas and management arrangements. One of these drafts also combines the institution of protected areas and wildlife conservation and management.

Nevertheless, Décret No. 21/80: "Arquipélago de Bijagós, Ilha de Cofra, Lagoa de Cufada, Mata de Cantanhez, Rio Geba/Rio Mansoa, Sector Administrativo de Boé" created six wildlife reserves. Hunting is prohibited in these reserves.⁴⁴

Some of these areas are being considered for the establishment of national parks in the IUCN coastal zone plan. This plan suggests the creation of national parks for mangrove protection in an area known as "Tarrafes do Rio Cacheu"; for biodiversity preservation, the Islands of Orango, in the Archipelago of Bijagós; for waterbasin and forestry protection the "Lagoas de Cufada" and the sub-humid forest of the "Matas de Cantanhês." The Archipelago of Bijagós is being considered for a biosphere reserve.

Guinée

Guinée's environmental law, Ordonnance No. 045/PRG/87, addresses wildlife protection in articles 48-57. The law, pursuant to articles 4-51, calls for all activities which might have an impact on animal populations to be regulated by the State. This chapter of the law also provides the legal basis for the system of classification of national forests and parks, which is further elaborated in the Forestry Code (see forestry section). Of note is article 53 which requires a public hearing process prior to any decision to create a national park.

Guinée's wildlife laws are further detailed in the Hunting and Wildlife Code, Ordonnance No. 007/PRG/SGG/90, enacted 15 February 1990. This code implements Guinée's signatory obligations under the 1968 African Convention on Conservation and the 1973 Convention on Endangered Species.

The Wildlife Code creates six different types of protected areas: national parks, natural animal reserves, managed reserves, special wildlife sanctuaries, special hunting preserves, and open hunting zones. Furthermore, the Code defines the limits on activities within each area which might negatively impact either protected species, their habitats or the entire ecosystem intended for protection. Article 30 makes clear that all areas of Guinée not designated in one of the first

⁴⁴ See WCMC, 1991.

five protected categories are open hunting zones where hunting for food and recreation are permitted.

Articles 31-51 establish three categories of species, those which are completely protected, and which cannot be hunted or captured or have their young or their eggs taken (article 36); those partially protected, for which hunting is to be regulated and limits imposed (article 45); and those not protected, which are subject to unrestricted hunting (article 50). Annexes to the Code provide the specific list of those animals which are either fully or partially protected.

Articles 52-99 detail the system of licensing for all forms of hunting, and the regulations which govern hunting activities. The Code differentiates among large and small recreational game hunting, scientific hunting/capture of animals, commercial hunting and bird hunting. Articles 125-161 codify enforcement procedures, vested in forestry and hunting rangers, who are granted considerable powers of investigation, pursuit and eventual confiscation of illicit hunting proceeds or weapons, vehicles or other material used in illegal hunting activities. In addition to those penalties, articles 150-161 prescribe criminal penalties for various infractions. Prison terms for most hunting violations range from three months to a year, with fines ranging from 30,000 to 150,000 Guinean francs.

Mali

Wildlife. All the legislation and codes dealing with wild natural resources and biodiversity are under a national review. The Wildlife Management Code (Code de la Chasse), Law No. 86/43, needs to update all the species, especially as it pertains to larger mammals, and formulate new rules for hunting.

Niger

Wildlife. The Décret of 18 novembre 1947, modified by the Décret of 21 decembre 1954, concerns the protection of fauna.

The Décret of 27 avril 1954, concerns the protection of wildlife reserves and national parks.

Law No. 28 of 1962, regulates hunting and lists protected species. Décret No. 101 of 1966, prohibits hunting of birds except with traditional weapons. Décret No. 64/97 of 1972, subsequently banned hunting.

Décret No. 122 of 1964, prohibits marketing or export of products from wild animals.

The GON is considering a new hunting code which would implement the government's obligations mandated by various international conventions. The code would seek to provide a national model for managing and conserving renewable wild natural resources for the benefit of rural people while providing the government and the private sector with the capacity to administer and contribute to the code's goals. The code would seek to:

Conserve the natural habitat and biodiversity of Niger.

Enhance the capacity of the private and public sector to manage and conserve natural habitat and renewable wild resources.

Enhance public understanding of the importance of conserving natural habitat and wild resources.

Provide incentives for rural people to manage wild species.

Provide rural communities with the capacity to manage wild species in a sustainable manner.

Ensure that rural people realize an equitable share of any benefits derived from their positive action in order to ensure their participation in the code's enforcement.

Nigeria

Protected Areas. The National Park Décret, 1991 (No. 36), established five national parks and contains provisions pertaining to nature conservation. Section 35 authorizes the National Park's Governing Board to make regulations to manage the parks.

The Natural Resources Conservation Council Décret, 1989 (No. 50), establishes the Natural Resources Conservation Council (NRCC) to coordinate matters concerning the conservation of natural resources. The Décret vests the NRCC with the power to designate sites and species of conservation interest and to take fiscal measures to encourage conservation of natural resources.

Wildlife. The Wild Animals Preservation Act, 1916, and The Endangered Species (Control of International Trade and Traffic) Act, 20 April 1985 (Cap. 108), prohibit and control the hunting and trading of endangered and threatened animal life. The latter Act implements Nigeria's international obligations as established by CITES. Nigeria also signed the African Convention on the Conservation of Natural Resources and along with Cameroon, Niger, and Chad ratified an Agreement on the Joint Regulation of Fauna and Flora on the Lake Chad Basin.

The Endangered Species Act lists ninety rare and threatened fauna. The Act absolutely prohibits the hunting, capture, or trade of fauna listed in Schedule 1, whereas fauna listed in Schedule 2 may be hunted, captured, and traded if an individual has a license issued pursuant to the Act. With regard to flora, however, a major deficiency appears -- since no separate national legislation of specific species, either rare or threatened, exists. The Act applies to species-oriented rather than spatially-oriented fauna. The wildlife laws concerning fauna emphasize protection and the regulation of hunting. These laws omit management of wildlife resources, including habitat conservation, from their purview.

Those states which have enacted legislation similar to The Endangered Species Act offer the only examples of wildlife laws being enforced. Since the Act is a federal law, the states do not have jurisdiction to enforce it and thus need their own legislation.

The Gambia

Protected Areas. Section 6 of The Land Provinces Act, 1966, empowers the Minister to declare forest parks and make regulations for the protection, control, and management of forest parks and protected trees outside of forest parks. Section 24 of the Act provides for the acquisition of land for public purposes. Control over all other forest land remains under the local authorities, who are also held responsible for fire control. However, all naturally grown forest products are owned by the government. Pursuant to section 6 of The Land Provinces Act, the following subsidiary legislation has been promulgated: Provinces' Land Regulations, 1952, Provinces' Lands Protected Tree Regulations, 1952, and Declaration of Forest Parks 1952-1954.

Wildlife. The most relevant wildlife laws are The National Environmental Management Act (NEMA), 1987 (Cap. 72.01); The Wildlife Conservation Act, 1977 (No. 1); and The Wildlife Conservation Regulations, 1978 (L.N. 36). The NEMA gives effect to the African Convention for the Conservation of Nature and Natural Resources and makes each minister responsible for implementing the Act. Section 5 of NEMA authorizes the responsible ministers to "make regulations for monitoring the state of the natural resources and the impact upon them of development activities." To implement the NEMA, section 6 establishes the Natural Environment Management Council (Council). The Council receives advice from the Advisory Committee on the Management of the Natural Environment.

The Wildlife Act prohibits the hunting of wild animals, except with a hunting license. Section 16 authorizes the Minister to prescribe, by regulation, the form and conditions of the licenses. Occasionally, the Conservation Department confiscates illegally held animals; however, the Department lacks the staff to enforce effectively the existing legislation. Part III of the Act charges the Minister with designating, with the approval of Parliament, national parks, national reserves, and local sanctuaries. The Act prohibits hunting and trapping within the parks and reserves and authorizes the Minister to make regulations to manage the parks and reserves.

The Banjul Declaration and various pieces of legislation express the GOTG's commitment to the preservation of its fauna and flora. The GOTG has demonstrated this commitment by setting aside park areas which are large compared to its Sahelian neighbors. The Kiang West National Park Order, 1987, established the 10,000 hectare national park in the Kiang West Division, which includes woodland and riparian habitats. The Wildlife Conservation Order, 1978, established The River Gambia National Park. The GOTG, however, lacks adequate resources to maintain Kiang West and The River Gambia National Parks, let alone establish new parks. Nevertheless, the critical need exists to establish a park along the coast to protect and encourage the varied avian fauna.

5.4 Coastal Zones and Fisheries⁴⁵

Coastal zones are the interface or transition space between two environmental domains -- the land and sea. To address the environmental protection and natural resource management issues that arise in coastal zones, the concept of integrated coastal zone management (ICZM) has been

⁴⁵ See Sorensen and McCreary, "Coasts: Institutional Arrangements for Managing Coastal Resources and Environments;" and United Nations Department of International Economic and Social Affairs, "Coastal Area Management and Development."

developed. ICZM has been defined as a "process in which a coordinated strategy is developed and implemented for the allocation of environmental, socio-cultural, and institutional resources to achieve the conservation and sustainable multiple use of the coastal zone." The WCA countries have had relatively little experience with ICZM.

In addition to oil and gas development, coastal zones provide good locations for industrial activities for obvious reasons of access, supply, market, and waste disposal into the sea. The unique characteristics of a coastal zone environment, however, pose special considerations which must be taken fully into account. The interconnection of important coastal-dependent economic sectors such as fisheries and tourism must be balanced against industrial development. Consequently, coastal zone laws need to be drafted to reflect different types of uses and the different types of environments (i.e., wetlands, mangroves).

When drafting coastal zone legislation there first needs to be an inventory of all the activities concerned, all the legal provisions applicable to the area, and all the related administrative agencies with jurisdiction over coastal zone matters. Given the special nature of coastal zones, a broad spectrum of elements should be taken into consideration when formulating laws and policies. Horizontal links should exist among the various agencies enforcing the numerous single-purpose laws; alternatively, a central coordinating unit could ensure consistent implementation of decisions by all agencies concerned.

A variety of legislative mechanisms are available to address coastal zone issues. Some legislative measures are designed for planning purposes, i.e. regulations on zoning and the imposition of building prohibitions or land acquisition, as methods of controlling urban development in coastal areas. Some are designed to deal with critical situations in certain sections of the coast, particularly because of mining or petroleum exploitation or tourism. Others have as their goals conservation, preservation, or protection in coastal areas. Laws to establish nature reserves and sanctuaries, or to prevent oil pollution are examples of this type. In regards to the latter issue, some of the WCA countries' marine legislation relates to oil pollution control and ratifies the 1952 International Convention on the Prevention of Pollution of the Sea by Oil.

The WCA coastal states have expanded seaward their resource jurisdiction. The concept of an exclusive economic zone (EEZ), as proposed by the U. N. Conference on the Law of the Sea, has become increasingly popular. Issues associated with the exercise of jurisdiction over the extended resource area are maritime traffic, pollution, scientific research, customs and immigration, and fisheries. Pursuant to their treaty obligations, the WCA signatory countries need to undertake inventories of EEZ resources, which will lead likely to new fisheries legislation.

Fisheries pose a critical resource management issue for the WCA countries, since fisheries play an important role in the economies and diet of the coastal countries. Fisheries legislation should be based on a scientific determination of the total catch allowable without depleting the stock and a country's capacity to harvest sustainably, particularly if foreign fishing vessels are permitted to harvest in the EEZ. Fisheries legislation and subsidiary legislation need to address such issues as: licensing, fishing vessels and equipment, species and quotas to be caught, seasons, areas of fishing, the type and size of fishing gear that may be used, training of personnel, transfer of technology, enforcement procedures, and conservation of living resources.

Benin

As one of the WCA coastal nations, Benin also has a separate, but somewhat dated, merchant marine law which covers some aspects of coastal zone protection, but not all. A new waterways code is now being prepared.

Ordinance No. 68-38 is the Code governing marine waterways and their commercial use. This law has some notable lapses, including the absence of measures to regulate pollution related to oil exploration and production and the disposal of toxic wastes in marine areas. According to a UNDP report on the proposed new Environment Code, a new marine law is being drafted.

Burkina Faso

Burkina Faso is a landlocked nation and has no coastal zones. It is, however, a major component of the watershed system of Western Africa (see water section below) and it does have a regulated system of fishing rights.

Articles 383-417 of the Reorganisation Agraire et Fonciere (RAF): Kiti AN-VIII-0038 form the Fishing Code, and make a distinction between fishing and fish farming, with both subject to regulation and licensing, including fees for permits. Article 417 sets forth penalties for any infraction of from 5000 to 300,000 francs CFA or imprisonment for one month to one year, and also provides for confiscations and restitution penalties.

Cameroon

Coastal Zone. Marine and coastal waters are governed by Décret No. 85/1278 of 26 septembre 1985, regulating harbor areas and Law No. 83/16 of 21 July 1983. The former Décret defines water pollution as the act of contaminating, dirtying, obstructing, or endangering the natural environment. The scope of the law includes rivers and other bodies of water connected to harbors. The port authority must authorize any installation or plant. Although coastal pollution reaches an alarming level, the laws are poorly enforced.

Fisheries. Décret No. 83/171 of 12 avril 1983, authorizes the GOC to establish protected zones in the Gulf of Guinea and the Bay of Biafra where fishing with trawling devices is prohibited. This zone includes the Pu Apwa-hife Road, the mouth of the Rio-del-Rey, Ambas Bay, Warship Bay, the mouth of the Bimbia and the estuary of Cameroon.

Article 10 of the Décret requires that an applicant for a fishing license must make a formal declaration agreeing to cooperate with the administration to ensure the control of fishing and good management of fishing resources. The Décret also prohibits the use of explosive devices for fishing.

The Forestry Law, No. 81/13 of 27 November 1981, regulates fishery development in rivers and fresh-water ponds. This is not unusual in the francophone countries that fresh-water fisheries fall within the jurisdiction of the forestry sector and are the responsibility of the national forest administration.

Part IV of this law defines various fishery resources, fishing activities, and fish processing and commercial operations. It regulates the exercise of fishing rights for traditional, commercial and industrial uses; the management and protection of the fishery resources in general; the operations of fish farms; the installation of fish processing establishments; and the sanitary inspection, packaging, and transportation of fishery products.

Cape Verde

Coastal Zones. The 1987 Fisheries Law, Décret-Law No. 17, declared Cape Verdian jurisdiction over the living resources found in internal waters and territorial sea, as well as archipelagic waters, the EEZ,⁴⁶ and the continental shelf. The 1993 National Environmental Policy Act maintains Cape Verdian jurisdiction to the limits of the EEZ, including the waterbeds, the continental shelf and the deep seabed within the EEZ. It also calls for the delimitation of a protected zone along the coastline.

Fisheries. Décret-Law No. 17 revoked colonial fishing laws. The Ministry of Fisheries, Agriculture and Rural Extension (MPAAR, Portuguese acronym) has primary jurisdiction over the fisheries sector through its Directorate-General of Fisheries. Along with the Directorate-General, the National Fisheries Development Institute is charged with fisheries promotion. Furthermore, article 16 of the 1987 Fisheries Law provides for the creation of Local Fisheries Councils which should assist the government in the formulation and implementation of the fisheries policy, both as to development and resource conservation.

The Council of Ministers must approve Fisheries Resources Management Plans developed by MPAAR.⁴⁷ According to article 18, these plans should consist of an identification of principal fisheries and an assessment of the present status of their management and utilization; an indication of new management and utilization measures; and the corresponding licensing policy.

This act, although primarily a fisheries development act, contains a number of environmental provisions, some of which seek to prevent resource degradation. Article 4, for example, prohibits the use of explosives or toxic substances. The amendments introduced by Décret-laws 97/87 and 71/92 also contain provisions that limit net mesh sizes and access to resources according to size of the species harvested and harvest seasons.

As for marine mammals, article 12 of the 1987 Fisheries Law prohibits their capture in national waters, and national vessels are also forbidden to hunt them in the high seas. No processing of marine mammals is allowed in the national territory.

Articles 8 and 9 of this decree provide for three categories of fishing vessels: national, foreign, and foreign vessels based in Cape Verde. National fishing vessels are considered those under State ownership; or owned by a Cape Verdian national; or when a Cape Verdian national owns,

⁴⁶ Although the territorial size of Cape Verde comprises 4,033 km², its EEZ is greater than 600,000 km², as delimited by Law no. 60/IV/92.

⁴⁷ The Cape Verdian Government has considered fisheries as an strategic sector of the economy and has launched an ambitious program to strengthen the artisanal fisheries through the renovation of existing vessels and new acquisitions, construction of new piers, training, resource inventories to guarantee sustainable yields of fisheries stocks, etc. See Cape Verde, Pesca, 1993.

at least, 51 percent of their value; or when they belong to a company controlled by nationals and based in Cape Verde.

Subsequently, article 11 discriminates against foreign fishing by designating reserved zones for exclusive national fisheries. Fishing in internal and archipelagic waters, capture of sedentary species on the continental shelf, and lobster fishing fall in this category.⁴⁸ Furthermore, articles 22 through 37 provide that foreign fishing rights are subject to prior bilateral or multilateral agreement with member countries and licensing.⁴⁹ National fishing vessels, in principle, are not charged for a license fee.

According to articles 58 through 72, violation of fisheries provisions may result in stiff penalties for the violator, the vessel master and the vessel owner, which include suspension or revoking of the fishing license, a 5,000,000\$ fine (approximately US\$60,000 at present exchange rate of US\$1 @ ECV85\$), and confiscation of the catch and the fishing gear. Pursuant to article 53, maritime authorities and the Fiscal Police are responsible for enforcement of these provisions. In light of the extensive maritime zone, effective enforcement proves problematic. The government recently obtained international financing to purchase an aircraft and a vessel for EEZ enforcement.⁵⁰

The Merchant Marine Disciplinary and Penal Code and the Code of Criminal Procedure may apply, subsidiary to the aforesaid criminal provisions and the procedure contained in articles 73 through 90 of the 1987 Fisheries Law. If the violation results in the application of fines, this decision is issued by the Ministry of Fisheries, Agriculture and Rural Extension, as the government authority responsible for the fisheries sector. Otherwise, the regional tribunals of Praia and S. Vicente will pass judgement upon request by the Ministry to apply additional sanctions, such as the confiscation of fishing gear and suspension or revoking of the fishing license.

Congo

Coastal Zones. Three laws have provisions pertaining to coastal zone protection. The Environmental Protection Law, No. 023/91, deals with "water protection" in title 5. Article 28 regulates the disposal or deposit of any solid, liquid, or gas capable of degrading the water quality in any body of water in Congolese jurisdiction. Article 30, nonetheless, vests in the Ministry of the Environment and Ministry of Merchant Marine the joint authority to permit disposal of waste or its immersion or incineration in the territorial waters of Congo, where such operations will not put at risk the aquatic environment or its uses. Article 32 forbids use of toxics and explosives in Congolese waters.

⁴⁸ Lobster catching is also regulated by Décret-law No. 97/87 and Décret-law No. 71/92. See Lima, "A Lagosta & a Lei", 1993. A bill has been drafted with FAO assistance to regulate coral harvesting. See also Pereira, "Gestão do Coral", 1993.

⁴⁹ Fishing agreements have been signed with the EEC and Sénégal. In 1992, 70 fishing licenses were issued: 37 to nationals, 30 to EEC and 3 to Sénégalaise vessels. No license to foreign fishing vessels had been issued in 1991. See Cape Verde, MPAAR, 1993.

⁵⁰ See Cape Verde. Mesa Redonda, 1993.

Of special interest, article 31 mandates a special responsibility on certain people to notify Congolese authorities of any observed threat to the aquatic environment or its related interests. This article states that the captain or owner of any marine vessel must notify the authorities regarding any such observed threat to the aquatic resources. Imposing legal burdens on individuals to notify authorities of situations involving possible wrongdoing by others is unusual, if not unique. Furthermore, article 74, which imposes sanctions for violations, reserves the largest fine under the law – up to 20 million francs CFA, for violation of this article 31 duty. Also, article 33 provides another noteworthy example of the Congolese laws enacting the polluter pays principle: anyone guilty of polluting water must pay for any resulting damages.

Ordinance No. 22/70 of 14 July 1970 also contains an anti-pollution provision of note; article 3 states that all Congolese boat captains must comply with the Convention for the Prevention of Pollution of the Sea by Oil. Within Congolese waters, foreign boats must likewise comply with this provision.

Fisheries. Two laws govern fisheries: Ordinance No. 22/70 of 14 July 1970 and Law No. 015/88 of 17 September 1988. The 1988 law sets forth the regulatory scheme governing all fishing in Congolese coastal waters, including the permitting process; limitations on the types of commercial, artisanal and sport fishing allowed; and the enforcement provisions to ensure compliance. This law generally seeks to regulate the industry so as to maximize sustainable economic benefit, but does not address specifically pollution or species preservation issues.

A considerable portion of Law No. 015/88 focusses on regulating and limiting commercial fishing in Congolese waters by foreign fishing vessels. Generally, articles 13-24 require all such vessels to comply with Congolese permitting and related regulatory requirements in order to fish in Congolese territorial waters. Ordinance No. 22/70 also regulates commercial fishing of Congolese waters and likewise manifests a longstanding concern of the Congo over encroachment of its fishing beds. Under article 2 of this law, the Congo claims territorial jurisdiction over a zone extending 15 nautical miles from low tide. Commercial and sport fishing within Congolese territorial waters is reserved, pursuant to article 4, for Congolese boats and those from nations with which Congo has a reciprocal fishing agreement.

Côte d'Ivoire

Coastal Zones. A variety of laws seek to protect marine resources. Law No. 61/349 of 9 November 1961, establishes the Merchant Marine Code. Law No. 77/926 of 17 November 1977, specifies the marine zones placed under national jurisdiction. Law No. 81/1048 of 8 December 1981, authorizes ratifying the agreement pertaining to cooperation in order to protect and develop the marine environment and coastal zones of the WCA region.

