REPORT ON THE PROCEEDINGS OF THE TRAINING WORKSHOP TO ENHANCE ENFORCEMENT OF ENVIRONMENTAL LAWS FOR CHIEF MAGISTRATES.

HELD AT

SUNSET HOTEL, JINJA

3RD- 5TH JUNE, 2007

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TABLE OF CONTENTS

ACKNOWLEDGEMENTS

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Special thanks are extended to **Ms. Elizabeth Chadri, the Programme Officer** for the Conservation and Sustainable Development programme of **the John D and Catherine T MacArthur Foundation** for the support and interest in the programme.

The National Environment Management Authority (NEMA) is also commended for the continued support and assistance in implementing this programme.

Special mention is made of the various resource persons for your valuable contribution to this programme. Your papers and presentations enabled the participants to acquire more skills, learn and share practical experiences in environmental compliance and enforcement.

We particularly acknowledge the efforts of the **Greenwatch secretariat** for the input provided in the planning, design and selection of the various resource persons and experts on the different topics presented. We are thankful for the tireless efforts exhibited to ensure that the workshop was a success.

LIST OF ACRONYMS

ACODE	Advocates Coalition for Development and Environment
CIEL	Centre for International Environmental Law
EIA	Environment Impact Assessment
E-LAW	Environmental Law Alliance Worldwide
ELI	Environmental Law Institute
LEAT	Lawyers Environment Action Team
MEA	Multilateral Environmental Agreements
NAPE	National Association of Professional Environmentalists
NEA	National Environment Act
NEAP	National Environment Action Plan
NEMA	National Environment Management Authority
NEMP	National Environment Management Plan
NFA	National Forestry Authority
NGO	Non Government Organisation
SI	Statutory Instrument
UWA	Uganda Wild life Authority
WRI	World Resources Institute

INTRODUCTION

Since the enactment of the National Environment Act (NEA) in 1995, other substantive legislation (Acts of Parliament) and a number of subsidiary legislation (regulation, by-laws, ordinances) have been enacted for the good management and protection of the environment and natural resources in Uganda.

The required institutions have been in place and are functional. However there is no significant improvement in the state of the environment in Uganda. It is largely agreed that this is because of one factor, lack of enforcement.

The law provides for a wide range of measures for the protection of the environment and management of natural resources. Some of these are administrative such as Environmental Impact Assessment (EIA), some are judicial or quasi judicial such as environmental restoration orders, criminal/ civil proceedings.

Since 1995, emphasis has been put mostly on sensitization, education and administrative aspects of compliance. This has had limited success in the area of compliance but largely successful in the aspect of public awareness and sensitization. The country is now ready for the enforcement of environmental law.

Environmental law provides for three major aspects of enforcement and compliance namely; administrative, civil and criminal. As already noted above, a lot has been done administratively. A number of civil suits have been filed in courts of law for enforcement of environmental law and have been largely successful. But civil procedure is long, expensive and complicated. Criminal aspects of environmental law have been largely un explored yet it has the greatest potential of effectively dealing with a wide range of environmental violations especially at grassroots level. It has been determined by NEMA, **Greenwatch** and other civil society organisations that the reason hindering enforcement of environmental law through criminal procedure is lack of capacity.

Criminal law is enforced by the police, prosecutors and the judiciary. Chief Magistrates are mandated to enforce a large number of laws that relate to the environment. **Greenwatch** and NEMA have since 2000 been conducting training of judicial officers in environmental law, both civil and criminal in all courts of law. The training of Chief Magistrates in practical aspects of environmental law, particularly in Environmental Impact Assessment is hoped to enhance their capacity in enforcing environmental law and ensuring compliance.

This training by **Greenwatch** in collaboration with Judicial Studies Institute and NEMA is geared towards this goal. This is the sixth of the training for a period of three years funded by the John D and Catherine T. MacArthur Foundation.

EXECUTIVE SUMMARY

This report contains the proceedings and technical papers presented at the Chief Magistrates training workshop on Enforcement of Environmental laws held from 3rd – 5th June at Sunset Hotel, Jinja Uganda.

The workshop was attended by twenty eight Chief Magistrates, registrars from Judicial Studies Institute, and facilitated by various resource persons. The training was conducted and facilitated by **Greenwatch**, Judicial Studies Institute and National Environment Management Authority (NEMA).

The aim of the workshop was to enhance and strengthen the capacity of Chief Magistrates to enforce environmental laws using the judicial process in Uganda.

The overall objective of this programme is to strengthen Government's ability to enforce environmental laws which will ultimately save the country's natural resources from depletion and to improve governance of the natural resources.

The workshop was officially opened by Ms. Elizabeth Alividza, the Registrar in charge of training at Judicial Studies Institute, and the Executive Director **Greenwatch,** Mr. Kenneth Kakuru made opening remarks. The workshop lasted three days and was closed by His Lordship Hon Mr. Justice Vincent Zehurikize , the Resident Judge Jinja.

During this period, the participants covered the following topics:

- General Overview of the EIA process
- Practical aspects of the EIA process;
- Trans- boundary environmental aspects: the case of East Africa;
- Applicability of Multilateral Environmental Agreements in the enforcement process in Uganda;
- Compliance and enforcement of environmental laws
- The Environment Impact Assessment Process in Uganda: Its strength and weaknesses
- Prosecutions of Environmental crimes
- The Court Process: Commencing Environmental Legal Action

The proceedings also contain group discussions in which participants were given questions focusing on Environmental Impact Assessment. They were divided into groups and later presented their answers to the plenary.
Participants emphasized the need to have the workshop duration increased in order for them to conduct substantive discussions.

1.0 SUMMARY OF THE WORKSHOP CONTENT

1.1 Overview of the Workshop Objectives

The overall objective of the workshop was to enhance the capacity of Chief Magistrates in enforcement of environmental laws. The workshop also aimed at providing the participants with a practical perspective of the Environmental Impact Assessment process and the Applicability of Multilateral Environmental Agreements in Uganda among other subjects.

The specific objectives of the workshop were to:

- Equip the Chief Magistrates with knowledge, skills and techniques in environmental law in order to strengthen their enforcement capacity;
- Provide an opportunity for dialogue among the Chief Magistrates on the practical ways of enforcing environmental laws;
- To forge a lasting link between NEMA, the judiciary and civil society for the purpose of enforcing environmental law.

1.2 Workshop Organization

Each topic was followed by thirty minute plenary discussions. Examples were highlighted in the group exercise in which the participants were divided into three groups, and discussed a question focusing on the practical aspects of the EIA for 30 minutes and presented their answers for twenty minutes each fully by giving plenary discussions.

DAY TWO: 4th JUNE 2007.

9.00am

2.0 OPENING REMARKS

2.1 Remarks from Mr. Kenneth Kakuru, *Director, Greenwatch.*

Mr. Kenneth Kakuru, the Director of *Greenwatch* welcomed participants to the workshop. He informed participants that *Greenwatch* is an environmental advocacy Non government organization that has been in existence since 1995.

He disclosed that it was not the first time *Greenwatch* was conducting an environmental training workshop. *Greenwatch* has been conducting a series of training sessions on strengthening the enforcement of environmental laws in partnership with National Environment Management Authority (NEMA), The Directorate of Public Prosecutions and the Police. He stated that the first training workshops were was based on an introductory course because environmental law was a relatively new subject at that time.

He noted that since 1995, a host of substantive and subsidiary legislation have been enacted for the good management and protection of the environment and natural resources in Uganda. In this regard, *Greenwatch* thought it was good to introduce the law at that time. Hence the training conducted focused on introduction to environmental laws.

He also observed that the training conducted at that time was not enough because environmental law is extremely wide, thus *Greenwatch* had continued to embark on further training in conjunction with the Judicial Studies Institute and NEMA.

He further noted that the workshop focused on some practical aspects of environmental law in more detail with emphasis on Environmental Impact Assessment. He urged the participants to interact and participate in the discussions. He also urged the participants to read more and to look up the relevant t literature, cases and the revised laws.

He thanked them for taking time away from their busy schedules to attend the workshop.

2.2 OFFICIAL OPENING CEREMONY

Remarks from Ms. Elizabeth Alividza
Registrar, Judicial Studies Institute.

Ms Elizabeth Alividza the Registrar in charge of training at Judicial Studies Institute represented His Lordship Justice D.K Wangutusi, the Executive Director of Judicial studies Institute (JSI) at the opening ceremony.

She welcomed the participants to the workshop.

She thanked the Director *Greenwatch,* Mr. Kenneth Kakuru for his encouraging remarks and extended her thanks to the entire staff of *Greenwatch* for their dedication in organizing the workshop aimed at enforcement of environmental laws to improving the environment.

She informed participants the Judicial Studies Institute and *Greenwatch* have a long standing relationship and have been working together in different training workshops for judicial officers and state prosecutors.

Ms. Alividza welcomed the new chief magistrates who had recently been appointed to the courts in Rukungiri, Busenyi and Nebbi districts.

She observed that environmental issues are cross cutting and affect us economically, politically, socially and culturally. She also noted that we always learn something new about the environment because it is dynamic.

She urged participants to fully participate in the discussions and hoped that at the end of the workshop, more useful resolutions would be made that would lead to efficiency of the work of judicial officers.

She wished the participants fruitful deliberations.

The workshop was declared open.

3.0 PAPER PRESENTATIONS

3.1 Overview of Environmental Impact Assessment
By Mr. Kenneth Kakuru, Director, Greenwatch.

Mr. Kenneth Kakuru began his presentation by defining Environmental Impact Assessment (EIA) as stated under the National Environment Act (NEA) as a systematic examination conducted to determine whether or not a project will have any adverse impact on the environment. It is therefore an assessment.

He informed participants that section 19 of the NEA requires that every developer submit a project brief of what the project is about. This would include whether the project will have a significant impact on the environment. He noted that a project brief is for new projects. The old projects that existed before 1994 are required to carry out environmental audits and those projects that were developed after 1995 are required by law to carry out EIA. Once an audit is carried out, the developer is advised on the mitigation measures that should be put in place.

He stated that the third schedule of the NEA lists projects that require an EIA to be carried out, such projects include processing and manufacturing industries, aerial spraying, mining, and dam construction. He noted that there are aspects of EIA that are not just on projects for instance the creation of National Parks. EIA's are not always on projects but on also on policies for instance changing land use- which would require an amendment to the Land Act. In such an instance, the EIA should be under taken on policy first, then on the development of the project later.

In highlighting the history of EIA, the presenter informed participants that it is the same history of Environmental law and its aspects. He stated that at first people thought their natural resources were in exhaustible but with increased population, better technology and greater capacity to consume raw materials, it was clear that the resources are exhaustible and can be easily depleted. He further emphasized that there is a limit to which the earth can take the damage done to it. Hence the very existence of mankind is at stake.

He stated that the Brundtland commission of 1987 coined the term sustainable development which it defined as "development that meets the needs of the present generation without compromising the ability of future generations to meet their needs." Thus we should not even exploit the resources to leave nothing behind for our children.

He emphasized that today we can now realize the danger is now ourselves having nothing i.e. that the rate at which we are producing and damaging the environment with issues like global warming emerging. In 1992 Earth Summit at Rio De Janeiro set out the Rio principles or the Rio declaration one of the principles included integrating environmental concern in all aspects of planning and development. The precautionary principles which is key to EIA must also be applied. The precautionary principle is a principle of common sense. Other principles noted include inter and intra generational equity, the polluter pays principles, principle of public participation.

The precautionary principle requires a developer to carefully assess the situation to avoid risk. It is for this reason that we have EIA, to mitigate the risk, reduce the harm, to make sure the resources are used sustainably. If there is risk, the issue is whether the damage is

reversible or irreversible, or there is very little risk or minimal risk which can be mitigated and the value expected form the project is great.

While elaborating on conflicting views, the presenter emphasized the need for balance to determine whether a project is viable as judicial officers make decisions in court. for instance, the precautionary principle states where there is uncertainty, precaution should be taken. He also noted that the problem with EIA is that it takes lawyers into the world of science, where scientific evidence may sometimes be required as proof and scientific explanations need to be given.

He observed that EIA is embedded in all aspects and embraces principle 10 of the Rio principles which emphasizes the need for public participation, access to information, access to judicial and administrative proceedings. Issues of locus standi are also encompassed in this ie, one does not have to be an aggrieved party in order to seek redress or remedy before courts of law.

He concluded his presentation by emphasizing that the policies and laws are in place and need to be complied with. Without amending the law, everyone must comply with the law. He stressed that the only way in which can move forward and have a peaceful resolution of conflict, especially conflict due to the ownership and allocation of natural resources if before courts of law and as such uphold justice.

Discussion.

Participants discussed the paper extensively, the highlights of which were that:

- Uganda has good laws in place which it embraced with the World Bank and IMF because at that time, the two institutions could not give Uganda funding unless we complied with their environmental standards.
- Donors put pressure on government to enact these laws as a condition. In the result, government does not have the political will to enforce these laws, although they had interest to enact them. Compliance to these laws can only be with support from the Government.
- The countries which emit most of these green house gases are against these laws that protect the world environment; China and the USA were cited as examples of countries which put economic development above environmental considerations.
- Ugandans should protect the natural resources that are already in place and use them sustainably as a comparative advantage.
- Environmental law training for High Court judges is useful to help consolidate achievements by trained magistrates. There is a danger of untrained judges overturning good judgments by magistrates made so far. Hence the need for all judges to be trained in environmental law.

3.2 Environment Impact Assessment (EIA): the basic EIA process

By Mr. Waiswa Ayazika, EIA coordinator, NEMA.

Mr. Ayazika's paper focused on the Environmental Impact Assessment (EIA) process in Uganda. He began his presentation by defining the EIA process as a formal process for identifying the likely effects of particular activities or projects on the environment and on human health and welfare. This includes the development of mitigation and monitoring measures.

He noted the expected outcomes of the EIA process including;

- Achieving an environmentally sound design and sustainable development.
- Helps avoid problem before they occur- lower project costs in the long term EIA not carried out to justify decisions already made- i.e. should be done before starting the project.
- Provides decision-makers with alternatives
- The assessment provides benefits to the public such as opportunity to learn, express concerns, and influence decision making process.
- EIA considers real alternatives.
- When the assessment is made it helps to identify and concentrate on the key issues.
- The impact predicts key impacts and judge their significance.

He informed participants that an EIA is for projects which have not yet been undertaken. The first step in the EIA process is to submit the project briefs by the developer to NEMA (National Environment Management Association) and lead agency. Step two consists of a review of the project briefs and decision on level of EIA required. Not all development activities may require full EIA because the assessment is based on the projects general characteristics.

His Worship Mr. Charles Sserubuga(center) and Mr. Waiswa Ayazika listen as Mr. Kenneth Kakuru (standing) raises a query

He observed that during the initial screening, an evaluation of the likely environmental impacts of a proposed project is carried out. The screening process should aid in deciding whether a proposed activity or project clearly requires an EIA or is not clear whether EIA is required.

He stated that Environmental Impact is assessed in order to achieve an environmentally sound design and sustainable development for projects like dams. It also helps avoid problems before they occur and provides benefits to the public to know about a project. The impact predicts key impacts and judges their significance. It also identifies ways to reduce these impacts.
He emphasized that EIA is a participatory process and those who carry it out need to consult. One of the key principles of EIA is that it considers alternatives. It also identifies and concentrates on key issues of importance the process if trying to assess, then predict and judge the importance of these impacts. Take into consideration the following - the nature and scale of the proposed activity and the location.

He informd participants that according to the law, the responsibility for carrying out EIA rests on the developer for projects listed in the 3rd schedule of the National Environment Act (NEA). The developer submits a project brief containing the name of the developer and also the proposed location of the project. While undertaking an EIA study, scoping is done to determine the key boundaries, issues and impacts (e.g. time scale, geographical budget, project alternatives, affected environment, significant impacts). This includes the selection of interdisciplinary experts needed for the EIA and the development of terms of Reference for each of the individual team members. The scoping process is intended to assure that real problems are identified early and studied properly. (Detailed paper in annexture 2)

Discussion.

In the extensive discussions that followed, participants noted, observed and made suggestions as follows:

- The person paying for the EIA may expect a favourable report.
- There was concern that the EIA reports would be theoretical than realistic thus needed to be verified by NEMA.
- The EIA process is highly consultative and non-disclosure of information is an offence on the side of the practitioner and also on the side of the developer. The practitioner may be blacklisted. Other stakeholders verify the reports and note whether there are issues missing on it or that have been omitted.
- There is a condition that before approving a certificate (license) the developer has to fulfill environmental requirements before a project is implemented.
- Closure of a facility is usually a last resort once the other measure including environmental restoration orders have been flaunted or ignored by the developer.
- Depending on the issues which has emerged, NEMA tries to give advice to encourage the developer to enforce mitigation measures (compliance advice)
- Depending on the nature of the project, there are other stakeholders to participate in EIA. NEMA's role is to oversee the process. NEMA does not review EIA alone but with stakeholders like Uganda Wild life Authority, Water Development. NEMA also oversees the compliance process.

- NEMA has tried as much as possible to make sure the law is complied with inspite of the political interference that still exists. .
- For controversial projects, EIA reports are put in news papers, on the internet, libraries and the public is informed of where the information can be obtained. This is done so the people can have some basic understanding of the project and its likely impacts.
- Where people are not satisfied by NEMA's decisions, they may seek redress in courts of law. The court is open to every member of the public and one can bring a case on behalf of another. (Article 50 of the Constitution)
- An EIA study should clearly identify direct and indirect impacts. I.e. how significant are the impacts that have been identified. Important cultural settings that would be impacted on by projects include shrines, burial grounds.
- When NEMA issues or revokes a certificate of approval, the courts' role is to uphold justice. With regard to the cancellation of approval of EIA, Regulation 28 of the Environmental Impact Assessment Regulations of 1998 states that at any time after the issuance of a certificate of approval of the project, the Executive Director may revoke the approval where there is non compliance with the conditions set out in the certificate, where there is a substantial modification of the project implementation or operation which may lead to adverse environmental impacts or where there is substantive undesirable effect not contemplated in the approval. - This revocation leads to the automatic cancellation of the certificate.

Participants listen attentively during the discussions.

- The constitution in Article 50 provides that any person who claims that a fundamental or other right or freedom guaranteed under the Constitution has been infringed or threatened , is entitled to apply to a competent court for redress which may include compensation
- Where one provides fraudulent information in the EIA process, that person can be prosecuted under the EIA regulations

- Regular monitoring is carried out by NEMA inspectors to find out whether mitigation measures proposed in the EIA study are being implemented.
- Project alternatives to rectify the problem of displacement of people by a project should ensure that the people to be displaced by the project will be compensated and fully resettled and should not be made worse off than they were before the project started.
- Scoping is done to ensure the issues which are not significant or which have been treated in prior EIAs are eliminated from detailed study and that the final EIA report is balanced and thorough.

3.2.1 Group Discussions and Exercise

The participants were divided into three groups, each group was presented with a moot question on Environmental Impact Assessment and presented in which they were asked to find answers.
This presented an opportunity to the participants to acquaint themselves with the practical aspects of handling environmental crimes and EIA. The group discussions were then presented by a representative from each group who read out the findings of a particular group to the rest of the participants.

The findings of each group to the exercise are annexed in annex 8.

3.3 Transboundary Environmental Aspects; The case of East Africa
By Ms. Christine Akello, Senior Legal Counsel, NEMA

In her presentation, Ms. Christine Akello noted that the management of natural resources was for a long time dictated by principally three concepts that is State sovereignty, territorial integrity and equitable utilization.

She noted that at first it was thought that state territorial sovereignty was absolute and it was therefore that a state could use its natural resources, including the shared ones, the way it wanted irrespective of any harmful effects that may ensue for other states. This was termed the Harmon Doctrine, a position on absolute territorial sovereignty. The US was also forced to retract the Harmon position in a dispute between the US and Canada over the boundary waters between the two countries. The result was the 1909 Boundary Waters Treaty, established principles and procedures to prevent and resolve disputes, primarily those concerning the quantity and quality of boundary waters between Canada and the United States. The Harmon doctrine has been largely superseded by the concepts of state responsibility and global citizenship.

She observed that one of the basic principles governing the creation and performance of legal obligations, whatever their source, is the principle of good faith. Just as the very rule of *pacta sunt servanda* in the law of treaties is based on good faith, so also is the binding character of international obligations assumed by unilateral declarations. Thus, interested states may take confidence in unilateral declarations and place confidence in them, and are entitled to require that the obligation thus created be respected.
She stated that although the principle of state sovereignty was at first applied to trans-boundary water and pollution, it gave rise to other peremptory norms of a procedural

character concerning the duty of information, consultation or arbitration in the event of environmental damage. The peremptory norm may also include the general obligation of states not to tolerate serious environmental pollution.

Ms. Akello expounded on the issue of territorial sovereignity stating that it is based on the assertion that every state is free to use shared rivers flowing on its territory as long as such utilization does not prejudice the rights and interests of the co-riparians who have reciprocal rights and duties in the utilization of the waters of their international watercourse and each is entitled to an equitable share of its benefits.

She highlighted some of the conventions made and agreements signed that were applicable to East Africa which include The 1968 African Convention on the Conservation of Nature and Natural Resources which provides for sustainable development and generational equity and the basis for joint action for transboundary issues. The 1994 Convention for the Establishment of Lake Victoria Fisheries Organisation which agreement created a programme that strengthened co-ordination among the three states in the management of lake resources including fisheries, water quality and land use, wetlands, and the control of the introduction of alien species., The 2006 East African Community (EAC) Protocol for Environment and Natural Resources Management.

She concluded her presentation by emphasizing that the issue of the management of transboundary natural resources is a complex one and needs concerted effort of all the beneficiary countries. It also calls for the abandonment of old treaties that do not respect equity, fairness and good faith. (Detailed paper in annexture 3)

Discussion.

The participants thanked the presenter for a good and elaborate presentation and also made the following contribution;

- Consumption of the game meat from the poachers should be a strict liability offence, and the consumers should also be punished for purchasing such meat. The Wild life Act also provides for Strict liability offences
- Fish processing plants that have immature fish should be targeted for legal action because they are the ones buying immature fish from the fishermen.
- Uganda fishes for export are poor and are not meeting the standards of developing countries ie fishermen use nets that catch immature small fish.
- If a state is party to the Bamako convention and the Bazel convention, that state cannot use its national law as a justification to avoid its International obligations. The state is bound to amend its law to be in line with its International obligations.
- Hazardous waste impacts directly on the lives of people, their health, soils etc hence dumping is a crime.
- Equitable sharing does not necessarily mean equal share of transboundary resources like shared waters. In determining equitable sharing relevant factors such as the geography of the basin, hydrology of the basin, population dependent on the waters, economic and social needs, existing utilization of waters, potential needs in future, climatic and ecological factors must be taken into account.
- There is need for concerted effort in the management of transboundary resources because environmental issues transcend borders.

- Under the convention on climate change, there is supposed to be a gradual phase out of the green house gasses that cause climate change. Thus developed countries partner with developing countries to plant forests which act as air filters ie ECO TRUST in Uganda carries out carbon trading.
- There is a policy to encourage "cage fish farming" on the lake. i.e. fish are fed and bred in one area with others excluded (in a cage). This type of fish farming is still in the pipe line in Uganda, though it is being practiced else where.
- Communities are now involved in sustainable utelisation of natural resources thus limited hunting is now permitted in game reserves where some animal population has increased i.e, in Kyambura, neighbouring Queen Elizabeth, poaching reduced when the community was involved in sustainable use of the resources.
- Permits can be given for certain hunting activities.

3.4 Applicability of Multilateral Environmental Agreements to Uganda
By Christine Akello, Senior Legal Counsel, NEMA

Ms Christine Akello began her presentation International Environmental Law by defining International law using the definition preferred by the International Court of Justice as the rules of law binding upon states that emanates from their own free will as expressed in conventions or by usages generally accepted as expressing principles of law and established in order to regulate the relations between the co-exiting communities or with the view to the achievement of common aims.
She noted that International environmental law assists in building and captures consensus between nations on goals for environmental protection and resource conservation and sustainable use. Its instruments primarily include conventions, protocols and "soft-law" instruments such as guidelines or codes of conduct. In addition, agreements, resolutions, guidelines and declarations adopted to facilitate the implementation of treaties and conventions are relevant.

The presenter observed that Multilateral Environmental Agreement's are clustered management strategy for enhancing coordination and policy coherence among multilateral environmental agreements. Some of the clusters include Biodiversity-Related Conventions ie CITES, the Atmosphere Conventions like the Kyoto Protocol, The Chemicals and Hazardous Wastes Conventions whose objective is the protection of human health and the environment from pollution by specific chemicals and hazardous substances.

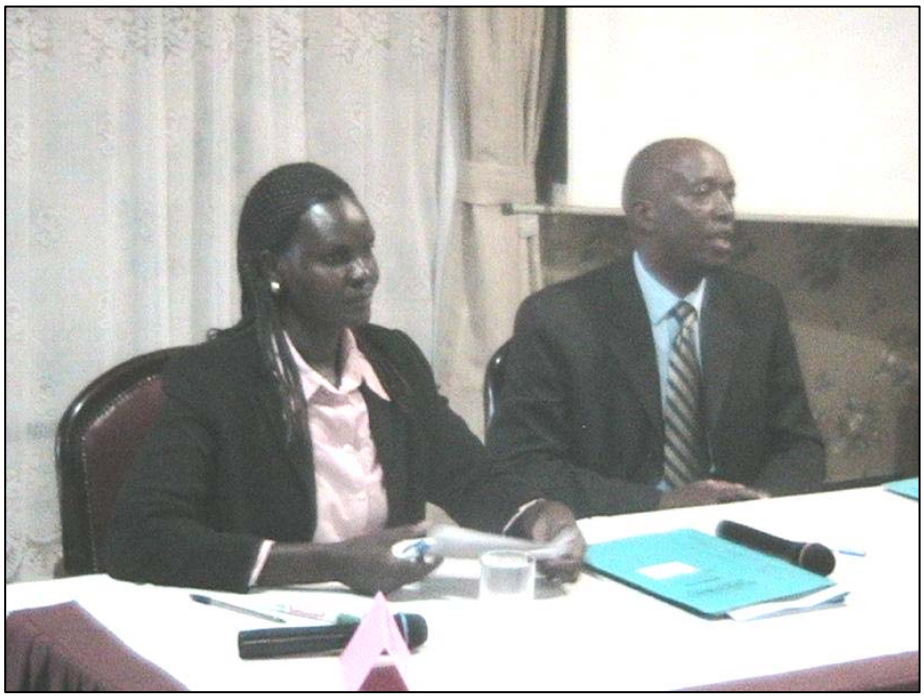
She noted that the scope of the Basel Convention covers a broad range of hazardous wastes, including chemical wastes, subject to transboundary movements, aiming to reduce these movements to a minimum by minimizing the quantity and hazardousness of the wastes generated and by promoting the treatment and disposal of hazardous wastes and other wastes as close as possible to their source of generation.

She further noted that each of these MEAs require that countries develop specific implementation mechanisms and fulfill obligations involving reporting, training, public education, and other activities. They have underscored the importance of states in enacting effective environmental legislation.

She observed that International law only becomes applicable in East Africa after it has been transformed into municipal law, a process known as domestication. Uganda has indeed reflected its international obligations in our national laws including the Constitution, the

National Environment Management Policy of 1994, the National Environment Act and other environment legislation.

Mr. Kenneth Kakuru and Ms. Christine Akello during her presentation



The National Constitution also under Article 39 states that "Everyone has a right to a clean and healthy environment"; Article 237(2)(b) provides for the public trust doctrine; and article 50 enables enforcement of the right to a clean environment using public interest litigation. Environmental principles are found in other international instruments as well as national constitutions, framework environmental management laws, sector legislation, and court decisions. The Public Trust Doctrine is used to prevent governments from conveying public resources to private enterprises. It is enshrined in Article 237(2)(b) of the Uganda Constitution, section 44 of the Land Act Cap. 227. These provisions impose a duty on the state and local government to protect important natural resources; including natural lakes, rivers, ground water, natural ponds, natural streams, wetlands, forest reserves, game reserves, national parks and any other land reserved for ecological and touristic purposes, for the common good of the citizens of Uganda.

She concluded her paper by noting that by whatever means MEAS are applied, the principle remains that no state party can use its municipal law as an excuse not to respect its international obligations. (Detailed paper in annexture 4)

Discussion.

Below are some of the issues that came out of the lively discussion that followed the presentation;

- Most environmental cases are not filed in Magistrates courts but in the High Court which is bogged down by the number of cases. The result is that enforcement is delayed.
- When environmental cases were first filed in court, Plaintiffs first proceeded under article 50 of the Constitution; the rule is that such cases are filed in the High court. Strategic litigation targets specific issues for purposes of opening doors for others. This is done in order to try and solve wider issues for instance the issue of locus standi, hence plaintiffs prefer High Court.

- It is easier and sets precedent if you have a High Court judgment that binds others
- Training is being done at the community level to make the people aware of their rights.
- The High Court as a court of record is a good starting point for Public Interest Litigation
- On the issue of polyethylene bags *(Kavera)*- NEMA wrote a draft for the minister which he is to present to cabinet for approval so that a policy is made on the issues of polyethylene bags (*kavera*). (In the 2007 budget of Uganda, the use of polyethylene bags '*Kavera"* less than 100 microns was banned in the country effective 1st July 2007)
- There are cases where NEMA issues improvement notices and restoration orders. If these are not complied with, NEMA enforces the laws as they are mandated under the NEA.

Participants were shown a documentary film titled *"An Inconvenient Truth"* about climate change, specifically global warming. In the documentary, former United States Vice President Al Gore discusses scientific opinion on climate change, the politics and economics of global warming, and describes the consequences he believes global climate change will produce if the amount of human-generated greenhouse gases is not significantly reduced in the very near future.

DAY THREE: 5TH JUNE 2007

9.00 am

3.5 Compliance and Enforcement of Environmental Laws
By Ms. Doris Akol, Environmental Law Resources Center

Ms. Doris Akol introduced herself as an environmental consultant. Her topic focused on compliance and enforcement of environmental laws, it also included aspects of procedure.

She noted that if the laws just stay in the statute books without being enforced, it would be useless. There is need for compliance with the laws relating to sustainable development.

She gave a brief overview of integrated strategies a country can use to maximize compliance with its laws and regulations to sustainable development. These include Enforcement, effective laws, regulations and standards that are based on sound economic, social and environmental principles and appropriate risk assessment, incorporating sanctions designed to punish violations, obtain redress, and deter future violations;

- Mechanisms for promoting compliance;
- institutional capacity for collecting compliance data, regular reviewing compliance, detecting violations, establishing enforcement priorities, undertaking effective enforcement, and conducting periodic evaluation of effectiveness of compliance and enforcement programmes

She noted that Uganda is faced with widespread environmental degradation. This is due to improper management and unwise use of the natural resources. One of the reasons for degradation is the absence or inadequacy of management system(s) and mechanism to deal

with those problems. She informed participants the Uganda doesn't have an active enforcement mechanism in place even though we have laws in place.

An enforcement and compliance strategy is an organisational, management system, a human and financial resources strategy dedicated to encouraging and compelling (implementation) compliance. Compliance occurs when requirements are met and desired changes are achieved e.g. processes or raw materials are changed, work practices are changed so that, for example, waste is disposed of at approved sites; tests are performed on new products or chemicals labelled before they are marketed; water quality attains the required standards, etc.

She stated that enforcement by NEMA and lead agencies should include: inspections to determine the compliance status of the regulated community and to detect violations, Negotiations with individuals or facility managers who are out of compliance to develop mutually agreeable schedules and approaches for achieving compliance. Sometimes legal action is taken, where necessary, to compel compliance and to impose some consequence for violating the law or posing a threat to public health or environmental quality e.g. compensation of victims of degradation, performance bonds, environmental audits, restoration orders and EIA requirements. Voluntary compliance can be encouraged through educational programmes, technical assistance, subsidies, and incentives. Other concerned institutions or NGOs can also comment on government enforcement actions or take legal action against a violator for non compliance or against the government or NEMA or other lead agencies for not enforcing the requirements.

She emphasized the need for concerted effort to promote compliance. She also highlighted the factors affecting compliance which include economics such as costs of compliance, institutional credibility (lack of institutional credibility), deterrence, psychological factors ie- the fear of change, Knowledge and technical feasibility- the need to hire technical people and the costs of dong so.

In looking at the component of a successful enforcement and compliance program , she noted that there is need to know who is supposed to met the legal requirement. She also emphasized the importance of timely response to violations. People also need to know what their roles is. She noted that there is need for a concerted effort to help judicial officers ensure their role in ensuring legal requirements are complied with. (Detailed paper in annexture 5)

Discussion.

In the discussions that followed, the participants commended the presenter for her well researched paper and made the following contributions:

- There is already an environmental desk at the Criminal Investigative Directorate.
- *Greenwatch* has been conducting training for different calibers of people including Environmental Officers, Grade I magistrates, police investigators and Judges of the High Court, Court of Appeal and the Supreme Court at the various training workshops.
- Promotion of compliance can be done through encouraging people to comply in which ever way. It is best to start with children at home, then the civic leaders.
- Deterrence sometimes works best when the person who is to be used as an example is a high level person.

- Sensitization of the public is important. The Public should first look at themselves in their own individual homes and especially how we dispose our waste in order to create a culture of a clean environment. i.e put roadside dustbins, people should realize their responsibilities. We need a system also to support us.
- The Chief Magistrates can use their meetings to train others. By doing so, it would not necessitate facilitation for training.

3.6 The Environment Impact Assessment Process in Uganda: Its strength and weaknesses. (The Water Hyacinth Control Programme for Lake Victoria- a Case Study). *By Mr. Kenneth Kakuru, Director, Greenwatch*

Mr. Kenneth Kakuru's presentation focused on using a case study to highlight the limitations of the Environment Impact Assessment (EIA) process in Uganda.

He gave a brief background on the problem of the water hyacinth which dates as far back as 1998. The EIA study being discussed was under taken by Ministry of Agriculture. He noted that from the beginning Environmental lawyers had a problem with the EIA because the National Environment Act (NEA) states that a project developer must undertake an EIA. However, does the spraying of the water weed amount to a project?

He observed that on closer inspection of schedule 3 of the NEA, other than aerial spray it was essential to question whether a project of spraying the water hyacinth weed on the lake Victoria required an EIA study to be carried out. He stated that there could be activities that are not envisaged in schedule 3 of the Act. This poses a question in that what should be done about such activities with regard to who is carrying out the study:- the EIA was conducted by Aquatics Unlimited who commissioned the study but were not the funders or the developers of the project. What was envisaged in the law did not quite fit with what was going to take place.

He observed that in some instances it is difficult to note who exactly the developer is. This poses a question of who is the developer. A lead agency may be the Government department or body that is involved in the implementation. The study also many times is related to other documents.

In the scoping process, most of the things the supposed to be undertaken under the rules had not been done i.e. consultation. On the evaluation of the impact:- it was found out that it was not properly done. During the public hearing, there was overwhelming evidence that other alternatives can be used for water hyacinth.

He concluded the discussion by stating that it is better to tackle smaller problems because they are easier to fight i.e. the EIA process before an EIA has been approved. (Detailed paper in annexture 6)

Discussion.

The following were some of the issues highlighted by the participants:

- There exists a judicial network on environmental law established in 2002 in Johannesburg, South Africa at the World Summit on sustainable development. The

Magistrates Association in Uganda needs to be connected with other judicial institutions in other countries.

- Environmental articles be written and posted on the internet for magistrates to be able to get contacts and create linkages.

3.7 Environmental Crime and why it should be prosecuted.
By Ms. Doris Akol, Environmental Law Resources Center.

Ms. Akol began her presentation by stating that her paper focused on some of the things magistrates should be looking out for when cases are presented in their respective courts. The magistrates should ensure that the prosecutors follow this.

She noted that environmental crime compromises the natural heritage and ecological integrity of the planet, It threatens the air we breathe, the water we drink, the food we eat. It unfairly disadvantages those businesses complying with environmental laws, and flouts environmental law as well as many other laws. Violation of environmental laws could be local, but impacts felt long distances away. Violation could be committed today, but impacts not realized for generations. A recent government study concluded that environmental crime syndicates garner between $22-31 billion US/annually.

She stated that environmental crimes are like any other crime and are usually the result of calculated business decisions either to make money or save money. Environmental crime enforcement is therefore necessary to protect human health, our natural heritage and the environment., to punish and deter the most egregious environmental offenses, to level the economic playing field, which protects those who comply with the law and to support, and be integrated with, the overall environmental mission of the department.

Ms. Akol emphasized the need to prosecute individuals at the highest level of organizational authority responsible for the crime. There should therefore be effective communication with the public and regulated community. She observed that while prosecuting environmental crimes one should note whether there is actual or threatened environmental harm and whether is being done by repeat violators with flagrant disregard of the law, the community, and/or the environment. One should also note whether the conduct was intentional and if it involves conspiracies and criminal syndicates.

She highlighted the importance of knowing the law and the applicable domestic statutes and regulations, including what international treaties apply in Uganda – e.g., Basel Convention, CITES, etc.

