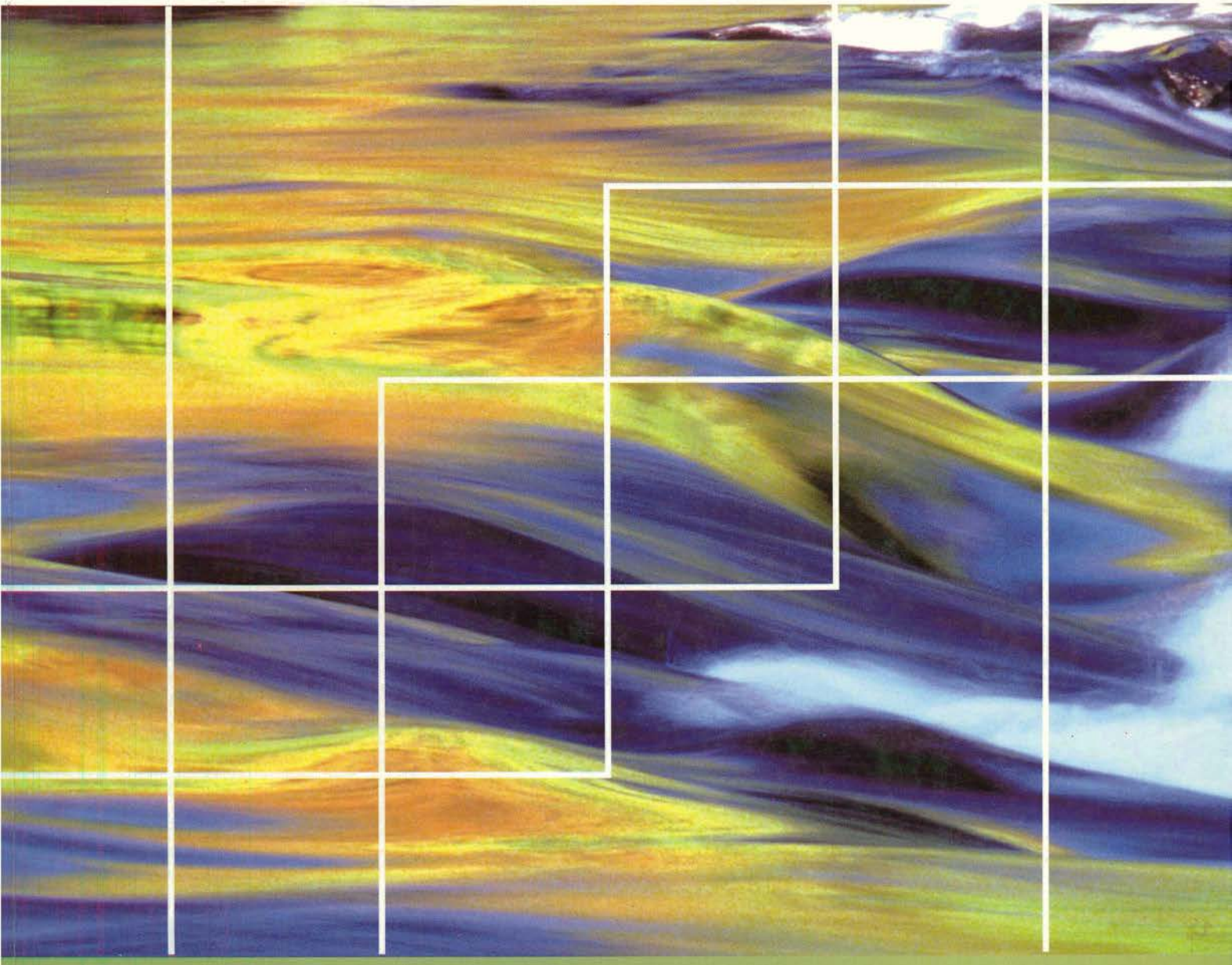
2434

Judicial Training Modules on Environmental Law



UNEP

UNITED NATIONS ENVIRONMENT PROGRAMME

United Nations
Environment Programme

JUDICIAL TRAINING MODULES ON ENVIRONMENTAL LAW

APPLICATION OF ENVIRONMENTAL LAW BY NATIONAL COURTS AND TRIBUNALS

Division of Environmental Law and Conventions (DELC)

ISBN: 978-92-807-2830-9
Job No: DEL/0956/NA

This publication can be ordered from UNEP's online bookshop at www.earthprint.com or by mail from:

Earth Print Limited Orders Dept.
P.O. Box 119 Stevenage
Hertfordshire SG14TP
United Kingdom
Tel .: +44 14 38748111
Fax: +44 14 38748844
E-mail: orders@earthprint.com

For further information, please contact:

Environmental Law Branch
Division of Environmental Law and Conventions
United Nations Environment Programme
P.O.Box 30552, 00100 Nairobi, Kenya
Tel.: +254 20 7623365
Fax : +254 20 7624324
E-mail : delc@unep.org
Web : www.unep.org/delc

MESSAGE FROM THE EXECUTIVE DIRECTOR

I am pleased to present the Judicial Training Materials on Environmental Law developed by UNEP in close collaboration with a team of distinguished judges from around the world representing many legal systems and geographical regions. It has been developed pursuant to the UNEP Governing Council decision 22/17 B to support "the improvement of the capacity of those involved in the process of promoting, implementing, developing and enforcing environmental law at the national and local levels such as judges, prosecutors, legislators and other relevant stakeholders, to carry out their functions on a well informed basis..."