Marine pollution receives particular attention. Décret No. 85/949 of 12 septembre 1985, provides for a plan, known as the Pollumar Plan, for emergency intervention in the event of pollution at sea. The Décret addresses pollution of any origin at sea, in lagoons or along the coastline. The impetus for this law came from the 400 ton oil spill in the Bay of Biety in 1980.

Gabon

Prior to passage of the new Environment Code, Gabon's law concerning coastal zones and fisheries was contained in Law No. 1/82 of 22 July 1982 – the primary compilation of Gabon's natural resource management codes.

Law No. 1/82 remains in force. Title IV of the law, articles 68-78, covers fishing and fish farming, in both continental and coastal waters. As with the other Gabonais codes, this Code is primarily concerned with the rational economic exploitation of the country's fishing resources. Article 70 stipulates that all taking of fish is subject to licensing by the ROG, through the Ministry of Water and Forests (MWF). Article 72 requires fishing boats to report regularly to the MWF on the quantity and types of fish in their catch. Article 75 subjects any new fishing technique to prior approval of the ROG.

The new Environment Code, Law No. 16/93 of 26 August 1993, does not repeal the provisions of Law No. 1/82, but adds new provisions regarding coastal waterways and continental waters. Article 7 makes explicit the Gabonese claim of jurisdiction over seabed resources as well as fish within the country's coastal waters. Article 8 instructs the environment ministry to prepare implementing regulations to prevent any acts which might pollute the marine environment or pose human health or other environmental risks.

Ghana

Coastal Zones. The following ordinances protect the coastal environment: The Beaches Obstruction Ordinance, 29 January 1987 (Cap No. 240); The Rivers Ordinance, 4 February 1903 (Cap No. 226); and The Land Planning and Soil Conservation Ordinance, 1953 (No. 32). These regulations are not enforced. The Rivers Ordinance deals only with the problems relating to dredging in fourteen rivers. Pursuant to The Land Planning and Soil Conservation Ordinance, a Planning Committee may construct and maintain works necessary for: protecting the source, course and feeders of any stream or river; disposing and controlling water -- including storm water; mitigating and preventing soil erosion; reclaiming land; and utilizing swamp-land.

The Maritime Zones (Delimitation) Law, August 1986 (PNDCL No. 159), implements the provisions of the United Nations Convention on the Law of the Sea relating to the delimitation of the territorial sea, the contiguous zone, the EEZ, and the continental shelf

The Oil in Navigable Waters Act, 1964 (No. 235), implements Ghana's obligations under the International Convention for the Prevention of Pollution of the Sea by Oil, 1954. Ghana has also signed the Liability 1969 and Fund 1971 Conventions but has failed to pass implementing legislation. While the International Convention primarily addresses marine pollution, Ghana enacted provisions in this Act to protect inland navigable waters from the discharge of oil or any mixture containing oil originating from a sea-going vessel, a place on land or from any apparatus used for transferring oil from or to any vessel. No legal restrictions exist on discharges into the marine environment of sewage, chemicals, and other industrial wastes from land-based sources, ships, or aircraft.

Fisheries. The Fisheries Law, 30 January 1991 (PNDCL No. 256), provides for a licensing system, various prohibitions, the creation of fishery zones for regulatory purposes and the appropriate fishing gear that may be used in these zones, sanctions for violations, and institutional mechanisms for the enforcement and/or operations. The Secretary for Agriculture is empowered to establish regulations pertaining to the type of fishing craft permitted, fishing gear, apparatus or methods for taking fish, licensing procedures and fees, vessel registration, and inspections.

The law establishes a Technical Committee, comprised of representatives from government agencies, and a Fisheries Advisory Council (FAC), comprised of government and private sector representatives. The FAC advises the government on all matters affecting the fishing industry as well as matters relating to the implementation of government policies on the development, management, and utilization of fisheries.

The law also establishes the Fisheries Monitoring Control Surveillance and Enforcement Unit, which is charged with enforcing the law. The Unit, comprised of personnel from the Navy, Air Force, Fisheries Department, and personnel from other agencies as needed, has extensive police powers. The composition of the Unit may provide a coherent and coordinated approach towards fisheries law enforcement. Questions arise, however, as to whether the Unit has sufficient equipment and resources to fulfill this enforcement role.

Violations of the law can result in stiff fines, imprisonment and confiscation of vessels and catch. Critics of the law maintain that the provisions prescribing imprisonment and/or confiscation violate the United Nations Convention on the Law of the Sea.

While the fisheries laws have historically not been adequately enforced, one noteworthy case exists. In the Decision of the National Public Tribunal, Accra, Case No. 85/89, March, 1989, entitled The People vs. Captain Papaikonoumou Nikolaos, Panayotis Stafilis, Chatzigeorgiou Nikolao Theodoreos Argoudelis, Ajax III, Ajax Shipping Company the defendants were successfully prosecuted for doing acts with the intent to sabotage the economy of Ghana contrary to sections 9(1)(f) and 16 of The Public Tribunals law (PNDCL No. 78).

Customary practices about fisheries conservation often emerge from traditional religious beliefs and taboos. These regulations are enforced by priests and priestesses who declare the wishes of the spirits which are believed to inhabit the rivers. As part of traditional religious belief, fishing on one particular day of the week may be regarded as taboo. Also, fishing may be prohibited for two to three months each year. Breaking these prohibitions can result in a fine in cash or in kind or both. Customary religious beliefs can provide rules for conserving fish in the seas and rivers and thus permit fish to become reasonably mature before harvesting.

Guinea Bissau

The fisheries law, Décret-Law No. 2/86, applies throughout the EEZ, the territorial sea, and interior waters of Guinea-Bissau. Many of the provisions in this law are similar to the Cape Verdian 1987 Fisheries Law, including the environmental provisions prohibiting the use of explosives or toxic substances. Article 10 of the Guinean law prohibits industrial fishing within the territorial sea, except under very special circumstances by authorization of the Council of Ministers.

Article 5, similarly to the Cape Verdian law, distinguishes between national and foreign fishing vessels but, contrary to Cape Verde, does not discriminate as to access to fishing grounds. Nationals and foreigners must receive authorization to fish. In this regard, the Guinean Fisheries Law and its regulation, Décret No. 10/86, establish very detailed licensing procedures. The licenses will specify the fishing season, prohibited grounds, mesh sizes, species and catch limits, and vessel type. Numerous provisions refer to the possibility of introducing licensing limitations and even suspending or revoking the guarantee of adequate management of living resources.

A license, usually valid for one year, will depend on prior international agreements for foreign vessels. Fishing rights are renewed every twelve months. Article 31 authorizes the Navy to inspect and apprehend nets, fish catch and even the fishing vessel, if not properly licensed. Pursuant to article 41, penalties include administrative fines and criminal charges. Unofficial accounts, however, inform that the Navy is ill-equipped to enforce this law. Lack of fuel due to insufficient funding from the Treasury prevents the Navy from stopping or controlling illegal fishing from Guinean waters.

Concern over resource depletion has led the Ministry of Fisheries to draft a new Fisheries Law, to replace the 1986 decree-law. This new bill does not modify existing legislation drastically, although it does provide guidelines for fisheries management plans, aquaculture activities, and the setting of quality standards for fisheries products. The primary objective of this bill is to develop artisanal fisheries and aquaculture as a sustainable activity.⁵¹

Guinée

Coastal Zone. Guinée's law protecting its coastal zones and fisheries is now highly developed. The Omnibus Environment Law, Ordonnance 045/PRG/87, addresses marine environmental protection in articles 32-39. Articles 32 and 33 provide a sweeping prohibition of any disposal, incineration, or other introduction of pollutants into Guinean waters which could have a negative impact either on fish and aquatic life or on human health. Articles 34-37 manifest a particular concern over oil spills and impose specific responsibilities on oil ship captains to avoid marine damage from such spills.

The environment law has been implemented with respect to marine protection by Décret No. 201/PRG/SGG/89, of 8 novembre 1989. That decree stipulates in greater detail the legal prohibitions and responsibilities stated in the environment law. The decree contains an annex specifically listing substances which are prohibited from being dumped into waterways. Articles 9-23 further elaborate the obligations imposed on ships within Guinean waters. Articles 29-31 specifically imposes a ban on any dumping of hydrocarbons or other polluting substances by those operating offshore oil drilling rigs within the EEZ of Guinée. Article 32 imposes additional requirements for protection of marine life on the owners or salvagers of shipwrecks.

Fisheries. Guinean law also includes a Fishing Code, Ordonnance No. 038/PRG/85, which has been in effect since 1985. This Code proceeds from the statist assumption that all fishing resources, both fresh and marine, are State assets. The taking or cultivation of fishing resources

⁵¹ Several papers were recently presented at the First National Seminar on Fisheries (August, 1993). For a review of recent fisheries management assessment, see Fernandes, Ferreira, Kassimo, Silva and Vieira. 1993.

are subject to licensing and regulation. The Code therefore establishes the licensing/permitting system applicable to each type of fishing. Restrictions, as specified in articles 16-16, apply to foreign boats fishing in Guinean waters.

Mali

Fisheries. The Fisheries Code, Law No. 86/44, fails to specify by size or weight the fish that can be caught. Pursuant to customary practice, however, the women who operate the fish collectives, which purchase the fish from the fishermen, will not purchase fish below a certain size or fish caught during a certain period of the year. The Code does not designate any areas as fishery reserves or address stocking or management issues. The GOM, however, does recognize the unsustainable harvesting that occurs as a consequence of the fish traps and may ban them.

Niger

Fisheries. Law No. 17 of 1971, regulates fishing and protects fisheries.

Nigeria

Coastal Zones. The Oil in Navigable Water Act, 1968 (Cap. 337), implements the terms of the International Convention for the Prevention of Pollution of the Sea by Oil 1954, by declaring it an offense to discharge oil or any mixture thereof into the navigable waters of Nigeria, from a vessel, on land or from any apparatus for transferring oil. Implementing these provisions, however, presents problems and under the existing regulatory system very little monitoring occurs.

The Gambia

Fisheries. The Fisheries Act, 1991, repeals The Fisheries Act, 1977 (No. 17), but regulations issued pursuant to the old Act may still be valid. The new Act addresses: fisheries development measures, local and foreign licensing, aquaculture, marketing and processing, prohibited fishing methods, enforcement powers, and penalties and legal proceedings.

The new Act prohibits the use of or possession with the intent to use, explosive, poison or other noxious substances for fishing, and prescribes stiff penalties of up to 1,500,000 dalasis and seven years imprisonment. The Act empowers the Minister of Natural Resources and the Environment to make regulations for the following purposes: prescribing the limits on the amount, size or weight of fish caught, retained and traded; prescribing minimum net mesh sizes; and designating prohibited fishing areas. Different licensing regulations will be established for artisanal and foreign industrial fisheries. Regulations will likely seek to enforce zoning of fishing grounds between the industrial and artisanal fisheries.

The Act establishes the Fisheries Advisory Committee, comprised of government and fishing industry representatives, to promote the fisheries industry and advise on development projects. The Committee will manage the Fisheries Development Fund, which will receive funds from fines and license fees.

5.5 Water⁵²

Water law and administration present some of the most complicated issues examined in this report. These issues are becoming increasingly complex and require an understanding of hydrologic systems and the integration of economic issues. While the fundamental legal classifications are groundwater and surface water, numerous sub-classes of water can exist that are subject to different laws. Moreover, a plethora of laws often exist to govern specific water uses, water misuses, wastewater, and pollution. Each of these laws can be administered by different ministries with little or no coordination.

While difficult to generalize about how common law, civil law, and customary law legal systems treat water issues, a few broad brush comments will be offered. In civil law countries, water may be privately owned – but the presumption is that water is in the national or public domain. Water in the public domain and its utilization is subject to government permits, authorizations, or concessions. An example of private water is a well constructed on private property by private means. Private water may be freely used on the basis of riparian rights. In a civil law system, one or more basic legal texts, such as a constitution or public land laws, will define the public domain.

Under a common law system, there can be no ownership in the running water of a stream, river, or natural channel. Such water is regarded as transient and elusive and a riparian land owner may use the water provided such use is reasonable. However, water that accumulates or falls on a person's land and is collected in artificial or natural drains and reservoirs may be privately owned. Such private ownership lasts only during the time of possession. The same principle applies to underground waters which become the property of whom abstracts them and retains possession. Under customary law, water is seldom privately owned and individuals have only a right to use water with the law providing priorities for water use. Customary law will likely be followed in the absence of modern law or in rural areas.

When undertaking water projects, legal and institutional issues must be resolved along with the technical and engineering issues. Prior to project commencement, the legal regime of water ownership and use rights need to be determined. Upon completion of the project, the law must be carefully drafted so as to provide for the most efficient water distribution and utilization patterns compatible with local conditions and needs. These priorities, in decreasing order of importance, are: drinking water, animal watering, irrigation, industrial, and recreational use. Urban areas, consequently, receive preference over rural and grazing areas. Health laws can control drinking water and provide for well and washing-place inspections, waste disposal, and cesspool standards.

Benin

The 1987 Water Code, Law No. 87-016, articles 1-7, clearly provides that virtually all water, with the exception of captured rainwater, such as in cisterns, belongs to the State and is subject to its management.

⁵² See Caponera, "Water Law in Selected African Countries," and Lohani and Thanh, "Water Pollution Control in Developing Countries."

Articles 8-16 detail the terms under which subterranean water may be captured and utilized, generally subject to appropriate authorization from the Ministry of Hydraulics. Articles 17-35 deal with the limits on the capture and use of surface water. Articles 40-56 deal with a range of other public policy water uses, such as the prioritization of water supplies in times of drought, while articles 57-65 deal with handling water-related natural disasters -- both floods and droughts.

Reference to the pollution of water and its control is largely limited to a brief "pollution" chapter, including articles 36-39. Much of this short chapter is hortatory, with article 38 containing the key prohibitive legal language. Article 38 declares that no deposit or disposal into a surface or subterranean waterway of any material capable of altering the water's physical, chemical, radioactive, biological or bacteriological characteristics is permitted without prior authorization of the Ministry of Hydraulics and Sanitation.

No further implementing language is included in the Water Code. According to the UNDP report on the proposed new Environment Code, "this text has not yet to date been supported by texts of application and has not played an effective role."⁵³ This report also criticizes the fact that two committees envisioned in the Water Code for oversight of its implementation "exist only on paper."

Burkina Faso

Water is of course a scarce commodity in Burkina Faso, and the bulk of the legal code regarding water, contained in the Réorganisation Agricole et Foncière (RAF) of 1991, is concerned with water rights, access, and conflict resolution for competing water claims. Articles 209-235 of Kiti An-VIII-0328. In this case as well, the general framework is statist. The water resources belong to the State, subject to limited concessional use under specified conditions.

Pollution of water is a concern of the code and of Burkina's NEAP. Article 231 of the RAF forbids the introduction into any water source or conduit of any materials likely to damage the healthfulness of water. Article 238 also addresses industrial/commercial pollutants, and article 239 forbids "abusive" exploitation of water, cutting of trees on riverbanks and agricultural practices conducive to erosion like downhill plowing.

Finally, article 264 declares that no discharge of any kind into Burkina's waterways that might modify their "physical, radioactive, chemical, biological or bacteriological characteristics" without prior authorization from the ministries of environment, water and sanitation and industry. Limited field interviews confirmed Burkina efforts to protect their water sources, particularly in the urban Ouagadougou area, but it must be noted that even in the capital, waterway pollution can be visibly observed, notwithstanding article 264.

The proposed Environment Code also contains a chapter on water pollution, which is an abbreviated form of, and appears largely consistent with, the current Zatu and Kiti (1991 RAF) just discussed. Articles 72 through 74 of the Code would provide the Environment, Water, Health and Industry ministries with joint powers to pursue and punish infractions including through injunctive actions barring industrial activities harmful to water sources.

⁵³ See Benin. UNDP, 1993.

Burkina's waterways should also be seen in the regional West African context, as they are in the NEAP. That document, in inventorying Burkina's environmental assets, points out that Burkina has four major watersheds, including two of the most massive and important in West Africa, the Volta and the Niger.

While outside the scope of this study, discussions in Burkina and Guinée, which shares a watershed with Burkina, suggest that regional watershed management and regional water pollution prevention are important topics not yet sufficiently addressed.

Cameroon

Loi No. 84/13 du 5 décembre 1984 portant régime de l'eau, provides for the system of water ownership and Loi No. 73/16 du 7 décembre 1973 portant régime des eaux de source et des eaux minérale addresses the quality of water resources, rights of usage, and conditions for water use. The latter law applies more to the exploitation and commercialization of water than to the regulation and establishment of quality standards. Loi du 5 décembre 1984 promotes rational water use; however, the regulations are inadequate.

None of the water laws address the problem of effluents, wastes, and residual water. The law merely mentions the need for an inventory of water resources and establishes no quality norms to provide a legal basis for monitoring water quality.

The gravest problem in water resources management results from the lack of a regulatory framework to govern the management of water resources. A multiplicity of water related laws exist and problems arise in determining which applies and which ministry has jurisdiction. Moreover, the ministries do not adequately coordinate their actions. The pertinent water laws are: Loi No. 64/LF/23 du 13 novembre 1964 portant protection de la santé publique; Décret No. 76/372 du 2 septembre 1976 portant réglementation des établissements dangereux, insalubres, ou incommodes et ses arrêtés d'application; Loi No. 81/13 du novembre 1981 portant régime de la forêt, de la faune, et de la pêche ainsi que la loi portant réglementation foncière contenant des dispositions relatives aux régimes juridiques des eaux.

Cape Verde

Water is perhaps the most critical natural resource in Cape Verde, thus making water supply a fundamental environmental priority. The 1984 Water Code, Law No. 41/II/84, reflects this concern.

This law centralizes the planning and administration of water resources. A national water council (CNAG, Portuguese acronym) was created to coordinate all water resources activities and to enforce the water laws. The council consists of representatives from government ministries and institutions with responsibility over water resources. The Prime Minister appoints the representatives for a two-year term. The council answers directly to the Council of Ministers, but has financial and administrative autonomy.

Articles 39 through 60 of the Water Code regulate the composition and functions of the CNAG, local water commissions, and other organs in detail. The commissions implement primarily the policies and guidelines from the national council, provide maintenance to local infrastructure, control local water quality, and function as a local conflict resolution tribunal.

Several other ministries, including the Ministry of Fisheries, Agriculture and Rural Extension; the Ministry of Infrastructure and Transportation; and the Ministry of Health have specific jurisdiction over water resources, but the CNAG coordinates and supervises their activities. The CNAG is also responsible for the development of a National Water Resources Plan.

This law encourages the creation of environmental protection associations and promotes the duty of all citizens, as well as public and private entities, to contribute to the development, protection and conservation of water resources (article 9). Articles 23 and 24 call for regulations to be issued by the government setting water-quality standards and establishing protected areas to guarantee the quantity and quality of water supply.

Articles 3-7 provide that all water resources belong to the State. Private property rights or any other land rights do not confer to the title holder real rights over water resources. The use of these resources is subject to fees that are established by the CNAG (article 45).

Articles 62 through 73 assign the highest use priority to potable water for residential consumption. Unless water is used for individual consumption and household purposes, its use requires a concession (mineral or medicinal water) or, in all other cases, a license.

Several provisions in the Water Code, articles 25 through 29, forbid and penalize all forms of water pollution, whether from domestic effluents or toxic and solid wastes. Industrial wastes must be treated and controlled. Violation of these provisions may constitute a water crime and result in imprisonment, as provided by articles 89 through 94, with terms that may vary from a minimum of one month for unauthorized containment of water to a maximum of eight years for willful water contamination or for willfully causing damages to dams, dikes, or other waterworks. Articles 95 through 99 list a series of monetary fines for misdemeanor cases, up to a ceiling of 10,000,000\$ (approximately US\$ 120,000 at 12/93 exchange rate of US\$1 @ ECV85\$).

New regulations will provide for the control of wastewater effluents and the disposal of solid wastes. This policy act requires that the management of water resources should consider the water basin as a management unit and take into consideration the related socio-economic and cultural implications.

Central African Republic

The CAR law concerning water obtained in this study is minimal. CAR has no coastline, so understandably no maritime law exists. With respect to other water pollution controls, a 1971 law, Ordonnance No. 71/090 of 6 août 1971, regulates fishing, with an eye toward preventing fishing practices that might pollute water or damage waterways, such as the use of explosives to corral fish (see article 4). Article 4 also prohibits industrial chemical waste capable of harming fish from being dumped into CAR waterways, subject to criminal penalties.

Décret No. 68/278 of 9 octobre 1968 subjects the digging of all water wells in urban areas to prior authorization by competent local authorities.

Congo

The major provisions relating to protection of water are found in the overall environmental protection law, Law No. 023/91. The principal provisions of this law were described in the Coastal Zone and Fisheries section. In addition to those provisions, the law also contains specific references to control of water pollution emanating from disposal of toxic and nuclear wastes. The law regarding such wastes is reviewed in the section on Industrial Pollution.

Côte d'Ivoire

The Central Laboratory for Marine and Lagoon Environment (Laboratoire Central de l'Environnement marin et lagunaire - L.C.E.) manages the Côte d'Ivoire's National Network for Observation of Ocean, Lagoon and Continental Waters and is responsible for physical, chemical, and microbiological analysis of waters and aquatic flora and fauna.

The Décrets of 19 mars 1921, 5 mars 1925, 25 mai 1955, all address water issues. While the Décrets generally fail to address water pollution, Order No. 9929 of 19 December 1955, does refer to pollution of industrial origin. This Order states that:

... protected areas could be created around catchment zones meant for the water supply of the population as necessary in order to protect the underground waters against mineral and organic pollution. The creation of protected areas will lead to the prohibition of discharges without prior treatment of industrial waste waters whose level of mineral and organic substances or the bacteriological density could lead to the pollution of water.

The Décret of 20 août 1926, addresses pollution from dangerous and unhealthy industries.