She noted that in taking an environmental case to trial one should note that there are unique factors in trying the environmental case because offenders are less willing to acknowledge responsibility and enter a plea. There is also need to note that the public perception of environmental crimes can vary and new environmental laws are subject to substantive challenges**.**

She urged the use of simplicity when presenting evidence at a trial and the need to work with experts. Evidence should also be relevant t the case. Ensure there is a known and low margin of error. It is essential to say why the prosecution both punished the guilty and helped protect

the environment. The case should contribute to both the overall criminal enforcement program and the regulatory enforcement effort. There is should be an attempt to combine prison, fines and supplemental sentencing to achieve these objectives. (Detailed paper in annexture 7)

4th June was World Environment Day with the theme "*Global warming is real*", the participants planted trees in accordance with the theme of the day.

Mr. Kenneth Kakuru, Mr. Faragi Ndyanabo of Greenwatch planting trees.
Looking on is the Chief Magistrate Tororo Court, His Worship Praff Rutakirwa.

3.8 The Court Process: Commencing Environmental Legal Action.
By Mr. Kenneth Kakuru, Director, Greenwatch.

This paper highlighted the reasons why cases are taken to the various courts. Mr. Kenneth Kakuru stated that where there is a mischief for instance a notorious issue that is bringing a problem to the environment, it becomes a subject matter of public interest litigation. At times when there is injury to an individual, this is used as a starting point to bring a case.
He noted that at times when harm is envisaged and there is intent to undertake an activity or projects that will have a negative impact on the environment, and where there is an eminent threat that needs to be prevented before it occurs a case can be brought before court. He cited the example of Mabira forest, a natural forest reserve and a natural habitat for thousands of bird species, whose value is beyond trees. The forest reserve was cited as an option of land wanted by a developer to expand sugar cane plantations.

Where a right has been violated this is not the same as injury, for instance, where one is denied access to information. This still gives on entry into a court of law. Violation of the

Constitution and the Public Trust Doctrine. He noted one can also go to court if a crime has been committed on the environment i.e. in case of pollution, encroachment on forest reserves.

He explained that after deciding on the cause of action, there is need to decide who the plaintiff is. Reasons for plaintiff include their financial ability. In many cases Greenwatch is the plaintiff.

Mr. Kenneth Kakuru stresses a point during his presentation

With regard to choice of courts, Mr. Kakuru noted that it depends on the subject matter and what kind of remedy one is seeking from the court ad also issues pertaining to the case. He noted that one may choose to proceed under article 5 whose advantage is the use of affidavits, or by plaint but you may find you have no locus. Hence one can decide to proceed under article 50.

He observed that cases are won or lost at the time when preparing pleadings i.e. witnesses envisaged, evidence, when you proceed under a wrong law it may be dismissed. Under Article 50 of the Constitution affidavits can be used. However the problem is how much one should put in an affidavit to support a case and what constitutes information? Is it ones belief or knowledge. These are the challenges being faced today.

Discussion.

In the lively discussions that followed, participants noted the following:

- Most of the people seem to respond more to criminal sanctions than to civil ones
- Magistrates are limited in activism, they only deal with what is presented before them. They need to increase their activism.
- There is a push to widen the law to include supplementary offences i.e include the options at an appropriate time.
- Fines in some instance may not work for recurring offenders. Depending on the type of community service one is given, there is need to look at the offender's perception of community service and whether it would be deterrent.

- Poverty is a serious problem and a challenge to environmental protection but this should not be an excuse to destroy the environment. Poverty should not be stretched as an excuse for environmental degradation.
- Environmental destruction causes more poverty and will not alleviate poverty.
- Means of earning a living and survival should also be considered in an enforcement programme. This would necessitate sensitization and awareness programmes.
- The NEA provides for an Environmental restoration Fund to be managed by the Ministry of finance. In practice, money has not been appropriated for this fund. Money should therefore not be misappropriated.

4.0 Recommendations and way forward.

It was resolved that:

- Chief magistrates be turned into trainers but they need facilitation
- Judicial Studies Institute avails the various courts with the different statutes and judicial legislation on environmental law.
- Fines imposed on environmental offenders should be a source of revenue for local government rather than the treasury.
- NEMA needs to target fish processing plants that are buying immature fish from fishermen. NEMA should take legal action against such fish processing factories.
- Fish processing plants that have immature fish should be targeted for legal action because they are the ones buying immature fish from the fishermen.
- More training be conducted for the judiciary which training should last more than the there days allocated.
- More books and materials with the environmental laws and regulations be availed to the Magistrates courts.

5.0 CLOSING REMARKS

Remarks by Mr. Kenneth Kakuru.

Mr. Kenneth Kakuru thanked the participants for their participation during the three day workshop. He hoped the workshop had given them an insight into the more practical aspects of environmental law. He said we would like to hear from them how to improve on the training programme. He informed participants that *Greenwatch* was working with NEMA and United Nations Environment Programme (UNEP) to get materials and handbooks which would help make the work of judicial officers easier. He thanked participants for their attendance and hoped that the workshop had the experience would benefit them in effectively carrying out their duties.

5.1 OFFICIAL CLOSING CEREMONY

His Lordship Hon Mr. Justice Vincent Tiwangye Zehurikize, Resident Judge, Jinja High Court officiated at the closing of the workshop.

Justice Zehurikize said he was honoured to officiate at the closing of the workshop for Chief Magistrates.

He commended the participants for having completed this workshop and for having fully participated in it. He hoped this workshop had presented the opportunity for Chief Magistrates to generate a common understanding of the Environmental Impact Assessment process and Compliance and Enforcement of Environmental Laws.

He emphasized the importance of constant provision of training in new areas which presents Judicial officers with an opportunity to update their knowledge and ensure that they make decisions based on latest knowledge.
His Lordship noted that Uganda is no exception to the challenges faced in sustainability of the environment in the world today. He cited some of the problems which include job creation without polluting the environment; environmental management without destroying the industrial base and the jobs that go with it; agricultural production without depleting natural resources.

He urged the participants to use the skills and expertise they gained during the workshop to handle complex environmental matters more efficiently and expeditiously as a result of this training.

His Lordship commended **Greenwatch, Judicial Studies Institute** for organizing the workshop and urged them to continue with the good work. He extended his appreciation to the **John D. and Catherine T. MacArthur Foundation** for sponsoring this workshop.

He thanked participants for being able to find time from their busy schedules to attend the workshop.

The workshop was officially declared closed at 4.00pm on Tuesday 5th June 2007.

6.0 WORKSHOP EVALUATION

At the end of the training, the participants were provided with an evaluation form and requested to comment on how the workshop was organized and conducted, the nature of topics presented, facilities provided and generally how they rated the workshop. Below is a detailed summary of how they responded.

6.1 Participants stated that the timing of the workshop was convenient for them and majority of them had received their invitations on time.

6.2 (a) The venue was convenient and accessible to the participants who came for the workshop. However, a few of the participants from upcountry stated that they would have preferred the workshop to be held in Kampala rather than in Jinja because of the transport costs.

(b) Most of the participants rated the venue chosen for the workshop as good and commended the hotel and the workshop organizers for the hospitality shown to them.
(c) Majority of the participants said they were well received upon arrival by the workshop organizers.

6.3 Comments on the workshop program

(a)Topics

Participants noted that the topics chosen were very interesting, informative and educative. They further stated that the topics chosen were well researched by the presenters and they were enlightened on the practical aspects of environmental law, compliance and enforcement as well as the importance of Multilateral Environmental Agreements.

(b) Duration

Most participants observed that the duration of the workshop was too short to cover the topics adequately. They noted the need for sufficient time to be able to internalize the different concepts and grasp the different aspects of environmental law.

6.4 Ratings of the presentations by topic.

A) General Overview of the EIA process – Mr. Kenneth Kakuru

The presentation was rated as very good by most of the participants. The presenter was articulate and knowledgeable. Participants stated that the presenter was audible and gave a good lecture on his topic.

B) Practical aspects of the EIA process- Mr. Waiswa Ayazika.

Participants noted that the presenter was well informed in his grasp of the EIA process. They stated that they were impressed by his presentation and that the presenter was a good teacher as he enabled the participants to grasp the various stages in the EIA process. The presenter was very thorough and elaborated his points well.

C) Transboundary Environmental Aspects; The case of East Africa– Ms. Christine Akello.

The presentation was noted as good and majority of the participants stated that the presenter was very eloquent knowledgeable and had a well researched paper. They however noted that the time allocated for the paper was too short given the various issues and concepts that they needed to comprehend during the presentation. They felt her topic should have been given more time.

D) Applicability of Multilateral Environmental Agreements to Uganda – Ms. Christine Akello

Majority of the participants stated that the presentation was very good and that the use of a visual aid made it more enlightening. They noted that the time allocated to this presentation was too short.

E) Compliance and Enforcement of Environmental Laws - Ms. Doris Akol.

The presenter was noted to be very knowledgeable on the topic and elaborated on the different aspects of compliance and enforcement. However participants stated that her presentation was too long.

F) The Environment Impact Assessment Process in Uganda: Its strength and weaknesses. – Mr. Kenneth Kakuru.

The presenter was very knowledgeable. Participants noted that the presenter was a good communicator and very concise in his explanations using examples to enable them to clearly comprehend the issues being discussed in the case study that was used.

G) Environmental Crime and why it should be prosecuted – Ms Doris Akol

The presentation was very good and educative, well researched and the presenter was very clear and knowledgeable. The presenter used practical examples to enable the participants grasp the enormity of environmental offences and the different laws under which the offences can be prosecuted.

H) The Court Process: Commencing Environmental Legal Action- Mr. Kenneth Kakuru.

Participants also rated the presentation very good, and commended the presenter for his presentation. They stated that the presenter was knowledgeable and he demonstrated a thorough understanding of how to proceed during legal action. The presenter engaged the participants in a discussion on why legal action is taken to the different courts and why prosecutors choose to proceed under particular laws. His presentation was also noted to be useful in court and legal practice

6.5 Comments on whether participants' expectations were met.

Majority of the participants stated that their expectations were met. They had acquired knowledge on the practical aspects of environmental law. They stated that they had on the whole found it a motivating and inspiring discussion. However, they urged for more time to be able to discuss the issues comprehensively.

6.6 Suggestions to improve on future trainings

It was suggested that

- The duration of the workshops be increased to one week in order to have enough time and avoid congesting topics.
- Participants should be encouraged to do research prior to the workshop.
- Current issues in particular climate change and its impacts should be discussed as priority topics
- Workshops should be conducted on a regional basis.
- Workshops should include other stakeholders including forestry officers, fisheries, and also involve health workers, different policy makers and civil leaders. Politicians be included among the participants.
- Participants should be sent updates on the impact of the trainings through email.

6.7 Comments on whether there is need to hold another workshop covering other aspects of environmental law.

Most of the participants said that there is need for another workshop covering other aspects of environment to be held. This is because the subject of environmental laws is wide and cannot be exhausted in only three days. Participants noted that the duration of the workshop was not adequate enough for them to get acquainted with the environmental laws and be equipped with knowledge and skills. They stated that environmental issues are dynamic and therefore there is need for more training workshops on emerging issues in the filed of environment.

The participants also noted that there is need to monitor whether the environmental laws are being complied with.

ANNEX 1

OPENING REMARKS AT THE TRAINING WORKSHOP ON ENVIRONMENTAL LAWS FOR CHIEF MAGISTRATES BY HIS LORDSHIP, HON MR. JUSTICE D.K WANGUTUSI, EXECUTIVE DIRECTOR, JUDICIAL STUDIES INSTITUTE.

My Lords,
Your Worships,
Distinguished Guests and Participants,
Ladies and Gentlemen.

I regard it as a great honour and responsibility to be asked by the organizers of this workshop to officiate at the official opening of yet another training workshop for Judicial Officers in the area of Environmental law.

The Judiciary recognizes the very important role Chief Magistrates play in the administration of Justice. They resolve disputes between a range of people and apply and interprete the laws of the land.

The vast majority of our people rely on the environment and natural resources directly for their livelihood. Inevitably, conflict over natural resources form the bulk of judicial disputes. These may include: disputes over land ownership, protected areas, access to water, wetlands and open water, fishing rights, contract, concessions, etc.

The conflicts may be between government and individuals or between communities, developers or investors and individuals or communities. They will come to you for adjudication. This training therefore is important as it equips you with the necessary skills and knowledge and expertise that you require in this role.

The trust and confidence the society places in our Judicial Officers must be reciprocated through a great sense of responsibility and integrity. In order to do this, it is imperative that not only must Judicial Officers be independent and courageous, but they must also maintain high standards of learning. These important attributes ensure that people will be Judged Justly in Courts and be able to enjoy adequate protection under the law.

I wish therefore to commend the **Judicial Study Institute, Greenwatch, NEMA** and **The John D and Catherine T MacArthur Foundation** for their untiring effort to train Judicial officers in Environmental law.

In view of the rapidly changing legal trends in general, and in the area of environmental law in particular, continued judicial education is extremely important. It needs to be underscored here that continued judicial education is a mandatory requirement for all Judicial Officers and is necessary for the development of our jurisprudence as well as the strengthening of the rule of law.

The importance of judicial training arises from the need to cope with the changing trends the world over. Training equips Judicial Officers with the most current developments in the world, not only in Judicial matters, but also in other disciplines. There can be no argument that an independent Judiciary is a critical element of a democratic society. It is a fact, which

however, calls upon judicial officers to be in possession of the requisite intellectual and moral strength to discharge their duties with competence and fairness. And, it is my most considered view, that all this can be acquired only through Judicial education and training.

There is increasing realization of the fact that judicial competence requires more than just knowledge of the law. All Judicial Officers must, by necessity, develop skills which enable them to effectively serve the society and apply the law with due dispatch and accuracy.

I understand the workshop is intended to enhance your capacity and skills in adjudication of environmental cases and to raise awareness and to generate a common understanding of the Environmental Impact Assessment process.

This is quite opportune, as we all know, that matters relating to the proper care of the environment in our country and everywhere else are assuming global concern. Judicial officers therefore require the necessary expertise to handle complex environmental cases that are bound to be brought to their courts.

It is my hope that the discussions will be able to show you how our courts can play their part in the protection of the environment, as well as how environmentally conscious citizens can be able to take lawful courses of action in arresting blatant destruction and degradation of the environment.

I am sure the workshop will also enable you to understand and conceptualise the legal and institutional framework governing the management of the environment in Uganda, as well as the procedural aspects of the same.

Looking at the program, it is clear that the workshop is highly interactive and participatory in nature. I must say, I am particularly excited by the inclusion of group discussions on the program. This is commendable since your role as judicial officers is mainly practical and not passive. The days of the passive Judge are long gone.

These are days of judicial activism. I therefore encourage you to take full advantage of the opportunity given to you by **Greenwatch** at this workshop. I also urge you to take back the materials and the knowledge acquired through this workshop and to put them to good use; so that you are able to handle complex environmental cases more efficiently and expeditiously as a result of your training.

In conclusion, I would like to express my sincere appreciation to the organizers of this workshop, namely the **JSI, Greenwatch, NEMA** for organizing the workshop.

I wish to thank the **John D and Catharine T MacArthur Foundation** for sponsoring yet another workshop for the Judiciary.

I also wish to extend my thanks to you the participants for being able to find time from your busy schedules to attend this important workshop.

I wish you all fruitful deliberations during the workshop.

It is now my pleasure to declare this workshop officially open.

ANNEX 2

ENVIRONMENT IMPACT ACESSMENT (EIA)

By: Mr. Waiswa Ayazika
Environmental Impact Assessment Coordinator,
National Environment Management Authority, NEMA

THE BASIC EIA PROCESS.

This is a formal process for identifying the likely effects of particular activities or projects on the environment and on human health and welfare. This includes the development of mitigation and monitoring measures.

Why assess Environmental Impact.

- The Environmental impact is assessed in order to achieve an environmentally sound design and sustainable development.
- Helps avoid problem before they occur- lower project costs in the long term EIA not carried out to justify decisions already made- i.e. should be done before starting the project.
- Provides decision-makers with alternatives
- The assessment provides benefits to the public such as opportunity to learn, express concerns, and influence decision making process.
- EIA considers real alternatives.
- When the assessment is made it helps to identify and concentrate on the key issues.
- The impact predicts key impacts and judge their significance
- It also identifies ways to reduce these impacts.

An environmental impact assessment required shall be appropriate to:

- The nature and scale of the proposed project, or activity;
- The nature of the proposed location;
- Its possible effects on the environment

The basic EIA process consists of the following steps:

The first step is to submit the project briefs by the developer to NEMA (National Environment Management Association) and lead agency.
Step two consists of a review (screening) of the project briefs and decision on level of EIA required. Not all development activities may require full EIA (the assessment is based on the projects general characteristics)

During the initial screening, an evaluation of the likely environmental impacts of a proposed project is carried out. The screening process should aid in deciding whether a proposed activity or project clearly requires an EIA or is not clear whether EIA is required.

Full EIA study.

Scoping, this is to determine the key boundaries, issues and impacts (e.g. time scale, geographical budget, project alternatives, affected environment, significant impacts). This includes the selection of interdisciplinary experts needed for the EIA and the development of terms of Reference for each of the individual team members.

The scoping process is intended to assure that real problems are identified early and studied properly. To ensure the issues which are not significant or which have been treated in prior EIAs are eliminated from detailed study and that the final EIA report is balanced and thorough.

Scoping is typically carried out in a meeting or series of meeting involving the project proponent, local experts, the public, and the responsible government agencies. The structure of the meetings may vary depending on the nature and complexity of the proposed action and on the number of interested participants.

Small- scale meetings might be conducted like business conferences, with participants contributing in informal discussions of the issues.
The large- scale scoping meetings might require a more formal atmosphere, like that of a public hearing, where interested parties are afforded the opportunity to present testimony.
Other types of scoping meetings could include "workshops", with participants in small work groups exploring different alternatives and deigns.

A baseline study is conducted, a baseline study attempts to establish what environmental conditions will be in the absence of the project. A baseline study is essential for two reasons.

- The activity acts on and within the environment which the baseline study seeks to characterize. Without the baseline study, environmental impacts cannot be predicted.
- Even if impacts could be predicted, they only have meaning when compared to the state of the environment in the absence of the project, and under alternatives to the project. In both cases, a baseline is required.

There are three general principles that should guide baseline studies. The first is to concentrate on relevant and important factors. The second is to establish the appropriate areas in which the environment is to be "baselined". This requires understanding where impacts arising from the project are likely to occur.

For this, one must consider the phases of the activity from planning through decommissioning and determine the geographic areas likely to be affected by each. Areas to consider include; the site itself, the immediate site vicinity or neighborhood, the watershed, the air-shed, the general area or region (transport routes, off-site construction quarries, disposal areas, etc)

Thirdly to provide a level of descriptive that is sufficient to indicate the nature of the natural and human resources that are potentially affected by the proposed action. It should be noted that in some instances, the establishment of baseline data may require that data survey work be expanded, refined r extended through seasons or years in order to establish reliable environmental information over time,

In identifying the alternatives to be studied EIA should consider the impacts of three alternatives.

- The proposed activity, project or program under consideration;
- The no-action alternative;
- And other alternatives to the proposed activity that fulfill the general objective or need.

Identifying and describing feasible alternatives should be carried out as soon as possible after the purpose and need are established; in this way, project planning does not bias the assessment toward one alternative.
Ideally, the alternative evaluated should provide decision-makers with different technical or planning solutions for meeting the same need or objective.

Potential impacts should be identified for EACH alternative. This consists of **direct** and **indirect**. Direct are those effects that are generally associated with the construction, operation or maintenance of a facility or activity. They are generally obvious and quantifiable. Indirect impacts (secondary impacts)- induced changes in the environment, population, economic growth and land use e.g. strip settlement associated with new roads, waterborne diseases associated with abandoned construction borrow pits or situation of rivers and streams caused by construction activity.

There are **short-term** and **Long-term impacts**, impacts can be short-term or long term depending upon the persistence or duration of the impacts; the duration of impacts may have a lot to do with the project phase in which they occur e.g. pre-operational (construction), operational, or post operational (e.g. after project completion or decommissioning)

The impacts are adverse (negative) and beneficial impacts (positive). Cumulative impacts (Are those that result from the incremental impact of the proposed action on a common resource when added to other past, present and reasonably foreseeable future actions.
When predicting potential impacts-two approaches are mainly used to predict ultimate impact;

Quantitative analysis, this relies on simulation models, such as a air quality or water quality models, that represent the linkages between element of ecosystem or other environmental components in mathematical terms.

Simulative models tends to be complex, expensive, and data-intensive. Its use may be limited due to data and financial constraints common to most developing countries. Not all quantitative analyses need to rely on models e.g. the number of people to be affected i.e. such can be relocated, acres of habitat disturbed can be measured; capita amount of sewage or solid waste generated can be estimated; the loss of an economic resource and its income can be calculated. Qualitative analysis relies on professional judgment or intuitive reasoning to predict cause and effect relationships and ultimate impacts

Significance of impacts

The significance of a predicted impact depends upon its context and intensity. The significance varies with the setting or context, for example, the loss of one hectare of park in an urban setting may be more significant than the same quantitative loss in a more rural setting-unless of course that hectare species (or belongs to you)

Impacts can be characterized in terms of: intensity depending upon the degree to which an action.

- Affects public health, safety or livelihood.
- Affects unique characteristics of an area
- Is likely to be highly controversial
- Is highly uncertain of involves unique or unknown risks
- Adversely affects endangered or threatened species or habitat.

Meaning of the word in the context in which they are used above.

- **Direction** – the impact will represent a beneficial or negative change.
- **Duration** – the time period over which the impact will be felt
- **Reversibility** – refers to the permanence of the impact.
- **Scope**- over what geographic distance or area will this impact be felt
- **Magnitude** (size)- the absolute or relative change in the size or value of environmental feature
- **Extent**- the area affected by the impact e.g. in hectares of productive agricultural land or kilometers of river. A distinction here between on-site and off site impacts is often useful.
- **Frequency**- refers to the return period for impacts which will recur over and over again e.g. seasonal water quality problems
- **Extent**- the area affected by the impact e.g. in hectares of productive agricultural land or kilometers of river. A distinction here between on-site and off-site impacts is often useful.

Compare and Evaluate Alternatives

The EIA process seeks to compare various alternative options that may be available for any project and thus determine which alternative represents the most desirable balance between environmental and economic costs and benefits. The alternative analysis shall include an evaluation of the associated environmental merits and demerits of each alternative with respect of the following considerations:

- alternatives in citing location of project,
- cost effectiveness, including associated environmental costs and benefits of each alternative
- technology and engineering design
- Interference and/or harmony with the surroundings and future plans.
- Operations, including associated demands for energy and other inputs by the various alternatives.
- Risks associated with the alternative, including potential risks to human health.
- Existence of important cultural and sensitive ecological system and habits in the proposed project area
- Conformity to existing policies, plans, laws, regulations.
- Presence of endangered, rare and/or threatened species that may be at risk if the project is implemented.
- The “no project” alternative

Identify mitigation options; prepare migration and monitoring plans.

Mitigation is the purposeful implementation of decisions or activities that are designed to reduce the undesirable impacts or a proposed action to the affected environment. Mitigation is a general concept that could include the following list of categories;

- Avoiding impacts altogether not taking a particular action.
- Minimizing impacts by limiting the magnitude of action
- Rectifying impacts by repairing or restoring particular features of the affected environment
- Reducing impacts over time by performing maintenance activities during the life of the action; and
- Compensating for impacts by providing additions to or substitutes for the environment affected by the action magnitude of action;

Mitigation can also be achieved through feasible chances in:

- Project citing
- Project design
- Technology and engineering design
- Construction practices
- Raw materials supplies
- Levels of waste production
- Levels of pollutant release
- Discharge of waste to less sensitive locations
- Effective effluent treatment
- Noise, dust, solid waste control
- Good housekeeping

Environmental monitoring and mitigation plan.

A project's mitigation or environmental management plan consists of the set of measures to be taken during implementation and operations to eliminate, offset, or reduce adverse environmental impacts to acceptable levels.

Mitigation or management plans should include the following items;

a) Identification and technical details for each mitigation measures, including the type of impact to which it relates and the conditions under which it relates and the conditions under which it is required, together with designs, equipment descriptions and operating procedures as appropriate
b) Institutional arrangements- the assignment of the various responsibilities for carrying out the mitigation measure
c) Implementation schedule for measures that must be carried out as part of the project showing phasing and coordination with overall project implementation plans.
d) Monitoring and reporting procedures ensure
e) Monitoring and reporting procedures to (i) ensure early detection of conditions that necessitate particular mitigation measures(ii) provide information on the progress and results of mitigation;

f) Integration into the total project cost tables of the cost estimates and sources of funds for both initial investment and the recurring expenses for implementing the mitigation plan

The various scenarios for application of eia.

Application of EIA as part and parcel of the project development and design process. Application of EIA can be made after finalization of the project design.

Communicating findings and decision making.

Communication findings is an essential part of the EIA process. The purpose of the EIA process is to foster better decision-making. This demands both that the EIA process be technically sound and that findings be communicated clearly.

The National Environment Management Authority oversees the implementation of and compliance to the EIA process reviews and approves environmental impact statements. When considering implementation, relevant line, ministries, sectoral departments, the public, private institutions. Because EIA is a tool for environmentally sound planning, it must be integrated into all levels of policy and project planning and development. This calls for full participation of all agencies, institutions and the general public.

Why Public Participation.

Broad-base public participation is the best way to assure that impacts on different segments of the population are identified.
The following stake holders should be involved in EIA?

- The developer of the project
- Regulatory agencies
- The public.

ANNEX 3

TRANS-BOUNDARY ENVIRONMENTAL ASPECTS. THE CASE OF EAST AFRICA

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1.0 Evolution of International Environmental Law

For long, the management of natural resources was dictated by principally three concepts i.e. State sovereignty, territorial integrity and equitable utilization.

1.1 State Responsibility

At first it was thought that state territorial sovereignty was absolute and it was therefore thought that a state could use its natural resources, including the shared ones, the way it wanted irrespective of any harmful effects that may ensue for other states. This was termed the Harmon Doctrine, after the US Attorney General who defended the US' diversion of the Rio Grande River in a dispute with Mexico.[1]

The Rio Grande flows from San Juan Mountains in Colorado 1885 miles into the Gulf of Mexico. For most of this length, the river forms the international boundary between the US and Mexico. The river flows through some of the most arid land in the US and is the most significant source of water for that portion of the US/Mexico boundary. In October 1894, Mexico complained to the US that diversion of the Rio Grande water for irrigation threatened the water supply of several important Mexican cities. The US Secretary of State asked the Attorney General for a legal opinion regarding US rights and responsibilities with respect to the utilization of the Rio Grande.

He commented, "The fact that the Rio Grande lacks sufficient water to permit its use by the inhabitants of both countries does not entitle Mexico to impose restrictions on the USA which would hamper the development of the latter's territory or deprive its inhabitants of an advantage with which nature had endowed it and which is situated entirely within its territory. To admit such a principle would be completely contrary to the principle that USA exercises full sovereignty over its national territory. " [2]

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[1] In *United States v. Texas,* 162 U.S. 1, 16 S. Ct. 725, 40 L. Ed. 867 (1896), a water rights case, the Attorney General Harmon espoused a theory of absolute territorial sovereignty that has come to be known as the Harmon doctrine. Harmon said, "[T]he rules, principles and precedents of international law imposed no liability or obligation on the United States" to let parts of the waters that were diverted upstream by the United States flow to Mexico. According to Harmon, nations had exclusive jurisdiction and control over the uses of all waters within their boundaries; Encyclopedia, British Columbia Press at: http://209.85.129.104/search?q=cache:xLTf8c2VluMJ:www.answers.com/topic/judson-harmon+The+Harmon+doctrine+of+state+sovereignty&hl=en&ct=clnk&cd=6&gl=ug (visited 27th April 2007).

[2] Patricia Birnie & Alan Boyle, International Environment Law, 2nd Ed. 2002, OUP, 332.

The opinion was to the effect that the US had complete freedom of action with regard to the portion of an international watercourse that was situated within its territory.

The dispute over the Rio Grande was ultimately settled in 1906 with the conclusion of the Convention between the US and Mexico Concerning the Equitable Distribution of the Water of the Rio Grande for Irrigation Purposes.[3] The US was also forced to retract the Harmon position in a dispute between the US and Canada over the boundary waters between the two countries. The result was the 1909 Boundary Waters Treaty, established principles and procedures to prevent and resolve disputes, primarily those concerning the quantity and quality of boundary waters between Canada and the United States.

Since Harmon's time, the Harmon doctrine has been largely superseded by the concepts of state responsibility and global citizenship.

The development of the principle of state responsibility can be seen in article 30 of the resolution of principles adopted by the General Assembly of the United Nations in 1974,[4]better known as `The Charter of Economic Rights and Duties of States.' The article, which is included in Chapter III of the resolution entitled `Common Responsibility Towards the International Community' provides that:

> The protection, preservation and enhancement of the environment for the present and future generations is the responsibility of all states. All states shall endeavour to establish their own environmental and developmental policies in conformity with such responsibility. The environmental policies of all states should enhance and not adversely affect the present and future development potential of developing countries. All states that have jurisdiction or control shall not cause damage to the environment of other states or of areas beyond the limits of national jurisdiction. All states shall co-operate in evolving international norms and regulations in the field of the environment.

In the Nuclear Test Cases,[5] the International Court held that France was legally bound by publicly given undertakings, made on behalf of the French Government, to cease the conduct of atmospheric nuclear tests in the South Pacific. The criteria employed was the intention of the state making the declaration that it should be bound according to its terms and that the undertaking be given publicly. There was no requirement of a *quid proquo* or of any subsequent acceptance or response. The court held that one of the basic principles governing the creation and performance of legal obligations, whatever their source, is the principle of good faith.... Just as the very rule of *pacta sunt servanda* in the law of treaties is based on good faith, so also is the binding character of international obligations assumed by unilateral declarations. Thus, interested states may take confidence in unilateral declarations and place confidence in them, and are entitled to require that the obligation thus created be respected.

The Lake Lanoux Arbitration[6]on its part, was concerned with sharing of international waters by states. Spain complained that France had violated a treaty by diverting a river in French

[3] 34 Stat. 2953 (1906). While the US did not completely discard the Harmon Doctrine, they did compromise by allowing Mexico to share some of the water.
[4] UN Res. 3281 (XXIX of 12 December 1974).
[5] Nuclear Test Cases Australia v France; New Zealand v France, I.C.J. Reports 1974 pp. 253, 457.
[6] Lake Lanoux Arbitration (1957) 24 I.L.R.101.

territory before it entered Spain. The tribunal found no violation of the treaty because Spain could not show that the effect of the diversion had been detrimental to it in any way. The arbitration decided that international law places riparian states on a basis of mutuality with respect to the use of the waters of an international river. The dependence of each state upon the river and its resources creates a regime of reciprocal obligations with respect to an equitable apportionment of the waters and their benefit.[7]

This principle also found expression in principle 21 of the Stockholm Declaration on the Human Environment, 1972. However, by contrast, the scope of the obligation under principle 21 extends to activities conducted anywhere outside the state's territory as long as that state has priority in exercising control over the injurious conduct.

Thus, although the principle of state sovereignty was at first applied to trans-boundary water and pollution, it gave rise to other peremptory norms of a procedural character concerning the duty of information, consultation or arbitration in the event of environmental damage. The peremptory norm may also include the general obligation of states not to tolerate serious environmental pollution. This obligation would have an *erga omnes* character, in other words, it would be an obligation that the entire international community would be bound to respect in order to protect the global environment as a vital resource.

1.2 Territorial Integrity

This theory, also known as the theory of limited territorial sovereignty, is based on the assertion that every state is free to use shared rivers flowing on its territory as long as such utilization does not prejudice the rights and interests of the co-riparians. In this case sovereignty over shared water is relative and qualified. The co-riparians have reciprocal rights and duties in the utilization of the waters of their international watercourse and each is entitled to an equitable share of its benefits. This theory is also known as theory of sovereign equality and territorial integrity. [8]

The advantage of this theory is that it simultaneously recognizes the rights of both upstream and downstream countries as its guarantees the right of reasonable use by the upstream country in the framework of equitable use by all interested parties.

This theory has been borrowed from international waters and applied to other shared natural resources as well. Hence, it is an established rule of international law that no state should permit its territory to be used in such a way as to cause significant environmental damage to the territory of another state or states. This rule was announced in the arbitral decision delivered on 11 March 1941 in the Trail Smelter Case[9] between the United States and

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[7] See also D.P. O'Connell, International Law, Vol. 1 Stevens and Sons Ltd. London 1965 at 616.

[8] The opposite of the Harmon doctrine was the theory of absolute territorial integrity. This theory regards an international river as the common property of its co-riparians. Under this theory, the lower riparian has the right to claim the continued and uninterrupted flow of water from the territory of the upper riparian, "no matter what the priority." Often downstream states support this theory as it guarantees them the use of an international river in an unaltered state. Like the Harmon doctrine, this theory is questionable and mostly dismissed by modern commentators.

[9] Trail Smelter Case 35 AJIL (1941), 684, 716. This rule however, has reportedly been attacked as having slight utility as an expression of an international law obligation- Hoffmann, B., `State Responsibility in International

Canada. In that case, a dispute arose out of damage to crops, pasture land, trees and agriculture in the United States from sulphur dioxide fumes carried across the international boundary by winds from a privately owned and operated smelting plant at the Consolidated Mining and Smelting Company of Canada at Trail, in British Columbia. Emission and damage had increased significantly after 1906, and again after 1925 and 1927, leading to the submission of the issue to the United States/Canada International Joint Commission established under the 1909 Boundary Waters Treaty. In February 1931, the Commission adopted a unanimous report awarding the US reparation for injuries suffered in the period upto January 1932. The Commission also made recommendations concerning damages arising thereafter and the use of equipment to reduce further sulphur emissions. In February 1933, the US complained that further damage was occurring and in April 1935, the two countries signed an arbitral *compromis* referring the dispute to an arbitral tribunal composed of three arbitrators, assisted by two scientists designated, respectively, by the two countries. The tribunal found it unnecessary to decide whether the question of liability should be answered on the basis of the US law or international law, since the law followed in the US, in the matter of air pollution was in conformity with the general rules of international law.

The arbitral tribunal affirmed that `under the principles of international law, as well as of the law of the United States, no state has the right to use it territory in such a manner as to cause injury by fumes in or to the territory of another or its properties or persons therein, when the case is of serious consequence and injury is established by clear and convincing evidence.'

The International Court of Justice repeated the very same principle in the Corfu Channel Case.[10]The case concerned a proposal by the French Government to authorize the construction of a barrage to channel water through a hydro electric power plant, diverting approximately 25% of the flow of the River Carol before returning the same amount of water to the river at a point prior to its use by farmers in Spain. Lake Lanoux is on the French side of the Pyrenees and is fed by streams rising in France and running only in French territory. Its waters run into the head waters of the River Carol which, some 25 kilometers from the lake, cross the Spanish frontier at Puigcerda, having previously fed the Canal of Puigcerda, which is the private property of that town. After some six kilometers in the Spanish territory, the River Carol joins the Segre which ultimately flows into the Ebro. The Franco-Spanish frontier was fixed by the 1866 Treaty of Bayonne and an Additional Act thereto whereby regulations were made for the joint use of the waters. Spain alleged that the plans proposed by France would adversely affect Spanish rights and interests contrary to the Treaty, and could be undertaken with the prior consent of both parties. The Tribunal held that the proposed French works did not constitute an infringement of Spain’s rights under earlier treaties. Although it did suggest that the Spanish claim to an infringement of rights might have been stronger if it could have shown, which it did not, that the proposed works would pollute the waters of the River Carol or change the chemical composition, temperature or other characteristic of the waters in such a way as to injure its interests.

The award considered whether riparian states have any obligation to notify and consult with others who may be potentially affected prior to engaging in activities which may harm a shared river resource. The Tribunal affirmed the existence of `every state's obligation not to

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Law and Transboundary Pollution Injuries', Vol. 25 I&CLQ (1976), 509 at p. 511, citing A.P. Lester, `River Pollution in International Law', Vol. 57 AJIL (1963) 828 at pp. 836-837.

[10] Corfu Channel Case (France v. Spain) ICJ Reports, 1949, 1, 22.

knowingly allow its territory to be used contrary to the rights of other states', and found application of the principle in national judicial proceedings.

1.3 Doctrine of Equitable and Reasonable Utilization

This use-oriented doctrine is a sub-set of the doctrine of limited territorial sovereignty. It entitles each basin state to a reasonable and equitable share of water resources for the beneficial uses within its own territory (Article IV, Helsinki Rules 1966 and Article 5 of the UN Watercourses Convention 1997).

This theory is adopted in majority of the treaties in recent time, i.e., Agreement on the cooperation for the sustainable development of the Mekong river basin (1995), 2002 framework agreement on the Sava River basin, and SADC protocol on shared watercourse systems (1995).