The Décret of 14 avril 1904, and Order No. 9929 of 15 December 1955, provide for the creation of pollution control zones around and along potable water supply sources. These laws address unsanitary conditions arising from human wastes and provide instructions for citing wells and treatment of residual waters.

Décret No. 68528 of 28 novembre 1968 (JOCI), while fairly comprehensive, only addresses water protection in the Abidjan region. This Décret establishes a protection zone to ensure the supply, conservation, preservation, and use of water resources.

Administrative Notice of 7 September 1955, on the accounting book of the Water Distribution Services Agency addresses water potability problems. The Public Health Act contains provisions prohibiting the introduction of any deleterious substances into water supplies for human or animal consumption.

The GOCI is currently considering sorely needed legislation to unify the existing water laws, revise them where needed, and introduce EIA procedures.

Gabon

Water pollution control in Gabon is now covered under the provisions of the Environment Code, Law No. 16/93 of 26 August 1993. Article 11 provides a mandate to the Environmental Directorate in the MWF to prepare a list of toxic or polluting substances, the introduction of which is to be limited or forbidden by appropriate regulations.

Article 11 also instructs the MWF to "systematically analyze the waterways to establish their degree of pollution." As noted, field site visits suggest that at present, Gabon lacks the material and institutional basis for such broad, sustained monitoring and analysis of surface and subsurface waters.

Ghana

The Volta River Development Act, 1961 (Act No. 46), with its various amendments is probably the most advanced and comprehensive water management legislation. Part I of the Act establishes the Volta River Authority (VRA), a corporate body, whose primary duties entail generating electricity and dam control. The VRA and the Irrigation Development Authority (IDA), established pursuant to The Irrigation Development Authority Décret, 1977 (SMCD 85), require users to obtain permission to abstract water from the Volta Lake and Volta River. Otherwise no laws exist requiring people to apply for consumptive use permits. The IDA has the power to issue regulations, but does not appear to have exercised this power.

The Rivers Ordinance, 1903 rev. 1951 (Cap. 226), deals with problems relating to the dredging of some fourteen rivers specified in Schedule One, by establishing a license requirement for dredging and diverting water resources. The listed rivers can float timber or carry ships or have alluvial gold or diamonds in their beds. The majority of rivers in the country are not covered.

Schedule 3 of The Rivers Ordinance provides detailed regulations as to the conduct of dredging operations and the various powers the authorities appointed to administer the Ordinance have to enable them to carry out the provisions of the Ordinance. Regulations have not been promulgated for diverting water and licenses seldom have fixed terms or conditions for water diversion. The Ministry for Industry issues licenses and designates inspectors to monitor compliance with the terms of the licenses and the regulations. The inspectors have very wide discretionary powers and their decisions cannot be effectively challenged. Whatever supervision exists over the inspectors rests with the Minister. Regulation 10 gives the Minister the sole power to decide judicial questions like disputes and differences arising out of the interpretation of the dredging regulations. The Minister's decision cannot be questioned in any court of law by way of appeal.

The Rivers Ordinance fails to address preservation of water or aquatic life seriously or to establish any comprehensive machinery for water administration or management. The broad purpose of the Ordinance appears to be commercial exploitation and development of rivers and transportation of timber.

The Ghana Water and Sewerage Corporation Act, 1965 (No. 310), established the Ghana Water and Sewerage Corporation. The main objectives of the Corporation are:

The provision, distribution and conservation of water in Ghana, for public, domestic and industrial purposes {Sec. 2(1)(a)}.

The establishment, operation and control of refuse removed through the sewerage systems {Sec. 2(1)(b)}.

While this Act demonstrates a sound environmental awareness in its outlook and content, the Corporation has failed to use its regulatory powers to create the necessary regulations to implement effectively the Act. The Corporation has become bogged down in the problems of water supply, and waste water management has not been addressed. Moreover, serious enforcement problems arise, since no reasonably practical means of waste treatment and disposal exist other than to dispose of such untreated wastes in water courses.

The following laws have provisions indirectly concerning water: Section 4(a) of The Forests Ordinance, 1951 rev. (Cap. No. 157); Section 3 of The Mosquitoes Ordinance, 1951 rev. (Cap. No. 75); and Section 12 of The Wild Animals Preservation Act, 1961 (Act No. 43). These statutes only deal with specific water problems and do not attempt to lay down any basis for water management law.

No statute specifically deals with the impact of inland drainage. The Volta River Development Act and The Ghana Water and Sewerage Act, however, contain some provisions relevant to controlling water pollution. Comprehensive legislation dealing with surface and ground water pollution, and requiring EIAs for proposed projects, is needed.

A plethora of organizations attempt to exercise water management: the Ghana Water and Sewerage Corporation, the Water Resources Research and Aquatic Biology Institutes, IDA, VRA, and the EPC. The EPC has proposed the establishment of a Water Resources Commission to coordinate water matters.

Water Rights and Use. Customary practices form the water laws in most villages; however, it is impossible to state any customary law which is applicable everywhere in the country. The customs stated herein are only applicable to the Akans, the largest ethnic group in Ghana.

Under customary law, water is essentially public property and cannot be claimed by an individual - even though an individual may be the riparian owner. Where water abounds, this rule may be relaxed and an individual may use water naturally on his property without any interference from the public, and treat it as if it were part of his land. When the necessity arises that the public must share the water, no length of private use can create any ownership through prescription or historic usage. When the chief grants permission, a person may divert water from a public river onto his land for a specific purpose and the diverted water becomes his property.

Questions arise as to whether customary law treats ground water as a part of the land and thus owned by the land owner or whether ground water should be treated like surface water. Nevertheless, whenever a landowner taps ground water into a well, the tapped water is his to the exclusion of the whole world.

Since the standards regarding water use and protection vary among the tribes, and since no means of effecting one uniform custom or practice throughout Ghana is available, customary law

can not provide a nation-wide scheme for water administration. While customary law may be effective for regulating water use in small communities, the law breaks down when small villages become big towns populated with people with different religious and cultural backgrounds. Statutory water laws, while applicable to the whole country, prove more effective in cities and large towns.

Guinea Bissau

The colonial legislation dating as far back as 1901 regulates water uses. In 1992 a national water council was formed to establish a national water policy to guarantee multiples water uses, such as fresh water supply to urban and rural communities, agriculture, hydroelectric power, navigation, and recreation. This council seeks to improve water management and legislation. A Water Code has been drafted to provide comprehensive codification and revoke previous laws. This bill provides for the regulation of all wafer uses, including domestic, industrial, and agriculture. Users may utilize rain water and other existing water on their land, as long as no mechanical means are utilized. Other uses, such as obtaining underground water from a well, will require a permit or a concession.

This draft of Water Code also provides for environmental protection by requiring environmental impact studies of projects that may affect water quality. Water polluters may face criminal charges, and pay for damages, clean-up costs, and administrative fines.

Guinée

Guinée's Omnibus Environment Law, 045/PRG/87, has a strong chapter, articles 21-31, on protection of inland, or "continental" waterways and water sources. These articles vest joint authority in the environmental ministry and the Ministry of Public Health to insure the cleanliness and safety of water. Article 27 formally prohibits any deposit or disposal of any substance into Guinean waterways capable of causing pollution.

The Environment Code also cross-references the system of classified establishments which exist in Guinée as in other francophone WCA countries. This system imposes certain obligations on commercial and industrial establishments with respect to their disposal of wastes incident to their economic activity. (See Industry Pollution and Urban Development section).

Mali

Water property rights are part of the public domain and are inalienable. Consequently, local communities and decentralized collectives cannot claim ownership of ponds, rivers, or springs.

Two possibilities exist, however, for circumventing this problem. Natural resources can be declassified and thus become part of the government's private domain. If part of the private domain, management responsibilities could be transferred to territorial institutions or authorizations of occupancy granted.

The law pertaining to the transfer of management specifies that: "for reasons pertaining to the general interest or of public utility, the government may transfer the management of its estate in the public domain to a decentralized local institution which will then assume responsibility for its

conservation." The provision clearly states that the decentralized institution can only manage the resource and cannot dispose of it.

Authorizations of occupancy can be granted to a legal entity outside of the government system, such as a local collective. Such authorizations are subject to revocation without indemnization, for any reason deemed in the public interest.

Niger

A plethora of water related legislation exists, specifically:

The Civil Code (articles 640-645) governs use of non-public water.

The Décret of 14 avril 1904, concerns the protection of the public health.

The Décret of 5 mars 1921, directs water users to seek permission from the proper authorities to use water and regulates waste water discharges.

The Décret of 21 mars 1928, concerns the status of water.

The Décret of 29 septembre 1928, governs the public domain and compulsory service and defines the public domain of surface water as including: navigable waterways and their overflow; springs, non-navigable watercourses and overflow areas; ponds and lakes to the highwater mark; and artificial water courses such as canals. Décret No. 55/490 of 3 juin 1952, amends articles 1 and 2 of the Décret of 29 septembre 1928, by defining all groundwater as part of the public domain. Order No. 9929 of 15 December 1955, issued by the Ministry of Public Works implements Décret No. 55/490 and supplements the Décret of 29 septembre 1928. This Order provides for protected areas around urban drinking water supplies and regulates groundwater use.

The Agreement of 5 February 1952, concerns the management of water, ice, and electricity service in Niamey.

The Décret of 30 août 1935, concerns the protection of drinking water.

Provisions of the mining law, Law No. 61/8 of 29 mai 1961, relate to water.

Law No. 63/31 of 7 May 1963, creates a public institution for the exploitation of underground water. Law No. 63/37 of 10 July 1963, amends article 7 of Law No. 63/31 of 7 May 1963. Law No. 66-032 of 24 May 1966, amends article 2 of Law No. 63/61 of 7 May 1963.

Décret No. 67/143 PRN/MER of septembre 1967, regulates the operation of pumping stations in grazing areas.

Décret No. 69/43 MTP/T/M/U of 2 janvier 1969, establishes a Water and Electric Committee.

Cahier des Charges, 9 July 1971, provides for the Electric Company of Niger to operate a public drinking water supply company on a concessional basis.

Water Rights and Use. Legislation in force concerning water is primarily based on French colonial laws, unless amended or superseded by subsequent legislation. In the absence of such legislation, Islamic and customary laws apply. In practice, the further from government authority the more likely water users are treated as water owners. Customary and Islamic law prevail in such circumstances and set priorities for water use. While legislation does not cover the amount of water that may be used in rural or urban areas, pumping stations in livestock areas may only be opened after exhausting surface water from the rainy season.

Water quality laws exist only for the urban areas and companies can be held liable for pollution.

The Ground Water Authority is charged with construction, operation, and maintenance of wells and boreholes in rural areas. The Water Commission, established pursuant to Décret No. 66/016 PRN of 20 February 1965, is responsible for determining water policy and for examining and advising on any water legislation matters.

Niger is a member of several international organizations which regulate water resources. The Lake Chad Basin Commission -- comprised of Cameroon, Chad, Niger, and Nigeria -- seeks to ensure that the development of water resources does not have detrimental effects on water courses in the basin or the lake or flora and fauna in the basin. This broad definition potentially encompasses such issues as: livestock production, agriculture, fisheries, transport and communication, tse-tse fly eradication, and hydrology.

The Niger River Commission and the Inter-African Committee for Hydraulic Studies are both charged with facilitating information exchange. These organizations may recommend legislation to member countries and theoretically are responsible for ensuring implementation by the member countries of any agreements reached. The Niger River Commission seeks to prevent pollution of the Niger River and requires that people consult with the Commission before undertaking activities that may effect the fauna and flora.

Nigeria

The Waterworks Act, 1915 (No. 11), contains provisions to protect the water supply from waste water. The Minerals Act, 1917 (Cap. 226), as amended, gives the President the power to make regulations for the prevention of pollution of any natural water supply or water course.

The Public Health Act, 1917, prohibits the fouling of water and the vitiation of the atmosphere. The penalties, however, are less stringent than the Criminal Code provisions. The Criminal Code, 1958 (Cap. 42 & 165), contains penal provisions for the detrimental vitiation of the atmosphere. The Public Health Act contains provisions prohibiting the introduction of any deleterious substance into the water supply for human and animal consumption, and similar provisions exist for vitiating of the atmosphere. State equivalents of this Act exist in most states in the country.

The states' environmental sanitation edicts also contain provisions against water pollution by industrial effluents. The penal provisions vary from state to state. As with the federal government, the state governments lack regulatory mechanisms for enforcing their laws.

The River Basins Development Authorities Act, 1966 (Cap 396), establishes eleven corporate bodies, with the powers of control over designated internal maritime areas. The River Basin

Development Authorities (RBDAs) may not be likely to address pollution arising from agricultural activities, since they exist primarily to promote agriculture. The RBDAs' procure and distribute pesticides and fertilizers, which contribute to pollution when washed into rivers and streams by rainfall.

The RBDAs have failed to establish comprehensive plans for water resources development. Private firms, individuals, communities, state water boards, municipal water bodies, and state and federal ministries follow their own agendas without any overall control.

The Federal Environmental Protection Agency Décret, 1988 (No. 58), contains provisions prohibiting the indiscriminate disposal of waste into the lagoons and waters of Nigeria, and authorizes FEPA to issue guidelines for the control and monitoring of the same.

Other relevant legislation in this area include The Sea Fisheries Act, 1971 (No. 30); The Territorial Waters Act, 1971 (Cap. 428); Petroleum Act, 1969 (Cap. 350); and The River Basins Development Authorities Act, 1986 (Cap. 396).

Water quality monitoring needs to be organized and conducted on a regular basis. In this regard, FEPA has environmental monitoring as one of its priorities and has established interim federal water quality standards and effluent limitations. The Guidelines and Standards for Environmental Pollution Control in Nigeria, 1991, are along the same lines as those established by the World Health Organization (WHO). FEPA has yet to implement a program to monitor the pollution of both surface and groundwater resources.

Water Rights. Laws defining and allocating water rights are needed. Water rights problems raise complex, jurisdictional issues among the relevant authorities, such as the federal and state governments, the RBDAs, and other government agencies.

The Gambia

The National Water Resources Council Act, 1979 (Cap. 66:02), established the National Water Resources Council (the Council) to formulate water policy with the assistance of the National Water Resources Committee (the Committee). Five ministries are represented on the Council and all governmental bodies dealing with water issues are represented on the Committee. Responsibility for executing and enforcing the laws and regulations affecting water rests with the Department of Water Resources (DWR). The Council and Committee structure provide an adequate institutional framework for formulating water policy.

The Act defines the Committee's basic functions as including the coordination of water use, development, and conservation projects. The Act fails to address such issues as pollution, contamination, and tolerable limits for chemical pollutants. Furthermore, the Act makes no reference to groundwater pollution or discharges from vessels. A comprehensive water law is needed.

The Cabinet approved an operational policy paper on water resources development. The DWR and the Gambia Utilities Corporation (GUC) have the following vaguely defined duties: the DWR provides water to rural areas and the GUC provides water to urban areas.

prevention⁵⁴ must be clearly identified. Moreover, it is much cheaper and easier to minimize pollution at the planning stage. Discharging wastes into groundwaters, abandoned wells, boreholes or catchment galleries should be strictly prohibited.

In recent years, there has been a great deal of concern in regards to hazardous and toxic substances. Many of the WCA countries have passed legislation prohibiting the import of hazardous and toxic wastes into their countries. The international community, in particular, has focused on the problems caused by fertilizers and pesticides. This is usually linked with traditional agricultural development activities.

Benin

Wastes and Effluents. Article 28 of the Constitution provides for the regulation of the stockpiling or disposal of toxic wastes. This represents an increasingly common preoccupation in the WCA countries studied. Likewise, article 29 declares that any transportation, import, stockpiling, or diversion of foreign-origin toxic wastes into Benin is "a crime against the Nation" to be sanctioned by law. The article also stipulates that any agreement ("accord") relating to introduction of such foreign toxic wastes is a crime. These articles, with essentially the same language, are found in the new Constitution of the Congo as well (see Congo discussion). With respect to industrial waste, despite the strong language in the new Constitution, Benin retains basically the legal structure of "classified establishments" inherited from the French colonial system.

While the countryside is afflicted primarily with resource degradation, resulting from desertification, logging, cutting of firewood, bushfires, and itinerant grazing; the cities present industrial and other forms of urban pollution problems. In Cotonou, fresh water supply appears to be a major concern since the population obtain water from wells. Because of a shallow water table and the lack of wastewater control policy, a significant risk of drinking water contamination exists.⁵⁵ Cement factories and vehicle exhaust were pointed out as causing significant air pollution and health problems in the urban areas, especially Cotonou.

Mining. The 1983 Mining Code, Law No. 83-003, as with the other codes in Benin and francophone WCA countries, is based on the State ownership of mines and quarries. Rights of exploration and exploitation are reserved to the government, subject to concessions which are made to private persons or legal entities under specified terms. Sand mining appears to represent the major mining problem in Benin, as beach sand is removed to cover the roads before the rainy season. This depletes beach space used for leisure and tourism.⁵⁶

Burkina Faso

Waste and Effluents. Both the currently applicable law, the RAF, and the proposed code treat industrial waste and pollution under a general approach, which is common to several former French colonies. The three categories of classified establishments under current Burkina law are:

⁵⁴ Pollution prevention refers to efforts to minimize the occurrence of pollution, as opposed to cleaning up pollution after it occurs.

⁵⁵ Interview with the Ministry of Environment, Housing and Urbanism.

⁵⁶ Interview with Benin Nature.

(1.) those posing a sufficient risk to be distant from housing, (2.) those where preventative or health/environment protective steps will be required based on their specific risks, (3.) those subject to general health and safety standards for such entities -- restaurants and bars, for example.

Basically, these classified establishments are regulated by the government for health and safety reasons, and Class 1 and Class 2 establishments can only be opened for operation after an "inquest" by the appropriate regulators. The list of which types of commercial and industrial enterprises are in each of the three classes is the joint responsibility of the environment and the industry ministries. See articles 558-563 of the Kiti and articles 18-30 of the proposed Environment Code.

Waste, both under current law and the proposed Code, is divided into urban waste and industrial waste. Urban waste is to be regulated according to regulations set by the Ministry of the Environment and is not to be disposed of in unauthorized areas. Determining the urban waste management situation was outside the scope of this study, but again it must be noted that substantial open garbage deposits, and widespread open burning of garbage occur even in downtown Ouagadougou.

With respect to industrial waste, current law, articles 568-569, requires class 1 and 2 establishments to manage their waste in conformity with regulations promulgated by an inter-ministerial committee led by Environment. Current law provides unspecific sanctions, to be determined by inter-ministerial decision. The proposed Code likewise does not specify precise monetary fines for industrial waste violations, whereas it does for urban waste infractions, but article 42 of the proposed Code formally creates civil as well as criminal liability for the managers of enterprises that violate the industrial waste regulations.

An important point to note is the special treatment afforded industrial waste which might be imported from outside Burkina Faso. The current law, article 570 of the RAF: Kiti, states firmly that the purchase, transportation, deposit, stockpiling sale, or importation of toxic waste of a foreign origin is formally forbidden.

The proposed Code would elaborate considerably on that distinction. Article 43 of the Code notes that any waste which is foreign will be presumed to be dangerous or toxic. The bar on importation of or dealing in such foreign-origin waste is therefore repeated, and extremely stiff sanctions specified: 100 million francs to 500 million francs in penalties or 20 to 30 years in prison for anyone involved in such waste import operations. Moreover, any attempt will be punished as an accomplished infraction, and the Code would apply extraterritorially, reaching acts in furtherance of such waste imports even where such acts were committed outside Burkina Faso. See article 45-47, proposed Code.

Mining. Articles 448-546 of the RAF: Kiti AN VIII address mining and quarrying issues, and to a lesser extent, the question of mineral and petrochemical extraction. The focus of the mining and quarrying code, however, is on the control by the government of access to rights of exploration and exploitation, and the financial benefits therefrom, of mineral resources.

Cameroon

Wastes and Effluents. The National Commission for Work Hygiene and Safety, created pursuant to Décret No. 75/ 740 of 20 novembre 1975, addresses problems of hygiene and safety in the work place -- particularly in the industrial environment. This Commission and the Superior Council of Health and Hygiene and Social Affairs, created pursuant to Décret No. 76/450 of 15 août 1976, could potentially play a role in regards to the management of toxic, industrial, commercial, and household wastes. These organizations, however, function intermittently and with difficulty.

The following laws address pollution and nuisances originating from commercial and industrial establishments and authorize governmental monitoring:

Décret No. 76/372 du 2 septembre 1976 portant nomenclature des établissements dangereux, insalubres ou incommodes, carries nomenclature defining dangerous, unhealthy, and inhospitable establishments.

Arrêté No. 17/MINMEN/ DMG du 21 octobre 1976 déterminant les conditions d'application du décret 76/372 du 2 septembre 1976, defines the terms of application for décret 76/372.

Arrêté No. 13/MINMEM/DMG/SL du avril 1977 portant nomenclature des établissements dangereux, insalubres ou incommodes, defines unhealthy, dangerous and inhospitable establishments.

Circulaire No. D69/NG/MSP/DMPHP/SHPA du 20 août 1980 relative à la collecte, le transport et le traitement des déchets industriels, des déchets et ordures ménagères et des matières de vidange sanitaire, this order relates to the collection, transportation and treatment of industrial waste, household waste, and garbage and sanitary waste.

The government exercises control a priori⁵⁷ and a posteriori⁵⁸ through authorization for opening up establishments and through inspections. These laws, some of which date from 1926, reflect a strong orientation toward public health issues. The GOC seeks to interpret them so as to control and prevent pollution. The laws, however, are inadequate for this liberal interpretation. For example, the law provides no discharge standards, and does not provide for collection areas. Administrative circulars seek to cover gaps in the law. Circular No. D69/NCMSP/DMPHP/SHPA carries instructions on rules for the disposal of wastes but is inadequately enforced.

⁵⁷ A priori - (Latin) From the cause to the effect; from what goes before. A term used in logic to denote an argument founded on analogy, or abstract considerations, or one which, positing a general principle or admitted truth as a cause, proceeds to deduce from it the effects which must necessarily follow.