Equitable sharing does not necessarily mean equal share of waters. In determining equitable sharing relevant factors such as the geography of the basin, hydrology of the basin (contribution of water by each basin state), population dependent on the waters, economic and social needs, existing utilization of waters, potential needs in future, climatic and ecological factors to a natural character and availability of other resources etc. should be taken into account.[11]

2.0 Principles of Management of Transboundary Natural Resources

2.1 Joint Management

This calls for the active involvement of the parties in the management of the resources as seen in the 1909 Boundary Waters Agreement between Canada and the US, that established a Joint Commission for the purpose. In Africa is the example of the Zambezi Intergovernmental Monitoring and Coordinating Committee established by the 1987 Agreement on the Action Plan for the Environmentally Sound Management of the Common Zambezi River System.[12]

2.2 International Cooperation and Collaboration

According to the UN Watercourses Convention and to several other water-related agreements, cooperation between riparian states may be achieved by different means: by establishing joint bodies and commissions of which riparian states are members, by regular exchange of information and data, by consultation and notification of planned measures. In particular, the establishment of joint commissions between riparians is a means of preventing disputes from arising and of contributing to their resolution. Moreover, they provide with a

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[11] Article V, Helsinki Rules 1966 at http://internationalwaterlaw.org/IntlDocs/Helsinki_Rules.htm; and Article 6 of the UN Watercourses Convention 1996 at http://links.jstor.org/sici?sici=0002-9300(199801)92%3A1%3C97%3AT1UNCO%3E2.0.CO%3B2-P (visited 27th April 2007)..

[12] http://209.85.129.104/search?q=cache:WK7bIKGBIJAJ:www.fao.org/docrep/W7414B/w7414b0j.htm+1987+Agreement+on+the+Action+Plan+for+the+Environmentally+Sound+Management+of+the+Common+Zambezi+River+System.&hl=en&ct=clnk&cd=1&gl=ug (visited 27th April 2007).

framework for notification of planned measures and consultations, and define an action program of common interest to improve water management and decrease pollution.

2.3 Other principles

1. Prior notification and consultation
2. scientific research and exchange of information
3. EIA
4. Liability and redress[13]

3.0 The East Africa Region

3.1 The 1968 African Convention on the Conservation of Nature and Natural Resources

Kenya, Tanzania and Uganda are party to the 1968 African Convention on the Conservation of Nature and Natural Resources,[14] the first post colonial regional legal instrument that acknowledges the principle of common responsibility for environmental management by African states. The Convention also provides for sustainable development and generational equity. The Convention provides the basis for joint action for transboundary issues.
However, there was need for specific natural resources shared among countries.

3.2 The 1977 Kagera Basin Agreement

The Kagera Basin Agreement of 1977[15] aims to ensure that environmental considerations are taken into account in development projects in the basin.[16] The Organization for the Management and Development of the Kagera River Basin (KBO)[17] set up in August 1977 was dissolved in 2004.

3.3 The 1996 Lusaka Agreement on Cooperative Enforcement Operations directed at Illegal Trade in Wild Fauna and Flora

The Lusaka Agreement of 1996 on Cooperative Enforcement Operations directed at Illegal Trade in Wild Fauna and Flora[18]obliged parties to take appropriate measures in accordance

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[13] See also Prof. Francis D.P. Situma, Transboundary Environmental Issues, a Paper presented at the East Africa Regional Judicial Colloquium on Environmental Law, 10th to 15th Sarova Whitesands Hotel in Mombasa, Kenya.

[14] Signed in Algiers on 15 September 1968 and entered into force on 16 June 1969.

[15] Agreement for the establishment of the Organization for the Management and Development of the Kagera River Basin (with attached map). Concluded at Rusumo, Rwanda, on 24 August 1977; Came into force on 5 February 1978. 1089 U.N.T.S. 165 (1978).

[16] In 1981 Uganda joined the Kagera Basin Organization, which was established by Tanzania, Rwanda, and Burundi. The organization's major goal was to develop 60,000 square kilometers of the Kagera River Basin, which extended into all four countries. Areas of interest to the organization included transport, agriculture, power, mining, hydroelectricity, and external finance.

[18] Lusaka 8th September 1994; entered into force on 10th December 1996, See http://209.85.129.104/search?q=cache:qHeZ-L2RaOkJ:untreaty.un.org/English/UNEP/lusaka_english.pdf+The+Lusaka+Agreement+of+1996+on+Cooperative+Enforcement+Operations+directed+at+Illegal+Trade+in+Wild+Fauna+and+Flora.&hl=en&ct=clnk&cd=5&gl=ug (visited 20th April 2007).

with this Agreement to investigate and prosecute cases of illegal trade in wild fauna and flora; share relevant information and scientific data relating to illegal trade; encourage public awareness campaigns aimed at enlisting public support for the objective of this Agreement and to encourage public reporting of illegal trade. The Agreement also established a permanent taskforce for the purpose of operationalising the Agreement.

3.4 Nile Waters Agreements - Water under the Bridge?

The Nile Waters Agreement of 1929 sought to divide the waters of the Nile between Egypt and the Sudan and especially to allocate water to the latter for irrigation in the Gezira. It contained a clause whereby the UK undertook not to construct any irrigation or power works on the Nile or its tributaries or associated lakes in the Sudan or in the territories under the administration of Britain without the consent of Egypt, if such constructions would have the effect of reducing or delaying the water destined for Egypt. The effect of this above Agreement is that Uganda and all the countries under British administration had to seek the consent of the Egyptian Government if any of them wanted to carry out irrigation, power works or construction of any other measures on the River Nile or its branches or on the lakes in those territories.

The Supplementary Agreement of 1932 provided for the building of the Jebel Awliya Dam near Khartoum on the Blue Nile for the benefit of Egypt and with Egyptian funds.

The Owen Falls Agreements of 30 May 1949, 5 December 1949 and 5 January 1953 between the UK and Egypt provided for the participation of Egypt in the construction of the Owen Falls Dam, and the use of Lake Victoria as a storage reservoir of water for Egypt. They also provided for the financial contribution of Egypt and the compensation Egypt would pay to the East African states due to damage incurred as a result of the rising level of the lake. Furthermore, it was agreed to have a Resident Egyptian Engineer at the Dam to ensure that the interests of Egypt were taken into account. To this day, an Egyptian Engineer is still resident at the Dam.

The 1959 Agreement for the Full Utilisation of the Nile Waters between Egypt and Sudan. This Agreement provided a basis for the equitable sharing of the waters of the Nile between the lower-most riparian countries. It also provided for the construction of the Aswan High Dam and for the sharing of the costs and benefits of the Dam. The Agreement further provided for the construction of other works in the Nile by the parties for their joint benefit. In addition, the parties established a Permanent Joint Technical Committee to administer works and any issues arising from the treaty. The parties also acknowledged that other riparian countries may claim a share of the Nile Water. The parties undertook to study such claims jointly and in such an event adopt a unified view. The Agreement points to the possibility of renegotiating assertions of acquired rights to Egypt. The Sudan successfully renegotiated with Egypt.[19]

Currently there are negotiations going on among the Nile River Basin countries to agree on cooperation framework for equitable sharing and utilization of the Nile River Basin

[19] History of Riparian Agreements Respecting the River Nile . Sorce: Appendix B.1 AESNP-Hydropower Facility, EIA March 2001. See http://209.85.129.104/search?q=cache:bqLCi_c3-zYJ:www.bujagali-energy.com/docs/HPPWEBVersion/HPP%2520SEA.Appendix%2520B.pdf+1977+Kagera+Basin+Agreement&hl=en&ct=clnk&cd=1&gl=ug 9visited 20th April 2007).

resources, among other provisions. The sticky issue is still the hesitation of Egypt and Sudan to revoke the 1929 and 1959 Agreements.

In 1992 the Council of Ministers (Nile -COM) of Water Affairs of the Nile Basin States launched an initiative to promote co-operation and development in the Basin. Six of the riparian countries - the Democratic Republic of Congo (D.R. Congo), Egypt, Rwanda, Sudan, Tanzania, and Uganda - formed the Technical Co-operation Committee for the Promotion of the Development and Environmental Protection of the Nile Basin (TECCONILE). The other four riparian states participated as observers. The objective of TECCONILE) is to promote basin-wide cooperation for the integrated and just development, conservation and use of the Nile Basin water resources, and to determine the equitable entitlement of each riparian state to the use of the Nile waters. At the Extra-ordinary meeting of the Council of Ministers (Nile-COM) in Arusha, Tanzania 23 - 24 Sept 1998, it was agreed to form the Nile Basin Initiative.

3.5 The 1994 Convention for the Establishment of Lake Victoria Fisheries Organisation

The Convention for the Establishment of Lake Victoria Fisheries Organisation[20]was made with the objective of fostering cooperation among the Contracting Parties, harmonizing national measures for the sustainable utilization of the living resources of the Lake and developing and adopting conservation and management measures. The Convention established the Lake Victoria Fisheries Organisation at Jinja, Uganda, as the basic institution to:

- Promote the proper management and optimum utilisation of fisheries and other resources of the lake;
- Enhance the capacity of existing fisheries institutions;
- Provide a forum for discussion of the impacts of initiatives on the lake;
- Provide for the conduct of research on the living resources of the lake and its environment;
- Coordinate and undertake training and extension in all aspects of fisheries;
- Consider and advise on the impact of introductions of non-indigenous organisms into the Lake Victoria;
- Serve as a clearinghouse and a data bank for information on the fisheries of the lake; and
- Promote the dissemination of information. [21]

On 5 August 1994, an Agreement on the Preparation of a Tripartite Environmental Management Programme for Lake Victoria[22] was concluded by Kenya, Tanzania and

[20]Kisumu, Kenya, 30 June 1994, entry into force 24th May 1996; http://www.fao.org/Legal/treaties/027t-e.htm (visited 29th April 2007).

[21] See http://209.85.129.104/search?q=cache:p975Sw2ZGw0J:www.lvfo.org/index.php%3Foption%3Ddisplaypage%26Itemid%3D135%26op%3Dpage+Protocol+on+the+sustainable+development+of+lake+victoria+basin&hl=en&ct=clnk&cd=7&gl=ug 9visited 20th April 2007).

[22]Dar-es-Salaam, 5th August 1994 and entered into force on the same day. See http://209.85.129.104/search?q=cache:R6DhKnXhujgJ:www.ecolex.org/en/treaties/treaties_full_display.php%3Fdocnr%3D3121%26language%3Den+Agreement+on+the+Preparation+of+a+Tripartite+Environmental+Management+Programme+for+Lake+Victoria&hl=en&ct=clnk&cd=2&gl=ug (visited 20th April 2007).

Uganda. This Agreement created a programme that strengthened co-ordination among the three states in the management of lake resources including fisheries, water quality and land use, wetlands, and the control of the introduction of alien species.

3.6 The 1999 Treaty for the Establishment of the East African Community

In November 1999 the Treaty for the Establishment of the East African Community was adopted.[23] Chapter 19 of the Treaty (covering articles 111-114) is on Cooperation in Environment and Natural Resources Management. Article 111 acknowledges the possible negative impacts of development on environment; in article 112 parties agree to adopt measures for the management of the environment; in article 113 parties agree to cooperate and adopt measures to curb illegal trade in and movement of toxic chemicals, substances and hazardous waste; in article 114 parties agree to cooperate and adopt measures and regulations for management of natural resources. Chapter 20 (covering articles 115-116) is on Cooperation in Tourism and Wildlife Management; in article 116 the parties agree to cooperate to foster conservation and sustainable utilization of wildlife and other tourist sites in the Community. They also agree to exchange information and to adopt common policies on wildlife management and development and to encourage the joint use of training and research facilities and develop common plans for transborder protected areas.

The above provisions of the EAC Treaty relating to the management of natural resources are in furtherance of the commitment of partner states to raise the standards of living of African peoples and to maintain and enhance the economic stability, foster close and peaceful relations among African states.[24]

3.7 The EAC Memorandum of Understanding for Cooperation on Environment Management

The Memorandum of Understanding for Cooperation on Environment Management (MOU of CEM) between the Republic of Uganda, the Republic of Kenya and the United Republic of Tanzania is part of the East African Community Treaty. It provided for the development, enactment and implementation of harmonised national frameworks and sectoral environmental laws, regulations, guidelines and mechanisms. The MOU of CEM was designed to effectively manage shared resources, or transboundary resources, and ecosystems, especially those of forests, water, wildlife, and marine among others, with the full involvement of people in sustainable use and management of environment and natural resources.

Work areas

it required parties to:

- regulate, control and prohibit the introduction of alien genetic materials;
- enact and harmonize environmental laws on Lake Victoria systems and other shared natural resources such as rivers and wetlands; and

[23] Entered into force on 7th July 2000. For the text of the treaty see http://209.85.129.104/search?q=cache:CJn1ikgnakwJ:www.iss.co.za/af/RegOrg/unity_to_union/pdfs/eac/EACTreaty.pdf+EAC+treaty&hl=en&ct=clnk&cd=6&gl=ug (visited 20th April 2007).

[24] See Preambular paragraph 16 of the Treaty.

- Constantly review and reform existing environmental legislation.[25]

3.8 The 2003 Protocol for Sustainable Development of Lake Victoria Basin

The Protocol for Sustainable Development of Lake Victoria Basin[26] was made under the enabling provision of the EAC Treaty. Article 3 thereof commits Partner States to cooperate in the conservation and sustainable utilisation of the resources of the Basin including water and fisheries resources; promotion of sustainable agricultural and land use practices including irrigation; promotion of sustainable development and management of forestry and wetland resources.[27]

Under article 4 the management of the resources of the Basin are guided by the following principles:

a) The principle of equitable and reasonable utilisation of water resources;

b) The principle of sustainable development;

c) the principle of prevention to cause harm to members whereby Partner States shall individually and jointly take all appropriate measures to prevent environmental harm rather than attempting to repair it after it has occurred;

d) The principle of prior notification concerning planned measures whereby each of the Partner States shall notify other Partner States of planned activities within it's territory that may have adverse affects upon those other States;

e) The principle of Environmental Impact Assessment and Audit;

f) the precautionary principle whereby each Partner State shall take the necessary measures to prevent environmental degradation from threats of serious or irreversible harm to the environment, despite lack of full scientific certainty regarding the nature and extent of the threat;

g) the 'polluter pays' principle whereby the person that causes the pollution shall as far as possible bear any costs associated with it;

h) The principle of public participation whereby decisions about a project or policy take into account the views of the stakeholders;

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[25] For the text see http://svs-unepibmdb.net/?q=node/5566&PHPSESSID=4847ea5bad9330f27ab56a8e6ce570ff (visited 20th April 2007). The MOU was concluded in recognition that a Protocol on environment and natural resources may take long to be made whereas action was need.

[26] Signed on 29th November 2003 and ratified in 2004. See http://209.85.129.104/search?q=cache:UeVEZt79QxMJ:faolex.fao.org/docs/texts/mul41042.doc+Protocol+on+the+sustainable+development+of+lake+victoria+basin&hl=en&ct=clnk&cd=4&gl=ug 9visited 20th April 2007).

[27] The Lake Victoria Basin Commission is hoted at Kisumu, Kenya.

i) The principle of prevention, minimization and control of pollution of watercourses so as to minimise adverse effects on fresh water resources and their ecosystems including fish and other aquatic species and on human health;

j) the principle of the protection and preservation of the ecosystems of international watercourses whereby ecosystems are treated as units, all of whose components are necessary to their proper functioning and that they be protected and preserved to the extent possible;

i) The principle of community of interests in an international water course whereby all States sharing an international watercourse system have an interest in the unitary whole of the system;

j) The principle of gender equality in development and decision-making;

k) The principle that water is a social and economic good and a finite resource; and

m) The principle of subsidiarity.

3.9` The 2006 EAC Protocol for Environment and Natural Resources Management

Under Article 3 of the Protocol, the Protocol[28] shall apply to all activities, matters and areas of management of the environment and natural resources of the Partner States, including the following-
(a) sustainable environment and natural resources management,
(b) conservation of biological diversity,
(c) management of forestry resources,
(d) management of wildlife resources,
(e) management of water resources,
(f) management of wetland resources,
(g) management of coastal and marine resources,
(h) management of fisheries resources,
(i) management and access to genetic resources,
(j) management of mineral resources,
(k) management of energy resources,
(l) management of mountain ecosystems,
(m) soil and land use management,
(n) rangelands management,
(o) combating desertification and mitigating the effects of drought,
(p) mitigating the effects of climate change,
(q) protection of the ozone layer,
(r) tourism development,
(s) biosafety and biotechnology,
(t) waste and hazardous waste management,
(u) pollution control and management,
(v) environmental impact assessment and audits,
(w) environmental standards,
(x) military and hostile activities,

[28] The Protocol was signed in 2006 and is yet to be adopted.

(y) environmental education and capacity building,
(z) public participation, access to information and justice, and
(aa) environmental disaster preparedness and management.

3.10 The Environmental Assessment Guidelines for Shared Ecosystems in East Africa

The three Partner States: Kenya, Uganda and Tanzania share common borders and many terrestrial and aquatic natural resources are shared between two or three of these countries. Examples of shared terrestrial ecosystems are the Eastern Arc Mountains of Pare and Taita between Kenya and Tanzania; Mount Elgon between Kenya and Uganda; Loima-Moroto hills between Kenya and Uganda; Serengeti-Mara, Kilimanjaro-Longido-Kajiado, and Tsavo-West Mkomazi Umba ecosystems between Kenya and Tanzania. Shared aquatic ecosystems are exemplified by Lake Victoria, which is shared between all the three EAC Partner States, Lake Jipe, Lake Chala between Kenya and Tanzania. These terrestrial ecosystems comprise unique habitats with a rich biological diversity. They are important water catchments and form habitats for globally important fauna and flora. They are also ideal lands for arable agriculture, livestock and wildlife. The Minziro-Sango Bay Swamp ecosystem is shared between Uganda and Tanzania. These aquatic ecosystems have vibrant fisheries worth millions of dollars annually and are home to many species of fish and other marine resources. The lakes and rivers are a major source of food and domestic and animal water supply and play part in regulating and modulating climate in their catchment. The marine coastal strip of the western Indian Ocean is shared between Kenya and Tanzania, stretches some 800km and is traversed by Tana, Sabaki,Galana, Pangani and other smaller rivers. The coastal strip includes estuaries, coral reefs, mangrove forests, tidal flats and sea grass beds which are important nursery, feeding and refugia habitats for fish and many other animals.

The natural resources within these ecosystems have been exploited by the communities of these countries for centuries and are therefore important for the survival of the peoples of the Partner States. However, these shared ecosystems are threatened by rising population pressure, expanding human activities. They face major threats including depletion of their natural resources due to over exploitation, over fishing, unsustainable agricultural practices, point source and non-point source pollution. There is rampant conversion and destruction of littoral wetlands. Further, it is noted that policies, laws and regulations are inadequate and where they exist, they are poorly enforced.

The Environmental Assessment Guidelines are intended to rationalize exploitation and use of natural resources in shared ecosystems amongst the EAC Partner States and to ensure their conservation and sustainable utilization. [29]

4.0 How to deal with environmental crimes that transcend borders

[29] The Regional Workshop on Environmental Assessment Guidelines for Shared Ecosystems of East Africa, organised by the East African Community on August 2004; See http://209.85.129.104/search?q=cache:BfOR-e5cxkUJ:www.eac.int/news_2004_08_environment.htm+Environmental+assessment+guidelines+for+shared+ecosystem+in+east+africa&hl=en&ct=clnk&cd=1&gl=ug (visited 20th April 2007). The Guidelines are awaiting adoption.

The growth of environmental crime is a serious side-effect of the development of policies aimed at protecting the environment. Unlike most other kinds of crime, it harms not just individual victims, but society as a whole. International environmental crime potentially damages the global environment.

Most environmental conventions have penal provisions couched in different ways:[30]

- Requiring state parties to develop appropriate national legislation to ensure the application of the multilateral environmental agreements (MEAs) and to punish infractions against their provisions. E.g. The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes requires parties to introduce national legislation to prevent and punish illegal traffic in hazardous waste.[31]The Bamako Convention on the Ban of Import into Africa and the Control of Transboundary Movement and Management of Hazardous Waste within Africa provides that the import of hazardous waste shall be deemed illegal and a criminal act.[32]

- Providing that violations 'shall be an offence punishable under the law of the territory in which the ship is registered' (International Convention for the Prevention of Pollution of the sea by Oil).[33]

- Setting out the environment offences. E.g. The European Union's Convention on the Protection of the Environment through Criminal Law (1998).[34]The said Convention

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[30] See Prof. Patricia Kameri-Mbote, The Use of Criminal Law in Enforcing Environmental Law, a Paper presented to the East Africa Regional Judicial Colloquium on Environmental Law, 10th to 15th April, 2005 Sarova Whitesands Hotel, Mombasa, Kenya).

[31] **Article 9, Basel Convention On The Control Of Transboundary Movements Of Hazardous Wastes And Their Disposal (1989), http://www.jus.uio.no/lm/hazardous.waste.transboundry.movement.control.and.disposal.basel.convention.1989/10.html (visited 30 April, 2007).**

[32] Article 4(1) of the Bamako Convention on the Ban of the Import into Africa and the Control of Transboundary Movement of Hazardous Wastes within Africa (1991) , adopted in Bamako, Mali, on 30 January 1991 and came into force on 10 March 1999); http://www.unitar.org/cwg/publications/cbl/synergy/pdf/cat3/bamako/convention_bamako.pdf. **(visited 30 April, 2007).**

[33] Article 3 of the International Convention for the Prevention of Pollution of the sea by Oil, London 1954. http://209.85.129.104/search?q=cache:h3GszsspP_kJ:www.admiraltylawguide.com/conven/oilpol1954.html+International+Convention+for+the+Prevention+of+Pollution+of+the+sea+by+Oil)&hl=en&ct=clnk&cd=1&gl=ug (visited 30 April, 2007).

[34] In 1998, the Council of Europe opened for signature the European Convention on the Protection of the Environment through Criminal Law. http://209.85.165.104/search?q=cache:ZRNC5CSgDmYJ:conventions.coe.int/Treaty/EN/Reports/Html/172.htm+European+Union%E2%80%99s+Convention+on+the+Protection+of+the+Environment&hl=en&ct=clnk&cd=6&gl=ug. This was significant because it represented the 1st international convention to criminalise acts causing or likely to cause environment damage. No member state of the Council of Europe signed it. Instead the Council, in 2000, adopted an initiative by Denmark for a framework decision. The Commission challenged the Framework Decision before the European Court of Justice on the grounds that it had been adopted on the wrong legal basis. On 15 September 2005 the European Court of Justice annulled the Framework Decision and confirmed that the Community had the competence to adopt criminal law measures related to the protection of the environment if this is necessary to ensure the efficient implementation of its environmental policy. In order to take into account both the Court's judgment and the latest developments in environmental legislation, the Commission decided to withdraw its earlier proposal of 2001 for a Directive and make a new one. The proposal presented by the Commission therefore replaces both its own proposal for a directive of 2001 and the Council's Framework Decision of 2003. See

provides for intentional offences, negligent offences, administrative offences and sanctions for the environmental offences, among others.

- Some MEAs expressly recognise their deterrent function. The Bamako Convention on the Ban of Import into Africa and the Control of Transboundary Movement and Management of Hazardous Waste Within Africa, for instance, provides that each Party shall introduce appropriate national legislation for imposing criminal penalties on all persons who have planned, carried out, or assisted in such illegal imports. Such penalties shall be sufficiently high to both punish and deter such conduct.[35]

This underscores the role of MEAs in providing the legal basis for national law to delineate criminal activity or conduct.

The awakening to combating environmental wrongs as crimes was in the realization of the magnitude of the pollution and related effects across countries and perhaps across regions, seas and oceans and the cost of restoration. The effects of oil spills, gas leaks, fires, toxic, hazardous and radioactive substances, discharge of untreated effluent, use of chemicals on shared resources and air pollution, sometimes do transcend boundaries and affect lives and property and the environment of neighboring or far away countries as well.

Countries are generating more waste than ever, and disposal systems are often unable to meet growing demands. Natural resources of fish, exotic species, and timber are dwindling, which increases the street value of the stocks that remain. There is a lot of illegal trade in wildlife, illegal fishing, illegal logging, illegal trade in ozone depleting substances, trade in banned subtances e.g hazardous waste and chemicals, among others. Due to economic globalization, contraband including CFCs, endangered species, and toxic waste is flowing through national borders that are disturbingly porous.

A pervasive lack of enforcement also contributes to the growth of environmental crime, especially in developing countries where corruption, poverty, war, and other social problems are perceived as greater and more immediate threats.

According to the published estimates, contained in a December 2000 US White House report titled *International Crime Threat Assessment*, illegal dumping generates up to $12 billion worldwide in criminal revenues annually. The endangered wildlife trade is also a financial bonanza for criminals. A single rhinoceros horn can earn one destitute poacher several hundred dollars, equivalent to a year's salary in some African countries. The same horn, ground up and used as a perceived remedy for impotence and other ailments, can fetch half a million dollars in Asia. Worldwide, illegal wildlife trading generates at least $10 billion a year, according to the U.S. Department of Justice.[36] Environmental crime and illegal trade is

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http://209.85.129.104/search?q=cache:r90ESQPwdoAJ:ec.europa.eu/environment/crime/index.htm+European+Union%E2%80%99s+Convention+on+the+Protection+of+the+Environment&hl=en&ct=clnk&cd=2&gl=ug ; and Europa Press Release at http://europa.eu/rapid/pressReleasesAction.do?reference=MEMO/07/50&format=HTML&aged=0&language=EN&guiLanguage=en (visited 30 April 2007).

[35] Article 9 (2)

[36] Charles W. Schmidt, Environmental Crimes: Profiting at the Earth's Expense; at http://www.schmidtwriting.com/articles/clients/ehp/ecrimes.html (visited 24 May 2007).

so serious that by some estimates, it is valued at tens of billions if not well over 100 billion dollars a year.

Although their effects can be global in nature, environmental crimes most often harm the world's poor disparately. Contraband waste, for instance, is usually dumped in underdeveloped countries that lack the legislative and technical controls needed to protect vulnerable populations. Usually, inadequate infrastructure for environmental protection is accompanied by a dearth of knowledge about the safe handling of hazardous materials. Criminals who take advantage[37] of lax controls to illegally dump toxic waste place local populations at serious risk. Most poor communities who handle these materials, usually handle them with their bare hands and without respiratory protection, have no idea what they are being exposed to. In addition, environmental crime can create lawlessness because of a violent culture fueled by illegal fishing, logging, and wildlife trade, among others.

In December 1998, for example, 3,000 tons of mercury-laden waste generated by Formosa Plastics of Taiwan was dumped in a field near Sihanoukville, Cambodia, allegedly sickening several villagers and sparking a rumor that the material was radioactive. In an ensuing riot, some 10,000 people fled the area, and 8 people were killed. (The waste was ultimately shipped back to Taiwan.).[38]Recently, the dumping of hazardous waste in Sierra Leone caused a massive up roar with calls to prosecute those that had dumped the waste.

Mindful of the escalation in international environment crime, UNEP[39] together with the World Customs Organisation, held a workshop in the third week of May this year (2007) in Shangai to equip customs officials with the necessary skills and know-how to address environmental crime. [40]

But as observed by one Lisa Mastny,[41]

> "We've got plenty of environmental treaties, more than 500 at last count……" But pieces of paper don't frighten criminals. Unless governments start implementing the terms of these treaties, and put some teeth into enforcement, these law-breakers will continue to ravage and pollute our planet."

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[37] Police organizations find that criminals who deal in environmental contraband often display little concern for the risk of capture. "During our investigations, we are often faced with exuberant confidence by smugglers who feel they have nothing to fear," says Alexander von Bismarck, a senior investigator with the Environmental Investigation Agency (EIA), a private organization based in London and Washington, D.C. "Some of them act as if they've stumbled on a gold mine. During a recent undercover meeting, one dealer said, 'This is better than drug smuggling.'" See Charles W. Schmidt, id.

[38] Charles W. Schmidt, Environmental Crimes: Profiting at the Earth's Expense; at http://www.schmidtwriting.com/articles/clients/ehp/ecrimes.html (visited 24th May 2007).

[39] The Cooperation involved UNEP, secretariats of the Multilateral Environment Agreements, the Chemical Weapons Convention, the World Customs Organisation (WCO) and Interpol

[40]Press Release at UNEP News Centre; at http://www.unep.org/Documents.Multilingual/Default.asp?DocumentID=506&ArticleID=5584&l=en (visited 24th May 2007).

[41] Worldwatch Research Associate in the September/October issue of World Watch magazine "International **Environmental Crime Shouldn't Pay,"** published in WorldWatch Magazine; at http://72.14.209.104/search?q=cache:wdhwlt_prxwJ:www.worldwatch.org/node/1739+international+environment+crimes&hl=en&ct=clnk&cd=6&gl=ug. See also "The growth and control of international environmental crime - Guest Editorial" at http://findarticles.com/p/articles/mi_m0CYP/is_2_112/ai_114559312 (visited 24th May 2007).

The resources and political will devoted to tackling the international environmental crime are indeed derisory - yet the problem threatens every citizen of the world, and undermines several key environmental treaties. What is still lacking is political will and resources for effective enforcement.

The EAC has, however, shown political commitment. In the Memorandum of Understanding for Cooperation in Environment Management between the three East African states, the parties agree, under article 16(2)(d) to grant equal access and treatment to persons seeking judicial or administrative remedies for transboundary environmental damage. This MOU is particularly saved under Article 142(1)(i) of the EAC Treaty. The EAC Protocol on Environment and Natural Resources provides the substance. It is yet to be seen how the EACA will treat cases of a transboundary nature, especially environmental crime, should they be brought before the Court. Other fora exist for settlement of disputes. The COMESA Court is one such forum as is the African Court.

What we need to do is to step up prosecution of environmental crime at the national level. This will give impetus for prosecution at the regional and even global level.

Legislation at national level to penalize environmental offences is crucial. That was the concern in the Ugandan case of The Environmental Action Network Ltd. v Attorney General & NEMA,[42]where Ntabgoba J., the Principal Judge as he then was, ruled that smoking is not a crime either under the Penal Code Act or under any law or statute and courts have no jurisdiction to create crimes or criminalize any acts. Nor do courts possess any power to order prosecution, which is a power strictly reserved for the Director of Public Prosecution. This was echoed in British American Tobacco (U) Ltd. v The Environmental Action Network Ltd.[43]decided by the same judge.

These causes were distinguished from the case of K. Ramakrishnan & ors. v State of Kerala & ors.[44]in which it was held that smoking in a public place vitiates the atmosphere so as to make it noxious to the health of persons who happen to be there. Therefore, smoking in a public place is an offence punishable under section 278 of the Penal Code (High Court of Kerala at Ernakulam). The difference between this case and the two Ugandan cases above[45]is that whereas the judge acknowledged the fact that cigarette smoke is injurious to the health of both the smokers and moreso to the non-smokers in the vicinity of the smoker, there was no law in Uganda to criminalize smoking in a public place; and as such, it was wrong for the applicant to ask court to declare such smoking unlawful. This position was rectified by the promulgation of the National Environment (Control of Smoking in Public Places) Regulations 2004, [46]which were made as a result of the Judge's order that NEMA puts those regulations in place.

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[42] Environmental Action Network Ltd. v Attorney General High Court Misc. Appl. No. 39 of 2001.

[43] British American Tobacco (U) Ltd. v The Environmental Action Network Ltd. High Court Misc. Appl. 444 of 2001.

[44] K. Ramakrishnan & ors. v State of Kerala & ors. High Court of Kerala at Ernakulam O.P. No. 24160 of 1998-A available at http://www.geocities.com/sahasram_2000/cigarette-1.html (visited 6/30/2000).

[45] In Joseph Eryau v The Environmental Action Network High Court Civil Appl. No. 470 of 2001, the Principal Judge, Ntabgoba J. found that the question is not whether cigarette smoke is noxious. Smoking certainly kills. What is to be considered is what public places smoking should be banned from. A blanket exclusion of every public place from cigarette smoking would be inappropriate and unacceptable to smokers like the applicant.

[46] National Environment (Control of Smoking in Public Places) Regulations No. 12 of 2004.

It has been argued that even where criminal liability exists in respect of actions or omissions, the construction of a statutory provision must not widen criminal liability beyond the wording of the provision or lead to an analogy to the detriment of the defendant, no matter how blameworthy the considered behaviour may seem to be.[47]

There is need, however, to distinguish between mens rea offences and strict liability and absolute liability offences. The ingredients of each are different. The judicial officer is, therefore, encouraged to draw from the experience of other jurisdictions that have developed a lot of precedents for prosecution of environmental crime.

5.0 Conclusions

The issue of the management of transboundary natural resources is a complex one and needs concerted effort of all the beneficiary countries. It also calls for the abandonment of old treaties that do not respect equity, fairness and good faith.

When it comes to how to deal with environmental offences that transcends boundaries, the equation becomes more complex. Both National and regional mechanisms have to be refined to take into account the finer detail, the nature of the complaint, issues of liability and restoration aspects, if any.

Today, environmental crime is an issue that is being intensely studied and dissected, even if efforts to fight it are still largely inadequate. Meanwhile, criminals continue to raise the ante; many of them simply incorporate penalties into the cost of doing business. Stopping these crimes will require officials to wield an ever bigger stick and increase the resources to deal with them. But boosting the capacity to fight environmental criminals is an enormous challenge, one that requires resources, determination, and political will. If environmental criminals are to be checked, then they must be fought with a level of severity at least equal to the ecological threats they pose.

Nevertheless, the stage has been set for better utilization and equitable sharing of these resources. The challenge is that they should be utilized sustainably and that they should benefit the citizens of the countries sharing the resource. In addition, environmental crime needs to be handled very firmly and together with other states, and the world over.

[47] Dr. H.U Paeffgen,, 'Overlapping Tensions Between Criminal and Administrative Law: The Experience of West German Environmental Law', Journal of Environmental Law Vol.3, No.2 of 1991, 247 at 250.

ANNEX 4

APPLICABILITY OF MULTILATERAL ENVIRONMENTAL AGREEMENTS IN THE ENFORCEMENT PROCESS IN UGANDA

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1.0 International Environmental Law

The Permanent Court of International Justice defined international law in the case of **The S.S. Lotus** as follows:

> *International law governs relations between independent States. The rules of law binding upon States therefore emanate from their own free will as expressed in conventions or by usages generally accepted as expressing principles of law and established in order to regulate the relations between these co-existing independent communities or with a view to the achievement of common aims.*[48]

International environmental law assists in building and captures consensus between nations on goals for environmental protection and resource conservation and sustainable use. Its instruments primarily include conventions, protocols and "soft-law" instruments such as guidelines or codes of conduct. In addition, agreements, resolutions, guidelines and declarations adopted to facilitate the implementation of treaties and conventions are relevant.[49]

Although concern for the environment first began to appear on the international agenda in the early 20th century with the conclusion of a number of international conventions, it was not until the period between 1940 to 1970 that a dramatic increase in international environmental treaties was witnessed.

1.1 From Stockholm to Rio

In 1972, 113 nations gathered in Stockholm to address growing concerns about the undesirable environmental effects of economic growth. Two instruments were created: *The Declaration on the Human Environment* and *The Action Plan for the Human Environment*. It was at the Stockholm Conference that the United Nations Environment Program (UNEP) was established.

Following the Stockholm Conference, international governmental and non-governmental organisations formulated programmes to implement the policies and principles adopted at

[48] **The S. S. "LOTUS"** (France v. Turkey), PCIJ., Ser. A, No. 10 (1927).
[49] UNEP Training Manual on the Drafting of Environmental Law, October 2004, developed by Prof. V.C.R.A. C. Crabbe and Prof. Francis D.P. Situma.

Stockholm. Important international instruments include: *World Conservation Strategy* in 1980, *World Charter for Nature* in 1982 and *Caring for the Earth: A Strategy for Sustainable Living* in 1991. Of particular importance is the report *Our Common Future* in 1987 which articulated the original concept of sustainable development as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs".

UNEP has played a catalytic role in the development of international environmental law. Under the auspices, or with the collaboration of UNEP, four global environmental conventions were elaborated during this time, namely:

- The Convention on the Control of International Trade in Endangered Species of Wild Fauna and Flora, Washington, 1973;
- The Convention on Migratory Species, Bonn, 1979;
- The Vienna Convention for the Protection of the Ozone Layer, Vienna, 1985, and its Montreal Protocol on Substances that Deplete the Ozone Layer, Montreal, 1987; and
- The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, Basel, 1989.

During this period, UNEP also launched its Regional Seas Programme under which conventions, protocols and programmes of action have been concluded to protect 13 regional seas. In addition, UNEP developed various guidelines or "soft-law" instruments, among them:

- The London Guidelines for the Exchange of Information on Chemicals in International Trade, 1989; and
- The Montreal Guidelines for the Protection of the Marine Environment against Pollution from Land-based Activities.

In 1992, 20,000 people from 178 countries attended the United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro, Brazil. Five key documents were signed:

- The Rio Declaration on Environment and Development (elaborates 27 basic principles to guide activities to ensure that lifestyles are sustainable);
- Agenda 21 (a framework for the cooperative generation of strategies for sustainable development and environmental management at global level)
- The Convention on Biological Diversity;
- The Framework Convention on Climate Change; and
- The Statement of Forest Principles

These documents have generated a number of multilateral environment agreements (MEAs), including the Kyoto Protocol on climate change promulgated in Kyoto, Japan December 1997. UNEP embarked on "clustering" of MEAs as a management strategy for enhancing coordination and policy coherence among multilateral environmental agreements. The different clusters are discussed below;

Cluster 1: Biodiversity-Related Conventions

The scope of the biodiversity-related conventions ranges from the conservation of individual species (CITES and the Lusaka Agreement) via conservation of species, their migration routes and their habitats to the protection of ecosystems (CBD, the Ramsar Convention, the World Heritage Convention and the International Coral Reef Initiative--ICRI). CITES is concerned with ecosystems, specifically with ensuring that trade in specimens of CITES-listed species is limited so as to ensure those species are maintained throughout their range at a level consistent with the roles in the ecosystems in which they occur and well above the level at which they might become eligible for inclusion in Appendix I (Article IV, paragraph 3 of the Convention). The Cartagena Protocol of the CBD specifically aims at protecting both species and ecosystems by promoting the safe transfer, handling and use of living modified organisms resulting from modern biotechnology. Five regional seas conventions (the Mediterranean, the North-East Atlantic, East Africa, the Wider Caribbean and the South-East Pacific) have protocols or annexes on specially protected areas and wildlife (SPAWs) that cover both individual species and ecosystems.