⁵⁸ A posteriori - (Latin) From the effect to the cause; from what comes after. A term used in logic to denote an argument founded on experiment or observation, or one which, taking ascertained facts as an effect, proceeds by synthesis and induction to demonstrate their cause.

Hazardous and Toxic Substances. Law 89/027 of 29 December 1989, forbids the introduction, storage, holding, transit, and dumping of toxic and dangerous wastes in any form on national territory.

Décret No. 86/66 of 27 décembre 1986, controls the use of medicines and chemicals intended for animals, humans, and cosmetic products. Regulatory measures, however, are not observed and potentially dangerous substances are readily available to the public.

Décret 83/410 of 29 août 1983, defines the framework for the control of radioactive substances. Only authorized radiologists and physicians are permitted to work with radioactive elements. This decree has proved difficult to enforce.

The laws dealing with toxic wastes fail to establish any threshold limits and are ineffective. Increased use of toxic products, and the lack of effective regulations and enforcement poses serious risks.

To limit the risks in transporting toxic materials, the GOC issued a memorandum, No. D 69/NC/MSP/DMPHP/SHA of 20 August 1980. This memorandum establishes conditions for the transport, collection, and processing of industrial wastes, household wastes and sewage by requiring ministerial authorization and prohibits parking vehicles within two-hundred meters of a residence.

Mining The pertinent mining laws are:

Law No. 64/LF/3 of 6 April 1964, which provides for the administration of mineral substances.

Law No. 64/LF/4 of 6 April 1964, which establishes the basis, rates, and procedures for mining duties, royalties, and taxes.

Décret No. 64/DF/163 of 26 mai 1964, which establishes the conditions for the application of Law No. 64/LF/3 of 6 April 1964 as modified by Décret No. 68/DF/224 of 10 June 1968, which provides for the administration of minerals.

Décret No. 78/036 of 30 January 1978, regulates quarries.

The laws listed above establish conditions for prospecting, exploration, exploitation, possession, holding, circulation, trade, and transformation of mineral substances but fail to provide for technical measures to help implement the laws. Furthermore, while the laws mandate a system of authorizations, permits, and concessions – they fail to provide for EIAs.

Energy. Law No. 20 of 26 November 1983, provides for the administration of electricity. Article 20 of this law provides that power generation must not hurt river banks or harm the environment.

Memorandum No. 1052/MINMEM/DMG/SL of 16 May 1980, prescribes regulations concerning flammable liquids stored in tanks and the protection of ground water.

While the production and consumption of energy constitutes a significant source of pollution and a very real environmental problem, existing laws fail to adequately address the problem. Wood or charcoal supply eighty to ninety percent of the country's domestic energy needs, but no provisions are made to regulate the sustainable use of these resources. The government's energy policy has been tangled in an inter-ministerial conflict since 1988. The Ministry of Mines, Energy and Water has jurisdiction over energy policy while the Ministry of Agriculture has jurisdiction over forest policy.

Cape Verde

Wastes and Effluents. Recycling and the reutilization of solid wastes and industrial wastewater effluents are encouraged through tax and other financial incentives. Strict licensing permits will be required for waste discharges. The ultimate objective is the promotion of clean technologies.

The NEPA also considers noise pollution. Article 22 provides for the establishment of maximum limits and public awareness to the problem. Motor vehicles, such as vessels and airplanes, will be subject to specific controls and permits, as well as those vehicles that advertise through loudspeakers.

When safety standards are not met in any given area, the government may declare a state of emergency and take actions to reduce the risk to the human health and the quality of the environment, pursuant to articles 34 to 36. These may include the reduction or temporary suspension of industrial or other polluting activities, and even the transfer of a plant to a safer location.

It is unclear, pending regulations of this act, which administrative agency will have controlling authority to enforce these provisions and apply the respective penalties. Article 46 provides that the regular courts are competent to hear tort cases and those that prevent further damages by ceasing the offending activity. As further provided by article 70 of the Constitution of Cape Verde and article 41 of the NEPA, the victims have standing to sue for cease and desist orders and compensation of damages.

Hazardous and Toxic Substances. Articles 23 through 26 of this act specifies that the production, sale, use, and disposal of chemical compounds, which include detergents, pesticides, and other toxic materials, must be regulated within one year. Regulations must also establish safety standards for air, water, and soil contamination. Article 26 specifically prohibits the introduction of radioactive wastes and any other wastes in the national waters, soil, subsoil, and atmosphere, that contain substances or microorganisms that might alter the characteristics, or contribute to the degradation of the environment.

Mining. Mining and other activities that might provoke substantial landscape transformation await specific regulations, as provided by article 18 of the 1993 National Environmental Policy Act.

Congo

Waste and Effluents. Article 47 of the Constitution, essentially the same as a provision in the Constitution of Benin, elevates toxic waste issues to constitutional status. This article states that stockpiling, burning, and disposing of toxic or radioactive industrial pollutants is to be regulated

by law. Further, "all pollution resulting from economic activity gives rise to compensation to benefit the populations of the exploited zones." Subsidiary law is to determine the precise nature and manner of such compensation.

Article 48 of the Constitution further reflects the extensive concern in WCA countries over the issue of toxic and radioactive waste from abroad. This article states that transporting, importing, stockpiling, or dispersing into territorial waters, including the EEZ, or dispersing into Congolese air space, of any toxic or radioactive wastes or other dangerous products coming from outside the country is a crime to be punished by law. The final line of this article suggests the prohibition of all agreements or accords relevant to this matter.

The overall approach to regulation of toxic and nuclear wastes is contained in the omnibus Environmental Protection Law, No. 023/91. Articles 48 and 49 of this law prohibit the disposal or abandonment of wastes in any manner capable of damaging human health or the environment. Disposal of all wastes must be done in conformity with regulations to be promulgated under this law. However, implementing regulations have yet to be promulgated. Article 50 requires the disposal of urban wastes, insofar as possible, in a manner that encourages recycling of materials and conservation of energy.

Article 52 prohibits the importation of nuclear wastes and other toxic wastes. Article 53 imposes a duty on those producing industrial and toxic wastes to dispose of them in an ecologically sound manner and to use new technologies to minimize their production. Article 55 imposes legal burdens on anyone operating a waste site to monitor the environment to detect any negative impacts of the waste site, to keep records of the wastes deposited there, and to report regularly to the Ministry of the Environment.

Law No. 25-62 of 21 May 1962, drawn from the French Equatorial Africa system of regulation of industrial and commercial activities, seeks to classify establishments in three categories. The regulations imposed by this law, passed in the first days of Congolese independence, are consistent with those found in other WCA francophone laws. Establishments are subject to siting and other cautionary requirements to protect human health and the environment.

Mining. The Congo also has a mining code, Law No. 23/82 of 7 July 1982, governing the operation of all mines and quarries in the country. As with the other Congolese codes, this code reflects the French colonial codes, and is primarily designed to regulate the economic activities in the mining and quarrying sector.

Air Pollution. One aspect of the environmental law merits particular mention, because of its comparative rarity in the WCA countries. Viewed in terms of environmental media, the WCA laws studied consistently cover land (soil) and water pollution issues, but almost completely ignore air pollution. A limited exception to that observation are the French-colonial inspired laws on "classified establishments" which refer to noxious odors emanating from commercial establishments. Air pollution remains a comparatively minor problem in the WCA context; but it is observable that in urban areas, air pollution, principally from an automobile fleet that is generally aging, is a nascent problem.

Title 4 of the omnibus environmental law, states "it is forbidden in any household or industrial, commercial, agricultural or artisanal establishment to emit pollutants of any nature, notably smoke,

dust, toxic gases or corrosives capable of damaging health and the environment." Article 22 instructs occupants and owners of all such households or commercial establishments to take measures to reduce or eliminate such air pollution.

Articles 23-25 seek to curb vehicular air pollution. Article 23 is another flat prohibition on the use of "any vehicle or other engines which emit fumes or toxic gases capable of inconveniencing the population and damaging health and the environment." Article 24 establishes a legal requirement for periodic inspections of automobile engines and other internal combustion engines, a provision unique in WCA. Field interviews suggest that this has not been implemented to date. Finally, with respect to auto air pollution, article 25 directs the Ministry of the Environment and the Ministry of Industry to develop criteria for the construction and use of internal combustion engines intended to prevent air pollution.

Article 26 directs the appropriate ministries to implement regulations governing the production, importation and use of all products "capable of altering the quality of the atmosphere and of damaging health and the environment." Article 27 completes the air pollution law by directing that the production, importation or use of substances which damage the ozone layer, notably hydrochlorides, are to be regulated in conformity with the Montreal Protocol.

Côte d'Ivoire

Wastes and Effluents. The Décret of 20 octobre 1926, represents the primary legal basis for pollution control. The following three statutes supplement this Décret: General Order No. 1268 of 28 April 1927, which sets the enforcement modalities; Order No. 25 of 26 May 1989, which sets general prescriptions applicable to all the establishments subject to the Décret; and Order No. 38 of 28 juillet 1989, which sets the nomenclature for the establishments subject to the Décret. The nomenclature lists approximately 400 items and classifies establishments into two categories according to risks of the establishments' activities.

To obtain a permit, the establishment owner must submit an application describing the establishment and the risks and nuisances associated with the establishment and the means to reduce them. The administrative services will review the application, which will be subject to public inquiry. The Minister in charge of classified establishments will issue a permit, prescribing operating instructions.

Article 21 of this Décret specifies that an inspector corps will "have access to the establishments under their surveillance any time during their operation in order to make any verifications they deem necessary." The Décret provides for penalties for violations and the inspectors have the right to determine violations. To date, action has been taken against sixty-three of the one-hundred most polluting establishments. These actions usually consists of orders to correct the problem within a specified time. The following general measures are also being taken: creation of a waste grant service to handle waste disposal within an establishment, installation of atmospheric pollution equipment in Abidjan to test for the degree of atmospheric pollution, and establishment of an ocean outfall for urban waste water.

Gabon

Prior to passage of the 1993 Environment Code, Gabon had several disparate laws touching on the subject of industrial pollution and disposal of toxic wastes. These laws remain in force, but the new Code adds broad umbrella provisions, which require implementing regulations. Gabon also has a generic anti-pollution law, Law No. 8/77 of 15 December 1977, governing the operation of industrial enterprises, which is different from the "classified establishments" approach taken in other francophone WCA countries. This law states in Article 1 that given the pollution risks attendant to all industrial activity, no industrial plant may be constructed or operated in Gabon without taking "adequate measures to control pollution" and without having obtained the consent of the environment ministry based on advice from the National Anti-Pollution Centre (see Institutional Framework discussion).

Article 2 of Law No. 8/77 further provides a period of six months for those industrial establishments already existing at the time of enactment of the law to take "appropriate measures" to achieve pollution control, under threat of penalties of a maximum of five million francs. Field interviews and site visits suggest that the law has not been enforced stringently.

The Environment Code, Law No. 16/93, contains several measures in Title III addressing "pollution and nuisances." Articles 32-38 direct that appropriate regulations be promulgated to govern disposal of all types of waste, with the intent of assuring that no environmental media are harmed by the waste. Article 39 calls for the adoption of recycling technology to reduce the volume of waste and conserve energy. And articles 47-52 provide a recodification of the existing system of "classified establishments" which is similar to the traditional French colonial approach to regulating industrial and commercial establishments.

Mining. Gabon, given its coastal sand and subsoil mineral resources, has a law governing quarries. Décret No. 0869/PR-SEMERH-DMG of 14 novembre 1968, provides a comprehensive regulatory framework for the safe construction and operation of quarries, both surface and subterranean. It focusses primarily with the safety and accident risks involved in quarry operation and the risks associated with abandoned quarries. The Code, promulgated early in Gabon's independence, lacks adequate environmental provisions.

Gabonese mining law, found in Law No. 4/88 of 23 September 1988, is principally concerned with gold and diamond mining. Like the other natural resource codes of Gabon, this text primarily seeks to insure the rational economic exploitation of the resource. In this regard, article 12 addresses issues pertaining to the financial participation by foreigners in mining operations.

Ghana

Wastes and Effluents. No laws exist for regulating waste discharge from industrial, commercial, or tourist activities. While the current level of industrial development is relatively low, proper industrial environmental controls must be established since increased industrial activities are expected as a consequence of the economic recovery program.

Water pollution control is ineffectively addressed with various provisions which seek to control nuisances. Jurisdictional conflicts arise, since the Inspector of Nuisances or the Health Officer or the District Commissioners potentially all have responsibility for giving notice to abate a

nuisance. This procedure requires a court action and proves to be long and cumbersome. Moreover, the courts lack the technical expertise to decide such issues.

No laws exist for controlling industrial pollution or requiring EIAs. Industries discharge untreated effluents directly into rivers and streams. The Investment Code, 1985 (PNDCL 116), however, requires that the environmental effect of an enterprise be taken into consideration before the Ghana Investment Centre approves the investment. Furthermore, Section 26(g) provides that:

In granting approval for investment the Centre may stipulate conditions in the approval certificate, the conditions to be complied with by the investor with regards to the prevention and control of any damage to the environment.

The Ministry of Industries, Science and Technology (MIST) and the EPC have an administrative arrangement whereby the MIST "invites" EPC officials to accompany them on approval inspections for new factories.

Hazardous and Toxic Substances. The Mercury Law, 1989 (PNDCL 217), requires a license to possess mercury, except for small-scale gold miners. No other laws exist relating to toxic or hazardous substances. Draft legislation to control the importation, distribution, sale, and use of pesticides and other toxic chemicals has, however, been prepared. To administer the proposed legislation, EPC proposes the establishment of an Inter-Departmental Pesticide Control Project (IPCP) comprised of all the agencies with activities related to pesticide use and control.

The EPC and the Ministry of Agriculture have established interim application procedures for examining agrochemical imports. A five-member subcommittee of the Toxic Chemicals Committee reviews pesticide import applications. The application must include technical data on pesticide composition. If approved, the applicant receives temporary clearance from EPC. All approvals are subject to further review after investigations determine the impact of the chemicals on the environment.

The Prevention and Control of Pests and Diseases of Plants Act, 1965 (Act 307), gives the inspector the power to apply such treatment and adopt such measures as he deems necessary for the purpose of preventing, exterminating, or restricting any pest or plant disease. The Prevention of Damage by Pests Décret, 1968 (NLCD 245), seeks to prevent the contamination, infestation, or infection of food and feed stuffs by pests.

Mining. Only with the passage of The Mining and Minerals Law, 1986 (PNDCL 153), did environmental protection provisions surface in laws regulating mining. Section 72 specifies that:

The holder of a mineral right shall in the exercise of his rights under the license or lease have due regard to the effect of the mineral operations on the environment and shall take such steps as may be necessary to prevent pollution of the environment as a result of such mineral operations.

The law, however, fails to require an EIA. For a licensee to know what adverse effect his operations will have on the environment and what steps are necessary to prevent pollution, an EIA should be prepared. The Minerals Commission has prepared EIA guidelines for prospective licensees. The Minerals Commission has broad authority in reviewing and approving license

applications, and exercising this authority should require compliance with the proposed EIA guidelines. Potential licensees may argue that the Minerals Commission is acting arbitrarily by insisting on an EIA -- which is not legally mandated. This speaks to the need for legislation. The Minerals Commission is also taking the positive step of requiring the large gold mining operations to prepare environmental action plans detailing what steps they will take to comply with the law.

The parastatal mining operations have seriously degraded sites. Problems now arise in privatizing these operations, because of concerns by potential purchasers as to whether they will be responsible for the clean-up efforts.

In addition to having a license revoked for polluting the environment, section 82 imposes penalties of up to 500,000 Cedis and/or imprisonment not exceeding two years. To date, no company has had its license revoked -- and there have been egregious cases of pollution.

Section 83 authorizes the Secretary to "make regulations for the conservation and development of mines and minerals and for the purpose of giving effect to the provisions of this Law." Such regulations may provide for:

The restriction of prospecting operations in or near any river, dam, lake or stream.

Preventing the pollution of waters, springs, streams, rivers or lakes.

Ensuring the safety of the public and the safety and welfare of persons employed in mines and the carrying on of mineral operations in a safe, proper and effective manner.

Preventing injury to persons or property in a mining area by chemicals.

To date, regulations have not been promulgated. The law also fails to require environmental rehabilitation of the mined out sites. Such legislation should address: removal of tailings, leveling of land, restoration of top soil, and site revegetation.

Although small scale gold mining has been done for centuries in Ghana, it was only legalized recently with the enactment of the Small-Scale Gold Mining Law, 1989 (PNDCL 218). The law opened the way for small scale gold mining activities to be brought into the formal economy. Unfortunately, the environmental problems have mushroomed with this legalization.

To deal with this problem, the Minerals Commission proposes to send out teams to locate and work with the miners in filling out simple EIA forms. Such action would enable the Commission to identify small scale mining sites, and the process of working with the miners to fill out the forms would entail educating the miners as to good mining practices. The Mining Commission, however, lacks the resources to carry out this plan.

The use of mercury by small-scale miners poses serious problems. The Mercury Law, 1989 (PNDCL 217), seeks to address this problem.

Energy. The Petroleum (Exploration and Production) Law, 1984 (PNDCL 84), provides that "a contractor or subcontractor carrying out petroleum operations shall be responsible for any pollution damage caused or resulting from such operations undertaken by an agent or employee

... and shall take the measures to remedy any pollution or damage so caused." Regulations may be issued regarding: the prevention of pollution and the taking of remedial action in respect of any pollution ... and the safety measures to be taken, as well as for the conservation of natural resources and the avoidances of waste.

Guinea Bissau

Wastes and Effluents. Sanitation poses a growing concern in the urban center of Guinea Bissau, particularly in the capital city of Bissau. Rapid urban growth, the lack of comprehensive land-use plans, improper lot allocation policies, and lack of financial resources have contributed to the inability of local governments to handle the disposal of solid wastes and sewage. While sewage treatment is unavailable in the country, according to the World Bank report "Towards a Strategic Agenda for Environmental Management," there is no evidence of any short-term human health impacts related to contamination of water supply.

Although Guinea Bissau lacks regulations concerning water and air pollution, especially for setting standards, the aforesaid report assigned a very low priority to these problems. Pollution monitoring data is not available. Toxic and hazardous substances were also assigned a low priority. Potential concern was demonstrated as to the health impacts of lead in gasoline due to the rapid urban growth and, also, the potential wastewater pollution from agro-industries.

Mining. Décret-Law No. 4/86 provides for quarry mining. Although the soil, subsoil and its resources belong to the State, a concession may be granted to individuals, who can be the concession holder of the land where the quarry is located or a third party. Article 29 provides that quarry developers are liable for civil damages to the holder of the land concession or other injured parties. The Ministry of Natural Resources and Industry is responsible for licensing and enforcement of mining regulations.

Guinée

Waste and Effluents. Guinée has three major laws addressing industrial pollution and waste management. The Omnibus Environment Law, 045/PRG/87, covers these topics in three chapters. Articles 58-67 govern industrial and construction wastes; these provisions declare that all such wastes must be treated sufficiently and properly to eliminate any negative effects on human or animal health or on the natural resource base.

Articles 68-74 recodify the system of classified establishments, inherited from the French colonial system, and subject them to licensing and control so as to prevent human health or environmental damage. This system of "établissements classes" provides for two classes of enterprises, one subject to strict permitting requirements due to a higher likelihood of health and environmental risk and the second subject to regulation based on a lower, but non-negligible, degree of risk. This system is further elaborated in Décret No. 200/PRG/SGG/89, discussed below.

Articles 75-78 govern chemical, radioactive, and toxic wastes, and subjects any handling, treatment, importation, or disposal of such wastes to strict regulation by the MNREE.

To date, the primary implementation of these provisions in the comprehensive environment law is Décret No. 200/PRG/SGG/89 of 8 novembre 1989, part of a package of three decrees of that

date which implement portions of the environment law. This decree recodifies the system of classified establishments previously discussed.

In regards to pollution control, the urban waste situation in Conakry presents a critical situation. Notwithstanding the range of environmental laws discussed in this report, the apparent situation in Conakry is one of extensive urban pollution, emanating from human/household, industrial and automobile sources. Efforts to clean up the city are underway. The major effort is a "Program to Improve the Urban Environment and Sanitation of Conakry," (French acronym, PADEULAC).

This effort has to date inventoried the dire environmental conditions in Conakry, including an analysis of 31 industrial enterprises in Conakry, constituting some 80 percent of the major industrial enterprises in the area. The team working on the cleanup project has also recommended a number of specific cleanup steps, including recommendations for recycling of used oil and other combustible wastes to generate electrical energy, a reliable source of which is greatly needed in Conakry. Debates over financing this cleanup effort appear to have delayed further action.

Mining. A third major Guinean law, the Mining Code. Ordonnance No. 077/PRG/86 of 21 March 1986, governs industrial waste. This is a comprehensive code on the model of others found in WCA, and reflects the longstanding status of the mining and quarrying industry in Guinée. Bauxite and gold represent the major mining resources.

As noted in the Land and Forestry sections, the Guinean Mining Code, pursuant to articles 1-3, proceeds from the assumption of State ownership of all natural resources. The Code therefore establishes the licensing/permitting procedures and conditions by which the State will permit economic exploitation of mineral resources. Mines and quarries of all types are covered, with specific regulatory attention paid to strategic minerals, articles 73-77, and to the exploitation of geothermal sites and aquifers, articles 78-85.

Articles 86-91 make separate provision for "artisanal" exploitation of mineral resources, but even the unmechanized or traditional means of mining and quarrying are subject to governmental permission.

Mali

Wastes and Effluents. Responsibility for urban sanitation rests with the district and municipal governments. There do not appear to be any national laws regulating urban sanitation.

The new industrial pollution law, Law No. 91 1047/AN-RM, Protection of the Environment, establishes a broad legal framework for regulating all forms of environmental pollution and also considers the receiving medium. The Council of Ministers will issue a decree of application providing details for the laws application and implementation.