While all of these agreements aim at conserving species and/or ecosystems, several also promote their sustainable use (CBD, CITES, Ramsar and ICRI). The Cartagena Protocol promotes measures related to safeguarding the sustainable use of biodiversity against adverse effects that could be caused by living modified organisms. Likewise, the SPAWs, which are closely linked to CBD, CITES, Ramsar and ICRI, support the sustainable use of marine and coastal species and ecosystems.

Cluster 2: The Atmosphere Conventions

The Vienna Convention on the Protection of the Ozone Layer and its Montreal Protocol on Substances that Deplete the Ozone Layer and the United Nations Framework Convention on Climate Change and its Kyoto Protocol are closely associated in protecting the environment by eliminating or stabilizing anthropogenic emissions that threaten to interfere with the atmosphere. While the former focuses on the impacts that ozone depletion can have on human health, the latter addresses concerns that climate change may have on food production and economic development. The overriding priority of the Montreal Protocol is to provide financial assistance through the Multilateral Fund to eligible developing countries to comply with the provisions of the Protocol and its amendments. The UNFCCC is in an earlier phase of implementation, with much of its future success depending on the operationalization of its Kyoto Protocol.

Cluster 3: The Land Conventions

This cluster is comprised of only one major global convention. The main objective of the UNCCD is to combat desertification and mitigate the effects of drought in countries experiencing serious drought and/or desertification, particularly in Africa. This objective is to be achieved through effective action at all levels, supported by international cooperation and partnership arrangements, in the framework of an integrated approach which is consistent with Agenda 21, with a view to contributing to the achievement of sustainable development in affected areas. There are very few regional agreements in the fields of arid lands and land degradation. Most notable are the Agreement for the Establishment of the Arab Centre for the Studies of Dry and Barren Land (1970) and the Convention Establishing a Permanent Inter-States Committee for Drought Control in the Sahel (CILSS) (1973).

Cluster 4: The Chemicals and Hazardous Wastes Conventions

The overarching objective of the chemicals and hazardous wastes conventions is the protection of human health and the environment from pollution by specific chemicals and hazardous substances. The Rotterdam Convention on Prior Informed Consent specifically addresses certain banned or severely restricted chemicals, as well as severely hazardous pesticide formulations, subject to international trade. The Stockholm Convention on Persistent Organic Pollutants has as its priorities the phasing out of an initial list of 9 chemicals; the restriction to certain acceptable purposes the production and use of DDT, and the reduction or elimination of unintentionally produced chemicals (dioxin and furans). The scope of the Basel Convention covers a broad range of hazardous wastes, including chemical wastes, subject to transboundary movements, aiming to reduce these movements to a minimum by minimizing the quantity and hazardousness of the wastes generated and by promoting the treatment and disposal of hazardous wastes and other wastes as close as possible to their source of generation. These global MEAs are complimented by regional agreements such as the Bamako Convention on the Ban of Import into Africa and the Control of Transboundary Movement and Management of Hazardous Waste Within Africa and the Waigani Convention to Ban the Importation into Forum Island Countries of Hazardous and Radioactive Wastes and to Control the Transboundary Movement and Management of Hazardous Wastes within the South Pacific Region (1995), as well as the Protocol to the Barcelona Convention for the Protection of the Mediterranean Sea against Pollution from Land-Based Sources.

Cluster 5: Regional Seas Conventions and Related Agreements

The 17 regional seas conventions and action plans are a global mosaic of agreements with one over-arching objective: the protection and sustainable use of marine and coastal resources. They have evolved into multi-sectoral agreements addressing integrated coastal area management, including in several cases links to the management of contiguous freshwater basins; land-based sources of pollution; conservation and sustainable use of living marine resources; and impacts of offshore exploration and exploitation of oil and gas. The Barcelona Convention (1976), the oldest of these agreements, fostered the establishment of the Mediterranean Commission for Sustainable Development which is serviced by the Secretariat of the Convention. Also included in this cluster are the Global Programme of Action for the Protection of the Marine Environment from Land-Based Activities (GPA) and the International Coral Reef Initiative (ICRI) which were both adopted in 1995.

The purpose of ICRI is to mobilize governments and a wide range of stakeholders to improve management practices, increase capacity and political support and share information on the health of coral reefs and related ecosystems, including mangroves and sea grass beds. In both agreements, the regional seas conventions and action plans are regional building blocks and vehicles for the implementation of the global agreements. From a substantive point of view, the Global Programme of Action is closely related to the chemicals-related conventions on issues such as agrochemicals, persistent organic pollutants and heavy metals. Likewise, the work of International Coral Reef Initiative is closely associated with the biodiversity-related conventions, specifically CBD, CITES and Ramsar.

Each of these MEAs require that countries develop specific implementation mechanisms and fulfill obligations involving reporting, training, public education, and other activities. They have underscored the importance of states in enacting effective environmental legislation.

2.0 The Case of Uganda – Ratification of Treaties: The Law and Practice

Under Article 123 (1) of the Constitution, the President or a person authorized by the President may make treaties, conventions, agreements or other arrangements between Uganda and any other country or between Uganda and any international organization or body in respect of any matter. This provision created an impasse with many treaties unratified until an enabling law was passed in 1998.

The Ratification of Treaties Act (of 1998) Cap 204 lays down the procedure to be followed in ratifying a treaty by the Government of Uganda.

Section 2 thereof provides that all treaties shall be ratified by cabinet. The exception are treaties that relate to armistice, neutrality or peace or those that require amendment of the Constitution which must be ratified by Parliament by resolution. The implication of this provision is that the Attorney-General, as legal advisor to Government, would have to analyse each treaty before it is forwarded to Cabinet for ratification. During this process, the Attorney-General would determine whether or not the ratification of a particular treaty would necessitate an amendment of the Constitution. It is also possible that ratification would be delayed or denied by operation of the Ratification of Treaties Act, if a treaty were found undesirable.

Under section 3, the Minister responsible for Foreign Affairs signs, seals and deposits the instrument of ratification.

The ratified treaty is thereafter (as soon as possible) laid before Parliament.

Practice

(a) The lead ministry/agency responsible for the matter requiring ratification, for instance, NEMA, prepares the draft Cabinet paper.
(b) NEMA forwards the Cabinet paper to its supervising Ministry, the Minister of Water and Environment for approval and onward presentation to Cabinet.
(c) The Minister presents the Cabinet paper to Cabinet for approval.
(d) Cabinet authorises the Minister of Foreign Affairs to ratify the treaty/Protocol.
(e) Minister of Foreign Affairs signs, seals and deposits the instrument of ratification with the treaty depository and also the national depository of treaties.
(f) All Cabinet papers have to be accompanied by a Certificate of Approval (or no objection) from the Minister of Finance and Economic Planning stating that (i) there are no financial implications or (ii) that there are sufficient funds to meet the obligation contained in the Cabinet paper.

2.1 Domestication of Treaties

International law only becomes applicable in East Africa after it has been transformed into municipal law, a process known as domestication. This is according to the dualist school of thought that states that international and national laws are two separate systems. As such, particular rules of international law only become applicable within a state by virtue of their adoption by the internal law of the state. It should be borne in mind, though, that under the Vienna Convention on the Law of Treaties 1969, a state cannot use its national law as justification for violating international law. Under the principle of pacta sunt servanda, a state is obliged to respect its international obligations even if it means changing the national law. There is therefore a general duty to bring national law into conformity with obligations under international law.

Uganda has indeed reflected its international obligations in our national laws including the Constitution, the National Environment Management Policy of 1994, the National Environment Act and other environment legislation.

The National Constitution of 1995 in the National Objectives and Directive Principles of State Policy;

- Paragraph 18 – Protection of Natural resources; states that "The State shall protect important natural species including land, water, wetlands, minerals, oil, fauna and flora on behalf of the people of Uganda."
- Paragraph 21 – Clean and Safe Water; states that "The State shall take all practical measures to promote a good water management system at all levels"
- Paragraph 27 – on the environment.

The National Constitution also under Article 39 states that "Everyone has a right to a clean and healthy environment"; Article 237(2)(b) provides for the public trust doctrine; and article 50 enables enforcement of the right to a clean environment using public interest litigation.

The National Environment Act incorporates the principles of-

- The Convention on Biological Diversity,
- The Vienna Convention for the Protection of the Ozone Layer, Vienna, 1985, and its Montreal Protocol on Substances that Deplete the Ozone Layer, Montreal, 1987,
- The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, Basel, 1989,
- The Bamako Convention on the ban of the Import into Africa and the Control of Transboundary Movement of Hazardous Wastes within Africa , 1991
- The African Convention on the Conservation of Nature and Natural Resources, 1968 (revised in 2003)

NEMA is also the focal point of the Stockholm Convention on Persistent Organic Pollutants, 2001 and the Rotterdam Convention on Prior Informed Consent.

The National Environment Act also has provisions on-

- management of hazardous chemicals

- management of wetlands, riverbanks and lakeshores
- air and water quality
- Control of pollution, among others.

The Wildlife Act Cap. 200 implements the provisions of-

- The Convention on the Control of International Trade in Endangered Species of Wild Fauna and Flora, Washington, 1973,
- The Convention on Migratory Species, Bonn, 1979.

Other environmental laws incorporating different aspects of international environmental law include the Water Act Cap. 152 and the National Forestry and Tree Planting Act, 2003.

Hence, international environmental undertakings are being implemented both by statute and by policy and strategic interventions in the national planning processes.

3.0 Environmental principles

Building on the *Stockholm Declaration on the Human Environment* the *Rio Declaration* adopted-

- The principle of integration of environmental considerations into development, planning and management,
- The precautionary principle,
- The principle of intergenerational equity,
- The "polluter pays" principle,
- Sustainable utilization principle,
- Promotion of public participation on environmental decision-making,
- Prior consultation and ultimate co-operation in the management of environmental resources shared by 2 or more states

Environmental principles are found in other international instruments as well as national constitutions, framework environmental management laws, sector legislation, and court decisions.

3.1 Public trust doctrine (PTD)

The PTD is used to prevent governments from conveying public resources to private enterprises (**prohibition on conveyance**). For example, in the case of Illinois Central Railroad v. Illinois[50] the US Supreme Court revoked the state legislature's transfer of ownership of nearly the entire waterfront of Chicago (about 1,000 acres) to the railroad on the ground that the water was held in trust for the people by the state.

The PTD guarantees public access to natural resources after the resources have been conveyed to private interests (**conveyance with impression)**. It is recognition that private

[50] Illinois Central Railroad v. Illinois 146 US 387

rights are subordinate to public rights. Environmental rights have been held as being such superior rights.[51]

The PTD has also been invoked in a case involving **dumping of waste** - Scottish case of Lord Advocate v. Clyde Navigation Trustees.[52] In that case, the Lord Advocate, on the Crown's behalf, sought and got orders preventing a statutory body from dumping dredge waste in an area. The Court recognized the existence of a trust on the Crown to protect the area in the "public interest."

It has also been invoked in **protection of recreational areas**: Australian case of Re Sydney Harbour Collieries Co.[53] The court stopped licensed development of a coalmine in Sydney Harbour on the grounds that the Crown had an obligation to use public land for the "health, recreation, and enjoyment" of the people. It held that the Crown occupied, in relation to public lands, a position akin to a trustee "under an obligation to dispose of, or alienate those lands…only in the interest and for the benefit of the people…"

The PTD equally found use in the **protection of rivers, lakes & estuaries** -National Audubon Society v. Department of Water and Power of the City of Los Angeles.[54] It was found as an independent basis for contesting the allocation of water resources. The Supreme Court of California upheld a challenge to the diversion of waters of Mono Lake under a permit – which diversion had led to one third reduction of lake surface area, depletion of bird communities, and decrease in scenic beauty and ecological value of the lake. The Supreme Court stated that "approval of (water) diversion without considering public trust values may result in needless destruction of those values."

In M. C. Mehta v Kamal Nath[55] the court took notice of a news item that the respondent had diverted the course of a river in order to save his motel from flooding. It was held that the `Public Trust Doctrine' is a part of Indian law. The court decided that `... the state is the trustee of all natural resources which are by nature meant for public use and enjoyment...the state as trustee is under a legal duty to protect the natural resources'. The polluter pays principle was also applied and the polluter company was found liable to compensate by way of costs for restitution of environment and ecology of the area.

Other instances where the PTD was invoked

Protection of Traditional Heritage - Abdikadir Sheikh Hassan v Kenya Wildlife Services.[56] In this case court used the PTD to review a public authority's exercise of statutory powers. In

[51] Commonwealth v Alger 61 Massachussetts 53 (1851).
[52] Lord Advocate v. Clyde Navigation Trustees. (1891) 19 Rittie 174
[53] Re Sydney Harbour Collieries Co.(1895) 5 Land Appeal Court Reports 243
[54] National Audubon Society v. Department of Water and Power of the City of Los Angeles (1983) 658 P 2d 709
[55] M. C. Mehta v Kamal Nath 1997 (1) SCC 388.

[56] Abdikadir Sheikh Hassan v Kenya Wildlife Services, Civil Case No. 2959 of 1996 (High Court of Kenya at Nairobi, Aug. 29, 1996); See also Niaz Mohammed Jan Mohammed v Commissioner of Lands, Civil Suit No. 423 0f 1996 (High Court of Kenya at Mombasa, Oct. 9, 1996) (holding that the state could not condemn private land to build a road and then allocate left-over portions to other private individuals); Commissioner of Lands v Coastal Aquaculture Ltd., Civil Appeal No. 252 of 1996 (Court of Appeal at Nairobi, June 27, 1997) (holding that a notice of intent to acquire coastal land did not adequately specify the public body for which the land was being acquired).

this case, the plaintiffs sought to restrain the Kenya Wildlife Service (KWS) from moving endangered hirola antelope from its natural habitat to Tsavo National Park, notwithstanding the KWS's express statutory mandate to protect the animals. The court held that the KWS `would be acting outside its powers if it were to move any animals or plants away from their natural habitat without the express consent of those entitled to the fruits of the earth on which the animals live.'

Protection of Public Land from illegal/irregular allocation -M.C. Mehta v. Kamal Nath.[57] *The* India Supreme Court invoked the PTD to quash a lease of property on the bank of R. Beas granted (when the defendant was a minister for environment and forests) to a Hotel (to which the defendant was affiliated). Court acted *on the basis of a newspaper article* alleging diversion of river waters to save the hotel from flooding. Court stated that "resources meant for public use cannot be converted into private ownership;" and directed the company to take various remedial works, and pay compensation for the "restitution of the environment and the ecology of the area."[58]

Public trust in Uganda

The PTD is enshrined in Article 237(2)(b) of the Uganda Constitution, section 44 of the Land Act Cap. 227, and section 5 of the National Forestry and Tree Planting Act, 2003, among others. These provisions impose a duty on the state and local government to protect important natural resources; including natural lakes, rivers, ground water, natural ponds, natural streams, wetlands, forest reserves, game reserves, national parks and any other land reserved for ecological and touristic purposes, for the common good of the citizens of Uganda.

There is therefore need to consider pro-actively ways of systematically 'reaching back' using PTD to –

- correct mistakes made by governments over time in allocating natural resources
- recover the public estate converted to private estate

There is need to-

- define the role of the state as public trustee
- balance the rights of the public and those of private property owners
- raise awareness on the part of the citizenry
- popularize the role of public interest litigation which is currently not being used much
- improve on the Capacity of lawyers to handle public interest case

Role of the judiciary

Should judicial officers become protectors of the public trust and act *suo moto*?

There is need to hold the executive accountable and in breach of its role of trustee

[57] M.C. Mehta v. Kamal Nath, (1997) 1 SCC 388.
[58] Prof. Patricia Kameri-Mbote, "The Use of the Public Trust Doctrine in Environmental Law," a Paper presented at the East Africa Regional Judicial Colloquium on Environmental Law, Sarova Whitesands Hotel, Mombasa 10-15 April 2007.

There is need for the judiciary to make precedents on the PTD with a view to clearly defining it.

3.2 Precautionary Principle (PP)

There are numerous formulations of the precautionary principle. The most widely employed formulation is as follows.

> *If there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.*

In the application of the precautionary principle, public and private decisions should be guided by:

(i) careful evaluation to avoid, wherever practicable, serious or irreversible damage to the environment, and
(ii) an assessment of the risk- weighted consequences of various options.[59]

PP: Conditions for application

The need to take precaution is premised on the fact that if it was required to prove that harm would occur before an activity were stopped, in some cases it would be either too late or too costly to avert it.

The Precautionary Principle is constituted by the following related concepts:

- The concepts of risk assessment and risk management
- The concept of pollution prevention
- The concept of "critical load"
- The concept of life-cycle assessment and life-cycle management
- The concept of Environmental Impact Assessment and other assessments

The application of the precautionary principle and the concomitant need to take precautionary measures is triggered by the satisfaction of two conditions precedent:

(i) A threat of serious or irreversible environmental damage and
(ii) Scientific uncertainty as to the environmental damage.

1st condition precedent:

- It is not necessary that serious or irreversible damage has actually occurred- it is the *threat* of such damage that is required.
- The environmental damage threatened must attain the threshold of being *serious or irreversible.*
- The threat of serious or irreversible damage must be adequately sustained by scientifically plausible evidence.

[59] Hon. Justice Brian J. Preston, "The Role of the Judiciary in Promoting Sustainable Development: The Experience of Asia and the Pacific," a Paper presented at the East Africa Regional Judicial Colloquium on Environmental Law, Sarova Whitesands Hotel, Mombasa 10-15 April 2007.

This condition will be fulfilled when empirical scientific data (as opposed to simple hypothesis, speculation or intuition) make it reasonable to envisage a scenario, even if it does not enjoy unanimous scientific support.

If there is no threat of serious or irreversible environmental damage (the first condition precedent is *not* satisfied), there is no basis on which the precautionary principle can operate.

The lack of full scientific uncertainty is in relation to the nature and scope of the threat of environmental damage.

2nd condition precedent

The degree of scientific uncertainty that needs to exist in order to trigger application of the precautionary principle varies depending on the magnitude of environmental damage used in the formulation of the first condition precedent of the precautionary principle.

For the formulation of "serious or irreversible environmental damage," the correlative degree of certainty about the threat is "highly uncertain of threat" or "considerable scientific uncertainty."

If there is not considerable scientific uncertainty (the second condition is *not* satisfied) but there is a threat of serious or irreversible environmental damage (the first condition precedent *is* satisfied), the precautionary principle will not apply.

Measures will still need to be taken but these will be *preventative* measures to control or regulate the relatively certain threat of serious or irreversible environmental damage, rather than *precautionary* measures which are appropriate in relation to uncertain threats.

PP: Shifting of burden of proof

If both of the conditions precedents are satisfied, the precautionary principle will be activated.

There will then be a shifting of the evidentiary burden of proof.
A decision-maker must assume that the threat of serious or irreversible environmental damage is no longer uncertain but is a reality.

The burden of showing that this threat does not in fact exist or is negligible effectively reverts to the proponent of the development plan, program or project.

PP: Preventative anticipation

The activation of the precautionary principle results in the taking of measures to prevent environmental damage without having to wait until the reality and seriousness of the threats of environmental damage become fully known. This is the concept of preventative anticipation.

PP: Zero risk standard inappropriate

A zero risk precautionary standard is inappropriate. Not every risk is unacceptable and needs to be prevented.

PP: Precautionary measure

The type and level of precautionary measures that will be appropriate will depend on the combined effect of the seriousness and irreversibility of the threat and the degree of uncertainty.

This involves assessment of risk in its usual formulation, namely the probability of the event occurring and the seriousness of the consequences should it occur.

The more significant and the more uncertain the threat, the greater the degree of precaution required.

PP: Allowing a margin for error

Prudence also suggests that some margin for error should be retained until all the consequences of the decision to proceed with the development plan, program or project are known.

This allows for potential errors in risk assessment and cost-benefit analysis.

Potential errors are weighted in favour of environmental protection.

Weighting the risk of error in favour of the environment is to safeguard the ecological space or environmental room for manouvre.

One means of retaining a margin for error is to implement a step-wise or adaptive management approach, whereby uncertainties are acknowledged and the area affected by the development plan, program or project is expanded as the extent of uncertainty is reduced.

PP: Proportionality

The precautionary principle embraces the concept of proportionality.

In applying the precautionary principle, measures should be adopted that are proportionate to the threats. Considerations of practicability need to be taken into account.

There must be a proportionality of response or cost effectiveness of margins of error to show that the selected precautionary measure is not unduly costly.

PP: Not a prohibition

The precautionary principle, when triggered, does not necessarily prohibit the carrying out of a development plan, program or project until full scientific certainty is attained.

Courts and application of the precautionary principle

- The right to sue (locus standi) – has to be given a broad and innovative interpretation to allow suits in public interest as seen below.[60]

- The courts are required to take into account the precautionary principle when exercising jurisdiction under respective environmental management Acts (see s. 5(3) Environment Management Act (Tz), s. 3(5) Environment Management Coordination Act (K), section 2 of the National Environment Act Cap. 153 (U)).

The courts have indeed applied the precautionary principle in judgments and there is a growing jurisprudence to that effect:
In the 1982 case of Kenya Ports Authority v. East African Power and Lighting Company Ltd,[61] the Court of Appeal (Madan, Law & Potter JJA) while dismissing a claim for pecuniary loss arising out of purely precautionary measures taken to clean up pollution, Law J.A said *Obiter* that "since pecuniary loss arising out of purely precautionary measures is not recoverable under common law, the remedy would appear to be for legislation to be enacted to make the cost of cleaning of pollution to be recoverable from the occupiers of waterside plots as well as ship owners who are responsible for the pollution of territorial waters and harbours."

The precautionary and the polluter pays principles are entrenched in section 2 of the Uganda National Environment Act and substantive provisions thereof and are accordingly actionable.

In Rodgers Muema Nzioka and 2 others v. Tiomin Kenya Limited,[62] an injunction was sought to restrain the defendant from mining without having conducted an EIA under section 58(2) of the EMCA. The court held that where a proponent has not fulfilled the requirements of carrying out an EIA it is immaterial that one is licensed- under another law, in this case the Mining Act, Cap. 306. The court found that the defendant had not taken any environmental factors into account in proposing the project and proceeded to grant an injunction on the balance of probabilities.

In the English case of R v Secretary of State for Trade & Industry Ex Parte Duddridge[63]an application was brought on behalf of 3 children living in South Woodford, an area of North East London, where the National Grid Company was laying a new high voltage underground cable. The applicants alleged that the non-ionising radiation which would enter their homes and schools, would be of such a level as would or might expose them to a risk of developing leukaemia. They urged the Secretary of State to issue regulations to remove any such risk. The court considered the precautionary principle as directed towards the prevention of serious or irreversible harm to the environment in situations of scientific uncertainty. Its premise is that where uncertainty or ignorance exists concerning the nature or scope of environmental

[60] See also Prof. P. J. Kabudi, "The Precautionary Approach to Environmental Management: Environmental Assessments, Audit, Monitoring and Precautionary Principle in the East Africa Countries," a Paper presented at the East Africa Regional Judicial Colloquium on Environmental Law, Sarova Whitesands Hotel, Mombasa 10-15 April 2007.

[61] **Kenya Ports Authority v. East African Power and Lighting Company Ltd** also reported in the Volume (KLR (E & L) 1 at p. 82

[62] Rodgers Muema Nzioka and 2 others v. Tiomin Kenya Limited, (High Court of Kenya at Mombasa, Civil Case No. 97 of 2001)

[63] R v Secretary of State for Trade & Industry Ex Parte Duddridge QBD Oct. 1997 Journal of Envt'l Law Vol. 7 No. 2, 1995 at 226.

harm (whether this follows from policies, decisions or activities), decision-makers should be cautious. The question raised was the equitable protection of generations.

In the Australian case of GreenPeace Australia Ltd. v RedBank Power Co. Pty. Ltd. & Singleton Council[64] it was held that the application of the precautionary principle mandates a cautious approach in evaluating the various factors to determine whether a development consent to construct a power station should be granted. This principle does not require, however, that the greenhouse effect issue be given precedence over all others. Greenpeace's main argument was that the impact of air emissions from the power station would unacceptably exacerbate the greenhouse effect in the earth's atmosphere, and that the court should apply the precautionary principle of the National Protection Agency and refuse development consent for the project.

In Vellore Citizens Welfare Forum v Union of India[65] the petitioner filed an action to stop tanneries in the State of Tamil Nadu from discharging untreated effluent into agricultural fields, waterways and open lands. It was held that sustainable development, and in particular the polluter pays principle and the precautionary principle, have become a part of customary international law. The court ordered the Central Government to establish an authority to deal with the situation created by the tanneries and other polluting industries in the State of Tamil Nadu. The authority was to implement the precautionary principle and the polluter pays principle, and, identify (1) the loss to the ecology/environment; and (2) the individuals/families who have suffered because of the pollution, and then determine the compensation to reverse this environmental damage and compensate those who have suffered from the pollution.[66]

3.3 Generational equity

Inter-generational equity requires the present generation to ensure that the health, diversity and productivity of the environment are maintained or enhanced for the benefit of future generations.

Intra-generational equity involves considerations of equity within the present generation.

The use of natural resources by one country (or sector or class within a country) needs to take into account the needs of other countries (or sectors or classes within other countries).

Intra-generational equity involves people within the present generation having equal rights to benefit from the use of natural resources and from the enjoyment of a clean and healthy environment.

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[64] GreenPeace Australia Ltd. v RedBank Power Co. Pty. Ltd. & Singleton Council 86 LGERA 143 (1994).

[65] Vellore Citizens Welfare Forum v Union of India AIR 1996 SC 2715

[66] Other cases on the precautionary principle include Natal Fresh Produce Growers Association v. Agroserve (Pty) Ltd 1990 (4) SA 749; Greenpeace Australia Ltd v. Redbank Power Company Pty Ltd and Singleton Council – Land and Environmental Court of NSW 86 Lgera 143 (1994); Nicholls v. Director of Private National Parks and Wildlife and others – Land and Environment Court of NSW 81 Lgera 397; Laetch v. National Parks and Wildlife Service and Shoalhaven City Council – Land and Environmental Court of NSW 81 Lgera 270 (1993); Ms Shehla and Others v. Wapda – Human Rights Case No 15-K of 1992 Supreme Court of Pakistan.

The concept of generational equity has been in use from as far back as the nineteenth century, when proponents first discussed the concept that the present generations hold the care of the earth in trust for future generations. In 1946 the International Convention for the Regulation of Whaling recognised the interest of the nations of the world to safeguard whale stocks `for future generations'. The same generational perspective underlies references in the 1972 Stockholm Declaration on the Human Environment to humankind's responsibility to protect the environment and the earth's natural resources.[67] The nature of this responsibility is spelt out more fully in the World Charter for Nature which calls on states to ensure genetic viability, the maintenance of animal population levels sufficient for their survival, the conservation of representative samples of ecosystems and the avoidance of irreversible environmental damage, among others.

Indeed, the protection of future generations is also envisaged in the Draft Declaration of Principles on Human Rights and the Environment. Principle 4 states; `All persons have the right to an environment adequate to meet equitably the needs of present generation and that does not impair the rights of future generation to meet equitably their needs.'

The late president of Kenya, Jomo Kenyatta, in Facing Mount Kenya, describes the intergenerational relationship the Gikuyu people have with their environment in the following words:

> A man is the owner of his land... But insofar as there are other people of his own flesh and blood who depend on that land for their daily bread, he is not the owner, but the partner, or at the most a trustee for the others. Since the land is held in trust for the unborn as well as for the living, and since it represents his partnership in the common life of generations, he will not lightly take it upon himself to dispose of it.[68]

Tolba concurs that we are all partners and trustees for our future children, the unborn.[69] Indeed the 1987 report of the World Commission on Environment and Development, *Our Common Future*, describes this relationship in terms of needs. The concept of sustainable development is described as development that meets the needs of the present without compromising the ability of future generations to meet their own needs. Edith Brown-Weiss observes that the concept of inter-generational justice is inherent in the use of the precautionary principle that advocates that in cases where there is uncertainty about potential environmental impacts associated with a certain activity, the likelihood of the maximum potential impact occurring should guide policy and practice.

However, it has been argued that future generations cannot have a right because they are composed of individuals who do not exist yet; that enforcement of any rights that may exist is done by a guardian for future generations as a group, not of future individuals who are intermediate.[70]It has also been said that we cannot argue for inter-generational rights because for every right there must be a right-holder with corollary obligations to the right; that the future generation is merely a legally hypothetical concept. This perception is changing.

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[67] Principles 1 and 2.
[68] Dr. Mustafa K. Tolba, `Global Environmental Justice', UNEP Information Green Paper No. 1 at p. 2.
[69] id.
[70] D'Amato, Weiss, Gundling: `AGORA: What Obligation Does Our Generation Owe to the Next?. An Approach to Global Environmental Responsibility', (1990) Vol. 84 AJIL pp. 190-213.

The case of Oposa et. al v Secretary of the Environment and Natural Resources (1993)[71]granted standing to sue to minors on behalf of their own generation and future generations. Parents and an NGO successfully challenged a government award of a timber contract on the basis that it contributed to rain forest destruction. The majority opinion by Justice Feliciano reversed a trial court decision in favour of the government and recognized both the plaintiffs' right to act for future generations and the concept of intergenerational equity.

The Philippine Supreme Court pointed out that:

> Their personality to sue on behalf of the succeeding generations can be based on the concept of inter-generational responsibility; insofar as the right to a balanced and healthful ecology is concerned such a right,(...) considers the `rhythm and harmony of nature'. Nature means the created world in its entirety (...). Needless to say, every generation has a responsibility to the next to preserve that rhythm and harmony for the full enjoyment of a balanced and healthful ecology. Put it a little differently, the minors' assertion of their right to a sound environment constitutes, at the same time, the performance of their obligation to ensure the protection of that right for the generations to come.

In the case of New Zealand v France,[72]Judge Christopher Weeramantry of the International Court of Justice in his dissenting opinion argued, under the heading the `concept of intergenerational rights': `The case before the court raises, as no case ever before the court has done, the principle of intergenerational equity - an important and rapidly developing principle of contemporary environmental law.'

The judge particularly noted the argument by counsel for New Zealand that if damage of the kind alleged had been inflicted on the environment by the people of the Stone Age, it would be with us today. The judge referred to the information before the court that the half-life of a radioactive by-product of nuclear tests, can extend to over 20,000 years. He noted that this is an important aspect that an international tribunal cannot fail to notice. In a matter of which it is duly seised, he said, this court must regard itself as a trustee of those rights in the sense that a domestic court is a trustee of the interests of an infant unable to speak for itself. If this court is charged with administering international law, and if this principle is building itself into the corpus of international law or has already done so, this principle is one which must inevitably be a concern of this court...'

Weeramantry J. asserted that New Zealand's complaint that its rights are affected does not relate only to the rights of people presently in existence. The rights of the people of New Zealand include the rights of unborn posterity. Those are the rights which a nation is entitled, and indeed obliged, to protect.

In the Argentina case of Irazu Margarita v Copetro SA,[73]the Court of La Plata stated that a change on the environment can have an effect not only to our quality of life but also to the

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[71] Oposa et. al v Secretary of the Environment and Natural Resources (1993)G.R. No. 101083, July 30. 1993.

[72] New Zealand v France SAELR, Vol. 3 (Nos. 1 to 2) 1996.

[73] Irazu Margarita v Copetro Sa. Cámara Civil Y Comercial De La Plata. Ruling Of 10.5.1993. Available at www.eldial.com (last visited September 15, 2005).

quality of life of our descendants. And in the case of Finis Terrae[74]the court said that environmental damage shall never be reparable through compensation, given that it shall fatally fall upon future generations.

The Colombian Constitutional Court stated in the case of Fundepúblico v Mayor de Bugalagrande[75] that the protection of the environment… is a compromise between the present and future generations.

In a 1988 Chilean case of Comunidad de Chañaral v Codeco[76]the Supreme Court explained:

> Present claims are particularly relevant because they relate to the right to live in an environment free from pollution (…). (These problems) affect not only the well being of man but also his own life, and actually not only (the livelihood) of a single community of persons, at present: future generations would claim the lack of prevision of their predecessors if the environment would be polluted and nature destroyed (…).

In the Carlos Roberto Mejía Chacón[77]case the court asserted:

> although man has the right to use the environment for his own development, he has also the obligation to protect it and preserve it so that future generations can use it.

In the Guatemala case of Concesiones otorgadas por el Ministerio de Energía y minas a Empresas Petroleras[78]the Constitutional Court explained that the objective of environmental measures is to guarantee the right to health and the achievement of a standard of living that guarantees the survival of future generations.[79]

3.4 Conservation of biodiversity

Biological diversity means the diversity of life and comprises:

- *Genetic diversity* (the variety of genes in any population)
- *Species diversity* (the variety of species)
- *Ecosystem diversity* (the variety of communities and ecosystems).

Inherent in the concept of biodiversity is the need to conserve both for the present and future generations; and also the understanding that diversity sustains life itself.

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[74] Finis Terrae. Cámara de Apelaciones. Sala Civil, Comercial y del Trabajo. Amparo Ambiental. 24.9.1997.

[75] Fundepúblico v Mayor de Bugalagrande & Ors. Juzgado Primero Suprerior. Interlocutorio # 032. Tuluá. 19.12.1991.

[76] Comunidad de Chañaral v. Codeco División el Saldor. S/ Recurso de Protección. Corte Suprema. 28.7.88.

[77] Carlos Roberto Mejía Chacón. Sala Constitutional de la Corte Suprema de Justicia. Decision 3705/93 0f 30.6..1993.

[78] Concesiones otorgadas por el Ministerio de Energía y minas a Empresas Petroleras. Resolución en Conciencia del Procurador de los Derechos Humanos de Guatemala en Materia Ambiental. Exp. 002-98/D.S. 10.10.98.

[79] 1999 Resolución en Conciencia del Procurador de los Derechos Humanos de Guatemala en Materis Ambiéntal. Exp. 002-98/D.S. 10.10.98.

3.5 Internalisation of external environmental costs

There is need to internalise environmental costs into decision-making for any economic and other development plan, program or project.

The principle requires accounting for both the short term and long term external environmental costs.

Internalisation of environmental costs can be undertaken in a number of ways.

- Environmental factors should be included in the valuation of assets and services.
  - Approaches to valuation
    - ✓ Analysis of the Direct use values
    - ✓ The indirect use values - ecological
    - ✓ Optional values – future
    - ✓ Existence use values – intrinsic values of wetland species and areas regardless of the present or future uses e.g cultural, aesthetic, heritage and bequest significance.
- The polluter pays principle should be adopted, i.e. those who generate pollution and waste should bear the costs of containment, avoidance or abatement.
- The users of goods and services should pay prices based on the full life cycle of the costs of providing goods and services, including the use of natural resources and assets and the ultimate disposal of any waste.
- Environmental goals, having being established, should be pursued in the most cost effective way, by establishing incentive structures, including market mechanisms, that enable those best placed to maximise benefits or minimise costs to develop their own solutions and responses to environmental problems.

3.6 Public Participation

Principle 10 of the Rio Declaration States that:

> "*Environmental issues are best handled with participation of all concerned citizens, at the relevant level. At the national level, each individual shall have appropriate access to information concerning the environment that is held by public authorities, including information on hazardous materials and activities in their communities, and the opportunity to participate in decision-making processes. States shall facilitate and encourage public awareness and participation by making information widely available. Effective access to judicial and administrative proceedings, including redress and remedy, shall be provided."*

In East Africa, the most instructive regional legal instrument that provides a basis for public participation in environmental decision making is the Memorandum of Understanding between Kenya, Tanzania and Uganda for cooperation on Environmental Management.[80]The Memorandum of Understanding sets out elaborate provisions on environmental procedural rights. The partner states commit themselves to promote public awareness programmes and access to information as well as measures aimed at enhancing public participation in

[80] Memorandum of Understanding between Kenya, Tanzania and Uganda for cooperation on Environmental Management, Signed in Nairobi on October 22, 1998.

environmental management.[81]The East African countries have moved a step farther to operationalise the provisions of the Memorandum of Understanding.[82]The East African Community Protocol for Environment and Natural Resources Management has a provision on public participation, access to justice and information. The Protocol awaits approval by the Council of Ministers.

In Uganda, the National Environment Action Plan for Uganda (NEAP),[83] recognised that public participation is necessary to enlist the support of the people and to influence changes in behavior and attitudes and act as an incentive to the sustainable use of natural resources. It also recognised that public participation can be achieved through the following strategies:-[84]

(a) Develop guidelines on public participation in environment/natural resource management to be applied by resource managers in their development programmes and projects.
(b) Strengthen extension programmes in natural resource management enlisting the assistance of local non-governmental organisations whenever possible.
(c) Design programmes that involve and benefit the most disadvantaged groups, particularly women, children and the disabled.
(d) Decentralise environment management to enhance public participation.
(e) Bridge the information gap between the central government and the local communities/resources users by developing a two–way mechanism for information collection and dissemination.

The public has, for instance, brought some actions against violators of the environment. In a case involving Greenwatch v M/s Sterling (settled out of court), M/s Sterling involved in constructing the Kampala-Jinja Highway, had blown so much fumes out of stone-blasting and had polluted the whole area (of Mbalala), causing a lot of damage to plants and lives of people.
In another air pollution complaint Greenwatch v Hima Cement (1994) Ltd.,[85]the Hima Cement Factory operating in western Uganda was found to be emitting over 80 tons of cement dust into the atmosphere from its factory. The dust was causing harm and damage to people, animals, crops and the general environment. There was public outcry about the factory's polluting activities. The plaintiff took an action as a public litigant to stop the cement factory from polluting the environment, and sought a pollution and environmental restoration order. NEMA ordered the cement factory to improve their technology and stop polluting the vicinity.[86]

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[81] Article 16(2)(a).
[82] See Godber W. Tumushabe, `Towards Environmental Accountability: The Case for a Freedom of Access to Information Legislation in Uganda', a Paper presented at a workshop on the Freedom and Access to Environmental Information for East African Countries, held at Arusha on the May 6-7, 1999.
[83] The NEAP 1994 at p. 67.
[84] id.
[85] Greenwatch v Hima Cement (1994) Ltd, a 1998 case, unreported.
[86] An Interview in February, 1998 with Mr. Justin Ecaat, then Environmental Impact Assessment Officer NEMA, now with UNDP. Also see M.H. Jackson, et.al., The Environment Health Reference Book. Butterworths, London 1989 at Chapter 8, pp.8/4, 8/37, 8/38 on vehicular pollution.

In the case of The Environmental Action Network Ltd. v The Attorney General and the National Environment Management Authority[87] the Learned Judge observed that there is limited public awareness of the fundamental rights or freedoms provided for in the Constitution, let alone legal rights and how the same can be enforced. He concluded that given such circumstances the Court, as guardian and trustee of the constitution and what it stands for, is under obligation to grant standing to a public spirited individual who seeks the Court's intervention against legislation or actions that prevent the enjoyment of the fundamental rights and freedoms.

Public Participation and Public Interest litigation

Public participation operates by empowering people with the right to a decent environment as has been done under section 3 of the National Environment Act and Articles 39 and 50 of the Constitution. As the public is directly to benefit or be harmed from activities involving the environment, public participation must be enhanced. The provision of the right to a decent environment and the capacity to sue in respect thereto dispenses with the local rules of locus standi. This encourages public participation.

The public can act either individually or collectively to enforce the right to a decent environment under section 71 of the National Environment Act read together with Article 50 of the Constitution. The role of environmental NGOs, Local Environment and District Environment Committees established under the National Environment Act in ensuring public participation is crucial.

In the case of the Environmental Action Network Lt Vs The Attorney General and NEMA[88] an action was brought under Art 50 (2) of the Constitution on behalf of the non-smoking members of the public to protect their rights to a clean and healthy environment, right to life and the general good of public health in Uganda.

In Greenwatch Vs Attorney General & NEMA[89] the applicants sought the regulation of the manufacture, use, distribution and sale of plastic bags and restoration of the environment to the state in which it was before the menace caused by the plastics. The action was brought under Art 50 of the Constitution.

Public participation is also undertaken through public hearings in the EIA process.

4.0 Compliance and Enforcement Provisions: A few examples

4.1 The EIA Process

The precautionary principle is concretized in framework environmental law through a number of tools which include environmental assessment, monitoring and auditing. The precautionary principle forms the basis for the different types of environmental assessments. The most known environmental assessment is the Environmental Impact Assessment (EIA).

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[87] The Environmental Action Network Ltd. v The Attorney General and the National Environment Management Authority High Court Miscellaneous Application No. 39 of 2001.

[88] The Environmental Action Network Lt Vs The Attorney General and NEMA Miscellaneous Application No. 39 of 2001

[89] Greenwatch Vs Attorney General & NEMA Miscellaneous Application N0. 140 of 2002

Other environmental assessments are:

- Social Impact Assessment (SIA)
- Health Impact Assessment (HIA)
- Strategic Environmental Assessment (SEA).

The new development is towards what is known as Integrated Environmental Assessment based on a holistic approach to assessment of impacts to the environment.

The courts are equally responding to the requirements of EIA. In a separate opinion of Vice President Weeramantry in the case concerning the Gabčíkovo Nagymaros Project (Hungary/Slovakia)[90]the judge stated that environmental impact assessment means not merely an assessment prior to the commencement of the project, but a continuing assessment and evaluation as long as the project is in operation. This follows from the fact that environmental impact assessment (EIA) is a dynamic principle and is not confined to a pre-project evaluation of possible environmental consequences. As long as a project of some magnitude is in operation, EIA must continue, for every such project can have unexpected consequences; and considerations of prudence would point to the need for continuos monitoring.[91]

In the Mauritius case of Ste Wiehe Montocchio & Cie v Minister of the Environment & Quality of Life[92]the Tribunal ordered that an EIA licence be granted on condition that the two buildings at the poultry project in a residential area be made flyproof and, that litter is properly removed and disposed of, and that the buildings and premises are cleaned and disinfected after each production cycle to the satisfaction of the Ministry of Health and that no nuisance by noise, odour and fly proliferation is caused to the nearby residents.

In Movement Social De Petit Camp/Valentina v Ministry of the Environment & Quality of Life[93]the grant of the EIA license was re-affirmed on grounds that the factory in issue had abided by the conditions set out therein.

And in the United States case of Sierra Club Et. al v Coleman & Tiemann[94]concerning the construction of a highway to link the Pan American Highway System of South America with the Inter-American Highway, the court found that the Federal Highway Administration (FHWA) had failed to circulate the Final Environmental Impact Assessment report or a draft thereof, to the Environmental Protection Agency for its comments, as required by the provisions of the National Environmental Policy Act (NEPA). The court also said that the discussion of possible alternatives was imperative in the assessment envisaged under the NEPA. As such, the failure of the assessment in the instant case, to discuss possible alternatives to the route that had been chosen for the highway, was a defect, which was of a substantive nature.

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[90] Gabčíkovo Nagymaros Project (Hungary/Slovakia) No. 92 ICJ 1997.
[91] Trail Smelter Arbitration III UNRIIA (1941) P. 1907.
[92] Ste Wiehe Montocchio & Cie v Minister of the Environment & Quality of Life, Mauritius Environment Appeal Tribunal Cause No. 2 1995.
[93] Movement Social De Petit Camp/Valentina v Ministry of the Environment & Quality of Life Mauritius Environment Appeal Tribunal Cause No. 2 of 1994.
[94] Sierra Club Et. al v Coleman & Tiemann 14 ILM P. 1425 (1975) & 15 ILM P. 1417 (1976).

In the New York case of Long Island Pine Barrens Society, Inc. v Town Board of Town of Riverhead,[95] there was a challenge to a decision by the Town Board of the Town of Riverhead granting a zoning change and site approval for the development of property in Baiting Hollow. In this case, the Second Department agreed with the petitioners' contention that, under the circumstances presented here, the town board had improperly segmented the State Environmental Quality Review Act (SEQRA) review process. The Second Department noted that the rezoning at issue was an integral part of a residential golf development but the Environmental Impact Statement (EIS) submitted by the developer and accepted by the town board discussed only the environmental impacts anticipated from the golf course and did not specify the number or locations of these residential buildings in its EIS, with the consequence that their environmental impacts remained unexplored. According to the appellate court, the town board was obligated to consider the environmental concerns raised by the entire project at the time of the rezoning application, and its failure to do so violated SEQRA.

In an Argentine case of Fundacion Fauna Marina v Ministerio de Produccion de la Provincia de la Buenos Aires[96] the court voided a permit to capture a number of dolphins and killer whales, stating that it was first necessary to conduct an environmental impact assessment. The judge relied on article 41 of Argentina's national constitution (recognising the right to a clean environment and establishing a correlative duty to protect the environment), and article 28 of the Buenos Aires provincial constitution, which requires authorities to control the environmental impacts of any activity that could damage the environment. The court held that the way to ensure the general constitutional environmental rights and duties found in these constitutions was by imposing an obligation to execute an environmental impact assessment before issuing a permit.

In Peru the citizens' constitutional right to a healthy environment was at issue when a barge was dumping petroleum residues into a lake that served as a source of drinking water, causing severe environmental damage and rendering the water unpotable. Finding for the plaintiff, the judge ordered the barge owner to halt the pollution by using a filter or other technology, or else to leave the lake. The judge also ordered the government to conduct an environmental impact assessment of the effects on the lake.[97]

In the Trillium Case,[98] Forestal Trillium Ltd., a US-based corporation operating in Chile, bought 285,000 hectares of old-growth forest in Magallanes, Chile's most southern territory. Trillium's plans were to harvest timber from the region, principally for the production of wood chips and lumber to be exported to Europe. Its environmental impact statement (EIS) submitted under the Environmental Framework Law of 1994 was approved and in 1976 the company began its timber harvesting project code-named 'Rio Condor'. But several non-governmental organizations objected to the EIS approval, and sought standing before Chile's Supreme Court to challenge the Rio Condor project.

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[95] Long Island Pine Barrens Society, Inc. v Town Board of Town of Riverhead 2002 N.Y. App. Div. Lexis 269.

[96] Fundacion Fauna Marina v Ministerio de Produccion de la Provincia de la Buenos Aires (Federal Court No. 11, Mar del Plata, Civil and Commercial Secretariat, May 8, 1996).

[97] See Judge Orders Barge to Stop Polluting, E-LAW UPDATE (Spring 1995), available at http://www.igc.apc.org/elaw/update-spring-1995.html (visited February 4, 2003).

[98] Trillium case, Supreme Court Decision No. 2.732-96 (Supreme Court of Chile, March 19, 1997), unofficial English translation available at http://www.elaw.org/cases/Chile/trilliumenglish.htm (the case is popularly referred to as `Trillium,' the defendant logging company). Also see `The Trillium Decision in Chile: Constitutional Standing for Citizen Review of Environmental Impact Procedures' at http://www.ispnet.org/Documents/chile.htm (visited February 27, 2003; September 15, 2005).

In the landmark decision of March 1997, Chile's Supreme Court voided the timber license on grounds that the government had approved an environmental impact assessment without sufficient evidence to support the conclusion that the project was environmentally viable and without incorporating the conditions proposed by different specialized agencies. Besides, the regulations governing the process had not yet been promulgated under the 1994 Environmental Framework Law.[99] The Court held that by acting in such an arbitrary and illegal way, the government violated the rights of all Chileans – and not just those would be affected locally – to live in an environment free of contamination.

In National Association of Professional Environmentalists (NAPE) v AES Nile Power Ltd,[100]the application was brought under section 71 of the National Environment Act seeking, inter alia, a temporary injunction to stop the respondent concluding a power project agreement with the government of Uganda until the National Environment Management Agency, NEMA, has approved an EIA study on the project. The court declared that approval of the EIAs by NEMA is required under 19 of the National Environment Act.

In Greenwatch & anor. v Golf Course Holdings Ltd.[101]it was held that the application for a temporary injunction could not be granted because the main suit had no likelihood of success and that the applicants would not suffer irreparable harm. This is because both Kampala City Council and NEMA, the controlling and regulatory bodies respectively, had given the respondent a go ahead to construct the hotel and an impact assessment had been carried out in accordance with the provisions of the National Environment Act, hence taking care of the public interest the applicants were claiming to protect. It was further held that even if damage was caused, this could be put right under the provisions of section 67 of the National Environment Act, which provides for restoration, which would be at the respondent's expense.

And in Advocates Coalition for Development and Environment v Attorney General,[102]the Attorney General was sued for allegedly granting Kakira Sugar Works Ltd. a permit/license to change land use in Butamira Forest Reserve in violation of the public trust doctrine and without carrying out a proper environmental impact assessment. It was held that the alleged granting of a permit/license to Kakira Sugar Works Ltd. was illegal for contravening the public trust doctrine and also because no environmental impact assessment was carried out as required under the National Environment Act.

4.2 Use of improvement order and restoration orders

The law was invoked in the case of Askia Muhammad v The Attorney General & Aquatics Ltd.[103]brought under section 71 of the National Environment Act, where the plaintiff, a private citizen brought an action for an environmental restoration order, restraining the defendants, jointly and severally, from conducting herbicides trials on lake Victoria.

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[99] Law No.19, 300, *Ley de Bases del Medio Ambiente* (Environmental Framework Law)

[100] National Association of Professional Environmentalists (NAPE) v AES Nile Power Ltd High Court Miscellaneous Cause 268 0f 1999. Ruling delivered in April 23, 1999.

[101] Greenwatch & anor. v Golf Course Holdings Ltd.H.C.M.Appl. No. 390 of 2001 arising from H.C.C.S. No. 834 of 2000 before His Lordship Hon. Justice Akiiki Kiiza J.

[102] Advocates Coalition for Development and Environment v Attorney General Miscellaneous Application No. 100 of 2004

[103] Askia Muhammad v The Attorney General & Aquatics Ltd.HCCS No. 792/96.

NEMA administratively issues restoration orders against diverse activities, including-

- dumping of sand bags into L. Kyoto by residents of the moving sudds,
- dumping of murrum into wetlands, lake shores and river banks
- construction in wetlands or other water catchment systems
- noise pollution
- smoking in public places
- operating without an effluent treatment plant
- construction of petrol stations on road reserves
- discharging effluent into open areas or into water bodies
- non compliance with other environmental standards.

Improvement notices are issued by environmental inspectors.
These instruments require the ceasing of the activity deleterious to the environment and restoration of the environment. Restoration order also provide for recovery of expenses used in the restoration done on behalf of the defendant, in case the defendant fails to act within time.

4.3 Compliance Agreements

Compliance agreements are signed with a developer to guide in the level of compliance required and specifying the time frame for the compliance and action that will be taken in case the schedule is not complied with. NEMA enters into compliance agreements with a view to achieving compliance without necessarily having recourse to courts.

Other compliance tools include environmental monitoring, audits, inspections and performance bonds.

5.0 Actions, Remedies and the Role of the Judicial Officer

From the international instruments and the national legislation and even under common law, a number of remedies are available for application by a judicial officer when an environmental case comes before court. I shall here below outline a few. These are in addition to the ones discussed above.

5.1 Private Law Actions

The following are the causes of action:
(a) Trespass
(b) Nuisance
(c) The Rule in Rylands v Fletcher
(d) Negligence
(e) Contract: positive or restrictive covenants

Trespass arises when a person causes physical matter to come into contact with another's land. It protects an occupier's right to enjoy his/her land without unjustified interference.

Trespass is limited to direct interference, and is actionable *per se*: depositing waste on someone's land will be trespass even if the waste can be removed without contaminating the soil or causing injury.

Private nuisance is the unlawful interference with a person's use or enjoyment of land, or some right over or connected with it.[104]Public nuisance is an interference with the public's reasonable comfort and convenience. It constitutes a criminal offence as well as a cause of action in private law.

Lord Denning in AG v PYA Quarries Ltd [1957] 2 QB 169 stated that:

> *"it's a nuisance which is so widespread in its range and so indiscriminate in its effect that it would not be reasonable to expect one person to take proceedings on his own responsibility to put a stop to it but that it should be taken on the responsibility of the community at large."*

The common law of private nuisance is still useful in dealing with noise, odour and other types of environmental pollution and degradation. In Crump v Lambert[105]it was accepted that noise alone, or smoke alone, or offensive vapour alone, may constitute a nuisance, even if they cannot be shown to be prejudicial to health. The case of Bamford v Turnely[106] held that the question whether a use is reasonable or not depends on whether it interferes with the plaintiff's use and enjoyment of his land to an extent beyond what any neighbour ought to bear. The court adopted the view that the effects of a particular use of land on one's neighbours is implicit in determining whether that use is reasonable to the extent that land is not the sort of property over which dominion can be exercised in disregard of the fact that it is situated in a particular place, and thus is by nature bound to the property of others.

In the case of Dr Bwogi Richard Kanyerezi Vs The Management Committee Rubaga Girls School,[107]the respondent was stopped from using 12 VIP latrines situated on the lower end of its school premises since they constituted a nuisance by unreasonably interfering with and diminishing the appellant's ordinary use and enjoyment of his home.

In the Tanzanian case of Festo Balegele & 794 Ors v Dar es Salaam City Council,[108] the city council had argued that in dumping solid waste at Kunduchi Mtongani, it was 'reconditioning' the area and not polluting it. Justice Rubama (as he then was) stated in no uncertain terms that 'it is a statutory duty of the city council… to stop nuisance and not to create it.' An order of mandamus was granted to direct the respondent to discharge its functions properly and in accordance with the law by establishing an appropriate refuse dump and using it.

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[104] Brazier Margaret, et. al., Clerk and Lindsell on Torts, 7th Edn. 1989, Sweet & Maxwell, London at p. 1356.
[105] Crump v Lambert [1867)]L. R., 3 Eq. 409.
[106] Bamford v Turnely [18621] 3 B & S 66 at pp. 76 8.
[107] Dr Bwogi Richard Kanyerezi Vs The Management Committee Rubaga Girls School Civil Appeal No. 3 of 1996.
[108] Festo Balegele & 794 Ors v Dar es Salaam City Council Misc. Civ. Cas. No. 90 of 1991 HC (DSM) Unreported).

Statutory nuisance are actions created by statutes in response to pressing social needs. The public health legislation often regulates noise and noxious fumes; the road traffic legislation sometimes regulates vehicle emissions.

The advantage of creating statutory nuisance is that private individuals can merely complain to appropriate local authorities or departments about nuisance troubling them and oblige those authorities to deal with the nuisance, without the expense and inconvenience of bringing individual action. The hindrance though, is that in many cases the responsible authority fails to provide for technical standards to measure pollution levels, hence the legislation remains largely un-enforced.

The Rule in Rylands Vs Fletcher makes an occupier strictly liable for the consequences of escapes from his land of a thing having potential to cause harm.

For this rule to operate it must be proved that a thing has been brought and kept on the land under the control/operation of the defendant; that it constitutes a non-natural use of the land; and that the thing must be mischievous and if it escapes could cause mischief.

This rule was applied in MC Mehta v Union of India [1987] AIR SC1086, where the plaintiffs claimed for damages resulting from a gas leakage; the court held 'that where an enterprise is engaged in a hazardous/inherently dangerous activity and harm results to anyone on account of an accident in the operation of such hazardous or inherently dangerous activity, the enterprise is strictly and absolutely liable to compensate those affected.

Negligence arises from failure to exercise the care demanded by the circumstances resulting in injuries to the plaintiff. Unlike trespass, the basis for action is not occupation of property. The plaintiff must prove a duty of care and that the said duty has been breached, resulting into injury.

Negligence as a cause of action is not ideal for environmental litigation because of need to prove fault on the part of the defendant. The action can be dismissed if it is perceived that the defendant acted reasonably. The test is that the resultant harm was foreseeable. In Cambridge Water Co v Eastern Counties Leather PLC [1994] 2 AC 264, the plaintiff sued the defendant for contamination of water services from chemicals that spilled from the defendant's factory. Court held that it is not sufficient to show that pollutions could have been foreseen as that is too wide a category of damages.

The limitations of common law are obvious, even though common law remedies can still be applied to environmental cases.

At national level the emphasis has been to move away from common law liability to imposing positive duties intended to prevent the occurrence of harm. The mechanisms used include licensing, approval mechanisms, general prohibitions, EIA, restoration orders, specific technical norms and standards applicable to dangerous substances or activities.

For this purpose a number of states, including Uganda have formulated generic obligations in framework legislation providing for:

- absolute or conditional prohibitions,
- prior authorization requirements,

- creation of corresponding regulatory and supervisory mechanisms,
- technical norms setting quantitative and qualitative standards,
- special environmental protection agencies,
- Environment restoration orders or EIA,
- emergency plans and damage containment schemes for high risk activities, public participation and access to environmental justice norms
- Fiscal incentives and disincentives such as:
  - ✓ Energy saving programmes
  - ✓ Pricing policy
  - ✓ Surtax
  - ✓ Rebates
  - ✓ Investment credits

5.2 Public Law Remedies

(a) Mandamus

(b) Certiorari

(c) Prohibition

(d) Declaration

(e) Injunction

Many of these remedies are obtained through judicial review, though they may also be obtained through originating summons or motions. The choice as to which procedure to use depends on a number of factors including the nature of the statutory duty, the time within which the action has been taken, etc. the principles to be used should also reflect the public nature of the obligation.

Public law remedies have been used to:

✓ **Quash a decision (certiorari)** to use public property in a manner that adversely affects the environment. In Mehta –vs- Kamal Nath (1997) 1 Supreme Court Cases, the Supreme Court of India quashed a grant of lease on the ground that the decision breached the public trust doctrine which enjoins government to protect all natural resources which are by nature meant for public use and enjoyment.

✓ **Stop unlawful action (prohibition)**: The High Court of Kenya considered the use of legislative powers under the Wildlife Conservation Act and prohibited the removal of a rare and endangered species named 'Hirola' from its natural habitat by implying a duty to conserve the species in its natural habitat: Abdkadir Sheika Hassan & Others –vs- Kenya Wildlife Society (CC 2059/96).

✓ **Require performance of a duty (mandamus)**: In Vellore Citizens Welfare Forum –vs- Union of India (AIR 1996 SC 2715) the Supreme Court of India, in addition to ordering restoration of the polluted land, ordered that the government should create an authority to deal with the situation of the polluting tanneries. It also ordered that an industry that

refused to pay compensation would be closed; those installing pollution control devises would still be liable for past pollution.

- ✓ **Declare the legal position of litigants**: The Court may grant declaratory orders on rights and duties of the parties before it. The use of declarations resolves disputes by clearly setting out the legal position and are relevant in cases where the Minister/Director for environment has not discharged his or her duties.

  In Advocate K B Shrestha & Others -vs- HMG, Department of Transport (Writ Number 3109 of 1999) the Supreme Court of Nepal held that a government decision to ban three wheeler engine tempos found to be the main source of air pollution was valid and rejected the claim by a business man that the decision violated his freedom to carry out business. The Court stated that the environment is interlinked with the right to life hence environmental protection measures were necessary. The Nepal Supreme Court also rejected an alternative plea that the ban should not apply outside Kathmandu merely because no standards had been prescribed for areas outside Kathmandu. The court stated that the right to a clean environment is universal.

- ✓ **Monetary compensation**: In Mehta –vs- Kamal Nath (*supra*) the Supreme Court of India used the polluter pays principle to order the Motel owner, who had diverted a river course, to pay compensation for the restitution of the environment and the ecology of the riverbed and banks.

- ✓ **Maintain status quo**: In R –vs- Secretary of State for Trade & Industry, *Ex parte* Duddridge, QBD, 7 Journal of Environmental Law the English High Court refused to compel the respondent to issue regulations restricting levels of electromagnetic fields which the applicants alleged would expose them to leukemia on the ground that there was no EU law imposing an immediate obligation to apply the precautionary principle. An inconclusive decision was also reached by the Supreme Court of Pakistan in Ms. Shehla Zia & Others –vs- WAPDA (Human Rights Case Number: 15-K of 1992 where the court refrained from making any orders due to the inconclusive scientific evidence.

- ✓ **Stop Further Degradation (injunction):** This is a remedy that is important where damages are insufficient, but also to stop continuation of environmental degradation.

5.3 Other Remedies and Creative Sentencing/Award Options

Damages

Calculation of damages for environment can be problematic, since in essence it touches on the value of biodiversity.

In Paul Nzangu v Mbiti Ndili, H.C of Kenya Civil Appeal No 8 of 1991, the plaintiff sued the defendant for dumping rubbish on his land. The magistrate declined to award damages. On appeal the High Court also refused to award damages due to difficulties in assessing quantum and just ordered the defendant to remove the rubbish.

Other creative sentencing/award options include-

- ✓ forfeiture of the substance, equipment and appliance

- ✓ Costs of disposing of confiscated substance, equipment and appliance used in the commission of offence.
- ✓ Expenses used to enforce compliance.
- ✓ Licenses, permits or authority granted under the environment legislation can be cancelled.
- ✓ Community service orders.
- ✓ an order to reduce the discharge of pollutants
- ✓ professional disqualification
- ✓ corporate liability
- ✓ remedy for communities: The Indian Supreme Court has held that the primary responsibility of the court is to the community and that in the particular case involving the serious consequences of deforestation this duty took precedence: Ambica Quarry Works –vs-State of Gujarat & Others (AIR 1987 SC 1073). Article 237(2)(b) of the constitution and article 39 also provide a basis for protection of resources such as forests in public interest, thus protecting the rights of collectivities.
- ✓ Rejection of Development Permission or Closure of Facility
  In M C Mehta & Others –vs- Shriram Food & Fertilizer Industries & Union of India (AIR 1987 SC 965) the Petitioners asked the Supreme Court of India to close a chlorine plant following a disastrous gas leak. The closure affected 4000 employees and was firmly opposed by management and labour unions. The court held that in view of the large scale unemployment that would ensue from the closure, the plant should be reopened subject to detailed conditions such as weekly inspection, periodic health checks for workers, setting up safety committees and training workers in safety measures.

  On the other hand in Rural Litigation and Entitlement Kendera –vs- Union of India (AIR 1985 SC 652) the Supreme Court ordered closure of the mines despite the looming unemployment. It however ordered that the retrenched workers should be re-employed in the reforestation and soil conservation works which it ordered be taken immediately.

5.4 Use of Criminal Law

Penal offences are created both under the environment laws and in the Penal Code Act.

Enforcement of environmental crime has, however, lagged behind because of the difficulties associated with discharging a "beyond reasonable doubt" burden of proof; strict adherence to the requirement of proving *actus reus and mens rea* in non strict liability offences; punishments meted out are normally not deterrent enough.

In Republic v Maria Akimu, H.C Review Case No.9 of 2003.The Malawi High Court was called upon to review the sentence of US$50.00 imposed on the convict found guilty of possession or trafficking of ivory contrary to section 110 of the National Parks & Wildlife Act. The convict had been found in possession of 10 pieces of ivory worth $14,000.00 and was killing elephants at Liwonde National park using poison.

5.5 The Role of Judicial Officers

(a) Advocates for the environment

(b) Discharge environmental cases speedily and creatively
(c) Use of precedent and comparative experience
(d) Suo moto?
(e) Access and sharing of environmental information
(f) Personal research efforts
(g) Interactiveness

6.0 Conclusion

International Environmental law is a discipline that is ever evolving, as need arises. The international community recognizes that to operationalise international legal norms and treaty obligations, there is need for national recognition of these norms and obligations. In countries where the monist school of thought operates, international law is applicable once ratified. There is no legal requirement for translation into national law. The dualists on their part believe in domestication.

By whatever means MEAS are applied, the principle remains that no state party can use its municipal law as an excuse not to respect its international obligations.

MEAs find expression in national law and inform municipal law provisions on the expected tools and mode of compliance. Failure in compliance means that penal provisions will apply alongside or by themselves.

ANNEX 5

COMPLIANCE AND ENFORCEMENT OF ENVIRONMENTAL LAWS: CONCEPT PAPER

By: Doris Akol
Environmental Law Resources Centre.

INTRODUCTION

Background

There is an urgency of addressing the serious threats posed to public health resulting from unhealthy air, unsafe drinking water, and discharge of raw or partially treated sewage waste into our water ways. This urgency further extends to the dumping of hazardous and toxic chemicals onto the land and into the waters; unchecked deforestation and inappropriate land management practices; loss of habitant, ecosystem and biodiversity which continues unabated.

Agenda 21 Chapter 8 developed under the Rio Summit on Environment and Development established an international mandate to build compliance and enforcement capacity as an essential element of environmental management. The chapter provides that states should develop effective national programmes for reviewing and enforcing compliance with national, state, provincial and local laws on environment and development. That each country should develop integrated strategies to maximize compliance with its laws and regulations to sustainable development. These strategies could include:

(a) Enforcement, effective laws, regulations and standards that are based on sound economic, social and environmental principles and appropriate risk assessment, incorporating sanctions designed to punish violations, obtain redress, and deter future violations;
(b) Mechanisms for promoting compliance;
(c) institutional capacity for collecting compliance data, regular reviewing compliance, detecting violations, establishing enforcement priorities, undertaking effective enforcement, and conducting periodic evaluation of effectiveness of compliance and enforcement programmes

A clear need and obligation therefore arises that Uganda should start developing her compliance and enforcement mechanism.

As such this document strongly proposes that NEMA should immediately embark on the process of developing an enforcement and compliance strategy for Uganda.

A Synopsis of environmental problems in Uganda

The problems of Uganda environmental degradation are well documented in the NEAP. The focus of this paper is not to repeat them and the reader is requested to refer to those documents for detailed analysis.

However, Uganda is faced with widespread environmental degradation. This is due to improper management and unwise use of the natural resources. One of the reasons for degradation is the absence or inadequacy of management system(s) and mechanism to deal with those problems.

The hitherto inadequate environmental legislation and lack of an enforcement mechanism has contributed to the rapid degradation of the environment and depletion of the country's natural resources. There are some institutional conflicts or lack of effective cooperation and coordination both within and outside government resulting in ineffective implementation of programmes geared towards reversing environmental degradation.

The most affected areas include the deteriorating water quality especially for general human consumption, livestock and wildlife, industry, irrigation and for the fisheries resources, etc. The water resources are threatened by situations arising from run-off of degraded land and pollution from mining, industry and human wastes and activities. This threatens the aquatic resources and the health of the population. There are high incidence rates of preventable water related diseases. The rapid growth in population increased agricultural and industrial production require adequate and safe water supplies.

Further, there is a moderate level of pollution of the land, water and atmosphere as a result of inappropriate disposal of domestic, mining, institutional and industrial wastes. Inappropriate use of agricultural chemicals and fertilizers and gaseous releases from exhausts and toxic waste from beyond our borders contribute to environmental pollution. The consequences of the above are well known.

Environmental standards and laws on pollution management are still inadequate and/or non-existent in many areas. In addition, waste disposal facilities are inadequate throughout the country. There is need to develop environmental standards and corresponding legal requirements. Environmental standards are a formal means of interpreting policy principles and laws; a source of institutional authority and a residual source of power where there is no specific legislation and a technical means for practical implementation of the law. We need to establish environmental standards of permissible levels of air, water and land pollution. Institutional, technical and legal capacities on waste management should be strengthened. A system to oversee monitoring compliance of standards and regulations to the control of pollution should be established. Specific safety and health codes of practice and guidelines should also be developed and implemented.

The detailed actions and measures needed to be taken are also well documented in the NEAP process documents.

That notwithstanding, Uganda has now identified a proper method of handling the issues relating to degradation maintaining and enhancing resource productivity and environment quality. The establishment of NEMA and all its linkages is the right way to go. Environmental issues will be handled in an integrated manner and will be involving all the players in the field. A participatory approach will evolve as time goes by.

WHY IS AN ENFORCEMENT AND COMPLIANCE STRATEGY IMPORTANT FOR ENVIRONMENTAL MANAGEMENT UGANDA?

Introduction
An enforcement and compliance strategy is an organisational, management system, a human and financial resources strategy dedicated to encouraging and compelling (implementation) compliance.

As a matter of fact, in any regulated community, some people will comply to laws and other requirements voluntarily and others out of the force of law, while others will not comply. Further, some will comply only if they see that others receive a sanction for non compliance. This directly applies to environmental management strategy in Uganda.

An Enforcement and Compliance strategy is needed in order to:

(a) **To *protect and conserve environmental resources and public health*** as envisioned by the NES and other environmental related laws, polices and actions. Tangible and intangible results are needed if the environment is to be protected. Enforcement and compliance programmes ensure that these results are achieved.

(b) ***To build and strengthen the credibility*** of environmental management efforts and the legal system that supports it. NEMA, Lead agencies and district authorities must be taken seriously. Once credibility is established, continued enforcement is essential to maintain this credibility. Credibility means that society perceives its environmental management programmes and the institutions that implement them as strong and effective. It also encourages seriousness of the regulated community which would otherwise not comply if environmental requirements and enforcing institutions are perceived weak.

(c) ***To ensure fairness*** for those who willingly comply with environmental requirements. Without enforcement, facilities that violate environmental requirements will benefit economically compared to facilities that voluntarily choose to comply. Facilities will be more willing to comply if they perceive that they will not be economically disadvantaged by doing so. This should also be seen in this era of stiff competition among economic establishments. The enforcement and compliance mechanism ensures that such unfair economic advantages are eliminated and/or minimized.

(d) ***To reduce costs and liability***. Though compliance is often costly in the short-term, it can have significant long-term economic benefits to both society and the complying facility. This is through reduced costs to public health and medical treatment and long term costs of restoring the degraded environment. Strong compliance programmes encourage facilities to minimize wastes, e.g. by recycling other than destroying used materials.

(e) ***To prevent short-term economic competitions*** among the regulated community or between facilities that might undermine longer-term economic and environmental goals for a sustainable future.

What is meant by Compliance?
Compliance is the full implementation of environmental requirements. Compliance occurs when requirements are met and desired changes are achieved e.g. processes or raw materials are changed, work practices are changed so that, for example, waste is disposed of at

approved sites; tests are performed on new products or chemicals labelled before they are marketed; water quality attains the required standards, etc.

The design of requirements affects the success of an environmental management programme. If requirements are well-designed, then compliance will achieve the desired environmental results. If the requirements are poorly designed, then achieving compliance and/or the desired results will likely be difficult.

What is meant by Enforcement?

By "**enforcement**" is meant the set of actions that government (NEMA) or other lead agencies may take to compel compliance within the regulated community and to correct or reverse or halt situations that endanger the environment or public health.

It encompasses the full range of **"carrot"** and **"stick**" or "command and control" approaches to gaining compliance, going beyond to include inspections and other forms of compliance monitoring. This is in addition to legal actions to impose some consequences of violating the law and also includes compliance promotion activities such as technical assistance and subsidies.

Enforcement by NEMA and lead agencies should include:

(a) Inspections to determine the compliance status of the regulated community and to detect violations.

(b) Negotiations with individuals or facility managers who are out of compliance to develop mutually agreeable schedules and approaches for achieving compliance.

(c) Legal action, where necessary, to compel compliance and to impose some consequence for violating the law or posing a threat to public health or environmental quality e.g. compensation of victims of degradation, performance bonds, environmental audits, restoration orders and EIA requirements.

(d) Compliance promotion (e.g. educational programmes, technical assistance, subsidies, incentives, etc) to encourage voluntary compliance.

Enforcement by other concerned institutions, NGO or individuals includes:

(i) Detecting non compliance;
(ii) Negotiating with violators;
(iii) Commenting on government enforcement actions;
(iv) Taking legal action against a violator for non-compliance or against the government or NEMA and other lead agencies for not enforcing the requirements.

These concerned institutions or individuals such as NGOs, environmental activists rely heavily on societal norms and the legal rights to sue.

THE BASIS FOR COMPLIANCE AND ENFORCEMENT

Introduction

One of the primary objectives of an environmental enforcement programme is to change human behaviour so that environmental requirements are appreciated and complied with. Another major objective is to correct any immediate and serious threat to public health and natural resources posed by the degradation or pollution (e.g. an oil spill that is contaminating a drinking water supply source in a public area).

FACTORS AFFECTING COMPLIANCE

There are many factors which affect compliance. What factor operates in any particular regulatory situation will vary substantially depending on the economic circumstances of the regulated community, socio-cultural norms and the nation as a whole. At other times it depends on the individual personalities and values of the managers within regulated community.

In any environmental management situation several of the factors described in Table 1 will influence the behaviour of the regulated community. For this reason, environmental enforcement programmes generally should be most effective if they include a range of approaches to changing human behaviour. The approaches fall into two categories:

(a) promoting compliance through awareness, training, education and incentives (voluntary)

(b) Identifying and taking action to bring violators into compliance (involuntary-legal).

These two approaches are referred to as the "**carrot**" and" **stick**". Different programmes will place different emphasis on these two approaches depending on the circumstances and the particular regulatory situation. However, experience with enforcement programmes does suggest that some form of enforcement response may ultimately be essential to achieve widespread compliance.

The following factors affect compliance:

(a) Deterrence

In any regulatory situation some people will comply voluntarily, some will not comply and others will comply only if they see that others receive a sanction[109] for non compliance.

[109] ***Sanction is used in this text to mean any adverse consequence imposed on a violator.***

TABLE 1, FACTORS AFFECTING COMPLIANCE

BARRIERS TO COMPLIANCE AND FACTORS ENCOURAGING

FACTORS MOTIVATING COMPLIANCE	NONCOMPLIANCE
ECONOMIC	
• Desire to avoid a penalty.	•Lack of funds.
• Desire to avoid future liability.	•Greed/desire to achieve competitive advantage.
• Desire to save money by using more cost-efficient and environmentally sound practices.	•Competing demands for resources.
SOCIAL/MORAL	
• Moral and social values for environmental quality.	•Lack of social respect for the law. •Lack of public support for environmental concerns.
• Societal respect for the law.	
• Clear government will to enforce environmental laws.	•Lack of government willingness to enforce.
PERSONAL	
• Positive personal relationships between programme personnel and facility managers.	•Fear of change. •Inertia
• Desire, on the part of the facility manager, to avoid legal process.	• Ignorance about requirements. •Ignorance about how to meet requirements.
• Desire to avoid jail, the stigma of enforcement, and adverse publicity.	