This law could benefit from some revisions. In order to have a regulatory measuring stick against which to evaluate environmental impacts or determine compliance, environmental quality and operating standards should be set. The concepts of integrated pollution management and pollution prevention should be referenced and defined. While the GOM lacks the capability to

implement these concepts to a substantial degree, referencing them would serve to raise awareness and facilitate later implementation when the capability is developed.

The law's provisions on permits, reporting requirements, and enforcement require more consistency. Moreover, the substantive requirements and penalties for violations vary considerably for different pollutants and the receiving media, without apparent reason. For example, the air pollution section requires obtaining a permit and submitting certain (largely unspecified) information to the government. The waste materials section does not require permits, but does mandate reporting requirements and compliance with standards. However, no clear standards exist. For water pollution, the law bans outright the discharge of potentially harmful effluents – but there are no permit or reporting requirements.

Harmonizing these requirements into a more coherent pattern would make implementation more manageable and equitable. The variations in penalties should be revised, as well as the differences which treat the failure to submit information as a violation only for some regulated activities.

Realistic requirements for corrective action should be specified. Specifying arrest, fines and abatement within one month for air and water pollution violations represents an arbitrary compliance deadline and will create implementation problems. In many cases, it will be technically and economically impossible for a violator to comply with this time schedule. Major process changes or capital investments must be negotiated between the government and the violator. The law fails to provide for recycling or waste reduction. Finally, the law needs more specificity about which government authorities are responsible for implementing the various sections.

Hazardous and Toxic Substances. The new environmental pollution law, Law No. 91 1047/AN-RM, includes provisions for toxic wastes. Other pertinent laws are Loi No 89/61/AN-RH (13.g.89), Portant Repression de l'Importation et du Transit des Déchets Toxics and Décret No. 90/355/P-RM, portant fixation de la Liste des Déchets Toxiques et des Modalités d'Application de la loi No. 89/61/AN-RM. The latter law also deals with pesticides and drugs and prescribes steps importers must take. The GOM's central veterinary lab will analyze samples of regulated toxic material.

Niger

Waste and Effluents. Law No. 66/033 of 24 May 1966, seeks to regulate discharges from manufacturing establishments, workshops, factories, warehouses, construction sites, and any other industrial or commercial establishments constituting a source of danger or inconvenience, whether to safety, hygiene, or amenity of the neighborhood or to public health, or agriculture.

Hazardous and Toxic Substances. Décret No. 69/99/MER of 30 mai 1969, prescribes provisions governing the possession and use of toxic substances. The manufacture, conversion, extraction, preparation, possession, offer, distribution, brokerage, purchase, sale, import, and export of toxic substances and in general, all agricultural, industrial, and commercial operations involving these substances are prohibited without a license. Schedule C annexed to the Décret of 2 avril 1951, lists the toxic substances. The Minister of the Rural Economy issues non-transferable licenses.

Décret No. 98 of 1970, regulates the transport and management of dangerous or infectious materials.

The Ministry of the Rural Economy issued Order No. 005 MER/AG of 19 May 1970, pursuant to Décret No. 69/99/MER of 30 mai 1969, establishing a list of pesticides permitted for crop use. The pesticides are classified as follows: (I) insecticides and acaricides, (II) fungicides, (III) herbicides, defoliants and shrub control agents, (IV) miscellaneous pesticides.

The Stockbreeding Code, Act 19 of 1970, prohibits unnecessary ill-treatment of animals and lists measures to prevent the outbreak, control, and elimination of animal diseases.

Décret No. 206 of 1960, sets conditions for the import of any vegetable or other matter which could introduce organisms detrimental to agricultural crops.

Mining. Law No. 61/8 of 29 May 1961, represents the major mining law and Décret No. 219 of 1961, establishes regulations pursuant to Law No. 61/8. Décret No. 133 of 1969 modifies Décret No. 158 of 1961, regarding creation of a council of mines and provides for its composition. Ownership and control of all mines and petroleum resources is vested with the national government, which issues licenses or leases pursuant to the mining law. Provisions of the mining law authorize the government to request restoration of mined areas. The GON, however, has failed to enforce reclamation provisions of the law.

Décret No. 134 of 1969 amends Décret No. 23 of 1968 pertaining to the institution of an enterprise scheme for research and exploitation of uranium.

Nigeria

Wastes and Effluents. FEPA, pursuant to section 37 of The FEPA Act, promulgated S.I. 8 National Environmental Protection (Effluent Limitation) Regulations, 1991; S.I. 9 National Environmental Protection (Pollution Abatement in Industries and Facilities Generating Wastes) Regulations, 1991; and Guidelines and Standards for Environmental Pollution Control in Nigeria, 1991. The guidelines and standards relate to six areas of environmental pollution control: effluent limitations, water quality for industrial water uses at point of intake, industrial emission limitations, noise exposure limitations, management of solid and hazardous wastes, and pollution abatement in industries.

S.I. 8 mandates that an installation made pursuant to this regulation shall be based on the Best Available Technology (BAT), the Best Practical Technology (BPT) or the Uniform Effluent Standards (UES). S.I. 9 represents a very ambitious effort to tackle waste generation problems, by mandating that industries: release toxic substances only with approval; monitor and report discharges; list chemicals used; obtain permits for the storage, treatment, and transportation of toxic wastes; adopt strategies for waste reduction; obtain permits for discharging effluents beyond permissible limits; and have a stock of pollution response equipment.

The Criminal Code, 1958 (Cap. 42), contains penal provisions for the detrimental vitiation of the atmosphere. The criminal code also imposes a sentence on parties found guilty of fouling internal waters of the country; eg: streams, lakes, and wells.

The environmental sanitation edicts of most states replace or complement existing federal public health laws and the town and country planning laws by providing for the control of such environmental sanitation issues as: refuse and waste disposal, industrial and commercial pollution, enhancement of aesthetic environmental quality, control of pests, and the safeguard of adequate water supplies. Tangentially, the edicts address the discharge of noxious or poisonous effluents into the environment via gutters, drains, and other waste receptacles. The penal provisions and fines fluctuate widely from state to state. Consequently, some states may be attractive as pollution havens.

Each state has at least one authority charged with implementing the edicts. The emphasis and scope the states' edicts give to environmental issues varies widely. For example, the Gongola State environmental sanitation edict provides for three bodies: the State Task Force Committee, the Zonal Task Force Committee, and a State Environmental Health Advisory Committee. In Lagos State the responsibility for a healthy environment rests with the Lagos State Waste Disposal Board, which has wide powers pursuant to the edict.

Problems arise in determining which state agency has responsibility for solid waste or refuse management. Even if an agency recognizes and accepts the responsibility, it will usually plead inadequate funding and shortage of technical facilities and expertise.

The edicts establish a general legal framework for sanitation issues and in particular target domestic and low level industrial pollution. Problems arise, however, since effective regulatory mechanisms do not exist to enforce the edicts. Moreover, the edicts usually fail to provide explicitly for the means and procedures to identify discharges or set standards and limits.

The Sanitation Décret contains a noteworthy provision, which establishes a monthly environmental sanitation day that mandates that citizens participate in neighborhood clean-up efforts. This provision has had some success in mobilizing people to work together – not only on the designated sanitation day but in addressing other environmental problems.

The Factories Act, 1987 (Cap. 126), provides protective provisions for occupational hazards to which factory workers may be exposed. The Act sets minimum standards for safety and welfare of the workers and provides for proper fencing and containment of vessels or equipment containing dangerous or corrosive elements.

This Act provides that any confined place containing dangerous fumes be brought to the attention of the appropriate authority, and precautionary measures, such as providing suitable breathing apparatus, be taken before production begins. Similar provisions exist under the Act regarding any explosive, flammable dust, gas, or like substance. The Act, however, fails to provide for any provisions or regulatory mechanism to monitor the emission of dangerous fumes into the atmosphere.

The Standards Organization Act, 1971 (No. 56), provides minimum acceptable standards for consumers in line with the provisions of the International Organization for Standardization. This law seeks to promote the development of standards so as to ensure acceptable and safe standards of goods and services within the country. While the Act fails to address this point, dangerous pollutants would probably fail to meet the required standards and thus fail to meet the

provisions of the law. This Act seeks to prevent dangerous chemicals and other pollutants from degrading the environment.

The Federal Environmental Protection Agency Décret, 1988 (No. 58), vests FEPA with the power to issue guidelines for monitoring and evaluating pollution control procedures, for treating municipal and industrial wastes, for limiting unlawful effluent discharge, and for protecting air quality and the atmosphere.

This Décret contains penal provisions against offenders discharging hazardous substances in harmful quantities into the air, land, or waters. The Décret also empowers FEPA to establish other agencies, bodies, or units to assist in specialized monitoring of the environment for protection and control of the environment – for example, the Radiation Protection Agency. Furthermore, the Décret directs the Minister in charge of environment to encourage state and local government councils to establish their own environmental protection bodies so as to maintain good environmental quality.

Hazardous and Toxic Substances. Section 20 of FEPD No. 58 prohibits the discharge of harmful quantities of any hazardous substances into the air, land, and waters of Nigeria, except where permitted.

The Harmful Wastes (Special Criminal Provisions, etc.) Act, 1988 (Cap. 165), warrants special mention since it carries a criminal penalty punishable by life imprisonment for carrying, depositing, dumping, transporting, importing, selling, buying, or negotiating trade in harmful wastes within Nigerian territory and the exclusive economic zone. The Act defines harmful waste as any injurious, poisonous, toxic, or noxious substance and, in particular, includes nuclear waste.

The hazardous waste dumping at the port in Koko, which received international attention, provided the impetus for the government to pass this legislation. The Koko incident involved 10,000 barrels of Italian waste material, including highly poisonous polychlorides biphenyls, stacked in a field on the outskirts of Koko.

The Agricultural (Control of Importation) Act, 1964 (Cap 12), provides for the prohibition, restriction, and control of importation of artificial fertilizers and for their marketing, chemical composition, and quality. Fines and penalties attach for offenses.

The Federal Environmental Protection Décret (FEPD), 1988 (No. 58) affords the most relevant legislation for environmental monitoring and prevention of pollution by agrochemicals and pesticides. The Décret establishes the FEPA and vests FEPA with the power to establish procedures for agricultural activities in order to minimize damage to the environment from such activities.

FEPA has the authority to establish procedures for monitoring and controlling not only the manufacture of pesticides and other related chemical substances for the enhancement of agricultural activities, but also their actual use.

Mining. The Minerals Act, 1946 (Cap. 226), is the major law controlling mining and reclamation of derelict land. The law vests ownership and control of all mines and mineral oils in the federal government. A person must obtain a lease or a license to mine or remove materials from the

land. The law, however, provides an exception for inhabitants of a given locality who may continue to mine minerals, e.g. salt, iron ore, soda, potash, etc. – if this has been the custom.

Section 34(1) of the Act empowers the government to request the "reasonable restoration of any area used for mining operations by the replacement of surface soil, the filling in of worked areas, the removal of any tailings or other dumps or heaps caused by mining operations, and such other methods as may reasonably be required." The "reasonable restoration" provision has been translated into leases as a requirement to reclaim 70-80 percent of the mined area and in some recent leases 100 percent restoration.

The government's enforcement efforts have been ineffective, resulting in minimal compliance. Moreover, the law is inadequate for modern mining practices. Given the depressed prices for many of the minerals mined, especially tin, the government fears that enforcement of lease restoration clauses could result in the bankruptcy of companies.

Energy. As pertains to energy production, no separate statute exists to deal with the conservation of oil and gas, like in some oil producing countries. The Petroleum Act, 1969 (Cap 350), and The Petroleum (Drilling and Production) Regulations, 1969 (Cap 350), provide for the control of oil field drilling methods and procedures which are aimed at promoting the conservation of oil and gas resources.

The Petroleum Regulations empower the Director of the Petroleum Resources to give directions to license holders and to revoke licenses for failure to comply. The licensees are subject to work obligations relating to the prevention of oil pollution, safety standards, and confinement of petroleum in prescribed receptacles or containers.

The Associated Gas Re-Injection Act, 1979 (Cap 26), governs the utilization and conservation of natural gas by laying down penalties such as fines or forfeiture of oil prospecting licenses or oil mining leases. The Act specifies that a company must submit detailed programs and plans for either the utilization or re-injection of natural gas to the appropriate Ministry. Rather than reinject the natural gas, however, most companies flare off the gas. Although the companies are required to pay a sum for every 28.317 standard cubic meter of gas flared, the companies prefer to pay this sum rather than adopt alternative technology.

Licensees or lessees of an oil concession, pursuant to The Petroleum (Drilling and Production) Regulations, must "adopt all practical precautions" to prevent polluting the environment. This provision, however, presents implementation problems and is inadequate for preserving the environment from oil spillage. The Oil in Navigable Waters Act, 1968 (No. 34), which gives effect to the International Convention for the Prevention of Pollution of the Sea by Oil, also contains provisions dealing with energy production.

Despite numerous oil spills, little litigation has occurred. Umudje v. Shell-B.P. Petroleum Development Co. of Nigeria Ltd., (1975) 11 S.C. 155, offers the most significant case.⁵⁹ This action arose as a consequence of the defendants' oil exploration activities. The plaintiff, the adjacent land owner, complained:

⁵⁹ See also Ige v Taylor Woodrow (Nigeria) Ltd. (1963) L.L.R. 140 (vibrations causing damage to plaintiff's building); Oladehin v. Continental Textile Mills Ltd. (1975) 6 CCHCJ 1269 (industrial waste water damaging plaintiff's house).

1. That, in the course of road-building, the defendants had blocked and diverted a natural stream, thus interfering seriously with the plaintiff's fishing rights.
2. That the defendants had accumulated oil waste on land under their control and that this oil escaped on to the plaintiff's land and caused damage there.

The Supreme Court, pursuant to Rylands v. Fletcher, found that the defendants were not liable because their blocking the stream had not caused flooding of the plaintiff's land but merely starvation of water and fish -- thus no escape. The plaintiff prevailed on the second count since clear proof existed that crude-oil waste, which the defendants accumulated in a pit on land under their control, had escaped on to the plaintiff's land where it polluted certain ponds and killed the fish therein.

Section 9 of The Petroleum Act, 1969 (Cap. 350), authorizes the Minister of Petroleum Resources to issue regulations and directives to prevent the pollution of water courses and the atmosphere. The Petroleum (Drilling and Production) Regulations, 1969 (Cap. 350), have a few provisions addressing water. Section 15 specifies that licensees and lessees may "not deprive any lands, villages, houses or watering places for cattle of a reasonable (water) supply or interfere with any rights of water enjoyed by any person under The Land Use Act or any other enactment." Section 36 directs that licensees or lessees shall maintain all drilling and mining apparatus in proper and workmanlike manner and take all practical steps to control the flow and to prevent the escape of petroleum into any water, well, spring, stream, river, lake, reservoir, estuary, or harbor.

Furthermore, section 25 of the Regulations provides that the Director of Petroleum Resources approve all equipment used by licensees and lessees in order to prevent the pollution of inland waters, rivers, water courses, the territorial waters of Nigeria or the high seas by oil, mud, or other fluids or substances which might contaminate the water, banks or shoreline, or cause harm or destruction to fresh waters or marine life.

The Agricultural (Control of Importation) Act, 1964 (Cap. 12), provides for regulating the importation of articles for the purpose of controlling plant diseases and pests. Pursuant to section 4 of the Act, the Minister has promulgated The Plants etc. (Control of Importation) Regulations, which prohibit, restrict or control imported plants, seeds, soils, fertilizers, containers and similar goods. The Pest Control of Produce (Special Powers) Act, 1968 (Cap. 349), provides for the inspection of produce for pests before export at all sea- and airports.

The Gambia

Wastes and Effluents. The Environmental Protection (Prevention of Dumping) Act, 1988 (Cap. 72:02), provides for the prevention of the dumping of industrial waste into land or water. The Minister, in consultation with the NEMC, may make regulations providing for: standards for storing, recycling, handling, and disposing of waste; issuance of dumping permits; and monitoring. No subsidiary legislation, however, has been prepared. Section 5 strictly prohibits dumping waste produced from sources outside The Gambia and mandates a fine of up to 500,000 dalasis and up to five years imprisonment.

Sections 9 and 10 of The Public Health Regulations provide for the disposal of night soil. Section 23 of the Regulations empowers the Medical Officer of Health to "order the removal of all

collections of water, sewage, rubbish, refuse, ordure or other fluid or solid substances" as he deems necessary.

Hazardous and Toxic Substances. Section 6 of The Environmental Protection (Prevention of Dumping) Act, 1988 (Cap. 72:02) strictly prohibits the importation of radioactive, toxic, or other hazardous substances. The Act imposes a minimum fine of 10,000,000 dalasis and a maximum of 50,000,000 dalasis, a minimum prison sentence of five years and a maximum of fourteen years, and forfeiture of vessels or aircraft used in commission of the offense. Furthermore, convicted offenders are required to remove the waste, correct any environmental damage, and compensate injured persons. No laws appear to exist on the prohibition and/or restriction, importation, distribution, sale, or use of fertilizers and pesticides.

Mining. The Minerals Act, 1953 as amended (Cap. 64), regulates the right to search for, mine, and work minerals. Sand and gravel mining constitutes the vast majority of mining operations. Section 82 of the Act provides that the Inspector of Mines may in his discretion order a lessee or license holder to:

take such reasonable measures for the prevention or reduction of soil erosion caused by his operations or reasonably to restore any area used for prospecting or mining operations by the replacement of the surface soil, the filling in of the worked area, the removal of any tailing or other dumps or heaps caused by such operations and such other methods as may reasonably be required and, upon service of such order, the provisions thereof shall be deemed to be covenants and conditions of the lease, right or license concerned.

Neither the Act nor the subsidiary legislation defines what "reasonable" land restoration entails. Section 20 provides for compensation to property owners for any damage to the surface of the land as a consequence of a mining operation.

Section 43 states that: " No person shall in the course of mining or prospecting operations ... pollute or permit to become polluted the water of any river, stream or watercourse." Section 46 of the Minerals Rules, however, permits the deposit in a watercourse and the "escape" of chemicals or other substances deleterious to animal or vegetable life with the consent of the Minister.

Section 44 prohibits a lessee from altering a water supply unless the lessee has obtained a water right license. While the Minister is empowered to make rules "regulating the disposal of sludge and tailings and declaring any waterways to be sludge channels," this has not happened.

The Act requires a license and a security to dredge any river, stream, or watercourse. The Minister may require such conditions or restrictions as he deems fit. The dredging and surface mining sections fail to require an EIA and a monitoring program does not exist.

Energy. The Petroleum Act, 1921 as amended (Cap. 65:01), provides for regulating the importation, conveyance and storage of petroleum and other inflammable oils and liquids. Detailed subsidiary legislation exists.

The Petroleum (Exploration and Production) Act, 1986 (Cap. 65:02), while requiring "good oil field practices" only has this vague definition of what such practices entail: "all those practices that are

generally accepted in the international petroleum industry as good, safe and efficient in exploring for and producing petroleum." Section 20 of the Act empowers the Minister to make environmental regulations with respect to:

(b) conserving, and preventing the waste of, the natural resources, whether petroleum or otherwise;

(e) the control of the flow and the prevention of the escape of petroleum or water, gases (other than petroleum) or other noxious or deleterious matter;

(f) the prevention of the escape of water or drilling fluid or a mixture of water or drilling fluid or any other matter

(i) the secondary or tertiary recovery of petroleum from a petroleum reservoir and the methods to be used in such recovery; and

(j) the use of wells and the use of the subsurface for the disposal of petroleum, water and other substances produced in association with the exploration for, or the recovery of, petroleum.

Such regulations have not been promulgated. To date, the GOTG has only awarded one Petroleum Production License and as of the Fall of 1991, the licensee had yet to commence exploratory operations.

6. RECOMMENDATIONS⁶⁰

The recommendations proposed herein are generic recommendations and will have to be tailored to the needs and conditions in each country. In some instances, laws that the legal team believed were particularly well crafted are cited as possible models for other WCA countries. In light of the short time in each country, however, the team could not always verify the degree of implementation and compliance with a law – even though the law appeared artfully drafted and to reflect the circumstances in the country.

6.1 Legal and Policy Reforms

In many instances, the WCA countries have elaborate legal codes – especially for those sectors with economic potential such as forestry, mining, and wildlife. Modern versions often have commendable environmental protection provisions. An issue to consider, however, is to what extent a law is crafted to reflect the circumstances and capabilities in a country. In other instances, the survey determined that laws are lacking or that the existing laws fail to address adequately environmental problems. The lack of subsidiary legislation to assist in implementing the enabling laws represented a recurrent problem.

A complete inventory, review, and analysis of all national, regional, and local laws; subsidiary laws; case law⁶¹; and customary laws dealing with the environment and natural resources in the WCA countries is needed. As a starting point in preparing a comprehensive national review of environmental law, this report could be circulated to the legal offices of appropriate ministries, the legislatures, bar associations, attorneys in private practice, law schools, NGOs, and bilateral and multilateral donors in the WCA countries for review and comment.

The people who respond in each country could form a legal team and follow through on the additional recommendations discussed herein. The team should comment on the report's accuracy, discuss any additional laws and expand on the legal analysis. After conducting a complete inventory and analysis of the environmental laws, each government could designate an office to maintain a complete set of that country's environmental laws.

The law review may indicate the need for significant law reform. Undertaking broad-sweeping legal reforms and effectively integrating new requirements into an existing legal system, however, represents a daunting task. Instead, initial law reform efforts should target areas where the environmental problems are the greatest.

The review should consider the laws' compatibility with the priorities identified in a country's NEAP. Institutions, government and private, can best design and implement laws when policies

⁶⁰ Many of the recommendations contained herein are drawn from S. B. Akuffo, "Pollution Control in a Developing Economy: A Study of the Situation in Ghana;" and a series of memoranda prepared by Faith Halter.

⁶¹ Where WCA legislation is similar to legislation in other countries, a review of court decisions interpreting the legislation in those countries would help. The WCA common law countries, if they do not have a case on point, find case law from other common law countries very persuasive. Given the lack of environmental case law to date in these countries, a compilation of relevant case law from other regions could prove helpful.

and plans establish clear priorities and goals. In this regard, The Gambia's NEAP offers a good example of how a NEAP can help set an environmental agenda. NEAPs can also serve as a vehicle for a law review, as is happening in Ghana. Benin and Burkina Faso have are also making significant progress on their NEAPs.