This phenomenon - that people will change their behaviour to avoid a sanction - is called **deterrence**. Enforcement deters detected violators from violating again. It also deters other potential violators from violating again. It also deters other potential violators by sending a message that they too may experience adverse consequences for non

compliance. This is a tool for achieving widespread compliance. Studies on enforcement from other parts of the world show that four factors are critical to deterrence:

(i) There is a good chance violations will be detected.
(ii) The response to violations will be swift and predictable.
(iii) The response will include an appropriate sanction.
(iv) Those subject to requirements perceive that the first three factors are present.

In order to create an appropriate level of deterrence, a more severe sanction may be needed for violations that are unlikely to be detected. Conversely, a less severe sanction may be response can therefore be relatively swift.

Because perception is so important in creating deterrence, how enforcement actions are taken is just as important as the fact that they are taken. History has many stories of small armies that successfully beat larger forces by giving the impression that they were a formidable fighting force. Similarly, enforcement actions can have significant effects far beyond bringing a single violator into compliance if they are well placed and well publicised.

(b) **Economics**

Changes may also be motivated by economic considerations. The regulated community is more likely to comply in case where enforcement officials can demonstrate that compliance will save money (e.g. achieving compliance by recycling valuable waste materials instead of discharging them to the environment may yield a net profit or adopting a new technology which
of subsidy for compliance in the regulated community. Some facility managers that may want to comply might not do so if they feel that the cost of compliance would be an economic burden to their operations[110]. The monetary penalty for a violation should, ideally, at least equal the amount a facility would save by not complying. This deters deliberate economic decisions not to comply, and it helps treat compliers and non compliers equally.

(c) **Institutional Credibility**

Each country has its own social norms concerning how enforcement and compliance is achieved. These social norms are derived largely from the credibility of the laws and the institutions responsible for implementing those laws. What NEMA and its Lead agencies will create as a norm on operations in the field of enforcement and compliance will therefore determine the responses Ugandans will achieve. We have to bear in mind that the social norm in Uganda has been non compliance and there has not been enforcement

[110] ***For example, the Netherlands experienced a relatively high degree of compliance for processing used oil from waterway vessels when the processing was offered free; however, compliance decreased as soon as the government levied a charge for this service.***

because of historical reasons. A quick glance shows that this was because of the law being practically unenforceable; inadequate coordination; out modelled laws; and the institutions responsible for enforcement lacked the political power, poor institutional set up and resources to enforce. Other reasons may include resistance to enforcement where some of the laws were imposed against the will of the people. This means that it may take longer for enforcement and compliance programmes to build credibility in Uganda. The rest of the story is well known to many people and need not be repeated here.

NEMA will need to build strategies for credibility. Such strategies will be many and varied. According to the recent history of Uganda, our cultures require both aggressive and persuasive enforcement to provide credibility.

It is also important to have an initial period of promotion and encouragement to create a spirit of participation and cooperation, and a well-publicized shift to more aggressive enforcement to signal that we are serious and that these are the consequences for non compliance. Therefore, a mix and comprehensive approach at the outset is the most successful for Uganda.

The NEMA's will to enforce environmental laws - i.e, to affirmatively promote voluntary compliance and identify and impose legal consequences on those who do not comply voluntarily - will indicate and influence the social values and norms. Enforcing a law tends to express a value that compliance is important and helps build a social norm of compliance.

(d) **Social Factors**

Personal and social relationships also influence behaviour. Moral and social values may inspire or inhibit compliance. For example, in some situations, facilities may voluntarily comply with requirements out of a genuine desire to improve environmental quality. They can also comply out of a desire to be a ***"good citizen"*** and maintain the good will of their local communities or their clients. Facility managers may also fear loss of prestige that can result if information about non compliance is made public. Conversely, compliance will likely be low in situations where there has been little or no social disapproval associated with breaking laws and/or damaging the environment.

Successful personal relationships between enforcement programme personnel of NEMA and Lead agencies and managers of regulated facilities may also provide an incentive to comply. On the other hand, a desire to avoid confrontation may prevent programme personnel from pursuing the full range of enforcement actions they may need to take to ensure compliance. Also, an enforcement official's objectivity may be compromised if he or she becomes too familiar with the facility's personnel and operations.

The relationship factor should be incorporated into any compliance strategy through such means as providing technical support to regulated groups and enhancing the inter-personal skills of enforcement and compliance personnel. Social respect for environmental requirements can be improved by finding industry leaders who agree to set

a well-publicized example of compliance, and by firm and visible enforcement of environmental requirements (particularly if the initial focus is to correct non compliance that is posing significant and clear risks to the environment and/or public health.

(e) **Psychological Factors**

Several psychological factors, common to human nature, may affect compliance rates. One of these is ***fear of change*** - the belief that familiar ways to operating are safe and new ways are risky. Closely related to this is ***inertia***. Many people tend to naturally resist change because of the perceived effort it will require to enact the change. Both promotional efforts to publicize the benefits of compliance and the perception and reality of consequences for non-compliance play an important role in overcoming inertia.

(f) **Knowledge and Technical Feasibility**

Besides being motivated to comply, regulated groups must have the ***ability*** to comply. This means that they must know they are subject to requirements; they must understand what steps to take to create compliance; they must have access to the necessary technology to prevent, monitor, control, or clean up pollution; they must have all the necessary information and they must know how to apply it correctly. A lack of knowledge or information or technology can be a significant barrier to compliance. This barrier should be removed by providing education, outreach, and technical assistance, etc. This is an important starting point for NEMA to implement.

THE MAIN COMPONENTS OF A SUCCESSFUL ENFORCEMENT AND COMPLIANCE PROGRAMME

1 **An effective and successful enforcement programme involves several components:**

(i) Creating requirements that are enforceable.
(ii) Knowing who is subject to the requirements and setting programme priorities.
(iii) Promoting compliance in the regulated community
(iv) Monitoring compliance and enforcement.
(v) Responding to violations
(vi) Clarifying roles and responsibilities
(vii) Evaluating the success of the programme and holding programme personnel accountable for its success.

However, there are several questions which need answers when developing a enforcement and compliance programme:

(a) What elements of the above components are important for Uganda.?
(b) How should we begin this programme? How can we handle all these responsibilities with our limited resources?
(c) Do we begin with some industries or facilities or handle all of them at a go?
(d) Do we first train the inspectors before we handle the programme or start on

piece meal basis?

(e) How do we start when we have no standards or other enabling facilities?
(f) How do we handle critical facilities in the economy e.g BAT, sugar factories, cement and soap?
(g) How do we handle political and other pressures from the public?

2 Considerations in setting priorities

When setting priorities, it is necessary to balance several important objectives: These objectives may include:

(a) Protecting and restoring environmental quality and public health;
(b) Preserving the integrity of the enforcement programme;
(c) Leveraging programme resources by focusing on the smaller subset of facilities where changes can have the greatest impact in improving the environmental quality and/or creating deterrence.

Often most of the pollution is caused by a small percentage of sources (20% of the regulated community may cause 80% of the pollution). Hence the need to concentrate on the 20%. Environmental degradation cases especially agricultural ones are numerous the number of the regulated community is numerous because of the nature of agricultural activities in Uganda.

In cases where deterrence has strong advantages of achieving results, selection of a smaller percentage of a larger group may suffice. For example, NEMA and the Lead agencies may decide to inspect all facilities of a certain type but randomly e.g. motor garages or soap industries in Kampala only. Well placed publicity suggesting that any facility of that type in any of the targeted areas may be subject to inspection, combined with publicity about actual inspection, could have substantial deterrent effect

PROMOTING ENVIRONMENTAL COMPLIANCE

Compliance promotion is any activity that encourages voluntary compliance with environmental requirements. Promotion helps overcome the factors affecting compliance mentioned earlier on.

Most compliance strategies involve both activities to promote and enforce requirements. Experience shows that promotion alone is often not effective. Enforcement is important to create a climate in which members of the regulated community will have clear incentives to make use of the opportunities and resources provided by promotion. Experience also shows that enforcement alone is not as effective as enforcement combined with promotion. This is particularly true where:

(a) The size of the regulated community far exceeds the programmes resources for enforcement e.g. the regulated community consists of very many small sources, such as garages or farmers/ peasants;

(b) The regulated community is generally willing to comply voluntarily;

(c) There is cultural or behavioural resistance to enforcement;

There are six approaches to compliance promotion:

1 Providing education, awareness and technical assistance to the regulated community.

This overcomes the barrier of ignorance or inabilities that would otherwise prevent compliance. These are particularly required in a newly developed programme such as the NEMA strategy. Since deterrence will be an important element of the strategy, the information communicated should include not only educational information, but also reports of enforcement activities and the regulations required of them. This creates an ***"enforcement presence"*** and helps provide an incentive for sources to seek assistance and comply.

2 Building public support

This is a powerful ally in promoting compliance. Public support creates a social ethic of compliance. The public serves as watch dogs that alert enforcement officials to non-compliance[111]. This is supported by the fact that the NES provides for members of the public and other interested persons to bring citizen suits against non-compliant facilities. *[The case of Green watch vs. Hima Cement is vivid]*

The presence of public support ensures that enforcement programmes continue to receive the necessary funding and political support to be effective. It is also important where personal economic concerns compete with concerns for environmental quality or where there is a general lack of awareness about or concerning environmental problems or *where the political good will is lacking*.
Public support is critically necessary in:

A) Strengthening technical government officials where there is limited or no political will to stop violations.
B) Improving decisions making;

C) Strengthening the role of civil society;

3 Publicizing success stories

NEMA should provide an incentive for the regulated community to comply by publicising information about facilities that have been particularly successful in achieving compliance. Positive publicity about a firm's success can enhance its reputation and

[111] ***A fisherman out on the river sees chemical waste through a stream, traces the source to a neighbouring factory, and alerts NEMA to the factories violations.***

public image. Such publicity helps create a positive social climate that encourages compliance. *[Nakasero Soap Works case]*

It also builds confidence in NEMA's compliance and enforcement efforts.

4 Creative financing arrangements

One barrier to compliance is cost. Facility managers may want to comply but may not be able to afford the cost of fulfilling the requirements. Creating financing arrangements may help solve this problem. This can be done in the following ways:

(a) Peer Matching: Investors interested in building a new facility are asked to "adopt" an existing facility and help it reduce pollution. Foreign investors may be interested in this area as a means of promoting good will in the local community and with government authorities. *e.g. A Developer builds a school/dispensary/plants trees besides having a good factory which does not pollute.*

(b) Loans: In this arrangement, institutions lending money for new investments, through persuasion by NEMA, require that a certain portion of the loan be applied to restoration or protection of the environment. This would apply where the lender is a government supported agency or government programme. Already the NES requires that projects carry out EIA and other environmental requirement.

(c) Environmental Performance Bonds: Government or private owners of facilities are subject to performance bonds to ensure that they voluntarily comply. Such funds can be used to offset the cost of restoration where the facility fails to comply with the required performance.

5 Providing economic incentives

Benefits of incentives can be applied to the facility generally or to an individual based on his or her performance. Incentives may include fees, waiving taxes, tax incentives, subsidies for complying facilities (to help defray the cost of compliance); facility or operator bonuses for achieving better results; promotion points. [NEMA should develop and circulate a Calendar for best performing facilities in environmental matters.

6 Building environmental management capacity within the regulated community.

One specific approach of doing this is developing an ***Environmental Compliance Corporate Plan.***

Through this the facility may develop a *formal environmental compliance plan or policy*, including environmental management goals; educational and training programmes for employees; purchase, operation and maintenance of equipment needed to achieve environmental goals; budgeting and planning for environmental compliance; developing

monitoring, record keeping, internal and external reporting systems and assessment of hazards and risks posed by the facility emissions and/or wastes.

The Environmental Compliance Corporate Plan is then implemented through a **Self Monitoring Strategy**. This is performed by specialized trained employees who periodically assesses the firms compliance status and recommends changes if necessary.

The concept of environmental monitoring is important because industry is finding it good business to run their operations in an environmentally sound manner.

ENFORCEMENT RESPONSES TO VIOLATIONS

Introduction

Experience with environmental programs in many countries has shown that *enforcement is essential to compliance*. This is because, in any society, many people will not comply with the law unless there are clear consequences for noncompliance.

Enforcement by government programs seeks to correct violations and create an atmosphere in which the regulated community is stimulated to comply because the government has demonstrated a willingness to act when noncompliance is detected. This atmosphere also helps stimulate members of the regulated community to prevent pollution and minimize waste so that they are no longer subject to requirements. If authorized, a government enforcement program may also seek to correct and redress actual or potential harm caused by environmental pollution, whether or not the pollution violates a specific requirement.

Government programs are but one means of enforcement. In some countries, private citizens and groups are empowered by law to bring enforcement actions against violators. Insurance companies and financial institutions may require facilities to comply to be eligible for insurance or a loan. Finally, social norms can be an effective method of ensuring compliance in societies where there is strong social sanction for noncompliance with environmental requirements. For example, the public may choose to boycott certain products if they believe the manufacturer is harming the environment. All these nongovernmental forms of enforcement can greatly enhance a government program. Policymakers can strengthen government enforcement efforts by considering these other forces for enforcement when designing government programs. For example, government officials may benefit by working closely with concerned nongovernmental groups on enforcement.

Policymakers may also wish to focus government enforcement activities on areas not adequately covered by the private sector. Government enforcement capabilities will generally be most effective if they are in place and used when requirements become effective. Delaying enforcement can undermine the credibility of the program and make it difficult to create an atmosphere of deterrence. Enforcement is often needed throughout the life of a regulatory program, to achieve initial compliance and to ensure that those who have achieved compliance maintain it.

Enforcement can be controversial because so much is at stake environmentally and economically. To be successful, enforcement requires support at all government levels and within all sections of the program. Governments can demonstrate their commitment to enforcement by enacting enforceable requirements and by providing clear and consistent support. Program personnel can demonstrate their commitment by taking violations seriously because of their threat to the environment and to the integrity of the legal system.

.**The Range Of Authorities Available For Response Mechanisms**

All enforcement programs benefit from a range of authorities and response mechanisms so that program officials can appropriately respond to the many different types of violations and circumstances that will arise.

1 Authorities

In most countries, the range and type of response mechanisms available will ultimately depend on the number and type of authorities provided to the enforcement program by environmental and related laws. These authorities provide the legal basis for enforcement which is essential to the power and credibility of an enforcement program.

2 Response Mechanisms

Enforcement mechanisms may be designed to perform one or more functions:

- Return violators to compliance.
- Impose a sanction.
- Remove the economic benefit of noncompliance.
- Require that specific actions be taken to test, monitor, or provide information.
- Correct environmental damages.
- Correct internal company management problems.

Response mechanisms generally fall into the following categories, described below:

(a) Informal or Formal
(b) Civil or Criminal
(c) Administrative or Judicial

(a) **informal mechanisms**

Informal responses include phone calls, site visits, warning letters, and notices of violations. Informal responses advise the facility manager what violation was found, what should be done to correct it, and by what date. The goal of informal action is simply to bring the violator into compliance or to initiate formal legal process. Informal responses themselves do not penalize and cannot be enforced, but can lead to more severe response if they are ignored.

(b) **formal mechanisms**

Formal enforcement mechanisms are backed by the force of law and are accompanied by procedural requirements to protect the rights of the individual. Formal mechanisms are either civil or criminal as described below. As indicated by the diagram, above, civil actions may be either administrative (i.e., directly imposed by the enforcement program) or judicial (i.e., imposed by a court or other judicial authority). Authorities to use formal enforcement mechanisms must be provided in environmental laws.

(c) **Civil Administrative Enforcement**

Civil administrative orders are legal, independently enforceable orders issued directly by enforcement program officials that define the violation, provide evidence of the violation, and require the recipient to take corrective action within a specified time period. If the recipient violates the order, program managers can usually take further legal action using additional orders or a court system to directly force compliance with the order. What distinguishes administrative response from judicial response, defined below, is that the legal action is handled by an administrative system within the organization responsible for implementing the enforcement program.

The administrative processes may be similar to those provided by the court system. Two advantages of administrative enforcement are that it does not require coordination with a separate judicial agency and the administrative organization's own administrative law judges are usually more knowledgeable because they are dedicated to addressing environmental problems. Therefore, administrative actions are usually resolved more quickly and require less time and expense than judicial actions. Administrative orders are not self-enforcing, however. If the order is not complied with, further enforcement action will need to be pursued through the judicial system.

Field citations are administrative orders issued by inspectors in the field. Typically, they require the violator to correct a clear-cut violation and pay a small monetary fine. Field citations are much like traffic tickets. Depending on the procedural steps defined by the program, the violator can either appeal the citation, pay it, or risk more formal enforcement action. Field citations are generally used at the provincial and/or local levels to handle more routine types of violations. They can be a relatively efficient means to enforce certain violations that are clear and do not pose a major threat to the environment. To issue field citations, inspectors need training to identify the particular violations for which citations can be written.

(d) **Civil Judicial Enforcement**

Civil judicial enforcement actions are formal lawsuits before the courts. Some nations with civil enforcement authorities rely exclusively on civil judicial actions to enforce environmental laws. Other nations have adopted both administrative and judicial mechanisms to carry out civil enforcement authorities. Where available, administrative enforcement is generally preferred as a first response (with some exceptions), because judicial lawsuits are far more expensive, require more staff time, and may take several years to complete. However, judicial enforcement has several advantages. It is often perceived as having greater significance and therefore has more power to deter potential

violations and to set legal precedents. Also, the courts are often uniquely empowered to require action to reduce immediate threats to public health or the environment. Thus, judicial enforcement can be essential in emergency situations. The courts also play an important role in enforcing administrative orders that have been violated, and in making final decisions regarding orders that have been appealed. Therefore, when administrative enforcement mechanisms are available, civil judicial responses are generally used against more serious or recalcitrant violators, where precedents are needed, or where prompt action is important to shut down an operation or to stop an activity.

(e) **Criminal Enforcement**

Criminal judicial response is generally considered appropriate when a person or facility has knowingly and willfully violated the law, or has otherwise committed a violation for which society has chosen to impose the most serious legal sanctions available. These responses seek criminal sanctions, which may include monetary penalties and imprisonment. Nations such as Canada that now rely exclusively on criminal law for environmental enforcement have also developed creative sentencing provisions to introduce other remedies and sanctions (such as community service and required environmental audits) designed to "punish" the wrongdoing. While criminal response can be the most difficult type of enforcement, it can also create the most significant deterrence since it personally affects the lives of those who are prosecuted and carries with it a significant social stigma. Criminal cases require intensive investigation and case development. They require proof that a violation has occurred and may require proof that an individual or business (through its employees) was knowingly and willfully responsible for the violation. Specially trained criminal investigators may be necessary to develop criminal cases. The ability to apply criminal enforcement in environmental cases depends on a country's legal system and on whether appropriate authority is provided in environmental or other laws. For example, in the United States there are generic statutes that make it a crime to report false information. Conversely, in Hungary only a "natural person" can be criminally liable, and a facility or business is not considered to be a "natural person." Under these circumstances, criminal enforcement is difficult because the facility itself is not answerable for the "crime" and it is often difficult to identify which individuals within the facility were responsible.

Selection of Appropriate Enforcement Response

Selecting an appropriate enforcement response raises several difficult issues, discussed below, which often need to be addressed in an enforcement response policy. (These issues may already have been addressed in the wording of the authorities provided by the environmental laws.)

(i) **When Should Civil or Criminal Responses Be Used?**

This issue is relevant only to countries that have or are considering implementing both civil and criminal authorities. E.g., in the United States, criminal enforcement actions are generally reserved for actions that deserve punishment, rather than correction, e.g., where the violation is intentional and willful. Criminal actions are also used to ensure the

integrity of the regulatory scheme, e.g., for facilities that operate without a permit or license. Cases reserved for criminal enforcement typically include:

- Falsifying documents.
- Operating without a permit.
- Tampering with monitoring or control equipment.
- Repeated violations.
- Intentional and deliberate violations (e.g. decisions to violate based on greed).

In the Netherlands, both criminal and administrative charges can be brought for violations of Environmental laws. Serious violations are usually met with direct criminal charges. Many Public Prosecutors believe that criminal charges should be imposed the second time a company is found to be out of compliance.

Administrative sanctions include shutting down all or part of a company's operations and fining the company for each day it remains out of compliance. Criminal sanctions include prison sentences, fines, complete or partial shut down of operations, confiscation of property, and publicizing the court's verdict.

(ii) **When Should a Sanction Be Imposed?**

For certain types of enforcement response, it may be sufficient to negotiate a compliance schedule where the violator agrees to return to compliance and/or clean up a pollution situation by a certain date. When deterrence is important to a program's compliance strategy, maximum impact will be gained if each enforcement action is used to send a deterrence message to the regulated community. Sanctions help send this message. However, sanctions may not be appropriate for violations that are not preventable, or that are too minor to focus government resources on the legal process that necessary to impose a sanction. These considerations need to balanced in deciding when to impose a sanction.

(iii) **Should a First Enforcement Response Include a Sanction?**

There are two basic approaches to this issue. One approach does not seek a sanction for first violations but imposes a stiff sanction if noncompliance continues. This approach is based on the belief that every facility should be given at least one opportunity to correct its problems before it receives a sanction. This approach is most successful when violations are easy to detect, and when the enforcement program has an excellent track record of detecting violations, diligently following up on violators to verify compliance, and imposing stiff sanctions for continued noncompliance. The second approach is to impose a sanction for first violations. This is based on a belief that lack of a penalty may encourage facilities to postpone compliance activities until the violation has been detected. This approach is essential for violations that are difficult to detect.

(iv) **What Type of Sanction Should Be Used?**

Depending on the authorities provided in environmental laws enforcement officials often have several types of sanctions they may impose for violations. The enforcement policy will need to provide guidance on when these various types of sanctions are appropriate.

(a) **Monetary Penalty**. Monetary penalties are the most common sanction used in enforcement response. An enforcement policy will need to provide guidance on how to calculate an appropriate penalty for various types of violations.

(b) **Denial or Revocation of Permits or Licenses.** Program officials can deny an application for a permit or license or revoke an existing permit or license. This would require a facility to cease at least part of its operation or be in clear and direct violation of the law.

(c) **Shutdown of Operations.** Program officials may be able to shut down operations. The threat of a shutdown can be an effective deterrent, particularly in a free market economy where shutdowns directly affect profits.

(d) **Jail Terms.** Criminal sanction (e.g., jail terms) for managers or employees of violating facilities can be an extremely effective deterrent. Criminal sanctions can only be imposed where allowed by the legal system. This penalty has substantial public support in the United States. In the United States, for example, criminal sanctions can be sought if someone willfully circumvents a requirement or fraudulently reports data. Some criminal cases can be costly and involve complex procedures. However, in the United States, their deterrent effect has been so great that even a relatively small number of successful cases have caused other companies to change their management ethics.

(e) **Environmental Restoration**
Environmental restoration settlements not only repair the damage done to the environment because of the violation, but also further enhance the environment around the facility. If the environmental damage caused cannot be restored, the settlement may require the facility to restore a comparable environment in another location.

MONITORING COMPLIANCE

Monitoring compliance- is the collecting and analysing information on the compliance status of the regulated community. It is important to detect and correct violations; provide evidence to support enforcement actions; and evaluate programme progress by establishing the compliance status.

The primary sources of compliance data and information are:

A) Inspection conducted by NEMA and Lead agencies inspectors;

B) Self-monitoring, self record keeping, self-reporting by the regulated community.
C) Environmental Audits.

1 Environmental Inspections

Inspections are the backbone of most enforcement programmes. Inspections are conducted by government inspectors, or by independent parties hired by and reporting back to NEMA. Inspectors plan inspections, gather data in and/or around a particular facility, record and report on their observations, and (sometimes) make independent judgments about whether the facility is in compliance. Inspections can be very resource-intensive, therefore they require careful targeting and planning. By standardizing inspection procedures, enforcement officials can help ensure that all facilities are treated equally and that all the appropriate information is gathered. By specifying deadlines for preparing inspection reports, environmental inspectors should help ensure that reports are made available to enforcement personnel (NEMA) without delay if there is a possibility of non-compliance.

(i) **Types of Inspections**

Inspections may be routine (i.e. there is no reason to suspect that the facility is out of compliance), or "for specific cause" (i.e., a particular facility is targeted because there is reason to believe it is out of compliance). Inspectors may notify the facility prior to inspection or simply arrive unannounced.

There are many levels of inspection (see Table 2). At the simplest level, an inspector can simply walk through a plant. Inspections get progressively more complex and time-consuming as inspectors spend time in the facility to observe operations, interview plant personnel, and take samples or analysis.

Inspection goals include:

(a) ·Identifying specific environmental problems.
(b) ·Making the source aware of any problems.
(c) ·Gathering information to determine a facility's compliance status.
(d) ·Collecting evidence for enforcement.
(e) ·Ensuring the quality of self-reported data, record keeping, compliance with EIA/ audit requirements
(f) ·Interviewing neighbouring communities.

TABLE 2. THREE LEVELS OF INSPECTIONS

LEVEL 1: WALK-THROUGH INSPECTION

This type of inspection is limited to a quick survey of the facility. Inspectors simply walk through the facility, for example to check for the existence of control equipment, observe work practices and housekeeping, and verify that there is a records repository. These inspections establish an enforcement presence, and can also serve as a screening process to identify facilities that should be targeted for more intensive inspection.

LEVEL 2: COMPLIANCE EVALUATION INSPECTION

This level involves a thorough inspection of the facility, but does not include sampling. It may include visual observations like those in Level 1, review and evaluation of records, interviews with facility personnel, review and critique of self-monitoring methods, instruments, and data, examination of process and control devices, and collection of evidence of non-compliance.

LEVEL 3: SAMPLING INSPECTION

This includes the visual and record reviews of the other inspection levels, as well as preplanned collection and analysis of physical samples. These inspections are the most resource-intensive.

(g) Demonstrating NEMA's and Lead agencies commitment to compliance by creating a credible presence.
(h) Checking whether facilities that have been ordered to comply have done so.
(i) Inspections may focus on one or more of the following:
(j) Does the facility have an up-to-date permit or license?
(k) Has required pollution monitoring or control equipment been installed?
(l) Checking whether the equipment being correctly operated?
(m) Checking whether records of self-reported data are properly prepared and maintained?
(n) Checking whether the facility is properly conducting any required sampling and analysis.
(o) Checking whether the facility's management plans and practices support the required compliance activities?
(p) Checking whether there are any signs of wilful violation of regulations and/or falsification of data? (Signs of wilful violation or falsification include conflicting data, conflicting stories from different employees who are ignorant of the regulations when company files show knowledge of these requirements, and tips from employees or citizens in the local community.)

Inspections usually begin with an opening conference to explain the inspection process to the facility. Some inspections end with a closing conference, in which the inspector may

make facility managers aware of any violations, how to correct violations, and what the future consequences of continuing non-compliance may be.

Some enforcement strategies may not allow closing conferences because they want to avoid the risk that information given by the inspector to the facility may somehow compromise future legal action.

(ii) **Gathering Evidence**

The inspector is responsible for gathering information, taking samples, photographs, interview of workers/communities to determine whether a facility is in compliance and collecting and documenting evidence that violation may have occurred.

(iii) **Inspector Training**

Inspectors have a great influence on the success of a compliance monitoring programme. They are responsible for identifying facilities that are out of compliance and gathering evidence for enforcement actions. They are often the only environmental officials that a facility manager will ever see in person, and may serve as the key witness in enforcement cases. Inspectors require training in a broad range of skills: legal, technical, administrative, and communication. They will need to be technically competent in the subject(s) of the inspections they perform, and skilled in obtaining crucial facts and in collecting and preserving evidence of non-compliance. Also, they need to be skilled in managing projects, working in a team, and effective communications ranging from entry conversations to complex cross examination in cases of serious violations. The training and integrity of inspectors are therefore critical to effective enforcement programmes.

2 Self-Monitoring, -Record Keeping, and -Reporting by the Regulated Community

Self-monitoring, -record keeping, and -reporting are three ways in which facilities can be required to track their own compliance and record or report the results for government review. Increasingly, self-monitoring, -record keeping, and -reporting are being recognized as providing essential data to supplement and support inspections.

In self-monitoring, facilities measure an emission, discharge, or performance parameter that provides information on the nature of the pollutant discharges or the operation of control technologies. For example, sources may monitor ground water quality, or may periodically sample and analyze effluent for the presence and concentration of particular pollutants. Sources may also be asked to monitor operating parameters on pollution control equipment (such as line voltage and electrical current used) that indicate how well the equipment itself is operating. Operating parameters are generally inexpensive to monitor and provide reliable data that give a more accurate and representative picture of emissions than occasional sampling and analysis of the emissions themselves. This type of monitoring has proven to be a cost-effective way for enforcement programmes and sources to assure themselves that controls are operating correctly.

Self-record keeping means that facilities are responsible for maintaining their own records of certain regulated activities (e.g., shipment of hazardous waste).

Self-reporting requires that facilities provide the enforcement programme with self-monitoring or record keeping data periodically and/or upon request.

Self-monitoring, record keeping, and reporting provide much more extensive information on compliance than can be obtained with periodic inspections. Self-monitoring -record keeping, and -reporting requirements also shift some of the economic burden of monitoring to the regulated community, and they provide a mechanism for educating this community about the compliance requirements. Self-monitoring, record keeping, and self - reporting may also increase the level of management's attention devoted to compliance, and may inspire management to improve production efficiency and prevent pollution.

3 Environmental Auditing

Environmental auditing is a periodic, systematic, documented and objective review at a regulated facility of its compliance status, management systems and/or overall environmental risk. Auditing has been encouraged by many nations as an essential tool for regulated facilities to ensure compliance and to effectively manage their environmental risks. Environmental audits have been required in several enforcement actions for one of two purposes. First, they have been used where a regulated facility shows a clear pattern of violations that suggests a management problem. In such cases, a settlement may include an agreement that the regulated facility will pay for an environmental audit to identify and correct the internal management problems that led to the repeated violations. Second, if a violation is likely to be repeated at other operations owned by the same company, a settlement may include an agreement (1) that the company or a third-party auditor will audit for that violation at the other facilities owned by the company, and (2) that any violations will be reported and corrected.

CLARIFYING ROLES AND RESPONSIBILITIES

1 NEMA

NEMA is responsible for identifying the need for legislation and enforcing the legislation once it has been enacted or made. An internal administrative arrangement is needed for enforcing administrative orders and regulations under the NES.

NEMA should also supply the lawyers responsible for taking legal action against violators. If it does not have capacity, then an inter lead agency arrangement should be made to assist her. In such a case, it is important to involve attorneys/prosecutions from the Justice Ministry and solicit their cooperation early enough in prosecution process of good cases and also in the development of compliance strategies.
NEMA's oversight function should involve the following:

(i) Identify the regulated community and establish priorities for enforcement.
(ii) Develop clear enforceable requirements.
(iii) Monitor compliance accurately and reliably.

(iv) Maintain high or improving rates of compliance.
(v) Respond in a timely and appropriate way to violations.
(vi) Use penalties and other sanctions appropriately to create deterrence.
(vii) Maintain accurate records and provide accurate reports.
(viii) Have sound overall programme management, supervision and coordinate lead agencies closely.
(ix) Monitor and supervise the districts programmes.

(ii) NEMA / Districts Enforcement Strategy.

NEMA should establish clear criteria as to when and how it will become directly involved in enforcement in the districts.

There are four instances when NEMA should consider becoming involved only if at least one of these conditions applies:

(i) At the start of the programme and before capacity is developed at the district level.
(ii) A district requests NEMA's involvement.
(iii) The district action is not timely and appropriate.
(iv) The case would set a national legal or programme precedent.
(v) When a court order has been violated.
(vi) District authority is inadequate.

Cases in which NEMA should become involved:

(i) ·The case is nationally significant (e.g., involves a significant non complier, or affects national priorities).
(ii) ·The violation significantly threatens major public health or environmental quality.
(iii) The violator is gaining significant economic benefit
(iv) ·The case affects other districts.
(v) ·The case involves a repeat violator.

However, when NEMA becomes involved, it should do so with maximum respect for the district decentralised mandate and how best it can complement district activities. Joint efforts with the district are welcome and the best.

2 Lead agencies

These are required by law to coordinate and consult NEMA in all activities related to environmental management. They will play a important role in implementing, enforcing and ensuring compliance in their areas of jurisdiction on environmental matters. They are both central and district lead agencies and their role is central in NEMA activities. The creation of environmental liaison units should assist in enforcement and compliance.

3 Police

The Police is very valuable in identifying and apprehending criminal and for detecting violations of environmental laws. The police also acts a the prosecuting agency of government in criminal matters. In some countries, police acts as environmental inspectors. Others have set up special units that deal with environment matters. Therefore, involve and train the police in handling cases of violations.

4 Judiciary

Judicial institutions are responsible for interpreting the laws and passing of judicial rulings or administration of justice. Courts do provide a forum for taking enforcement action, for prosecution, and for enforcing administrative orders. They also play an important role of assessing sanctions. These need to be well equipped and sensitised

5 NGOs and Private sector

A: Uganda Manufacturers Association (UMA).

Their role is to track and publicize developments that may affect their members. They also influence environmental legislation or programmes as they are being developed. They serve as channels of disseminating information on requirements, methods of complying and compliance activities.

B: Association of Professional and Technical Engineers

These advise NEMA and Lead agencies and the regulated communities on compliance issues. Hence they track and disseminate information on regulatory developments.

C: Trade Unions or Workers Unions

Environmental management programmes can have a great impact on workers. Enforcement programmes which result in substantial changes or shut down of an operation may result in some unemployment. The participation of such unions or workers groupings has an important role to play in the success of enforcement actions at a facility. Such groupings can also be involved in the development of environmental requirements. The Federation of Uganda Employers (FUE) is an example in this field.

D: NGOs and general public

The public or NGOs play a major role in shaping and implementing environmental enforcement programmes. This is through lobbying; collection and publicizing of data on environmental quality and compliance levels in an effort to influence programme priorities. They also play an important role of disseminating information to the regulated communities and to public, file suits against environmental agencies or regulated community or individual violators.

E: URA

The Uganda Revenue Authority (URA) plays a major role in informing the lead agencies and NEMA about the type and nature of imported goods and materials and can stop the importation or exportation of hazardous materials. Under the environment law they will assist in re-exporting those material which are no allowed into the country.

F: UIA

The Uganda Investment Authority (UIA) and its affiliate institutions such as the industries and foreign investors and the Private Sector Foundation will play an important role in influencing change in the production process to environmentally safe technology.

ANNEX 6

THE ENVIRONMENT IMPACT ASSESSMENT PROCESS IN UGANDA: ITS STRENGTHS AND WEAKNESSES.

(The Water Hyacinth Control Programme for Lake Victoria- a Case Study)

By: Mr. Kenneth Kakuru
Director, Greenwatch.

INTRODUCTION

This paper analyses the Environment Impact Assessment (EIA) process in Uganda from the legal perspective. It considers a brief history of EIA. It reviews the existing legislation on EIA, analyses its frame work as provided under the National Environment Act (NEA) and the concepts found in the regulations made under the said Act.

The paper considers the strength and weakness of the EIA process in Uganda by looking at a case study, "The Water Hyacinth control programme for Lake Victoria and other regional waters." It looks at how the EIA process works in practice using the above case study and whether or not it was properly subjected to the EIA process. The paper makes observations and recommendations on the EIA process.

DEFINITION

There seems to be no clear, concise definition of Environment Impact Assessment but there is a consensus on several basic tenants of EIA and its aims and objectives.[112] EIA has been defined as a process of analysing the positive and negative effects of a project, plan or activity on the environment[113].

The objective is to provide decision makers with the information allowing them to introduce environmental protection considerations in the decision making process leading to the approval, rejection or modification of the project plan or activity under examination[114]. EIA therefore is first and foremost, a study of effects of a proposed action on the environment. Depending on the effects of the scale of the proposed action, EIA may include studies of the weather, flora and fauna, soil erosion, human health, urban migration, employment etc. It includes the physical, biological, social, economic cultural and other impacts.

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[112] P.1 Sany and Ahmed.

[113] P (i) Study 122.

[114] P (ii) " "

It also compares various alternatives available for any project plan or programme and determines which one represents an optimum mix of environmental and economic costs and benefits.

The EIA also makes predictions based on technical work involved with the change in environmental elasticity which may be expected as a result of the proposed action. It weighs the resultant environmental effects on a common basis with economic costs and benefits to be desired from the project. In other words it is a tool in decision making that guides the decision makers reach a well balanced and informed decision.

E.I.A. HISTORY

As far back as 1950's it had been realised in most industrialised countries that many industrial developments were producing unforeseen and undesirable environmental consequences. It was also realised that most of these consequences could be reduced or eliminated through proper planning, better technology, or out right avoidance. The public was concerned as a result of the problems, especially pollution, resulting into citizen groups being formed to address the problems.

On 1st January 1970 U.S.A. became the first country in the world to adopt legislation requiring environmental impact assessment on major projects. Following this pioneering effort in the USA, many other countries followed suit even where E.I.A. is not a legal requirement. It has sought to enact legislation which would best fit into its constitutional, economic, social and technological frame work.

In parallel with this growth of legislation has been the growth of concepts, precepts and techniques of E.I.A. In Uganda the requirements for E.I.A before the 1995 National Environment Act were contained in various enactments, such as the Investment Code, the Town and Country Planning Act and the Urban Authorities Act, the Public Health Act. However these laws have not been implemented in a manner that promotes comprehensive assessment of environmental issues in development.

In the 1980's there was an attempt to integrate E.I.A. in every project especially those that required foreign funding. Uganda National Parks integrated E.I.A. in almost all projects carried out under it.

However since 1995 NEA, E.I.A is compulsory for every project listed under schedule 3 of that Act.

WHY THE E.I.A

E.I.A. process has been criticised as being just another bureaucratic stumbling block in the path of development[115] or another way of keeping industrial development away from

[115] Ahmed and Sany p.5

developing countries. The perception seems to derive from the fact that the E.I. A. process takes time and as such seems to delay development especially industrial development, or implementation of certain plans or policies.

But developing countries are now paying heavily for having achieved tremendous industrial development at the expense of the environmental considerations.

The E.I.A. therefore is an attempt to avoid what happened in the developed countries taking place in the less developed countries which have no resources to reverse the effects. The developing countries can now take advantage of the new technologies to avoid environmental disasters. Besides the E.I.A. is a process with checks and balances and only a guide or tool in decision making. This process if it is used well would achieve good results and may also be subject to abuse.

A series of alternatives are analysed, each of which has costs and benefits both economic and environmental. It gives the decision maker alternatives from which to choose. If used as a tool for balanced decision making, EIA will enhance the development process in the same way as economic and financial analysis. The other concern is in the expenses involved with EIA which makes the project expensive. It is argued that some developments for example cannot simply afford the expensive process of EIA. The actual costs include not only the cost of the E.I.A. document but also lost opportunity due to delays, loss of research and development.

For many projects in developing countries whatever the percentage of the cost of E.I.A it must be met by the developer. At this stage of EIA the project is not yet in place and funding or financial credit is usually not forth coming. This itself may be a hindrance. However if one looks at the costs to the project or policy in event of environmental degradation or disaster it is nowhere compared to the cost of E.I.A.

It has also been suggested that the EIA may be designed and written to justify the project and several project alternatives put forward which are practical simply to make the preferred alternative appear attractive or at least less palatable. But this as we shall see has been checked with E.I.A. process by involving the affected community and the whole public.

THE E.I.A. PROCESS

There is no fixed approach with E.I.A. process. Whatever the approach it must be practical and cost effective and able to give the decision maker a clear picture on the stamps involved, the importance of fixing of each step and the resources regarded. There are nine basic steps in the E.I.A. process.

1. Preliminary activities
2. Scoping (impact identification)
3. Baseline study
4. Impact evaluation (qualification)
5. Mitigation measures

6. Assessment or comparison of alternatives
7. Documentation
8. Decision making
9. Post -auditing

PRELIMINARY ACTIVITIES

These include identifying appropriate decision maker, selecting a co-ordinator to manage the study on behalf of the decision maker. He ensures that the study proceeds along the lines set out by the scoping exercise and that the results generated are in a form that will be useful to the decision maker. Then the work is allocated to specific persons. The writing of the description of the proposed action follows, this is a brief statement, may be ten pages, useful in the scoping exercise and afterwards. Then there should be a review of all existing laws and regulations that apply to the proposed action, directly or indirectly. These are just the basic preliminaries which would be expanded to include more related activities.

SCOPING

This is a means of controlling the extent of EIA so that only very relevant issues are considered. The team identifies the possible impacts and ranks them by looking at the exhaustive list of all possible impacts, severe as well as trivial, checking on EIA's of similar projects helps drawing up the list. Then the list is reduced to remain with only the impacts to be studied in details- the criteria to be applied when reading the list includes the magnitude, the extent, the significance and special sensitivity.

BASELINE STUDY

This need neither be extensive nor conclusive. It looks at the existing environment then records it; If it is a forest, it consists of abc species of trees, and animals. The soils, the climate, the population, human activity etc. Since interest would be concentrated on those impacts identified during scoping, the baseline levels will be determined by the impact they have on the environment. This requires field work as well as reviewing existing documents. The resource persons must all have basic training in the relevant field. At the end of the scoping a list of impacts to be studied would have been generated. Once this is done the appropriate experts to study these impacts would be selected.

IMPACT EVALUATION

This is the most difficult technical aspect of the E.I.A. and no doubt the most difficult and at times most controversial. This determines the possible impacts in detail of the list of impacts determined during the scoping exercise on how they will affect the baseline of the existing environment. It determines the quantitative aspects and then the qualitative ones. It determines the projects acceptability and the effects of the project on the people.

MITIGATION MEASURES

It is almost impossible to eliminate all possible effects of the project, therefore there is need after identifying the impact to identify mitigation measures available and how they would be put in place to limit, the overall diverse impact on the environment. Such

measure may be change in engineering design or management practices, etc. All mitigation measures have associated costs. It is therefore necessary to compute their costs and quantify the level of impact and acknowledge the beneficial effect of the mitigating measures.

ASSESSMENT

This may otherwise be called the comparison of alternatives; the technical information is put together with the previous work. The environmental losses and gains are combined with the economic costs and benefits to produce a full picture for each project alternation. The result is a series of recommendations, observations, from which the decision maker is to choose a course of action.

The decision maker compares the positive and negative environmental impacts as assessed and weighs them against the economic costs and benefits. The environmental impacts are converted into economic equivalents and listed as costs or benefits. This is the cost benefit analysis. The only problem is that in environmental matters many impacts cannot easily be reduced to cash benefit.

DOCUMENTATION

Documents arising out of the EIA process so far are categorised into two. Reference documents and working documents. The former containing a detailed record of the work done in the EIA and the necessary future reference; the latter carries information for immediate action. Reference documents are intended for use by a technical audience. They may be a series of reports or one long report. They are written by specialists who have done qualification impacts.

Working documents are formal means of communication from the technologists on one hand and the decision maker on the other. They should be in concise and unambiguous language and should state the recommendations clearly and reasons for the recommendations presently in summary form. Usually to co-ordinate as a link between the technologists and the decision maker prepares the working document.

DECISION MAKING

The decision making in the EIA process states when working documents reach the decision maker, wherein he finds a list of alternatives with comments and recommendations as to one or several of the preferred alternatives and why. Normally the decision maker takes the advice of the technologists unless for strong reason he decides otherwise.

The decision maker may accept one of the proposed alternatives, or request for a further study or reject the proposed action all together. If further study is requested then the decision maker should be quite specific as to what information is being requested. This would easily be complied with thus minimising delays.

Out right rejection may either lead to the developer abandoning the proposal or appealing against the decision.

EIA process being a tool in decision making, the working document that is generated must clearly convey to the decision maker the nature of the problem to be addressed, the alternatives which were considered, the pros and cons of each alternative. Only then can the E.I.A. process be useful and meaningful to the developer, the decision maker and the public[116]. In Uganda NEMA is called upon to make decisions as the key environmental watch dog for the public policy. It determines whether the project should be approved or requires the developer to redesign it. The decision maker therefore is not only the developer alone but NEMA. This is because EIA is not purely a business decision of the developer. The central government control and direction is still very desirable especially in developing countries like Uganda.[117]

THE E.I.A. PROCESS UNDER THE NATIONAL ENVIRONMENT ACT (NEA)

The above general principles have in Uganda been codified into law and are contained in the National Environment Act (Cap 153). The whole of Part V of the Act deals with E.I.A. Sections 19 to 23. The Act however is not comprehensive enough .It has left many loopholes, [118] as we shall see later.

The first step to be taken by a 'developer' under Sec.19 is to submit a project brief to the 'Lead Agency'. If 'developers' project is one that is described in the schedule of the Act. A developer is defined under Sec. 1 of the Act as being " any person who is developing a project which is subject to E.I.A. The projects subject to E.I.A. under Section 19 (1) are set out in schedule 3 of the Act.

Although the Minister is given powers to amend this schedule on the advice of the board (Sec.19 (2)) the schedule is not exhaustive and never could be, we shall see the problem this has caused.

It is submitted that the schedule should have contained a general clause to cover 'projects' not envisaged at the time of making the statute and or which are boarder line that would fall into this category using the *Ejusdem Generis's* Rule of Statutory Interpretation- "or any other such related project or any project as the Minister on the advice of the board may prescribe".

The next problem with Section 19 (1) is the assumption that there must always exist an independent and impartial lead Agency. The law does not take into account a situation where the 'developer' who requires the E.I.A. is at the same time the lead agency e.g. where the Department of Water Development requires to sink several bore holes or dams or where an urban authority requires to establish a garbage dumping site or large

[116] Ahmed and Sany p.16

[117] Ntambirweki. J, UNEP/UNP Envir. Law p.13

[118] Kenneth Kakuru and Mutyaba

recreation park. The list is endless. To whom in this case does he submit the project brief as required under Sec. 19(1)?

The next step in the E.I.A. process is the decision by the Lead Agency and NEMA as to whether or not the project requires E.I.A. If under Sec. 6 (2) the Lead Agency in consultation with the authority is satisfied that the project will lead to significant impact on the environment it shall require then an E.I.A. to be conducted.

There is a requirement, 19 (9), that the E.I.A. process be publicised in such a manner as may be prescribed. The law does not say by who is or at what stage the publicity is to be carried out.

Where the project has been determined to require an E.I.A. then Sec. 20 (1) requires that an Environmental Impact Statement (E.I.S) be made by the developer, and submitted to the Lead Agency, the authority and the person requesting for it.

This shall be a public document, available for inspection by the public. However the law does not say where the public ought to find it. It establishes no open public registry. Where is the public expected to find this document? There however exists a library at NEMA Headquarters but it is not to the public and is no public registry. It is recommended that it be turned into a public registry for the environment.

The authority in consultation with the lead agency is empowered and entrusted with the duty thereafter to carry out an environmental audit and monitoring.[119]

THE CASE STUDY

The Water Hyacinth Control Programme for Lake Victoria and other regional waters.
NOTE: This study was carried out before the coming into force of the EIA Regulations.

The above is an on going E.I.A. process. In this case study we shall analyse how the above law and principles of law regarding E.I.A. apply in practice by using the above case. We shall see the challenges faced by 'the developer' and the strengths and weaknesses of the law as applied.
This Environmental Impact Study was under taken to evaluate possible alterations to control water hyacinth infestation on Lake Victoria and surrounding water bodies.

The study seems to have been undertaken by the Ministry of Agriculture, Animal Industry and Fisheries (MAAIF) and prepared by Aquatics Unlimited (AU) and was funded by the United States Agency for International Development (USAID). From the on set this raises legal problems.

a) **Does the control of the water hyacinth on Lake Victoria fall under the description "Project" as envisaged by the NEA and listed under schedule 3 of the Act**?

[119] S.22 &23 National Environment Act (Cap 153)

A close look at the schedule, one cannot see where such an activity would fall. Not even under "any activity out of character with its surroundings" which to me envisages construction of a concrete block in a National Park or an airstrip in a forest or factory in a swamp or any other such thing. It would be stretching it too far to include removal of a water weed from the water by whatever means. Clearly such a 'project' was not envisaged under the Act. Unless of course the removal of the water hyacinth was to be done by use of aerial spraying in which case the study would have been limited to the control of the water hyacinth by only that mean and this ought to have been specifically stated in the problem statement.

If therefore the control of the weed was to be by mechanical, manual or even chemical means other than by aerial spraying, there would be no legal requirement to conduct an E.I.S., confirming our earlier submission that the law is inadequate in this regard.

b) The E.I.S. was carried out by Aquatics Unlimited a company that could not under the NEA be described as a 'developer'. It seems to have been a company that could otherwise be described as a "contractor" in the project. It could not be said to be the agent of the developer for the purposes of E.I.S. as itself had to contract experts to carry out the study on its behalf. Its interest in the E.I.S. is neither defined nor properly disclosed.

c) The study was to be funded by the USAID, an independent foreign body that is not the developer. Its interest in the E.I.S. or E.I.A. process is not disclosed. It is important to determine the interests of the players in the E.I.A process as to determine from the beginning whether or not and to what extent they are interested in the outcome of the E.I.S. e.g. whether Aquatics Unlimited was to be contracted to spray the water hyacinth if chemical spraying was approved or if the chemicals were to be supplied by American Companies.

d) The Lead Agency in the case should have been the Ministry of Agriculture (MAAIF) but could not possibly be so as the study was prepared under its auspices. How then could the same study be presented to it for approval? If MAAIF is the developer it could not again be the Lead Agency. If it is the Lead Agency is AV the developer?

The other problem with this 'project' is that it is a project specifically prohibited by the Act Section 34 (2) (NEMA waives the prohibition in writing but there is no evidence that it did in this case.). Section 34 (1) subject to Subsection (2) no person shall in relation to river or lake carry out any of the following;-
34 (I) (e) deposit any substance in a river or lake or in or under its bed if that substance would or is likely to have adverse effects on the environment.

The legal question to be answered is whether E.I.S. can be carried out on project prima facie prohibited by the Act. If an E.I.S. could be carried out for such a project then Sec.34 is redundant in view of the fact that what is listed there under would still require E.I.S. under Sec. 19 and 20 and schedule 3 of the Act.

The Scoping Process

A scoping process was carried out by A.U. and a scoping document was prepared. (Annexture 2 to the study) The objections of the scoping process were said to include;-

1. Scope and content of E.I.S. the significant and nor significant issues and non significant issues
2. Training and schedule
3. Allocation of assignments
4. Identification of Rules
5. Identification of information, data and documents including other impact assessments
6. Identification of interested parties
7. Initiation of Environment Education process
8. Open and transparent outreach and participants of interested parties and interest.

However the document did not address the above objections at all. The scope and content of E.I.S. is not determined neither does the document contain a training schedule. On the other hand the scoping document indicates that trials using chemicals had begun. (P.4) contrary to the Act regulations. It also indicates that USAID preferred and supported the use of chemicals (P.3). USAID also recommended that chemical products for use in the experiment be procured from the U.S.A (P. 7). So the decision to try the chemical process in the lake had been made during the scoping process instead of identifying it as an area for study in the E.I.S.

The other alterations were not mentioned in details in the scoping process and whether they would be studied or not. The "no action" alteration was not considered and only two paragraphs in the scoping document just give the definition. No allocation of assignments was made. Interested parties were not identified neither is there mention of the Environmental Education process. The scoping process as contained in the scoping document falls far short of what the statute and international regulations require. It even falls short of its own objections which it fails to determine.

BASELINE STUDY

No baseline study was conducted to determine the state of the environment before the EI.S. If this had been done it would for example have indicated the amount of weed entering Lake Victoria from River Kagera. It would have documented the effect of the discharge of sewage, solid waste and industrial effluent into Lake Victoria from industries in Kampala, Jinja and other areas.

It would have determined the activities of the population around the Lake etc.[120]
The E.I.A process is less than completion without the Baseline study.

Nevertheless the EIS was carried out eliminating for the study 2 alternatives (P.16 EIS)

[120] Study P.2

1. Single method control
2. No action alternative

It is submitted that both the above alternatives were eliminated for no good reason. The study should have gone ahead to analyse these alternatives and present them to the decision maker at the end of the study to enable the decision maker determine on the issue.

The Impact Evaluation:
A detailed impact evaluation was made, it considered an integrated control programme involving physical (i.e. manual and mechanical), chemical control and biological control. The E.I.S did not take into account the consensus of the public as was required through the scoping process. There were no public reactions included in the EIS at all, to address the consensus and fears of the public.

The EIS did not look at the risks to the economy resulting from the chemical control method especially risk to the fish industry although it had considered the matter in rejecting the "no option" alternative that the need would choke the lake, reduce breeding grounds for fish and affect the first industry yet this consideration was not looked at in the EIS.

The risk of liability to the fish consumer on the export market was not looked at as well. The question of liability was not addressed as who would be liable for direct or indirect loss or injury resulting from the use of the chemical through spraying. The EIS annexed detailed directions from use of the chemicals lay the manufacturers limiting their liability and giving a warranty only if the user specially adheres to the directions for use. (Annex 5 to EIS) .98)

The Precautionary statements to 2, 4-D Anine Weld Killer states:- *Danger Hazardous to Humans & Domestic Animals, causes irreversible eye damage harmful if swallowed. May be fatal if absorbed through the skin or clothing.*

The EIS did not show how the public was to be protected against the above.

The EIS did not provide enough information on Uganda's International obligation relating to shared water resources. It was not shown whether or not Uganda could alone use chemicals on shared waters without express consent from the countries with which the water is shared. The EIS portrayed chemical control was safe but this was contrary to the scientific findings during the trials which showed that first application of chemicals was not enough to assess the environmental effects of repeated spraying over long periods of time (P.11 & 12 EIS).

The cost of chemical spraying did not include the hiring of aeroplanes, payment of crew and qualified herbicide operators nor did it take into account loss of revenue from fish, the cost of chemicals and other attendant costs. The EIS does not include the monitoring

component, i.e., there is no programme put in place for monitoring the effects of chemicals on the environment, the economy, social and cultural impacts, human health, etc. There is a must for every EIS. This is very essential in this study in that the process of spraying would go on for several years. In the Sudan and the U.S. it has been on for 40 years or so.

PUBLIC HEARING

As indicated above the E.I.A process so far had not involved the public at all. There had been no consultations, no public meetings, no soliciting of opinion etc up to this stage. This may be contrasted with Coca Cola Mbarara/Namanve projects where there was a lot of public soliciting of views of local people and other concerned parties. In the case of water hyacinth control programme, there had been a lot of public concern especially through the press and public meetings and seminars yet the EIS had so far ignored this. The Government on the other hand had seemed to have been pursuing it heavily from the use of chemicals with the President, Vice President, the Prime Minister, the Minister for Agriculture etc publicly advocating for use of the chemical to be sprayed even before the completion of the E.I.A. process

NEMA on the other hand was careful to ensure that the law is complied with and a decision is made based on scientific findings other than emotional or political considerations. It was with this background that a public hearing was called and held at Kampala on 30th July 1997. It was called, according to the NEMA report (Report on public views presented at the public hearing on E.I.S. from the Water Hyacinth Control Programme on Lake Victoria and other regional waters P.1) because it is a legal requirement under the NEA and guidelines and NEMA considered it a VERY CRUCIAL element of the EIA process because of its importance in soliciting wide views of the public so that the views can guide the authority in arriving at a fair and just decision on the E.I.S

NEMA named the following factors as those it required to look at in order to approve the project or reject it. (Report p.3)

a) technical soundness of the EIS recommendations.
b) socio-economic and ecological benefits of the proposals to Uganda.
c) long term sustainability of the proposals.
d) the soundness of the mitigation means to achieve the desired success.
e) the validity of identified mitigation methods.
f) aggregate public opinion of the proposal.

The expectations of NEMA from the public hearings included the following:-

a) an accurate and scientifically valid study description.
b) honest reference to literature cited.
c) honest reference to experiences in other parts of the world.
d) honest and frank discussions by participants.
e) avoidance of emotional outbursts.
f) due regard to alternative views and opinions

At the hearing there were technical presentations of the study findings by members of the EIA study team, which found the basics for the public discussions of the EIS. After the technical presentation the public was limited to comment. There were four participants (Report P.12) who supported the use of chemical control involving the use of candidate chemicals; only one of these participants was from the Lake region. The rest of the participants who presented their views were against the proposed use on EIS of chemicals from the control of the water hyacinth.
They gave a number of reasons among them;

- That many countries including USA no longer consider herbicide spray in weed control.
- Work in Sudan showed damage to environment
- The chemicals may increase the lake nutrients and worsen the problem.
- Scientific studies by NARO indicated that the growth of the hyacinth is stable.
- 85% of Ugandans drink raw water drawn from the lake
- Fish exports and local markets may suffer.

Other participants questioned the validity of the E.I.S

- The results of experiments were not valid
- That EIS did not consider community views i.e. those who eat the fish, drink the water
- The cost of chemical use was deliberately down played
- E.I.A did not include a risk analysis
- Safety of hyacinth infestation was not stated in E.I.S.
- The EIS completely ignored all major requirements from EIA as recommended by NEMA of description of what is proposed, existing and projected environment impact, lack of analysis of risks.
- E.I.S was a set of individual reports bound together and not integrated
- EIS did not provide for a monitoring strategy.

Other participants raised questions as to the reputation of Aquatics Unlimited (A.U)

- The lack of research on the use of water hyacinth for economic purposes e.g. Furniture making
- Lack of the Attorney General's opinion on the legal consequences resulting from the use of chemicals.

The above proceedings of the public hearing highlight one major factor, which is the crucial role of public participation in EIA process. Had the process in this case involved the public from the start the EIS would have addressed the questions raised and come up with answers or solutions. For example the question that the growth of the weed had stabilised. This would have led the EIS to consider it and the action option would never

have been dropped at the scoping stage. It would have been cheaper and time saving and also transparent.

NEMA's rejecting the use of chemicals as recommended in the EIS must have taken the public views at the public hearing seriously. This case study confirms that the E.I.A. process as contained in the NEMA statute and regulations made thereunder is effective. In this case it was effective through the use of checks and balances. The government on one side, together with the donors and A.U. support the use of chemicals, the public on the other and NEMA as the decision maker did not.
But as we had earlier noted the E.I.A process itself needs to be supervised. In this case NEMA should have insisted at an early stage that the public must be involved. That all the loopholes must be closed especially since it was aware of the public outcry. This would have saved the development time and money.

OBSERVATION AND RECOMMENDATIONS

Section 21 of the NEA provides that the Lead Agency in Consultation with the Authority will determine the extent of potential impact and level of assessment required and will decide the ultimate disposition of a completed E.I.S which if submitted is wrong the final say must vest in NEMA The Lead Agency as we have seen could also be a developer or an interested party as when the Minister of Agriculture was advocating for use of chemicals in the case study above.

In practice Ministries/Lead Agencies are reluctant to share responsibility with NEMA. Most of the time their decisions are based on considerations other than the environment.

Designation of a Lead Agency

The Act makes no provision for determining which agency should take the lead. In the case study, it was not very clear whether MAAIF was the Lead Agency or not. Under Sec. 19 (1) of the NEA, E.I.A. is initiated when the developer submits a brief to the Lead Agency. This seems to leave it open for the developer to determine the Lead agency on his own.

It is submitted that the brief should be submitted to NEMA then NEMA identifies the Lead Agency or Agencies and forwards the brief. It is also at times difficult in practical terms to determine the Lead Agency until the project brief has been analysed as several Ministries have jurisdiction on various areas of environment. In the case study – MAAIF is not the only Ministry concerned with control of water hyacinth. There is the Ministry for Health, Labour, Transport, Regional Co-operation, Water Resources, Energy and Environment. It therefore becomes difficult for a developer at this early stage to determine the Lead Agency.

It is submitted that the duty to determine the Lead Agency should rest with NEMA, which should establish the criteria of determining it. Pecuniary interest in a project should preclude an entity from undertaking the Lead Agency role. And where the Lead

Agency is the developer, NEMA should take over the role of the Lead Agency or shift to another government entity.

NEMA should reserve to itself the final determination for the Lead Agency in event of dispute. In addition to NEMA and the ministries, local government entities will play an important role in environmental impact assessment. Section 16 of the Act requires Local Environment Councils (LECs) to report to the district any activities likely to have significant impacts on the environment. In addition, District Environment Committees (DECs) must ensure that environmental concerns are integrated in all plans and projects approved by the district RC. (NEA Section 14(2)(b)). NEMA should clarify the relationship between this DEC role and the EIA process, taking care to ensure that the functions are complementary, not duplicative. DECs could assist in the preparation of project briefs submitted to NEMA when the district is the developer. DECs also should be consulted during the EIA process for projects planned within the district.

The Project Brief

As already submitted, schedule 3 of the NEA needs to be amended to include projects not envisaged and also to exclude very insignificant ones. There is need to include in the brief a project justification documenting the need for the project and demonstrating why the proposal is best suited to fulfil that need, it should also be required to assess compliance with relevant laws and policies. If mitigation measures have been developed, they should be set out in the project brief.

Public Involvement

As already noted in the case study public involvement is critical in identifying a project's potential environmental impacts and possible mitigation measures. As the users of potentially affected resources, local people are quite knowledgeable regarding their sustainable use. Often, they will be able to provide information regarding the local climate, ecology, soils, plants, animals and insects which can be used to assess the "baseline" conditions from which any impacts may be measured. Furthermore, public involvement gives those who will be affected by a project an opportunity to shape its construction and operation, thereby ensuring a more harmonious long-term relationship between the project and the surrounding community.

Involving the public may increase the time and resources to perform and review an EIA. However, failure to involve the public in impact assessment can also result in increased costs to developers.

Public participation should occur at several stages in the EIA process. First, the public should be accorded an opportunity to comment when, based on review of the project brief, the lead agency determines not to require an EIA. The public may bring to attention issues not apparent from the project brief. If the local community has grave concerns over the potential impact of the project, the Lead Agency should be aware of this, and if appropriate, require additional investigation.

Second, public participation is critical during the scoping process to ensure that issues concerning the community are addressed in the EIA.

E.I.A's ON POLICY AND LAW

A close look at schedule 3 of the NEA provides no clue as to whether in general terms Government Policy or Law is subject to E.I.A. However there is need to address this problem. The case study is a good example. This was a government policy subjected to EIA. However other policies in many countries including Uganda are not subject to EIA whereas their implementation requires it. For instance degazzetting a game reserve or forest reserve, creating a National Park, land tenure policies etc. Policy EIA's would present an opportunity to examine national and regional development proposals before decisions are made that lead to specific projects.

Policy EIA would mostly focus on broad issues; they do not have to include detailed information to the same extent as that contained in the project specifically E.I.A's.

CONCLUSION

The E.I.A. process is an essential part of environmental protection. It has over years been improved upon. It has in many countries been made a legal requirement detailing every stage of the process.

However, it has to be made to work. For example in this case study the developer should never have been allowed to flaunt regulations. The Government and the Lead Agency should never have taken sides, because in doing so they fail to be objective and become biased. If this bias is coupled with donor pressure, corruption, political considerations then there is a danger that in some instances the EIA process may be used for interests other than the protection of the environment, which should never be the case.

The only sure protection and safeguard is the open and full participation of the public, not only at the public hearings but right from the start of the E.I.A process.
The process is not perfect, but is certainly being perfected.

ANNEX 7

ENVIRONMENTAL CRIME AND WHY IT SHOULD BE PROSECUTED.

BY: Doris Akol
Environmental Law Resource Centre.

Topics to be Covered and Examples of Environmental Crime

- Impacts of Environmental
- Crime Reasons for Environmental Crime
- Objectives and Goals of an Environmental Criminal Enforcement Program
- Prosecutorial Factors

Impacts of Environmental Crime Violation could be local, but impacts felt long distances away. Violation could be committed today, but impacts not realized for generations. A recent government study concluded that environmental crime syndicates garner between $22-31 billion US/annually.

Environmental crime: Compromises the natural heritage and ecological integrity of the planet, It threatens the air we breathe, the water we drink, the food we eat, Unfairly disadvantages those businesses complying with environmental laws, and Flouts environmental law as well as many other laws.

Reasons for Environmental Crime

Environmental crimes are like any other crime: They are motivated by

1. Lying: To Regulators or Customs Officials.
2. Cheating: Not incurring costs paid by businesses disposing waste properly or poaching wildlife.
3. Stealing: From the customer who paid for proper disposal or taking endangered species illegally.

Environmental crimes are usually the result of calculated business decisions either to make money or save money.

Goals of Environmental Goals of Environmental Criminal Enforcement

- To protect human health, our natural heritage and the environment.
- To punish and deter the most egregious environmental offenses.
- To level the economic playing field, which protects those who comply with the law.
- To support, and be integrated with, the overall environmental mission of the department.

Objectives

(i) General deterrence. More than just the cost of doing business.
(ii) Prosecute individuals at the highest level of organizational authority responsible for the crime.
(iii) Clearly articulated criteria and priorities for prosecutorial decision-making.
(iv) Effective communication with the public and regulated community.

Prosecutorial Criteria

1. Environmental Harm

- Is there actual or threatened environmental harm.
- Examples of Environmental Harm
- Killing or trafficking endangered species.
- Harm to the public.
- Destruction of habitat.
- Significantly exceeding regulatory standards and requirements.
- Falsifications of reports, analyses, manifests, applications, etc.
- Includes threatened harm

2. Culpable Conduct

- Repeat violators.
- Flagrant disregard of the law, the community, and/or the environment.
- Intentional conduct.
- Conspiracies and criminal syndicates
- Trafficking of endangered species.
- Illegal waste hauling.
- Environmental crimes committed among other crimes.

These are very important cases for which there is a lot of public support. Keep the defendant the bad guy, not the government. Successful cases breed more cases.

B: INITIATING THE INVESTIGATION:- Getting Off to the Right Start

(i) First step – know the law what are the applicable domestic statutes and regulations. What international treaties apply in Uganda – e.g., Basel Convention, CITES, CBD, etc
(ii) Encourage outreach with other lead agencies. Why outreach is important – sources of cases

Agencies with which outreach programmes necessary

- Regulatory Agencies
- Citizens/NGOs
- Current or Former Employees
- Business Competitors
- Environmental Contractors/Professionals

Case selection critical

- Type of Conduct – Start With Most Egregious Conduct In Early Cases
- Actual or Threatened Harm To Public Health or The Environment
- Conduct v. Harm -A Sliding Scale
- Combining Environmental and "Traditional" Crime
- Is There An Environmental Violation?
- How Would Case Fit Into Overall

Environmental Enforcement Program? Questions to be considered

- How Would Case Fit Into Overall Criminal Enforcement Effort?
- Worth Resources Even If Crime Committed – Seriousness/Harm?
- Parallel Civil and Criminal Cases

When should a Prosecutor get involved?

- Early Is Good
- Can Help Shape Investigation
- Know Case Better
- Acquire Broader Perspective And Education Over Time
- Do You Have Right Mix of Investigative and Technical Resources On Team?

Early step – reviewing records

- Inspection Reports
- Permits or lack of Permits
- Financial Records
- Laboratory Reports
- Shipping Records

Who is the target?

- Low level workers
- Supervisors/managers
- High-ranking officers or owners
- Individuals or the business itself or both

Next steps

- Surveillance
- Interviews
- Undercover Operation
- Audio Recordings
- Searches
- Document Requests

SEARCH AND SEIZURE IN ENVIRONMENTAL CASES: TIPS AND TRAPS

1 Bad Things That Can Result From A "Bad" Search…

- Evidence can be suppressed
- A guilty person might go free

- With people getting more litigious these days, the investigating agency/agent might be sued

2 Remember always that each person enjoys the Constitutional Right to Personal Privacy

- Established for all persons in the Constitution, including right not to be subject to searches of person, home or property, seizure of private possessions or violation of private communications;
- BUT remember also that Constitutional rights may be limited by law of general application, provided such limitation is reasonable, justifiable and does not negate essential content of basic right to privacy

3 Criminal Procedure Regulates Search and Seizure

- Standard is "reasonable belief" that a particular article located on certain premises is connected with the commission of an offence;
- Objective test
- Information justifying suspicion should be placed before Justice of the Peace justifying him/her to issue a search warrant authorizing seizure operations
- Exigent warrant less searches also authorized in narrow circumstances
- The invasion of an individual's reasonable expectation of privacy as the result of state action.
- "Reasonable expectation of Privacy ("REP")
- "State action"

4 **Search Warrants should be in Four Parts**:

(i) The warrant itself -usually a form, looks like a cover sheet
(ii) The affidavit-outlines the p.c.; written by an agent
(iii) Attachment A (description of the place to be searched)
(iv) Attachment B (description of the things to be seized)

The deponent must ensure that each part is correct down to the smallest detail

5 Affidavit Must Contain:

- Experience and knowledge of the affiant;
- Explanation of relevant laws and regulations;
- Precise description of place(s) to be searched and things to be seized; and
- Narrative of facts (not conclusions) establishing probable cause.
- Try to draft a document which any agent could read and have no doubt about where to search and what to seize

6 What Deponents to affidavits must know:

- DON'T hide anything relevant: be absolutely candid;
- DON'T try to write persuasively or add editorial comments about what you think - just state facts;
- DO describe the sources of all factual information (who saw it, who said it, who told them about it); and

- DO describe your CI and his/her situation completely.

7 Where a corroborating informant was used, include:

- When s/he started working for government and why
- The corroborating informant's criminal history, if any
- The corroborating informant's motivation for cooperation
- Monies paid
- Promises of immunity or non- cooperation
- Anything else
- Corroboration of information provided by the corroborating informant
- Excerpts of transcripts from tapes made by the corroborating informant, etc.
- Any and all other corroboration
- Why agent believes the corroborating informant is reliable and credible

8 Search Warrant Affidavit Must Be

- CLEAR
- CANDID
- CONCISE
- COMPLETE

9 More Affidavit Drafting Tips

- Aim to be clear, concise and logical; use simple, short sentences whenever possible;
- Pretend you are explaining the case to a 12-year old; assume no prior knowledge by the reader;
- Make sure every single sentence is absolutely true and accurate; and
- Always get a prosecutor to review and approve it prior to presenting to the magistrate.

10 Describing the Premises

- The more detail the better: goal is to write a description that any agent could use to find the correct premises; include everything you can about the address and physical description of the premises;
- If a rural property, include driving directions from nearest city or town; and
- Use "premises", not "house," and include "appurtenances and outbuildings" whenever possible. Double-check everything!

11 Describing the Items to Be Seized

- Objective: write this so that nothing is left to the discretion of the searching officer.
- Describe as precisely as possible the actual items you hope to find; and
- Add the phrase "together with fruits and instrumentalities of the crime and all other property constituting evidence of the crime of_____."
- Review affidavit drafts carefully – ensure tips suggested earlier are followed;

- Ask all necessary questions to satisfy self that the affidavit is as perfect and well-justified as it can be
- Don't be rushed into approving an affidavit that isn't ready
- Ensure descriptions of premises and property are complete and bulletproof
- Ensure agency is prepared to handle live or dangerous evidence items

NB: The "Good Faith" Exception Does Not Apply:

- If the warrant was obtained using a deliberately or recklessly false affidavit;
- If the magistrate was not neutral or objective in approving the warrant; and/or
- If the warrant was "so lacking in indicia of probable cause as to render official belief in its existence entirely unreasonable.

12 Executing the Search Warrant

Be aware of time, and time of day, legislative limits of when the search warrant can be executed, if any.

Knock and announce, unless you have received a "no-knock" warrant (rare in wildlife cases)

If no one answers, you may break in

Give or leave a copy of the warrant face sheet and a receipt for all property taken;

Officer who applied for warrant must make an inventory of seized items and "return" it to the magistrate

13 Search and Detentions of Persons Present During Execution

- All persons present when you enter may be required to assemble for purposes of officer safety and to prevent destruction of evidence;
- Residents may be detained for the duration of the search;
- You may pat down any person you reasonably believes poses a threat;
- Can't search people unless warrant specifies or you arrest them
- Can't search containers in possession of visitors unless consent or other warrant exception exists

14 Warrant Execution Tips

- Assemble everyone present in one place; determine who leaves, who stays and who needs a pat-down;
- Ask resident to collect all cash and jewelry and put them
  On the kitchen table;
- At end of search, ask person to confirm before two officers that none of these has been removed;
- Locate all weapons, ensure safe, store in plain view;
- Give copy of warrant to resident;
- Photograph/videotape the search, if possible.
- Put one person in charge of collecting and logging in evidence found by other searchers;
- Assume everything you say during search will be recorded and played back in court

- Refer any lawyers to the prosecutor
- At end of search give inventory to resident (or leave on premises)
- Don't delay in making the return to the judge
- Keep chains of custody short and strong
- No press releases or media comments - period.