The review should lead to recommendations where laws need to be revised or repealed. If new legislation is warranted, legal drafters with input from the legal team should consider whether the new legislation should be an independent piece of legislation or consolidated with other laws. For instance, should an industrial development law be amended to incorporate environmental protection provisions. Given the complexity of drafting new laws or revising old ones, and the possible opposition, the legal team may want to consider devising more flexible and creative ways to manage with the existing laws they have. Legal drafters must consider the economic, political, social, and technical contexts in which the implementing institution must operate when drafting a law.

When a developing country undertakes environmental legal reform, the issue almost always arises of whether to adopt an environment protection policy law, also known as a framework or umbrella law. This type of "goal-oriented" law can touch on many environmental issues and indicate a general national policy orientation. A policy law brings a holistic approach to environmental law, rather than keeping it as separate resources laws. This legislative approach avoids the more costly process of drafting an environmental code. Furthermore, such a law can prove useful if more comprehensive legislation meets with strong resistance from various government ministries and the private sector. The law can help to stimulate environmental awareness and cause people to consider using legal mechanisms to achieve environmental goals.

The Cape Verdian "base (or basic) environmental law" provides a good example of a policy law. It brings together under environmental protection many existing sectoral laws which must now be interpreted according to the environmental principles put forward by the new base law. It also serves to induce new behavior, such as public participation and EIA requirement.

Such all-encompassing policy laws, however, can cause problems. They may prove ineffective at the implementation level, since they fail to set workable near-term goals and priorities. A government could initially adopt a policy law, but after identifying environmental priorities, it would need to promulgate laws with greater specificity and/or subsidiary laws. More specific laws will include incentives, deadlines, and oversight mechanisms to ensure that implementation will be rewarded and that delay will be reviewed and rectified. A policy law would probably function better in a civil legal system.

The legal team needs to consider whether the laws are sufficiently clear for the regulated actors and communities to understand. Furthermore, since the ministries handle most enforcement, the question also arises as to whether an enforcement agent can apply the legal requirements to determine who is supposed to comply, what compliance entails, and whether a violation has occurred. Also, for each of these elements, is the law sufficiently comprehensive? The regulators also need to consider whether a court would concur in the law's clarity, even though the regulators are confident that they understand the law.

The legal review should examine the adequacy of fines and fees. Such charges may need to be raised to reflect present conditions – especially in those countries that have experienced high

rates of inflation. In addition, the review should examine whether the laws clearly authorize the government to order violators to make the necessary changes to comply with the law or else shut down. Compliance with the law and permit conditions is the key issue -- not fines and punishment.

The legal review needs to determine to what extent legislation takes into account customary practices, since custom and culture bear on natural resource use. For example, forestry legislation prohibiting the felling of trees in an area where tree felling is an age-old practice will likely not be observed. The same legislation, however, with strong management-oriented rules providing alternatives to prohibited practices may produce compliance. The bottom line is that without local acceptance and participation in the process of formulation and implementation, laws and policies requiring behavioral changes are doomed to fail.

6.2 Environmental Impact Assessment

Many of the WCA countries are just now beginning to formulate guidelines for EIA and the legal review could provide input on this difficult issue. While the United States pioneered the development of EIA legislation, and important principles can be learned from studying the U.S. legislation, the U.S. legislation should not be seen as a universal model. Each country should adopt EIA legislation which will best fit into its constitutional, economic, environmental, social, and technological framework. WCA countries need to be realistic as to what is practical and absolutely necessary. In this regard, a useful reference is "Guidelines to Environmental Impact Assessment in Developing Countries," by Y.J. Ahmad and G.K. Sammy.

EIA must be planned and phased in carefully, and be consistent with national priorities and available resources. Various government entities should establish compatible permit and licensing structures linked to EIAs. An EIA process should be a routine facet of government policy development and/or project review. In order to ensure the comprehensive application of EIAs, governments could mandate that any application for a government permit or license be accompanied by either an EIA or a certificate describing the environmental impacts with proposed monitoring and mitigation measures.

Some countries may need to pass enabling legislation requiring EIAs. The legislation governing EIA should clearly specify the projects subject to EIA procedures, so as to avoid bureaucratic constraints on minor activities. This legislation could be drafted in a number of ways to make it more or less comprehensive. The WCA countries should avoid stringent language that would trigger an EIA for all projects which might have any negative impact on human health or the environment. Such a law would prove impossible to enforce. EIAs should reach only those projects which pose truly significant environmental dangers, so as to justify the bureaucratic and economic burdens. As in-country EIA capabilities grow and developmental activities increase, the EIA standards can be raised. The legislation should specify who should perform an EIA (the project proponent, the government, the licensing agency, or an independent group of experts/consulting companies), who pays for the EIA, and who reviews it.

Two components should comprise the EIA process. There first needs to be an environmental screening process to determine what type of environmental review to perform and then the actual review document. EIA legislation should provide for review and dispute settlement procedures so as to avoid unnecessary delays in decision making. Furthermore, the legislation should

provide enforcement powers, including the authority for the review agency to halt proposed action. The degree of public participation should be spelled out in the legislation and the public should have access to completed, reviewed, and approved EIAs.

Large, established industries, mines, and petroleum operations should prepare environmental action plans detailing what steps they will take to comply with environmental laws and subsidiary laws and their time frame for achieving compliance.

6.3 Compliance Mechanisms

Effective legal reform and institution building will require three types of mechanisms: direct interventions and negative and positive incentives. Direct interventions can be used in the short term. Direct interventions can be pursued for clean-up, reclamation, and rehabilitation efforts, or when the other mechanisms prove incapable of addressing immediate problems. Negative incentives, which can include direct enforcement controls, can be pursued over the medium term. Finally, positive incentives, such as awards or market incentives, should be built into the fiscal system.

Positive incentive mechanisms represent a medium to long-term approach. Positive incentives will depend on fiscal laws and subsidiary laws and a certain level of economic development not yet present in many WCA countries. Market incentives rely on a working legal environmental structure with clear goals and standards. For instance, some developed countries have established systems of marketable discharge permits and emission credits. Such systems require sophisticated monitoring to measure the emissions or effluent produced by every source subject to charges. If a WCA country pursues such systems, the systems would have to be designed to reflect what is technically and economically feasible to measure. Moreover, it is problematic whether a private market would develop for emission rights.

Since these countries are reforming their fiscal regimes, some opportunities may exist to start incorporating positive incentives. On the other hand, some countries may have already provided for a variety of tax credits and deductions to foster investment and may not have additional positive incentives to offer to entice environmentally responsible behavior. Moreover, if a country fails to enforce tax collection stringently, a tax deduction does not offer an attractive incentive. WCA countries often enforce collection of custom duties more vigorously than income taxes. Consequently, a reduced duty for anti-pollution equipment may offer an attractive incentive.

Negative incentives such as fines and fees should be consistent with the polluter pays principle, i.e., the level of penalty or fee should be proportional to the level of damages resulting from the pollution. In lieu of paying a fine, a violator could agree to invest in new pollution abatement equipment or processes in an amount proportional to the amount of the fine. Fee structures could be based on the following components: modest fixed charges going toward the monitoring and regulatory process, annual license fees proportional to the environmental degradation, and environmental performance bonds adequate to cover potential environmental damages in excess of the licensed amount.

Proper accounting procedures must be in place to ensure that the revenue goes for the legally designated use. In countries with high rates of inflation, fines and user fee structures should be indexed to keep pace with inflation and reflect market prices for natural resource use. Such

charges can greatly affect the degree and type of use of a natural resource. For example, where water is scarce, charging substantial fees discourages consumption, whereas charging minimal or no fees encourages consumption. Realistic charges for an exploitation concession – be it water, timber, electricity etc. – will ensure that the costs are borne by those who benefit from the concession.

Determining the proper mix of negative and positive incentives will vary from country to country. For instance, a regulation or other negative incentive could require replacing harvested trees with new seedlings and failure to comply would trigger a fine. Alternatively, a positive incentive would offer the opportunity to provide input in designing projects and the establishment of property rights that give individuals a private reason for doing what has been determined is in the public interest. The financial incentives that the Government of Guinée offers to villagers to participate in reforestation projects is a noteworthy example of a positive incentive.

Using enforcement mechanisms as the centerpiece of a compliance program proves less effective than using them as a supplement to other tools. Enforcement mechanisms such as fines and penalties are a means and not an end in itself. The objective is not to punish people, but to get them to change environmentally harmful behavior. Moreover, excessively harsh fines and/or prison terms reduce the likelihood of actual prosecution. Lighter sanctions with greater certainty of enforcement will prove more effective. Nevertheless, in cases of egregious environmental degradation where a facility lacks the political will or the technical and financial resources to achieve compliance, a government should have the authority to shut down the facility.

Negative and positive incentives must be integrated and made part of a coherent economic plan. Otherwise, in an effort to promote a government's economic growth agenda, bureaucrats can become confused as to how vigorously they are to enforce environmental laws, which could slow economic growth. Again, this speaks to the need to identify and prioritize environmental issues.

Problems arise with regulations and standards when they are not adequately monitored and enforced, since they are subject to abuse. The issue thus arises as to whether new requirements should be implemented if that country does not have the institutional capacity for adequate monitoring and enforcement. Too many unenforced laws reduces a government's credibility and people lose respect for the law. Consequently, governments should set environmental priorities. On the other hand, having the laws on the books does have some advantages. The requirements will guide responsible parties and will be in place when enforcement becomes feasible.

6.4 Standard Setting and Regulatory Approaches

Pollution control policies and legislation must relate to the level and the operational efficiencies of the environmental technologies existing in the country as well as the socio-economic conditions. In this regard, there are two approaches to pollution control: best available technology (BAT) and best (reasonably) practical technology (BPT). Regardless of which approach or combination of approaches a country adopts, approval for new facilities should be contingent on an EIA which specifies regulatory standards. Moreover, provision should be made for phasing in tougher standards.

Where feasible, the regulations on new facilities could include BAT requirements. This approach seeks to use the best available technology available on the world market and ensures the highest

efficiency in the use of resources, and also the highest quality of effluents discharged from industries and sewage treatment plants. The BAT approach implies stringent, detailed, uniform standards and consequently does not consider the assimilative capacities of the receiving media for the effluents and the intended use of the receiving media. Developed countries that rely on a "command and control" approach usually use the BAT approach.

In relatively unpolluted areas or countries with weak economies, BAT requirements may prove unduly restrictive and economically burdensome. Moreover, many of the WCA countries cannot afford BAT technology. Where pollution directly affects public health, however, financial constraints should not be a limiting factor. For instance, the discharge of asbestos dust into the work environment calls for the BAT approach.

Developing countries with limited financial resources usually adopt the BPT approach, which seeks the least costly way of protecting the environment and avoids idealistic maximum standards inherent in the BAT approach. The BPT approach strives to balance the ability of a country, industries, and individuals to pay for pollution control facilities and the need to maintain minimum standards of environmental quality in relation to the requirements of public health and the health of the environment.

Problems can arise with the BPT approach, however, if industries interpret BPT to mean "cheapest possible technology" and fail to provide acceptable solutions to pollution problems. The BPT approach puts greater pressure on the regulatory agencies to determine exactly what is technically feasible and the level of effluents the receiving media can safely accept and the intended use of the receiving media. For instance, drinking water standards would need to be higher than water used for industrial purposes. Countries adopting a BPT approach should be prepared to adopt stricter standards as and when they become feasible and necessary.

Rather than undertake technically complex environmental quality standard setting exercises, some WCA countries may decide to adopt standards prepared by various multilateral institutions. These standards will not be as stringent as standards in many developed countries, but they may still prove unobtainable in some WCA countries. The standards could be tailored to a country's capabilities with schedules for phasing in full compliance over several years. Such incremental progress can provide a bridging mechanism between strict standards and the real world difficulties of achieving compliance. In light of transboundary environmental problems, model standards would facilitate the harmonization of standards among the WCA countries.

WHO standards are probably the most commonly used standards. They provide general guidelines for various environmental media along with recommended limits for concentrations of many specific pollutants. In addition to WHO, other multilateral organizations may be able to provide model standards and regulations. The FAO has developed a scheme for pesticide regulation. The World Bank, through its Office of Environmental Affairs, has issued a series of occupational safety and health guidelines for projects involving hazardous chemicals, such as pesticides and rodenticides. The United Nations Centre on Transnational Corporations has prepared a Code of Conduct for transnational corporations.

Guidelines may also be available to help implement the international environmental conventions, to which many WCA countries are signatories. For instance, the IUCN has prepared policy papers for protected areas legislation to meet the criteria of the United Nations List of National

Parks and Equivalent Reserves, and of the 1972 UNESCO Convention for the Protection of the World Cultural and Natural Heritage; and for national regulatory implementation of CITES.

Developed countries have traditionally sought to manage pollution by regulating environmental media such as air and water separately. Other approaches are regulation by substance, regulation by geographic area, regulation by source, and integrated pollution management (IPM). The regulation by substance approach is most frequently used in regards to pesticides, toxic chemicals, and hazardous waste. This approach is similar to the regulation by media approach, in that it focuses on a single issue. The regulation by geographic area is most commonly used to manage watershed areas, parks and other protected areas, and coastal zones.

The regulation by source approach identifies pollution sources such as industrial or sanitation facilities and treats the facilities as a single complex source of pollution. The regulation by source approach bears similarity to the IPM approach. IPM considers the overall effects of specific pollution management measures on the ecosystem. These holistic approaches seek to avoid the media specific approach which can lead to problems of "cross-media pollution."

For the developed countries to adopt different approaches at this point would prove very difficult. The WCA countries in the process of industrializing may find, however, that holistic approaches offer a viable option. Large industrial and sanitation facilities are relatively few and can be easily identified. Furthermore, a new environmental legal regime could more easily handle a few large actors than numerous small ones. Changing the behavior of a major enterprise often can produce larger improvements faster than trying to change the behavior of many small actors. After establishing and implementing effective regulations for large facilities, the regulations could be expanded to include smaller facilities.

Holistic approaches have the disadvantage of being difficult to implement. They require a detailed examination of a facility. When establishing the requirements for a facility, government officials have considerable discretion, and discretion all too often leads to abuse of privilege or inaction. On the other hand, a holistic approach would prove compatible with the BPT approach, which entails a more detailed scrutiny of each specific situation.

Some limited opportunities may exist to develop holistic approaches easily. Many large facilities in the WCA countries are undergoing privatization. As part of this process, environmental audits are often conducted on the facilities. These audits could provide the scientific basis for adopting a holistic approach. For instance, Ghana has conducted environmental audits of gold mines slated for privatization and Zambia has extensive experience with environmental audits. Sometimes the audits reveal environmental devastation that scares off possible investors afraid of the potential liability and the costs of remediation. To assuage such fears, investors will likely seek a phase-in period for having to comply with requirements and releases from liability for the existing degradation.

Increased evaluation and monitoring will determine whether the sources of pollution or natural resource exploitation are exceeding acceptable limits, and if so, this data will serve as the rationale for the formulation and enforcement of environmentally-related policies, laws, rules, regulations, and standards. A sound factual basis and an actual need for legal requirements is crucial. Nevertheless, given the lack of baseline data in many of the countries, the governments may have to implement laws and regulations where they perceive a great threat to the

environment or public health. Legal drafters need to be sensitive to this problem and design laws that facilitate the collection of relevant data.

In addition to collecting environmental data, economic information on the costs-benefits of undertaking environmental reforms and the costs-benefits to human health and the natural resource base should be collected. Based on experiences in developed countries, this represents a complex task. Every effort should be made to keep the methods of calculating and comparing the costs-benefits simple. The academic and NGO communities may be able to help collect and evaluate the environmental and economic data.

Economic cost-benefit data can usually provide analysis on first-order consequences or consequences of well-understood relationships. The short-term economic costs can be easily measured, whereas issues such as public participation and long-term environmental effects are rarely well understood and prove difficult to quantify.

Given the pressing problems facing the WCA countries, environmental monitoring will probably not rank high as a priority program. Requiring regulated entities to, in effect, periodically monitor and inspect themselves and report the results to the government can supplement government inspections. Self inspections are of course subject to mistakes and fraud, but they can be effective with responsible companies.

An effort should be made to work with the multinational corporations and the joint ventures (JVs) that have western partners. Such companies will offer a good starting point since they will likely have the financial resources and technical expertise and experience with environmental reporting. Moreover, multinationals and JVs are often held to a higher standard. Given their expertise and experience, these companies would be likely candidates for many of the initiatives discussed herein.

Companies should be required to maintain their environmental records for a certain time period - such as two or three years. This could prove helpful, if the government discovers a problem and wants to check earlier records. Such records could also help determine the overall quality of the country's environment and provide baseline data. Many of the WCA countries, however, will not be able to handle substantial new record-keeping. Consequently, the reporting requirements should be kept simple, with the reporting frequency limited to an annual basis. In addition, as was mentioned in the section on institutional strengthening, concerns also arise as to the availability and adequacy of equipment and testing facilities.

6.5 Dispute Resolution

The threat of swift and effective enforcement actions can serve as a deterrent to potential violators. Many of the WCA countries, however, lack an adequate civil or administrative legal system capable of adequately handling the technical and procedural intricacies of complex environmental enforcement actions. While many of the recommendations herein seek to foster a more efficient enforcement system, the courts will probably not offer a viable option in the short term. Moreover, litigation represents a winner take-all approach to resolving problems and fails to foster consensus building and balance between competing interests.

lead responsibility for establishing policy, guidelines, and procedures. Regional and local governments could have clear responsibility for monitoring and implementation, with periodic audits by national representatives. Effective management controls for monitoring and measuring performance should be mandatory. If the regional and local governments undertake monitoring and implementation responsibilities, they will require increased financial resources. This will prove problematic.

If legislation fails to specify jurisdictional responsibilities, the various governmental institutions will need to negotiate memoranda of understanding or set up ad-hoc inter-ministerial coordinating bodies to establish and/or clarify their relationships. The obvious objective is to have complementary, as opposed to competitive, sharing of responsibility. Such bodies should also review the implementation of environmental activities.

Developing EIA capabilities represents a priority matter and should serve as a starting point in institutional strengthening efforts. National, regional, and local governments need to develop the expertise to analyze EIAs and to determine if they conform to the recommended guidelines. Furthermore, government institutions must strengthen their monitoring and enforcement capabilities. Technical and financial assistance from the donors will likely be required at all levels for formulating guidelines, regulations, and standards, and assisting with EIAs.

The lead environmental enforcement agency should have access to a laboratory facility to carry out rapid analyses of water, soil, and toxic chemical substances. Furthermore, a mobile pollution testing unit should be formed to undertake on-the-spot analyses of air, water, and soil pollution.

All government ministries charged with environmental protection and/or natural resource management should have a legal division. The main responsibilities of the legal divisions would be to: advise their agency on legal matters; study and keep up-to-date records of all existing and proposed legislation dealing directly or indirectly with the environment -- both national and international; draft, assist in or promote the drafting of environmental legislation, EIA procedures and standards; and monitor, inspect, report or assist in cooperation with other bodies and agencies, in the implementation and enforcement of all environmentally related legislation.

The legal divisions should function on a continuous basis and be staffed by full time attorneys, assisted by environmental inspectors. The attorneys must be able to work on environmental legal issues and not have their time taken up with routine legal matters such as contract and labor issues for their particular ministry. When bringing an enforcement action, the attorneys and inspectors will have to be able to show that the inspector had adequate reason to conclude the existence of a violation, the necessary proof of violation and what contrary evidence the defendant will produce.

As was mentioned in the previous section on Dispute Resolution, the judicial system lacks the capacity to adjudicate environmental disputes. Consequently, in the short term, institutional strengthening efforts should probably focus on the type of alternative dispute resolution measures discussed herein.

6.7 Public Participation

Effective public participation must constitute a central element in a country's effort to build new environmental legal regimes. Involving all affected parties not only increases the likely acceptance of environmental laws and willingness to comply, it also increases the transparency and therefore the credibility of the process. Furthermore, government activities conducted in an open manner afford less opportunities for corruption.

An environmental legal reform project should begin by adopting the recommendations for public participation, in order to have public input into subsequent legal reform initiatives. Moreover, public participation will facilitate democratic institution building. Encouraging the transition to more stable government, grounded in legal process, represents a fundamental purpose of U.S. assistance.

In many developed countries, public and political support for environmental action has enabled governments to build strong democratic, environmental legal regimes. The type of legal participatory mechanisms that prevent abuse of power and foster political responsiveness to pressure for environmental action are: "government in the sunshine" laws; administrative procedure acts, similar to that in the United States, which provide for the right to participate in public hearings and rule making procedures; and private citizen actions to police government and industry compliance with the environmental laws, with the right to recover attorney fees; and a free press.

Implementing such legal mechanisms in the WCA countries will pose enormous challenges to the legal profession and government bureaucrats. In these countries, the aforementioned participatory mechanisms will only be implemented in the medium to long-term. Alternative public participation mechanisms will have to be designed for the short term. How a participatory process evolves will depend on each country's legal system and local customs and culture.

Several instances of public participation hold promise. Ghana's bushfire law and The Gambia's community forest project provide good examples of involving local populations in the design and implementation of laws and programs. Cape Verde's basic environmental law provides for public participation of social groups in the formulation and implementation of environmental policy. In Guinea Bissau's new proposal for a land tenure law, public participation is expected in zoning and licensing processes. The country reports that many WCA countries prepared for the United Nations Conference on Environment and Development (UNCED) represented a first step for some countries in soliciting input for an environmental agenda. Of even greater significance are the NEAPs, which can build on the processes initiated by the UNCED country reports. In particular, Benin's and Guinée's NEAP served as catalysis to stimulate public participation in environmental decision making.