15 Prosecutor's Role after SW Execution

- After agents organize and catalogue seized items, review them in presence of agents ASAP;
- Never take possession of evidence yourself
- Decide what items should be returned to target and ask agents to do so as soon as possible;
- Ensure warrant is returned promptly and all procedures are followed;
- Encourage swift completion of agent reports about the search ("if you kill it, you must eat it")

16 Final Thoughts:

- A well drafted and executed search warrant can forestall a suppression hearing and persuade the defense attorney that the rest of your case is equally strong, thus encouraging a plea; the reverse is equally true;
- A search warrant is like an airplane that you will eventually have to pilot (in court); best to pr-e-e flight it as thoroughly as possible before you have to take off in order to avoid a crash
- The more you work with agents during the search warrant preparation phase, the better agents they will become

TAKING AN ENVIRONMENTAL CASE TO TRIAL

1. Unique Factors Involved In Trying The Environmental Case

- The accused is often not a typical "criminal" and may have no criminal record
- Businessperson (in pollution cases) unhappy with "excessive governmental regulation;"
- Wildlife collector or dealer who believes s/he knows more about species preservation than agents;
- Less willing to acknowledge responsibility and enter a plea

2. Public Perception of Environmental Crimes Can Vary

- "I think anyone that kills a snake deserves a medal not a criminal citation!"
- "Oh, I just love animals so much that I could not possibly be fair and impartial as a juror in a wildlife smuggling case!" -comments from potential jurors in the same reptile smuggling case

"Folks, when I was a kid we shot these plants with shotguns just for fun!" -defense lawyer to jury during closing argument in a cactus smuggling trial

3. New Environmental Laws Are Subject To Substantive Challenges

- Constitutionality
- Interpretation of language, issues, term
- Judges may feel these cases are "clogging" their dockets – not as important as other more common criminal cases, leading to…..?
- Environmental Laws Unfamiliar to The Judge, Defense Attorney (and maybe to you, too!)
- Can lead to reluctance to charge, try, hear or plead the case;
- Can lead to incorrect legal rulings by the Court;
- Can lead to insufficient sentences by judges who don't realize context or severity of the criminal conduct.
- Can lead to unusual constitutional challenges and defense theories
- Subject of Expert Witness Testimony Can Be Unusual…
- Mercury poisoned? Who's yer daddy?
- More Frequent Need For Expert Testimony To Prove Your Case
- To prove nature, character, location, effect of substance at issue;
- To prove species of wildlife at issue;
- Requires you to become familiar with complex scientific issues and evidence rules regarding admissibility of expert opinion.

4. Some Ideas For Counteracting These Problems

- Identify the need for an expert early, identify the expert early and work on understanding the relevant issues;
- Where possible, use the media to publicize nature and seriousness of these crimes;
- Use NGOs for help in finding experts, publicizing seriousness of crimes and helping court understand issues;
- Don't be shy about educating the defense attorney in letters and memos;
- Use briefs and memos to educate the court.
- But most of all, convince yourself that these cases are worthy of your time and effort.

5. Deciding to Prosecute: Four Basic Questions

1 Should Anyone Be Charged with a Criminal Violation?
2 If so, What Charges Should be Considered?
3 Who should be charged? Should Anyone Be Charged?
4 What factors to consider?

6. Main Factors to Consider in the Exercise of Prosecutorial Discretion

- Evidence of Significant Environmental Harm
- Culpable Conduct (Intent or Knowledge)
- Does the conduct represent a trend or common attitude in the regulated community?
- If so, one case may have great impact even though no significant environmental harm from the one case.
- Look to cumulative impact

- Repeat Violations-but can't substitute for evidence beyond a reasonable doubt.
- Tampering with sampling equipment-goes to the integrity of the program. Inherently criminal.
- Operating without a permit Common Factors/Defenses in Environmental Crimes Cases
- Carefully consider advice of Counsel
- Evaluate each on a case by case basis

7. What Charges should be considered?

In addition to environmental offenses, consider whether traditional criminal charges will better capture the overall fraudulent conduct surrounding an environmental crime.

8. Should Business Organizations be charged?

Basic Principle-Business Organizations should not be treated differently than an individual- but exceptions apply.

9. Business Organizations: When Not to Charge

- If business organization is bankrupt, the prosecution may be a hollow victory. May be better just to pursue individuals-avoid a split verdict.
- Rogue Employee-If company employee is acting outside scope of employment and act is not for the benefit of corporation. But scrutinize company's representation about employee. Is he or she being set up to take the fall for the company?
- When trying to change corporate culture, trends or industry practice.
- At sentencing may be able to craft conditions that promote better corporate compliance.

10. Who Should Be Charged:

(i) Executive of Business Organizations

- Charge the Highest Ranking Individual in a Corporate who had Actual Knowledge of the Violation and Either Directed the Violation to Occur or Acquiesced in its Occurrence. This is intended to provides for Maximum Deterrence
- Penalizes the Ultimate Decision Maker(s)
- Caution-Deciding Which Executives are Culpable Can be a Difficult Decision

(ii) Low Level Employees of a Business Organization

- Make Better Witnesses than Targets
- May Require Immunity
- Charge only if Fail to Cooperate and/or Lie to Investigators

Where it is alleged that an accused on diverse occasions during any period committed an offence in respect of any particular person, the accused may be charged in one charge with the commission of that offence on divers occasions during a stated period.

How to Charge an Environmental Violation Occurring Regularly over a Long Period of Time

- Charge Daily Violations only if there are a small number of 20-30 days.
- Charge by the week or month if activity occurs on a regular basis over 3-6 months.
- Charge by the month if the activity occurs on a regular basis for over six months.
- Avoid Charging by the year if at all possible.

How to Charge an Environmental Violation that Occurs Only Once at an Indefinite Time

- Consider non-criminal sanction if no significant environmental harm
- Chose Time Period Consistent with Proof and Does not Run Afoul of Variance

PRESENTING EVIDENCE AT TRIAL

Items to Be Covered

1 Key principles for presenting evidence during an environmental trial
2 Common types of environmental evidence
3 Problems and pitfalls to avoid

Key Principles

1 Know your evidence fully!
2 Is it relevant and can it be authenticated?
3 Work with your experts

Points to follow

(i) Simplicity and clarity
(ii) Use your most compelling exhibits frequently to keep them before the trial of fact.
(iii) Research the other side's evidence
(iv) Is The Evidence Relevant?
(v) Does the evidence tend to make the existence of a material fact more or less
(vi) Probable than it would be without the evidence?
(vii) Always ask: why do you want that piece of evidence admitted? What element does it prove?
(viii) How Do You Prove Reliability?
(ix) The methodology has been tested.
(x) The methodology has been subjected to peer review.
(xi) There is a known and low margin of error.
(xii) Accepted technique in the scientific community.
(xiii) In other words, is it good science?
(xiv) Lastly, was it appropriately applied?

(xv) Is Evidence Prejudicial? All evidence is prejudicial . . .but although relevant, is probative value outweighed by danger of unfair prejudice, confusion or misleading the trier of fact?

Common Types of Environmental

- Evidence
- Photographs
- Videos
- Documents
- Samples
- Laboratory Analyses
- Computer Records
- Summaries

Photographic Evidence

(a) Provides viewer with context and perspective.
(b) Important tip; Go from wide angle to close up.
(c) Film is cheap. You cannot have enough photographs. Remember that a picture is worth 1000 words.
(d) Photographs can be used to cure gaps in evidence.

Videos

(a) Often used by government during the execution of a search warrant.
(b) Benefit: Gives a fuller picture of a scene than a still picture.
(c) Drawback: Can inadvertently capture more than you want.
(d) Dilemma: should you keep the sound on or sound off?

Samples

(a) Foundation question: Is it representative?
(b) A representative sample means a sample of a universe or whole which can be expected to exhibit the average properties of the universe or whole.
(c) How do you establish authenticity?
(d) The log book
(e) Every field inspector keeps a log book.
(f) The log book should detail all relevant information about the sampling: where, what, when, how, etc.
(g) The inspector should ALWAYS assume that the log book will be scrutinized by court and defense attorneys.
(h) Chain of Custody Using the Actual Sample as a Courtroom Exhibit
(i) Can be very dramatic. Example of a Parrot brought as an exhibit to court that kept saying funny words to the magistrate e.g. “Who’s your Daddy”
(j) Make sure to comply with all applicable environmental, safety and transportation regulations.
(k) Using the Actual Sample as a Courtroom Exhibit

Laboratory Analyses

(a) One of the most compelling parts of the government's case.
(b) A lot of defense issues. So expect a fight!

Points to note in using Laboratory Analyses

- Work with the analytical chemist.
- Understand the methodology.
- Have it explained to you and trier of fact in simple terms.
- Were all steps followed? If not, why not?
- Were holding times met, or exceeded?
- Does the laboratory have proper certification?
- Laboratory Analyses (continued)
- Were quality control/quality assurance (QA/QC) procedures followed?
  - Instrument calibration
  - Method spikes and blanks
  - Is the chemist's work being checked by someone else?

Computer Evidence

(a) Same issues of foundation, relevance, and authenticity.
(b) Is computer retrieval methodology reliable?
(c) Can you prove computer documents were not tampered with?
(d) Chain of Custody
  - Establishing who had access to computer.
  - Proving Computer Documents Not Tampered With
  - Maintain tight chain of custody and security.
  - Access to Computer Before Retrieval
  - Still must prove that defendant had sole access to computer.
    - Might be in his/her office, but did any one else use it?
    - Establish by criminal investigation and witness interviews.

(e) **Computer** Document Retrieval
  - Use software widely accepted by the industry: ENCASE.
    - www.guidancesoftware.com
    - Will produce a mirror image of hard drive in about 30 minutes. Won't interfere with ongoing business.
    - Documents can be printed or exhibited in court electronically.
    - Computer Retrieval Software assigns a hash algorithm number for the bytes on the hard drive.
    - Determined when mirror image of hard drive accomplished.
    - Any tampering of documents would alter hash algorithm number.

Summary Exhibits

(a) Have a witness or witnesses establish all the underlying evidence and then produce a summary exhibit of that evidence.
(b) A powerful exhibit that's easy to follow and understand.

Common Evidentiary Problems

(a) Witness not fully familiar with, and in command of, the evidence.

- Too much time had passed.
- Witness did not fully prepare.
- Wrong witness; e.g., chemist can't testify about sampling episode, or prep chemist different from analytical chemist.

(b) Opposing counsel makes witness defensive about:
- Not following what is characterized as "required" methods.
- Overstating impacts of slight deviations, discrepancies and/or omissions.
- These things happen.

(c) Counsel makes it more technical and complicated than it is.

(d) Divide and conquer tactics of Defense Counsel, e.g.
- Attack the sample as not being representative through sampling witness.
- Then have analytical chemist testify that if field sample not representative, analyses not good.

SENTENCING IN ENVIRONMENTAL PROSECUTIONS Prison, Fines and Beyond

1. Sentencing objectives
- Punishment
- Deterrence
- Restitution To Victims
- Protection and Improvement of the Environment and Human Health

2. Sentencing options
- Confinement in prison, jail or half-way house
- Fines and Forfeiture
- Restitution/Medical Monitoring
- Probation/Community Service
- Imposition of Environmental Management induced monitoring of Company Systems
- Public Apologies
- Supplemental Sentencing (for corporate bodies)

3. Obtaining the right sentence
- Educate judge by stressing factors that led to case investigation/prosecution
- Deliberate, intentional conduct – lying,
- Cheating/stealing/money
- Actual or threatened harm – use
- Experts to explain/quantify harm or loss
- Put human face on victims if possible
- Conduct's impact on regulatory system
- Stress defendant's education, training or position
- Use same factors in seeking high fines
- Reward defendants who cooperate
- Long term educational effort – more cases, more progress

4. **Case specific factors justifying prison time**
    - Actual serious environmental contamination from discharges, releases or emissions
    - Market value or protected status of wildlife or plants taken illegally and the financial motivation behind the taking.
    - Substantial likelihood of death or serious bodily injury or risk of disease or infestation
    - Crime resulted in substantial clean up costs, community evacuation or utility disruption
    - Conduct either deliberately violated a permit or was deliberately done without required permit
    - Accused used special skill or training, held position of trust, or was leader of others in criminal activity

5. **Supplemental sentencing**
    - Prison time and fines are aimed at punishing the guilty and achieving general deterrence. Supplemental sentencing components are specific activities aimed at the environment and human health

6. **Types of supplemental sentences**
    - Future Monitored and evaluated Pollution Prevention and Pollution Reduction
    - Environmental training/education for regulated businesses or community
    - Funding environmentally beneficial projects performed by third parties

7. **Supplemental sentencing concerns**
    - No Reduction in Jail Time or Who Gets Charged
    - Who Identifies and Selects Projects Or Decides Who Gets Money for funding projects – Concerns about favoritism
    - Who Monitors for Government How Money Spent by Third Party which received the funding.

8. **Final result at end of case**

You should be able to say why this prosecution both punished the guilty and helped protect the environment. The case should contribute to both the overall criminal enforcement program and the regulatory enforcement effort. You should therefore attempt to combine prison, fines and supplemental sentencing to achieve these objectives.

ANNEX 8

CLOSING REMARKS AT THE TRAINING WORKSHOP ON ENVIRONMENTAL LAWS FOR CHIEF MAGISTRATES IN UGANDA.

BY HIS LORDSHIP, HON MR. JUSTICE VINCENT TIWANGYE ZEHURIKIZE, RESIDENT JUDGE, JINJA HIGH COURT.

Your worships,

Distinguished participants,

The organizers of this workshop,

Ladies and Gentlemen.

I am deeply honoured to officiate at the closing of this important workshop for Chief Magistrates where important topics in the area of environmental law have been covered. .

I commend you for having completed this workshop and for having fully participated in it.

This workshop was organized by Greenwatch in conjunction Judicial Studies Institute.

I am made to understand that the workshop was intended to, inter alia, enhance and strengthen your capacity and skills in adjudication of environmental cases. I hope this workshop has presented the opportunity for you to generate a common understanding of the Environmental Impact Assessment process and Compliance and Enforcement of Environmental Laws.

Constant provision of training in new areas gives an opportunity to Judicial Officers to not only update their knowledge but ensure that they make decisions based on latest knowledge.

I must stress that, however just the laws and however efficient their enforcement, we also need to have the people on our side and take their interests as paramount. We still face the challenges; the onus is on us in civil society to reach out. We have to get to the industrialists, aggrieved local residents and the relevant government departments and together move forward.

Environment and natural resources are directly linked to the survival of our people who in the majority live in the rural areas and hence directly interact with nature on a daily basis not only for their livelihood but more importantly, their survival.

It is therefore important that Judicial Officers whose mandate includes resolution of

disputes arising from environmental issues which may include: disputes over land ownership, protected areas, access to water, wetlands and open water, fishing rights, to mention but a few are well versed with the skills and tools to handle such disputes and also enforce environmental laws and requirements.

In Uganda we face the same challenges of sustainability as the planet as a whole- job creation without polluting the environment; environmental management without destroying the industrial base and the jobs that go with it; agricultural production without depleting natural resources; wilderness conservation without putting flora and fauna ahead of human beings; eco-tourism without putting undue pressure on the wilderness. One can go on and on. Sustainable development is the most delicate balancing act, whatever level you approach it. As Judicial Officers, practicing laws, administrators we are all now faced with this given challenge. We need to keep the scales of justice balanced. Only then shall we attain environmental justice and with it sustainable development

In my view, the timing of this training would not have been more opportune as we are all aware that matters relating to the proper management of the environment in Uganda and the world over are of great importance for the sustainability of scarce resources not only for ourselves but for future generations.

It is my sincere hope, that the skills and experience, you have gained during this workshop have enhanced your skills. I urge you put in practice what you have learnt.

I also sincerely hope that the workshop has enabled you to understand and conceptualise the legal and institutional framework governing the environmental management in Uganda, as well as the procedural aspects of the same. This should be a welcome insight action.

Your program shows that the workshop has been highly interactive and participatory with group discussions on the Environmental Impact Assessment the workshop was aimed at providing you with a practical perspective of this as well as compliance and enforcement aspects in Uganda.

I urge you to take back all the materials and the knowledge acquired through this workshop and to not only put them to good use but also share it with others so that you are able to handle complex environmental matters more efficiently and expeditiously as a result of this training.

In conclusion, I would like to express my sincere appreciation to the organizers of this workshop, **Greenwatch, Judicial Studies Institute** and the **John D. and Catherine T. MacArthur Foundation** for sponsoring this workshop. I wish to give special appreciation to the staff from Greenwatch and NEMA resource persons, for their

dedicated efforts in making this workshop a success. I urge them to continue with the good work

I also wish to extend my thanks to you the participants for being able to find time from your busy schedules to attend this important workshop.

Lastly, I wish you all safe journey back to your respective stations.

With those few remarks, **IT IS NOW MY PLEASURE TO DECLARE THIS WORKSHOP OFFICIALLY CLOSED.**

ANNEX 9

GROUP EXERCISE

CASE STUDY 1- Masindi Cassava Starch Factory; Adding value in the agricultural sector

This particular facility is located approximately 10 km from Masing Town and its located very close to the many farmers that it serves. The facility is co-owned by farmers. Cassava is brought in from farmers and is washed using water pumped from Lingona stream and 1000kg of cassava is milled on a daily basis;

Process of starch production

- The cassava that is delivered to the facility is fed into a crusher together with the outer-skin;
- The milled cassava is then transferred to a mixer and water is added;
- After mixing, the new product is sieved so that unwanted products are removed;
- The sieved mixture (supernatant) is then left to settle for between 4-6 hours;
- The chamber in which the supernatant settles has got a number of outlets. The tap on the top is leased such that water on top of goes out into a soak pit;
- The starch is then left to harden for 5 hours;
- The starch is then taken outside and dried in the open air;
- After drying, the starch is taken to a maize mill for grinding;
- The milled product is then packed and ready for sale;

Notes and Cautions

1.These case study notes are based on information that is sometimes conflicting or incomplete.

Background Information; commercial processing

In this case study, the site is located within Masindi District . The District has been selected based on its level of production and utilization, industrial development, capacity for expansion and potential to stimulate economic growth and trade with potential spill over to other districts in future activities. Commercial processing is a necessary requirement for successfully intensifying and commercializing agriculture. Processing promotes food security by reducing perishability and increasing transportability of food stuffs. High-quality processing is also necessary to successfully export agricultural products at premium prices.

General Environment Issues;

Sources of direct adverse impacts- commercial-scale agricultural processing is a type of manufacturing. These operations are often the largest users of water, energy in rural areas they are also large producers of waste water and other manufacturing waste products. These wastes have adverse impacts on community health and workers in the plants.

Sources of indirect adverse impacts – commercial-scale agricultural processing creates increased demand for a particular type of crop. This may cause changes in cultivation patterns and land use in the areas supplying the factory. Issues of concern include increased mono-cropping, soil depletion, inappropriate use of agricultural inputs, potential for increased erosion, increased dependency on a single crop etc.

Beneficial impacts – commercial agricultural processing should have beneficial impacts. Economically, it can create a more reliable and larger-volume market for farm products. Processors may invest in rural infrastructure improvements, such as roads. Processors may introduce improved agricultural technologies as a way to increase quality of their feedstock. These technologies may increase the productivity and sustainability of local agricultural practices.

Assignment –Case Study Itinerary

The objective of the project is to increase rural incomes by supporting a value-added agro-industry and increasing agricultural exports. Starch from cassava has been identified as a competitive industry for Uganda.. Although it competes with tobacco. If this plant is successful, government intends to construct cassava starch plants in a number of regions.

Recall that an environmental review of ANY proposed project requires evaluation of the baseline situation in the area, and an evaluation of how the proposed project would affect this baseline. Participants will therefore be expected to carry out a *hypothetical* survey of the existing environmental, social, and economic conditions and trends in the case study site (baseline).

Environmentally sound design requires that environmental effects of a project be considered together with the project's economic and social effects. Thus, the environmental impact assessment process involves gathering and analyzing social and economic data, as well as environmental.

The group will be able to discuss the process the company went through to identify the location of the factory, including socio-cultural, economic, and environmental issues they considered.

(1) prepare an environmental impact assessment report for this project;

- Obtain basic environmental and social information regarding (i) the immediate physical and social environment of the factory and (2) the physical and social environment of the area that supplies the factory.

- Understand the basic steps of the production process and particularly the major inputs required by the production process; (2) the disposal of wastes; (3) exposure of workers to waste, inputs and processes (if at all applicable) (4) prepare an environmental mitigation and monitoring plan that is appropriate to the type and level of impacts that are likely to be caused by such a project.

Mitigation Issues
Mitigation measures should be designed to address the specific environmental impacts identified by the team, including direct and indirect impacts.

CASE STUDY 2-Fish ponds in Apac District.

Notes and Cautions
1.These case study notes are based on information that is sometimes conflicting or incomplete.

2.These notes are NOT exhaustive. They are intended to be a starting point for field data collection and subsequent analysis by participants.

Background; Lake Albert covers a total area of 989 km^2, of which 611 km^2 forms the project area. It falls between latitudes $13^o0'$ and $13^030'$S, and longitudes $33^o50'$ and $42^o20'$E. The watershed of the lake is endowed with vast natural resources vital to the livelihoods of its 55,000 human inhabitants. Over the past 20 years, the catchment has experienced escalating rates of environmental degradation due mainly to the following factors: deforestation, soil erosion, siltation declining fish populations from over fishing.

Because of the above problems, the community expressed concerns which include among others;

- Degradation of natural resources from poor land-use practices which have led to:
    - declining agricultural productivity and food insecurity
    - decreasing incomes to meet basic household needs
    - acute shortages of wood for energy and building needs
    - sedimentation of the lake with dropping fish catches
    - increasing dependence on external assistance in times of drought

Assignment
Participants will conduct an environmental review of a hypothetical project to be implemented within the water shade of lake Albert;

The fish ponds are located within the water shed of Lake Albert. This is project being undertaken to improve on rural household incomes. In the creation of the ponds, water has been diverted and dammed into the fish ponds.

Recall that an environmental review of ANY proposed project requires evaluation of the baseline situation in the area, and an evaluation of how the proposed project would affect this baseline. Participants will therefore be expected to carry out a *hypothetical* survey of the existing environmental, social, and economic conditions and trends in the case study site (baseline).

Environmentally sound design requires that environmental effects of a project be considered together with the project's economic and social effects. Thus, the environmental impact assessment process involves gathering and analyzing social and economic data, as well as environmental.

Participants are expected (1) identify alternative scenarios-these must meet the project's objectives; (2) prepare an environmental impact assessment report ; and (3) prepare an environmental mitigation and monitoring plan that is appropriate to the type and level of impacts that are likely to be caused by such a project. During this analysis, participants should note any information that is unavailable, but that they would need to make the most informed decision possible.

Fisheries sector as a social, cultural, economic and nutritive resource.
The communities in this area have relied on fish caught from the lake but with the decreasing levels, there is need to start aquaculture. Fish is an important activity, as it is important in the local diets, it is traded in local markets and regional markets.

Fish is the main source of protein in the diets of people in this particular area. However, fisheries for subsistence have been declining due to increasing population leading to over-exploitation, silting due to clearing swamps, important breeding areas for fish.

Mitigation measures

This project is intended to increase employment by transforming the lives of people in this area. Mitigation measures should be designed to address the specific impacts identified by the team.

The team should consider mitigation measures for the direct and indirect adverse environmental effects; and mitigation measures which respond to effects on the social and cultural landscape.

CASE STUDY 3- Construction of the Busiki –Namutumba Road

Project Summary

The Project activity involves the construction and tamarking of the Busiki-Namutumba Road with a distance of 21 km. The project is aimed improving the lives of 360 families. The project activities are anticipated to take four months. The project is located approximately 30 km from Iganga.

- The objective of the project is to improve access to Namutumba where there are schools, hospitals, Markets;
- Road to Busiki trading centers;
- Improve access to maize mill at Namutumba;
- Road to Namutumba District head quarters

General Environment Issues

Activities associated with feeder road rehabilitation:

- ***Sources of direct adverse impacts***- Limited road widening typically involving cut and fill on sides. Potential environmental impacts include loss of vegetation and increased soil erosion and minor failures of cuts until stabilized with vegetation;
- Clearing of right of way. Potential environmental impacts include loss of arable land, loss of vegetation and possible soil erosion during and immediately after construction;
- Drainage improvements such as road side ditches and cross drainage culverts. Potential environmental impacts include concentration of flow causing gully formation and erosion at culvert outfalls;
- Improved road surface material (gravel) and grading in some locations. Potential environmental impacts include water ponding in abandoned borrow pits and disturbance to cultivated fields and homesteads due to gravel excavations creating breeding grounds for mosquitoes.

Sources of indirect adverse impacts – After improvements are completed, the inevitable increase of traffic on the community roads will likely result in dust, noise and possibly traffic accidents. In addition, road rehabilitation can result in increased population concentration along the road.[121]

Beneficial impacts – improved access to schools, commercial facilities and water for irrigation purposes.

Assignment
Participants will conduct an environmental impact assessment of a hypothetical project. Recall that an environmental impact assessment of any proposed project requires evaluation of the baseline situation in the area, and an evaluation of how the proposed project would affect this baseline. Participants will therefore be expected to carry out a hypothetical survey of the existing environmental, social, and economic conditions and trends in the case study site (baseline).

Environmentally sound design requires that environmental effects of a project be considered together with the project's economic and social effects. Thus, the environmental impact assessment process involves gathering and analyzing social and economic data, as well as environmental.

Mitigation & Monitoring Issues
While conducting the environmental impact assessment, you should consider mitigation measures to address the specific environmental impacts identified by the team, including direct and indirect impacts. Based on your understanding of the project, propose a monitoring program including the stakeholders to be involved.

GROUP DISCUSSIONS.

GROUP 1.

MASINDI CASSAVA STARCH FACTORY

ENVIRONMENTAL IMPACT ASSESSMENT REPORT.

DATE: 4TH JUNE 2007

LOCATION: MASINDI DISTRICT

ACTIVITIES PROPOSED: Review of the baseline situation in the area. Conduct a baseline study and interaction with the community e.g. farmers

ACTIVITY: Production of starch

PURPOSE/ RATIONALE OF THE PROPOSED ACTIVITY.

1. To increase rural incomes by supporting a value added agro industry and increasing agricultural export.
2. it is also a pilot project

SITE CHARACTER/ BASELINE INFORMATION.

- it as a gazetted forest land

STAKE HOLDERS

- National Forest Authority
- Masindi District Local Government
- Bugongo sub. County council
- Ministry of Agriculture, industry and Technology
- Investment Authority
- National Export Promotion Council
- Bunyoro Kingdom

SENSITIVE AREAS.

Budongo Forest, Fauna, flora Echo system, Lingona stream which can be contaminated with waste products from the factory.

OPERATIONAL IMPACTS.

-Deforestation

- Soil depletion caused by mono cropping

CONSTRUCTION IMPACTS.

Construction of a dam which might create flooding. No smoke but some dust

INDUCED/ INDIRECT.

Social services e.g. schools, social services, improved roads.

CUMULATIVE PROMOTION.

Increased income through export. The farmers may sell all the cassava leaving little or no for home consumption.

GROUP 2.

DATE: 4th June 2007

LOCATION: APAC

ACTIVITIES PROPOSED: Construction of fish ponds.

PURPOSE RATIONALE: Increase fish production in order to:

1. Improve the standard of living
2. economic growth
3. nutrition improvement

SITE:

1. Lake Albert watershed
2. inhabited by 55000 inhabitants
3. the area experienced environmental degradation due:
    a. deforestation
    b. soil Erosion
    c. siltation
    d. declining fish population

STAKE HOLDER

a. Ministry of Lands
b. 55000 inhabitants
c. Apac Local Government

d. NEMA

SENSITIVE AREAS

Likely to displace inhabitants.

CONSTRUCTION IMPACTS:

a. Displacement.
b. Decrease in water level of Lake Albert.

OPERATIONAL IMPACTS

I. Positive impacts

a. Increased fish production
b. Improve economic welfare.

II. Negative impacts

a. Depletion of lake water.
b. Deforestation
c. More silting of the lake

MITIGATION:

a. All affected be adequately compensated
b. Resettlement
c. Downscale project
d. Re-afforestation
e. Re stock the fish

ALTERNATIVE:

a. Re store the lake
b. Control fishing
c. Control erosion

MONITORING:

a. Apac Local Government
-Regular
b. NEMA
-Regular
c. fisheries Dept
- Regular

GROUP 3

EIA-BUSIKI NAMUTAMBA ROAD CONSTRUCTION.

DATE: 4th June 2007

LOCATION: Namutamba District

ACTIVITIES PROPOSED: Road Construction

PURPOSE/ RATIONALE

- Improve Access to social services e.g. schools, hospitals, markets etc
- Stimulate small scale industries
- Access to Namutamba District headquarters and other trading centers

SITE CHARACTER

- Narrow gulled road network
- General illiteracy
- Abject poverty
- Poor health conditions
- Small gardens along the road
- Swamps, thickets, bushes and grass land and rearing of animals
- Poor habitation along the road
- Tiny trading centers along the road.

STAKE HOLDERS

- Local population
- Road constructors
- Regulatory agencies e.g. NEMA Local Government. Uganda
- Service providers like- UMEME telecommunication Cos. Water providers etc.
- The general public

SENSITIVE AREAS

- Bibanja/ land owners
- Swamps/ wetlands
- Hunting areas
- Grazing areas
- Fishing areas
- Culture sites

CONSTRUCTION IMPACTS

- Displacement of people

- Displacement of biodiversity
- Air pollution
- Gully erosion
- Faster and cheaper access to social services
- Enhanced income
- Increased economic activity

OPERATIONAL IMPACT

- Displacement of people
- Loss of income
- Distablising the social setup
- Pollution/ diseases
- Floods
- Job creation during road construction

INDUCED/ INDIRECT

Change in culture/ increased interaction

MITIGATION

- Compensation to land owners
- Local employment
- Plant trees

MONITORING

-NEMA
-Local Government
- Local people
- Every three months

COMMENTS

The project is viable and beneficial.

ANNEX 10

TRAINING WORKSHOP ON ENFORCEMENT OF ENVIRONMENTAL LAWS FOR CHIEF MAGISTRATES.
3RD – 5TH JUNE 2007
SUNSET HOTEL INTERNATIONAL JINJA

LIST OF PARTICIPANTS

No	NAME	STATION
1	Margaret Tibulya	Chief Magistrate Buganda Road Court
2	Kisakye Tasika Charles	Chief Magistrate Bushenyi Court
3	Deo Nizeyimana	Chief Magistrate Nakawa Court
4	Praff Rutakirwah	Chief Magistrate Tororo Court
5	Cissy Mudhasi K	Chief Magistrate Jinja Court
6	S.M.Obbo Londo	Chief Magistrate Fort Portal Court
7	Isaac Muwata	Chief Magistrate Mbarara Court
8	Sserubuga Charles	Chief Magistrate Iganga Court
9	Maruk Joshua	Chief Magistrate Masindi Court
10	Nyipir. O.Gabriel	Chief Magistrate Lira Court
11	Cohens Okullu Silver	Chief Magistrate Mpigi Court
12	Deborah Wanume	Chief Magistrate Rukungiri Court
13	Agaba John	Chief Magistrate Soroti Court
14	G. Opifeni Angudia	Chief Magistrate Entebbe Court
15	Emuria Charles	Chief Magistrate Soroti Court
16	Irene Akankwasa	Chief Magistrate Kabale Court
17	Omodo Nyanga Joseph	Chief Magistrate Arua Court
18	Katorogo Mutanzindwa	Chief Magistrate Luweero Court
19	Chemutai Tom	Chief Magistrate Gulu Court
20	Otto Gulimali Micheal	Chief Magistrate Nebi Court
21	Kabanda Elizabeth	Chief Magistrate Mukono Court
22	Batema N.D.A	Chief Magistrate Masaka Court

Resource persons/ Facilitators

NO.	Names	Designation/ Address
2.	Ms.Doris Akol	Environment Law Resource Centre
3.	Mr.Waisswa Ayazika	EIA Cordinator, NEMA
4.	Mr.Kenneth Kakuru	Director, Greenwatch
6.	Ms. Christine Akello	Senior Legal Counsel,NEMA
7.	Valerian Tuhimbise	JSI
8	Elizabeth Alividza	Registrar, JSI

Secretariat

1. Harriet Kezaabu	-	Ag. National Coordinator, Greenwatch
2. Ivan Twebembere		Research Assistant, Greenwatch
3. Faragi Ndyanabo		Financial Officer , Greenwatch
4. Harriet Bibangambah		Research Assistant, Greenwatch

ANNEX 11

TRAINING WORKSHOP ON ENFORCEMENT OF ENVIRONMENTAL LAWS FOR CHIEF MAGISTRATES
3RD-5TH JUNE ,2007.

SUNSET HOTEL INTERNATIONAL, JINJA.

DAY 1: SUNDAY 3RD JUNE, 2007

3:00p.m. Onwards : Arrival of Participants

DAY 2: MONDAY 4TH JUNE, 2007

8:30 – 9:00 a.m. : Registration of Participants

9:00 – 9:15 a.m. : Welcome Remarks : Mr. Kenneth Kakuru, Director,Greenwatch

9:150 – 9:30 a.m. : Official Opening Remarks; Hon. Mr. Justice D.K. Wangutusi Executive Director, Judicial Studies Institute.

9:30 -10:10 a.m. : General overview of the EIA Process: ***By Kenneth Kakuru***
Introduction, definitions and concepts used

10:10 -10:30 a.m. : **TEA BREAK**

10:30 – 11: 30 a.m. : Practical Aspects of the EIA Process : ***By Mr. Waisswa Ayazika ; National EIA Coordinator, NEMA***
What constitutes a project brief, why other projects require public hearings? Project brief versus detailed study etc.
Implementation: whether EIA is effective to the developer
Monitoring and enforcement
Inspections, Audits (Post EIA)
Costing

11:30 – 12:00p.m : Plenary: Mr. Waiswa Ayazika

12:00 – 1:00 p.m. : Participants break into Groups for group work on EIA

1:00 - 200 p.m. : LUNCH BREAK

2:00 – 2: 30 p.m. : Report from Groups

2:30 – 3:20 p.m. : Trans-boundary environmental aspects. The case of East Africa: *By Ms. Christine Akello, Senior Legal Counsel, NEMA.*

The African Convention on the Conservation of Nature and Natural Resources, the East African Protocol on Environment and Natural Resources and the Memorandum of Understanding for environmental management,
How to deal with environmental crimes that transcend borders

3:20 - 4:00 p.m. : **Applicability of Multilateral Environmental Agreements in the Enforcement process in Uganda**: Ms. Christine Akello
Multilateral Environmental Agreements, Environmental law Principles

4:00- 4:20 p.m. : Evening Tea Break

4:20 – 5:00 p.m. Plenary: Ms. Christine Akello
7:00p.m. – 9:00 p.m. :Dinner

DAY 3: TUESDAY 4TH JUNE, 2007.

8:30 – 9:00 a.m. : Compliance and Enforcement of environmental Laws; *Ms. Doris Akol, Environmental Law Resources Centre*
Definations and concepts
Mechanisms of enforcement
Components of a good enforcement team

9:00 -9:30a.m. : Strategic Litigation: Compliance and Enforcement Aspects: *Mr. Kenneth Kakuru*

9:30 – 10:00 a.m. : Case Study

10: 00 – 10:30 a.m. : TEA BREAK

10:30 – 11: 20 a.m. : Prosecutions of Environmental Crimes: ***Ms. Doris Akol***
General Overview and definitions
What are environmental crimes?
Evidence gathering and prosecution

11:20a.m. – 12:00 p.m.: Procedure*: Mr. Kenneth Kakuru*
What is the best way to proceed?
How to do a pleading of an unexpected environmental hazard/accident?

12:00 – 1: 00 p.m. : **Simulation Exercise**

1:00 – 2:00 p.m. : LUNCH BREAK

2:00 – 3: 30 p.m. : Presentations of the moot

3:30 – 4:00 p.m. : **Wrap Up**

4:30p.m **:** **Official Closing By Hon. Mr. Justice Vincent Zehurikize**

5:00 p.m. **:** **Departure**

ANNEX 12

TRAINING WORKSHOP ON ENFORCEMENT OF ENVIRONMENTAL LAWS IN UGANDA.

FOR CHIEF MAGISTRATES.

3RD – 5TH JUNE, 2007.
SUNSET HOTEL INTERNATIONAL, JINJA.

EVALUATION FORM.

Please answer the following questions and return the filled form to the secretariat.

1. Did you receive your invitation on time, and was the timing of the workshop convenient?

Yes **No**

2. a) Was the venue convenient and accessible?

Yes **No**
Please explain

…….
b) Rate the venue

i) Very good ii) Good iii) Fair iv) Poor

3. Were you well received on arrival by the workshop organizers?
Yes **No**

If no, Please explain.
……

4. How did you find the workshop program?
   a) **Topics**
   ……..

   b) **Duration**
   …….

5. Rate the presentations on each topic by the different Resource Persons.
   a) General overview of the EIA process:

i) Very good ii) Good iii) Fair iv) Poor.

Comment on the nature of presentation and the presenter.

……..…

b) Practical aspects of the EIA process.

i) Very good ii) Good iii) Fair iv) Poor.

Comment on the nature of presentation and the presenter

……..…

c) Trans-boundary environmental aspects: The case of East Africa.
i) Very good ii) Good iii) Fair iv) Poor.

Comment on the nature of presentation and the presenter.

……..…

d) Applicability of Multilateral Environmental Agreements to Uganda.
i) Very good ii) Good iii) Fair iv) Poor

Comment on the nature of presentation and presenter.

……

e) Compliance and Enforcement of environmental Laws.

i) Very good ii) Good iii) Fair iv) Poor.
Comment on the nature of presentation

……..…

f) Strategic Litigation: Compliance and Enforcement Aspects.
i) Very good ii) Good iii) Fair iv) Poor

Comment on the presentation:

…….

g) Prosecutions of Environmental crimes
i) very good ii) Good iii) Fair iv) Poor
Comment on the nature of presentation and the presentation

……..…

h) Procedure

i) Very good ii) Good iii) Fair iv) Poor

Comment on the nature of presentation

…..……

6. Were your expectations met? Please explain.

……

7. Please suggest any way in which we could improve future training programmes.

……..

8. Do you think there is need to hold another workshop covering other aspects of environmental law?

Explain.

……

Thank you.

Signature: …….