Government/private sector advisory committees or task forces organized by sector or region should be established to review environmental issues and make recommendations. Government representatives should include not only people from ministries with environmental responsibilities, but also the finance and education ministries. In this regard, the activities of the Cape Verdian Ministry of Education and Sports and its interaction with other Cape Verdian ministries sets a useful precedent for other WCA education ministries. The private sector representatives should be from the business/regulated community, academia, NGOs, and local community groups.

Having an inclusive group will produce a slow and contentious process. The task force representatives, hereinafter referred to as stakeholders, will come to the table with different interests, information, roles, and perspectives. The stakeholders will be motivated to participate, when they understand that negative and positive incentives will be formulated that affect their interests.

Involving the regulated community may produce less stringent requirements, but the benefits will outweigh the negatives. The requirements may be more realistic and easier to enforce, and thus greater environmental improvements. Finally, all the stakeholders need to realize this process entails a continuing debate in seeking to balance the concerns of economic growth, equity, the environment, and public participation.

The teams that undertook the legal review could evolve into task forces or entirely new entities could be created. Some NEAP teams already have sector task forces. If a new entity is created, the legal team could remain in place to provide legal advice to the task force. If the legal team no longer exists, there should be at least one attorney on each task force. There should be effective notice of task force meetings, the meetings should be open to the public, and there should be a public record of a task force's deliberations.

Legal teams, task forces, NEAPs, and EIA can serve as building blocks for more long-term consultation networks, either formal or informal, in an environmental legal regime. A challenge for the future will be how to structure follow-up and oversight mechanisms that includes public participation and NGO consultations once the paper NEAP is complete. Questions to be resolved include: how to sustain public and NGO involvement? the appropriate structures and forums? who convenes meetings and workshops? who pays for the activities? One scenario would be for a task force to be institutionalized as a "National Environmental Council." After the parties become use to working with each other in developing environmental law and policy, an Administrative Procedure Act or similar participatory legal mechanism will not sound like a radical idea. In this scenario, the reality goes before the law, instead of promulgating a law which bears no relation to reality.

An issue related to public participation concerns how to support the decentralization process underway in many WCA countries. Laws should permit people to address their concerns to local government officials and not a registrar in the capital city. The decentralization process will lead to transfers of jurisdictional responsibilities. As a practical manner, the regional and local levels of government will only gain increased power as they receive increased financial resources. As long as the central government controls the purse strings national initiatives will pre-empt over regional and local initiatives.

While increasing public participation represents an essential element of any environmental legal reform agenda, it is important to recognize the authoritarian governmental structures of many WCA countries. Even where a government may have been democratically elected, it often operates in an authoritarian manner. Decision-making is often informally done, outside institutional structures. Such regimes are designed for stability rather than change, and may resist the type of public participation mechanisms discussed herein. Consequently, key decision-makers will need to buy-in to the environmental reform agenda and serve on or have input into the task forces. Without such support, bureaucrats and politicians, even though they may

recognize the deficiencies in the existing environmental legal regimes, will be reluctant to move forward.

Defining what public participation means may prove problematic. Governments may interpret it to mean informing stakeholders or consulting with them, but not necessarily allowing stakeholders to actually participate. Furthermore, while governments may permit stakeholders to help implement a project, stakeholders may be excluded from designing a project and subsequent evaluation of an implemented project.

Traditional decision-making systems, such as village councils, may offer viable mechanisms for public participation. For instance, the Councils of Elders and religious leaders such as Imans and Islamic League in Guinée have proved effective in influencing attitudes toward natural resource use. Local communities would be more comfortable working with such established and accepted participatory mechanisms. Moreover, the experience in The Gambia with VDCs and in Ghana with Committees for the Defense of the Revolution (CDRs) indicate that "modern" decentralized institutional mechanisms can generate tension with traditional mechanisms. Modern mechanisms have to incorporate traditional leaders and values.

NGOs can serve as a catalysis spark to engage local communities in taking environmentally responsible actions and to help foster an environmental consciousness. NGOs can help governments and donors reach out to the grassroots levels. Effective enforcement of environmental laws will only occur when the public demands that the government enforce the law and government officials are held accountable for their actions. The Koko incident involving the dumping of hazardous wastes demonstrates that the public can be energized to demand environmentally responsive actions. In many cases the donor community initially influenced the governments to take environmental actions, but as a consequence of the rapid growth among NGOs, more pressure for environmental action is coming from within the countries.

The NGOs coalitions which are forming in most WCA countries should be supported. Governments and donors often find it easier to work with coalition representatives than individual NGOs. A first step would be to help establish a network to exchange information. The NGO network in each country could publish an environmental newsletter -- such as the one in The Gambia-- distributed free of charge, advising on legal and policy developments. If the NGOs coalesce into a viable coalition they could consider establishing an environmental community development foundation. Foreign assistance funds could be channeled directly to the foundation, which could make small grants and loans to NGOs and local community groups. The foundation would not undertake projects itself, but remain a mechanism for dispersing funds. The foundation could also serve as a liaison in coordinating activities with the appropriate governmental bodies and the donor community. USAID is supporting such an initiative in Madagascar.-

NGO development is particularly important in light of the decentralization process underway in many of the WCA countries. Also, well developed village organizations and local community groups could address the concerns of the rural populations -- if they have good information and a supportive legislative context in which to work.

In some countries, however, the legal and bureaucratic demands present problems for young, indigenous NGOs to receive governmental recognition and approval. The issues are further complicated since some governments fear that NGOs will assume a political character and

threaten the political regime. International NGOs equipped with finance, managerial skills and qualified staff can pursue the complex, time consuming requirements to obtain legal recognition, whereas indigenous, rural and village NGOs with limited staff, structure and resources are severely handicapped. NGOs require a legal status that will enable them to access financing for projects from any source without incurring tax liability.

6.8 Education, Training and Public Awareness

Representatives from the WCA law schools should be involved in the law review efforts described above. The reports arising out of this effort could form the basis for environmental law courses at the law schools. The law schools should stress to their professors and students the importance of writing and publishing practical, environmental legal treatises. Few lawyers have been trained in the legal mechanisms for environmental regulation. Such legal expertise will enhance the quality of environmental management. Furthermore, the law schools could work with the Business, Science and Education Departments at the Universities to develop a multidisciplinary course on environmental law and management.

The law schools could work with the local bar associations to develop one/two day continuing legal education seminars for attorneys. In addition to practicing attorneys, judges need to attend these seminars. Environmental cases will present novel and technically complex issues to the judiciary. Furthermore, the bar associations could establish environmental law sections. Collaboration among the WCA countries' environmental law sections and environmental law sections in other regions of the world should be encouraged.

The material collected while doing the legal review could form the nucleus for an environmental law library in each country. The libraries could supplement their collections with material from WHO, FAO, UNDP, UNEP, and various bilateral donor agencies. The libraries should also collect environmentally related judicial decisions, especially if a country's judicial system is not geared up to record, publish, and distribute the courts' decisions.

The agencies and ministries charged with environmental protection and natural resource management should develop comprehensive environmental manuals, which should be made readily available to the public and which could be purchased at a nominal fee. In many WCA countries, obtaining copies of the laws, even from the enforcement agencies can pose problems. FEPA in Nigeria provided a notable exception to this situation. Consequently, if one wants to comply with the law, determining what is the law is the first hurdle to overcome.

The manuals should thoroughly address and explain in simple, lay language all policy, laws, subsidiary laws, and practices. For each level, it should outline required documentation (plans, licenses, permits, annual reports, audits, EIAs, etc.), distribution of jurisdictional responsibility and points of contact, sanctions, renewal or amending procedures and associated policy, regulatory requirements, and practices.

The WCA countries would benefit from sharing information with each other on their environmental laws. In many cases, their environmental successes and failures would prove more relevant than the experiences of developed countries. The Network for Environmental and Sustainable Development in Africa (NESDA), formerly known as the Club of Dublin, located in Abidjan, Côte d'Ivoire, and the Centre d'Études de Recherches et de Documentation en Droit International et

pour l'Environment (CERDDIE), located in Yaoundé, Cameroon, could facilitate a sharing of information. Both organizations have francophone and anglophone staff. Either of these organizations or some other organization could become a repository for any legal reviews and environmental manuals that the WCA countries prepare.

NESDA is vigorously working to establish a network among government environmental institutions and the private sector and serve as a clearing house for information. NESDA puts out periodic news-releases and a quarterly newsletter. With minor editorial revisions, the executive summary of this report could be published in the newsletter. The executive summary should also be made available to other appropriate newsletters. NESDA also sponsors an annual conference, which focuses on two or three key environmental issues. In this regard, environmental law offers an appropriate topic.

An abridged version of this report containing the over view material in the beginning and the recommendations section could be prepared. The abridged version should be translated into French and possibly Portuguese and circulated widely in the WCA francophone and lusophone countries. If an environmental law conference takes place, the abridged version could serve as a hand out.

Nonformal, educational programs need to be created to advise local authorities and community groups on the laws, the purpose of the laws, and how to implement the laws. The francophone countries refer to such education as "sensibilisation." Educational efforts prepare the ground for compliance enforcement. The people attending the programs could also provide feedback and suggestions on the laws.

Attitudes toward environmental quality and natural resource management are matters of human habit. Sufficient resources will never exist to send enforcement agents house to house in the cities, towns, and villages to enforce the environmental laws and force people to change their habits. The success or failure of laws and regulations will thus depend on the responses and the general attitudes of the majority of the people. Since a sizeable portion of the population can neither read nor write English, French, or Portuguese, educational programs should be conducted through the kinds of media understandable to all -- such as radio and television. Since radio and television are often controlled by the WCA governments, there would be little difficulty in devising practical programs to assist the government in using those media to educate the public about environmental laws. Furthermore, several countries have begun integrating environmental concerns into the regular school curricula. Cape Verde, with international aid, developed a series of books on environmental protection, ranging from a teacher's guide to the student exercise book. Once an educational program proves successful in modifying habits, governments will face a growing public demand for increased environmental protection and natural resource management.

NGOs or other private sector groups could sponsor environmental workshops and conferences open to the executive and legislative branches of government, the business community, and the public at large. Such groups are well suited to sponsor workshops and conferences since they could draw a broad range of attendees. If a government ministry hosts a conference, it may try to select the attendees from within the executive branch of government or limit the conference to party members.

Special efforts should be made to ensure that members of the legislative branch attend the workshops and conferences, since they will need to draft and pass new environmental laws. Elected representatives in newly established democratic bodies would particularly benefit from such workshops and conferences. Even in those countries with established legislative bodies, the representatives usually defer to the executive branch in drafting environmental legislation. This occurs because of the political power of the executive branch and the technical expertise in the government agencies. Clearly the agencies need to draft the subsidiary laws, but the legislative branch could play a greater role in drafting executing laws. Also an environmentally oriented legislative body fully aware of environmental laws would be more likely to try to compel the executive branch to enforce the law.

Staff training obviously represents a critical element of institution strengthening. Determining the appropriate training proves more complicated. Training based on experiences from industrialized countries, which have greater levels of financial and technical resources than the WCA countries, may prove inappropriate. Experiences from other developing countries need to be identified and adopted. For instance, USAID recently sponsored a trip for Ivorian officials working on the Ivorian NEAP to meet with their Madagascar counterparts. If an industrialized country is used as a model, the more appropriate models are government structures at the regional and local level.

An effort should always be made to provide training and workshops in-country. If people are sent to developed countries for special training, an effort should be made to target two types of individuals: first, individuals in the public and private sectors who are likely to hold environmental leadership positions in their countries, and second teachers or trainers.

6.9 Legal Technical Assistance

Fostering environmental legal reform will pose greater challenges to the WCA countries and the donor community than traditional projects. First, bringing about lasting legal and policy reforms is more complex than a discreet project. Many more actors and interests are potentially affected. To succeed, both environmental and economic interests have to be balanced and integrated. Spectacular successes will not be likely; moreover, success will prove difficult to quantify. The parties have to be prepared to accept incremental progress over a long period of time. On the other hand, the benefits of legal and policy reforms ultimately offer more widespread benefits and sustainability than traditional projects.

The type of donor technical assistance (TA) to implement environmental legal reform will vary somewhat from traditional donor TA. Legal reform may not necessarily require having a consultant reside in a country for several years, but it will require continuing, intermittent consultancies of several weeks to a few months for several years. A benchmark of success should not be that a consultant came into a country for a week and drafted a new law. For the law to be effective, implementing regulations would also have to be promulgated. Moreover, a few weeks is not sufficient time to analyze thoroughly the ramifications of a proposed law and regulations and to consider alternatives and to go through a process of public participation. Basically, the process is the project.

A series of pilot projects in different countries would validate the recommendations in this report. Pilot projects would afford an opportunity for experimentation and learning by trial and error, before undertaking more far-reaching legal reform efforts. Nevertheless, an effort should be made

to avoid particularly risky projects and instead target projects with a high probability of success. The pilot projects will have high visibility, so as to create momentum for environmental legal reform.

The projects will involve formulating recommendations for changes in the environmental legal regime. These changes could include changes in standards and how such standards are set, and in compliance and enforcement mechanisms. Pilot projects could take a number of forms. A country could consider a project using concepts of IPM or single source regulation. Alternatively, there could be media specific projects dealing with water or wastes. An EIA for a major infrastructure project could serve to integrate many of the recommendations discussed herein.

A regional project involving a water basin, national park/protected area, or a coastal zone that includes territory in different countries and different levels of government within a country could provide a model for how to resolve jurisdictional issues address environmental issues holistically. A regional arrangement could provide a framework for harmonizing and unifying laws and institutions. Such a project needs to be carefully considered in light of different political regimes, languages, legal systems, and economic development. When designing a pilot project, the designers should conduct periodic reality checks and avoid grandiose projects that promise too much.

When this report is circulated for review and comment, recommendations for pilot projects could also be solicited. Obviously, a country that organizes a legal team and responds to the legal reform recommendations and submits a project proposal establishes a measure of credibility. A country's proposed pilot project should reflect an environmental issue, which that country has identified as an environmental priority. A project should be replicable, not only in the country that proposed it, but in other WCA countries. Furthermore, it could be a project that is already scheduled, but where legal and policy issues had not heretofore been considered and integrated into the project.

A central office in a WCA country needs to be designated to coordinate technical assistance and disseminate information on the pilot projects to the WCA countries. The WCA countries will benefit from the lessons learned from similar experiences in the other countries and avoid having to reinvent the wheel. The central office will provide foreign consultants with environmental legal expertise to work with the attorneys in-country on an as needed basis.

It is advisable that a local attorney be paired with a foreign consulting attorney. The local attorney will understand the intricacies of the legal system in the host country far better than a foreign attorney. The local attorney, however, may not have the same degree of environmental legal expertise as the consulting attorney. The consulting attorney would assist with the analysis of existing laws and environmental institutions, assist with drafting new laws, provide a commentary on the proposed draft laws, and work with the stakeholders to stimulate environmental consciousness and a public debate. The consulting attorney must be careful to take into account the particular circumstances in a WCA country and not suggest laws which may fulfill the consulting attorney's theoretical environmental ambitions.

Local attorneys would have been identified during the initial law review process. The close collaboration between in-country and foreign attorneys will facilitate problem solving and provide on-the-job training. This strategy contemplates that mechanisms will be put into place to hire or contract with local attorneys if the host government does not provide an attorney from one of its environmentally related ministries.

ANNEX I

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BIBLIOGRAPHY

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ANNEX III

LEGISLATION

LEGISLATION

BENIN

"Loi no. 90-32." December 11, 1990. Constitution of the Republic of Articles 27, 28, 29 and 98.

Coastal Zone. "Ordonnance no. 68-38." June 18, 1968. regulates Waterways Navigation.

Forestry. "Loi no. 87-012." September 21, 1987. Forestry Code, recently revoked.

Forestry. "Loi no. 93-009." July 2, 1993. Forestry Code.

Institutional Framework. "Decret no. 92-17." January 28, 1992. Establishes the organization of the Ministry of the Environment, Housing and Urbanization.

Institutional Framework. "Decret no. 74-60." March 8, 1974. Establishes a National Environmental Commission.

Institutional Framework. "Decret no. 78-180." July 14, 1978. Establishes a National Man and Biosphere Committee.

Institutional Framework. "Decret no. 8-240." September 5, 1980. Establishes the National Potable Water and Sanitation Committee.

Land. "Loi 62-025." August 14, 1962. Provides the organization of agrarian property.

Land. "Décret 82-435." December 30, 1982. Prohibits brush fires and the burning of plantations.

Land. "Arrêté local no. 422 F du 19 mars 1943." March 19, 1943. Establishes the conditions for land transfer and use in Dahomey.

Public Hygiene. "Loi no. 87-015." September 21, 1987. Public Hygiene Code.

Water. "Loi no. 87-016." September 21, 1987. Water Code.

Wildlife. "Loi 87-014." Regulates Wildlife Protection and Hunting.

BURKINA FASO

Projet de loi Portant Code de l'Environnement Reorganisation Agricole et Foncière (RAF): Zatu No. AN-VIII-0039 Bis/FP/PRES du 4 juin 1991 Kiti d'application No. AN-VIII-0328 Ter/FP/PLAN-COOP du 4-6-91

Zatu No. AN-VII-0035/FP/PRES--Statut général des groupements pre-coopératifs et sociétés coopératives au Burkina Faso

Zatu No. AN-VII-0016/FP/AGRI-EL: Code de la Santé Animale

Kiti No. AN-IV-232/CNR/ETOUR: Création du Comité National de Lutte contre la Désertification

Kiti No. AN-VII-00113/FP/AGRI: Règlement de la Police Zoo-Sanitaire au Burkina

Kiti No. AN-VII-0112/FP/AGRI-EL: Autorisation et organisation de l'exercice à titre privé de la profession de vétérinaire

Kiti No. AN-VII-0114/FP/AGRI-EL: Règlement de la Santé publique vétérinaire

Kiti No. AN-VII-015/FP/MET/PLAN/MAT: Création de structures de gestion et d'exécution du programme Sahel Burkinabe

Arrêté No. 010/MET/MARA/MTPHV: Création, attributions, organisation et fonctionnement d'une cellule de Coordination du Programme Nationale de Gestion de l'Information sur le Milieu

Arrêté No. 91-00557/AGRI-EL/SG/PNGT: Organisation et fonctionnement de l'Unité de Gestion Operationnelle du Programme National de Gestion des Terroir

Décret No. 77/128/PRES/MCDIM/DGM du 18 avril 1977: Hygiène et Sécurité dans les mines

Décret No. 92-213/PRES/PM/MET: Organisation du Ministère de l'Environnement et du tourisme

Décret No. 92-233/PRES/MET: Création, attribution, organisation et fonctionnement des structures du Plan d'Action National pour l'Environnement

Raabo No. AN-VI-0012/FP/AGRI-EL/MET/ME/MAT/MF: Détermination des pistes à bétail

Raabo No. AN-VII-0001/FP/AGRI/EL/ACP/EAU/MF/MAT/MET: Approbation des cahiers des charges sur l'exploitation des périmètres hydro-agricoles, des terres aménagées pour cultures pluviales et des terres pastorales aménagées

Raabo No. AN-VIII-14/PYTG/HC/OHG: Création du Comité Provincial LU. CO.DEB dans la province de Yatenga

Cahiers de charges sur l'exploitation des périmètres Hydro-agricoles

Cahiers de charges sur l'exploitation des terres pastorales aménagées

Cahiers de charges sur l'exploitation de terres aménagées pour cultures pluviales

CAPE VERDE

Environmental Policy. "Lei n° 86/IV/93. Boletim Oficial da República de Cabo Verde. I Série - n° 27." July 26, 1993. Establishes the bases of a national environmental policy.

Fisheries. "Decreto-Lei n° 17/87. Suplemento ao Boletim Oficial de Cabo Verde n° 11." March 18, 1987. Provides general policy for the utilization of fisheries resources.

Fisheries. "Decreto-Lei nº 97/87." September 5, 1987. Amends Decree-Law no. 17/87.

Fisheries. "Decreto-Lei nº 71/92." June 20, 1992. Amends Decree-Law no. 17/87.

Fisheries. "Lei nº 60/IV/92." December 21, 1992. Establishes the limits of the exclusive economic zone.

Forestry. "Decreto nº 62/89. Suplemento ao Boletim Oficial de Cabo Verde nº 36." September 14, 1989. Regulates forestry activities.

Land Tenure. "Lei nº 9/II/82." March 28, 1982. Agrarian Law.

Land Tenure. "Lei nº 78/III/90." June 29, 1990. Amends Agrarian Law.

Land Tenure. "Lei nº 5/IV/91." July 4, 1991. Amends Agrarian Law.

Protected Areas. "Lei nº 79/III/90. Boletim Oficial de Cabo verde nº 25." June 29, 1990. Declares the islets of Rombo, Raso, Branco, Baluarte and Curral Velho as natural reserves.

Water. "Lei nº 41/II/84. Suplemento ao Boletim Oficial de Cabo Verde nº 24." June 18, 1984. Water Code.

CAMEROON

Law No. 67/LF/19 of June 12, 1967, relating to the Right of Association

Ordonnance No. 74/1 du 6 juillet 1974, fixant le régime foncier, modifiée par l'ordonnance 77/1 du 10 janvier 1977

Ordonnance No. 74/2 du juillet 1974, fixant le régime domanial, modifiée par l'ordonnance 77/2 du 10 janvier 1977

Ordonnance No. 80/22 du 14 juillet 1980, portant repression des atteintes a la proprieté foncière et domaniale, modifiée par la loi 81/21 du 27 novembre 1981

Loi 85/09 du 4 juillet 1985

Décret No. 76/165 du 27 avril 1976, fixant les modalités d'obtention du titre foncier

Décret No. 76/166 du 27 avril 1976, fixant les modalités de gestion du domaine national

Décret No. 76/167 du 27 avril 1976, fixant les modalités de gestion du domaine privé de l'Etat

Décret No. 87/1872 du 16 décembre 1987, portant application de la Loi 85/09 du 04 juillet 1985

Ordinance No. 73/18 of May 22, 1973

Law No. 81/13 of November 27, 1981, portant régime des forêts, de la faune et de la pêche

Law No. 81/13

Decree No. 83/169 of April 12, 1983

Decree No. 83/169

Loi No. 84/13 du 5 décembre 1984 portant régime de l'eau

Loi No. 73/16 du 7 décembre 1973 portant régime des eaux de source et des eaux minérale

Loi du 5 décembre 1984

No. 85/1278 of September 26, 1985

Law No. 83/16 of July 21, 1983

Loi No. 64/LF/23 du 13 novembre 1964 portant protection de la santé publique

Décret No. 76/372 du 2 septembre 1976 portant réglementation des établissements dangereux, insalubres, ou incommodes et ses arrêtés d'application

Loi No. 81/13 du novembre 1981 portant régime de la forêt, de la faune, et de la pêche ainsi que la loi portant réglementation foncière contenant des dispositions relatives aux régimes juridiques des eaux

Forestry Law, No. 81/13 of November 27, 1981

Law No. 81/13 of November 27, 1981

Decree No. 83/169 of April 12, 1983

Decree No. 83/170 of May 12, 1983

Decree No. 83/171 of April 12, 1983

Forestry Law, No. 81/13 of November 27, 1981

Decree No. 75/ 740 of November 20, 1975

Decree No. 76/450 of October 15, 1976

Décret No. 76/372 du 2 septembre 1976 portant nomenclature des établissements dangereux, insalubres ou incommodes

Arrêté No. 17/MINMEN/ DMG du 21 octobre 1976 déterminant les conditions d'application du décret 76/372 du 2 septembre 1976

Arrêté No. 13/MINMEM/DMG/SL du avril 1977 portant nomenclature des établissements dangereux, insalubres ou incommodes

Circulaire No. D69/NG/MSP/DMPHP/SHPA du 20 août 1980 relative à la collecte, le transport et le traitement des déchets industriels, des déchets et ordures ménagères et des matières de vidange sanitaire

CENTRAL AFRICAN REPUBLIC

Fisheries. "Ordonnance No. 71/090." August 6, 1971. Regulates fishing and water sanitation.

Fisheries. "Loi No. 61/283." December 22, 1961. Regulation of fishing.

Forestry. "Loi No. 90.003" February 2, 1991. Forestry Code.

Forestry. "Loi No. 61/273." February 5, 1962. Forestry Code, abrogated by 1991 Code.

Institutional Framework. "Décret No. 75/026" January 31, 1975. Creates National Commission to Manage the Environment.

Institutional Framework. "Ordonnance No. 69/49" and "Décret No. 69/293" September 23, 1969. Organic law, regulations for a National Office of Forests.

Land. "Loi No. 63-441" January 9, 1964. National public property ("domaine national") law.

Land. "Loi No. 62/359" January 18, 1963. Amends the public taking provision of the urban planning law.

Land. "Loi No. 61/263" December 23, 1961. Urban planning law.

Land. "Loi No. 56/1106" November 3, 1956. Colonial law establishing/classifying public property.

Water. "Décret No. 68/278" October 9, 1968. Regulates drilling of water wells.

Wildlife. "Ordonnance No. 85.005" January 30, 1985. Ends elephant hunting.

Wildlife. "Ordonnance 84.062" October 9, 1984. Regulates capture and export of wildlife.

Wildlife. "Ordonnance No. 84.045" July 27, 1984. Wildlife, Hunting and Protected Areas Code.

CONGO

Constitution de la République du Congo. Adopted by referendum, February 16, 1992.

Actes of the Congolese National Conference, Nos. 054, 056, 059, 073, 092, June 21, 1991.

Environmental Policy. "Loi No. 023/91" April 23, 1991. Comprehensive Environmental Protection law.

Environmental Policy. "Décret No. 86/775" June 7, 1986. Establishes broad requirement of Environmental Impact Studies.

Environmental Policy. "Décret No. 76/398, October 23, 1976. Creates Natural Resource Management Fund.

Coastal Zone and Fisheries. "Loi No. 015/88" September 17, 1988. Regulates fishing.

Coastal Zone and Fisheries. "Ordonnance No. 22/70" July 14, 1970. Regulates coastal zone pollution.

Forestry. "Loi No. 32/82" July 7, 1982 and "Decret No. 84/910" October 19, 1984. Forestry Code and implementing regulations.

Forestry. "Loi No. 004/74" January 4, 1974 and "Décret No. 74/188" May 6, 1974. Prior Forestry Code and regulations, superceded by 1982 Code.

Forestry. "Décret no. 89/042" January 21, 1989. Creates National Reforestation Service.

Forestry. "Décret No. 85/728" May 17, 1985. Provides for administrative structure of Forest Sector Ministry.

Forestry. "Loi No. 062/84" September 11, 1984 and "Décret No. 88/617" July 30, 1988. Creates national tree day.

Forestry. "Arrêté No. 3037" August 13, 1938. French colonial regulation creating protected forest area in Brazzaville.

Industrial Pollution. "Loi No. 25/62" May 21, 1962. regulates "classified establishments" posing health and environmental threats.

Industrial Pollution. "Loi No. 23/82" July 7, 1982. Mining Code.

Institutional Framework. "Décret No. 90/599" October 26, 1990. Organization of Ministry of Equipment and Environment.

Land. "Loi No. 52/83" April 21, 1983. Land use/tenure code. "Code Domanial et Foncier"

Land. "Loi No. 021/88" September 17, 1988. Urban planning law.

Wildlife. "Loi No. 48/83" April 21, 1983 and "Décret No. 85/879" July 6, 1985. Wildlife Code and regulations.

Wildlife. "Décret No. 82/1039" November 11, 1982. Establishes Congolese "Man and Biosphere" Committee.

Wildlife. "Décret No. 81/564" August 29, 1981. Establishes Bioecology Research Station of Dimonika.

Wildlife. "(unnumbered) Décret" signed December 1993. Creates National Park of Nouabale-Ndoki.

CÔTE D'IVOIRE

Important réglementation des biens vacants et sans maitre, 15 novembre, 1935

Important réglementation de l'expropriation pour mise en valeur de la terre law, 12 juillet, 1971

Relatif aux procédures domaniales et foncière, Decree No. 71/74 of February 1971

Law No. 65/425 of December 20, 1965 portant code forestier

Decree No. 78/231 of March 15, 1978, fixe les modalités de gestion du domaine forestier de l'État

Decree No. 78/231

Decrees of March 5, 1925; May 25, 1955; and March 19, 1921

Order No. 9929 of December 19, 1955

Decree of October 20, 1926

Decree of April 14, 1904

Order No. 9929 of December 15, 1955

Decree No. 68528 of November 28, 1968 (JOCl)

Administrative Notice of September 7, 1955

Law No. 61/349 of November 9, 1961

Law No. 77/926 of November 17, 1977

Law No. 81/1048 of December 8, 1981

Decree No. 85/949 of September 12, 1985

Decree of August 5, 1965

Order No. 3 of February 20, 1974

Decree of October 20, 1926

GABON

Environmental Policy. "Loi No. 16/93" August 26, 1993. Comprehensive Environmental Code.

Environmental Policy. "Loi No. 8/77" December 15 1977. Anti-pollution law requiring all industrial activities to limit pollution and to obtain prior authorization from environment ministry.

Environmental Policy. "Décret No. 913/PR/MEPN" May 29, 1985. Organization of ministry of environment and protection of nature.

Environmental Policy. "Arrêté No. 00199/MRS/E/PN/CENAP" June 28, 1979. Requires environmental impact studies.

Forestry. "Loi No. 1/82" July 22, 1982. Forestry, water and wildlife protection codes.

Forestry. "Décret No. 1746/PR/MEF" December 29, 1983. Organization of water and forestry ministry.

Forestry. "Décret No. 184/PR/MEFCR" March 4, 1987. Regulates classification of forests.

Forestry. "Décret no. 185/PR/MEFCR" March 4, 1987. Provides enforcement penalties for forestry, water and wildlife codes.

Forestry. "Décrets No. 1205,1206/PR/MEFPE" August 30, 1993. Delimits exploitable forest areas and conditions for logging permits.

Industrial Pollution. "Loi 15/62" June 2, 1962. Mining Code.

Industrial Pollution. "Loi No. 13/74" January 21, 1975. Calls for reduction of toxic waste and for urban cleanup.

Industrial Pollution. "Loi No. 4/88" and "Décret No. 1044/PR/MMH" September 23, 1988. Code for gold and diamond mining.

Industrial Pollution. "Décret No. 0869/PR-SEMERH-DMG" November 14, 1968. Regulates quarrying.

Land. "Loi No. 15/63" May 8, 1963. Land Tenure Code.

Wildlife. "Loi No. 1/82" July 22, 1982. Wildlife, water, fishing and forestry code.

Wildlife. "Décrets Nos.186-190,192-193/PR/MEFCR," March 4, 1987. Regulations governing hunting, fishing and protected areas.

GHANA

The National Redemption Council (NRC) issued The Environmental Protection Council Decree, 1974 (NRCD 239), which established the Environmental Protection Council (EPC)

The Local Government Law, 1988 (PNDCL 207)

The Land Planning and Soil Conservation (Amendment) Act, 1957 (No. 35)

The Land Planning and Soil Conservation Ordinance, 1953 (No. 32)

The Towns Ordinance, 1892 (Cap 86)

The Rivers Ordinance, 1903 (Cap. 226) as amended 1935

The Mining Health Areas Ordinance, 1925 (Cap. 150) as amended 1935

The Town and Country Planning Ordinance, 1945 (Cap 84) as amended 1969 (Act 33)

The Beaches Obstruction Ordinance, January 29, 1987 (Cap No. 240)

The Rivers Ordinance, February 4, 1903 (Cap No. 226)

The Land Planning and Soil Conservation Ordinance, 1953 (No. 32)

The Maritime Zones (Delimitation) Law, August 1986 (PNDCL No. 159)

The Wildlife Reserve Regulations, 1971 (LI 710)

The Ghana Forestry Commission Act, 1980 (Act 405), new Act (Sec. 8 to 12)

The Forests Ordinance, March 30, 1927 (Cap. 157)

The Forest Protection (Amendment) Law , 1986 (PNDCL 142)

The Forest Improvement Fund Act, 1960 (No. 12)

The Forest Protection Decree, 1974 (NRCD 243)

The Concessions Act, 1962 (Act 124)

The Protected Timber Lands Act, 1959 (No. 34)

Forest Reserve Regulations, 1927 (L.N. 31)

The Trees and Timber Ordinance, 1950 (Cap. 158)

The Protected Timber Lands Act, 1959 (No. 34)

The Trees and Timber Decree, 1974 (NRCD 273)

The Trees and Timber (Control of Measurement) Regulations, 1960 (L.I. 23)

The Trees and Timber (Control of Measurement) - Amendment - Regulations, 1976 (L.I. 1090)

The Trees and Timber (Control of Export of Logs) Regulations, 1961 (L.I. 130)

The Concessions Act, 1962 (Act 124)

The Administration of Lands Act, 1962 (Act 123)

The Timber Leases and Licenses Regulations, 1962,

The Forest Fees Regulations, 1976 (L.I. 1089)

Timber Operations (Government Participation) Decree, 1972 (NRCD 139)

The Investment Code, 1985 (PNDCL 116)

The Timber Industry and Ghana Timber Marketing Board (Amendment) Decree, 1977 (No. 128)

The Ghana Forestry Commission Act, 1980 (Act 405)

The Volta River Development Act, 1961 (Act No. 46)

The Irrigation Development Authority Decree, 1977 (SMCD 85)

The Rivers Ordinance, 1903 rev. 1951 (Cap. 226)

The Oil in Navigable Waters Act, 1964 (No. 235)

Ghana Water and Sewerage Corporation Act, 1965 (No. 310)

The Forests Ordinance, 1951 rev. (Cap. No. 157)

The Mosquitoes Ordinance, 1951 rev. (Cap. No. 75)

The Wild Animals Preservation Act, 1961 (Act No. 43)

The Wildlife Conservation Regulations, 1971 (LI 685)

LI 1284 of 1983 and LI 1357 of 1988

The Prevention and Control of Pests and Diseases of Plants Act, 1965 (Act 307)

The Prevention of Damage by Pests Decree, 1968 (NLCD 245)

The Fisheries Law, January 30, 1991 (PNDCL No. 256)

The Public Tribunals law (PNDCL No. 78)

The Control and Prevention of Bushfires Law, 1990 (PNDCL 229)

GUINEA BISSAU

Fisheries. "Décreto-Lei nº2/86, Suplemento ao Boletim Oficial da República da Guiné-Bissau nº 13, Lei Geral das Pescas." March 29, 1986.

Fisheries. "Décreto nº10/86, Boletim Oficial da República da Guiné-Bissau nº ." April 26, 1986.

Fisheries. "Despacho Ministerial nº21/92." December 4, 1992.

Fisheries. "Projecto de Lei sobre a Gestão das Pescas". April 1993.

Forestry. "Décreto 4/82, Boletim Oficial da República da Guiné-Bissau nº . Determina a concessão do direito de abate, serração e comercialização interna de madeira."

Forestry. "Décreto Lei nº 4-A/91. Suplemento ao Boletim Oficial da República da Guiné-Bissau nº 43." October 29, 1991.

Forestry. "Décreto nº 26/91. Boletim Oficial da República da Guiné-Bissau nº 44." November 4, 1991.

Institutional Framework. "Décreto nº 24/92, Boletim Oficial da República da Guiné-Bissau nº12." March 23, 1992. Creates the National Environmental Council.

Institutional Framework. "Projecto de Lei Orgânica do Conselho Nacional do Ambiente." no date.

Land. "Décreto nº 43.894, Boletim Oficial da Guiné nº 38. Aprova o Regulamento da Ocupação e Concessão de Terrenos nas Províncias Ultramarinas." September 27, 1961

Land. "Regulamento dos Registos de Cadastro do Direito à Utilização da Terra." no date.

Land. "Lei nº 4/75, Boletim Oficial da República da Guiné-Bissau nº ." May 5, 1975.

Land. "Constituição da República de Guiné-Bissau." 1984. Articles 12 and 13.

Land. "Despacho Normativo - Regime Fiscal e Disciplinar de Ocupação de Terras." August 12, 1992.

Land. "Ante-Projecto da Lei da Terra." March, 1993.

Land. "Regulamento dos Registos de Cadastro do Direito à Utilização da Terra." no date.

Mining. "Décreto-Lei nº 4/86, Suplemento ao Boletim Oficial da República da Guiné-Bissau nº 13." March 29, 1986.

Protected Areas. "Ante-Projecto de Lei sobre as Áreas Protegidas e os Parques Nacionais." no date.

Shipping. "Décreto nº 25/92, Boletim Oficial da República da Guiné-Bissau nº 12." March 23, 1992.

Water. "Décreto de 17 de setembro de 1901, Suplemento do Boletim Oficial da Guiné nº 48/1902. Aprova o Regulamento para aproveitamento das nascentes das águas minero-medicinal."

Water. "Décreto nº 35.498, Suplemento do Boletim Oficial da Guiné nº 12. Concessão do aproveitamento de águas públicas nas colônias." February 9, 1946.

Water. "Décreto nº 35592, Boletim Oficial da Guiné nº 22. Regula a participação do Estado no aproveitamento de águas públicas nas colônias, quando destinadas à produção de energia." April 11, 1946.

"Décreto nº 52/92, Boletim Oficial da República da Guiné-Bissau nº 40. Cria o Conselho Nacional das Águas, Comitê Interministerial das Águas e Comitê Técnico das Águas."

Water. "Anteprojecto de Código das Águas."

GUINÉE

"Loi Fondamentale" and "Lois Organiques", including L/91/002--L/91/016, December 23, 1991. Comprise the constitution, or fundamental law, of Guinée.

Environmental Policy. "Ordonnance No. 045/PRG/87", Code sur la Protection et la Mise en Valeur de l'Environnement, May 28, 1987. Comprehensive environmental code.

Environmental Policy. "Arrêté A/93/6291/MRNEE/CAB" July 29, 1993, organization, powers of the "direction nationale de l'Environnement," the environment division within the ministry of natural resources, energy and environment.

Environmental Policy. "Décret No. 199/PRG/SGG/89" November 8, 1989. Requires environmental impact studies.

Environmental Policy. "Arrêté No. 990/MRNE/SGG/90" March 31, 1990. Prescribes content and methodology of environmental impact studies.

Coastal Zone and Fisheries. "Ordonnance no.038/PRG/SGG/85" February 23, 1985. Fishing Code.

Forestry. "Ordonnance No. 081/PRG/SGG/89" December 20, 1989. Forestry Code.

Industrial Pollution. "Ordonnances Nos. 076-077/PRG/86" March 21, 1986. Mining Code.

Industrial Pollution. "Décret No. 200/PRG/SGG/89" November 8, 1989. Codifies system of "classified establishments."

Water. "Décret No. 201/PRG/SGG/89" November 8, 1989. Regulates Coastal Zone pollution.

Wildlife. "Ordonnance No. 007/PRG/SGG/90, February 15, 1990. Wildlife protection and hunting code.

MALI

No. 82/122/AN-RM of February 4 1983

No. 85/39/AN-RM of June 22, 1985

No. 82-122/AN-RM of February 4, 1983

Decree No. 134/PG-RM of July 30, 1975

Decree No. 37/PG-RM of February 10, 1963

Code Domanial et Foncier of 1932 and 1955-56

No. 86/91/AN-RM of July 12, 1986

No. 86/91/AN-RM

Forestry Code, No. 86/42

Law No. 86/42

The Wildlife Management Code (Code de la Chasse), Law No. 86/43

The Land Clearing Code, No. 86/65

The Fire Code, Law No. 60/4

The Fisheries Code, Law No. 86/44

The Decree of November 18, 1947

Decree of December 21, 1954

Decree of April 27, 1954

Law No. 28 of 1962

Decree No. 101 of 1966

Decree No. 64/97 of 1972

Decree No. 122 of 1964

Stockbreeding Code, Act 19 of 1970

Decree No. 206 of 1960

Law No. 17 of 1971

Criminal Code, 1958 (Cap. 42)

NIGER

Decree No. 89/007/PM of July 1989

Article 30 of July 7, 1935

Decree No. 70/265, PRN/Dir-Cab of December 11, 1970

No. 74 of March 1974

Decree No. 74/226, August 1974

Edict, No. 049 MAG/EL/CNCR of May 16, 1991

The Civil Code (art. 640-645)

The Decree of April 14, 1904

The Decree of March 5, 1921

The Decree of March 21, 1928

Decree No. 55/490 of June 3, 1952

Order No. 9929 of December 15, 1955

Decree No. 55/490

Agreement of February 5, 1952

The Decree of October 30, 1935

Law No. 61/8 of May 29, 1961

Law No. 63/31 of May 7, 1963

Law No. 63/37 of July 10, 1963

Law No. 66-032 of May 24, 1966

Law No. 63/61 of May 7, 1963

Decree No. 67/143 PRN/MER of September 1967

Decree No. 69/43 MTP/T/M/U of January 2, 1969

Cahier des Charges, July 9, 1971

Decree No. 66/016 PRN of February 20, 1965

NIGERIA

The Federal Environmental Protection Decree, 1988 (No. 58)

The Natural Resources Council Decree, 1989 (No. 50)

The Land Use Decree (No. 6) enacted in 1978 and later retitled as

The Land Use Act (LUA) 1980 (cap. 202)

The Nigerian Standards Organization Act, 1971 (No. 56)

The Forestry Ordinance, 1937 (Cap 75)

The Forestry Regulations promulgated pursuant to Section 46 of the Ordinance

The Forestry (Southern Provinces Native Authorities Rules, 1943

The Forestry (Northern Provinces Native Authorities) Rules, 1951

The Timber Revenue Collection (Native Authorities) Rules

The Waterworks Act, 1915 (No. 11)

The Minerals Act, 1917 (Cap. 226)

The Public Health Act, 1917

The Criminal Code, 1958 (Cap. 42 & 165)

The River Basins Development Authorities Act, 1986 (Cap 396)

The Petroleum Act, 1969 (Cap. 350)

The Petroleum (Drilling and Production) Regulations, 1969 (Cap. 350)

The Oil in Navigable Water Act, 1968 (Cap. 337)

The Federal Environmental Protection Agency Decree, 1988 (N.o. 58)

The Sea Fisheries Act, 1971 (No. 30)

The Territorial Waters Act, 1971 (Cap. 428)

Petroleum Act, 1969 (Cap. 350)

The River Basins Development Authorities Act, 1986 (Cap. 396)

The Agricultural (Control of Importation) Act, 1964 (Cap. 12)

The Pest Control of Produce (Special Powers) Act, 1968 (Cap. 349)

The Wild Animals Preservation Act, 1916

The Endangered Species (Control of International Trade and Traffic) Act, April 20, 1985 (Cap. 108)

The National Park Decree, 1991 (No. 36)

The Natural Resources Conservation Council Decree, 1989 (No. 50)

The National Environmental Management Act (NEMA), 1987 (Cap. 72.01)

The Wildlife Conservation Act, 1977 (No. 1)

The Wildlife Conservation Regulations, 1978 (L.N. 36)

SÉNÉGAL

Colonial Law of 1935

National Domain laws of 1964 and 1972

1972 Communité Rurale law

Forestry Decree of July 4, 1935

No. 74/76 of July 1974

No. 65/23 of February 1965

Decree 65/078, February 10, 1965

Decree No. 70/265, PRN/DIR-CAB of Dec. 11, 1970

THE GAMBIA

State Lands Act, 1990 (No. 2)

The Land Provinces Act, 1966

Provinces' Land Regulations, 1952

Provinces' Lands Protected Tree Regulations, 1952

Declaration of Forest Parks 1952-1954

The Forest Act, 1977 (No. 9)

The Forest Regulations, 1978 (L.N. No. 12)

The National Water Resources Council Act, 1979 (Cap. 66:02)

The Fisheries Act, 1991

The Fisheries Act, 1977 (No. 17)

The Environmental Protection (Prevention of Dumping) Act, 1988 (Cap. 72:02)