UNEP will continue to fulfill its abiding commitment to implement this decision and ensuring that this impressive publication contributes to engaging judicial officers and other legal stakeholders at regional and national levels to the further development, application and enforcement of the rapidly growing field of environmental law. This publication is a comprehensive resource which includes a set of ten presentations and an accompanying CD Rom containing the texts of several UNEP Environmental Law publications. I have no doubt that these materials would also be useful in the teaching of environmental law, especially at university level.

UNEP's Global Judges Programme was conceived in the context of strengthening the Rule of Law in the area of sustainable development. The Rule of Law comprises an intricately inter-linked chain of fundamental ideas including equality before the law, the independence of the judiciary, transparency, consistency and accountability in the administration of law and the notions of equity, justice and fairness. The Rule of Law is also essential for the realization of sustainable development, which itself is founded on equitably balancing environmental, social and economic considerations in decision-making at all levels. The judiciary - as the universally recognized guardian of the Rule of Law - plays a crucial role in promoting sustainable development through the application, interpretation and enforcement of environmental law. As this publication eloquently demonstrates, courts of many countries have already shown sensitivity to promoting the Rule of Law in the field of environment and sustainable development.

On behalf of UNEP, I should like to express our deep appreciation to the Governments of the Netherlands, Norway and Belgium that have supported this programme with financial resources and call upon all our partners- governments, UN agencies and bodies, international and regional organizations - to join in a collaborative partnership with UNEP in strengthening the capacity of judges and legal stakeholders in promoting the realization of sustainable development through the Rule of Law.

Achim Steiner
Executive Director

FOREWORD

Over the past decade UNEP has, in partnership with Chief Justices and other Senior Judges from almost all the countries in the world, carried out a global initiative to engage the judiciaries in the pursuit of applying the Rule of Law to promote sustainable development. We have been much encouraged by the overwhelming support that these senior judges have given to the UNEP Global Judges Programme, which resulted in the adoption by the UNEP Governing Council of its decision 22/17 B on supporting capacity building of judges and other legal stakeholders in the field of environmental law.

This publication and the accompanying CD Rom responds to repeated requests from judges in almost all legal systems and regions of the world, for continued support from UNEP's Law Programme, in their efforts to sensitize judges at all levels to this rapidly growing area of law.

The outcome of this global initiative may be summarized as follows:

- Formation of a UNEP Global Alliance of Chief Justices and senior judges from over 100 countries, supportive of the UNEP Judges Programme, who have declared their commitment to carry out capacity building of Judges at the national level with the support of UNEP and its partner agencies.
- Creation of Regional Judges Forums for the Environment in Europe, Asia and the Pacific, Southern Africa, Eastern and Western Africa, the Arab States, the Francophone States and the Caribbean.
- Development of a significant collection of legal materials that respond to a continuing call from judiciaries and other legal stakeholders in developing countries, for urgently required books on environmental law. It has become evident that most lawyers, academics and students from many developing countries do not have access to books on environmental law.
- Mobilization of a consortium of partners for the UNEP capacity building programme on environmental law of judiciaries, prosecutors, and other legal stakeholders. The organizations and institutions that have collaborated with UNEP in the above programme include, UNDP, the World Bank Institute, United Nations University, UNITAR, IUCN and its Academy of Environmental Law, INECE, the Commonwealth Secretariat, the Francophone Secretariat, the Commonwealth Magistrates and Judges Association, the Asia Foundation, the Hanns Seidel Foundation, Secretariat of the Pacific Regional Environment Programme (SPREP), South Asian Co-operative Environment Programme (SACEP), Environmental Law Foundation of the UK, Environmental Law Institute and the Centre for International Environmental Law.
- Commencement of systematic national training of judges through national judicial institutions with support of UNEP and partner agencies. Such national judges training programmes have so far been held under UNEP auspices in Botswana, Kenya, South Africa, Uganda, Tanzania, Vietnam, Cambodia, Lao PDR, Seychelles, Ghana and Nigeria. This publication and the accompanying CD Rom would facilitate the organization and conduct of more national judicial training programmes in the coming years.

Henceforth, the UNEP programme will focus primarily on activities at the regional, sub-regional and national levels with the aim of sensitizing judges and related legal stakeholders and building institutional capacity of judicial training institutions and environmental protection agencies. Our objective is to assist countries to strengthen and retain the necessary capacity to ensure that environmental law is incorporated into their on-going legal education programmes. We are committed to working in close collaboration with our partner agencies in pursuing this objective.

We look forward to making this material available as widely as possible, to judges and other legal stakeholders especially in developing countries and countries with transition economies, including the translation of materials into the official languages of the United Nations and other languages, as necessary.

I wish to express our deep appreciation to the Chief Justices and other Senior Judges for the important contribution that they have made to the global and regional judges symposia and the review of the judicial training materials, and for their sincere commitment to collaborate with UNEP in the development and implementation of national activities on capacity-building in the area of environmental law.

I would also like to express my appreciation to Dr. Iwona Rummel-Bulska the Principal Legal Officer and Chief of the Environmental Law Branch, for the outstanding contribution that she has made to the UNEP Environmental Law Programme and in developing these most impressive legal materials.

I sincerely hope that these Judicial Training Materials on Environmental Law will contribute to meeting the information and training needs of judges and other legal stakeholders. I look forward to working closely with governments, judiciaries and our partner agencies in achieving our shared objectives and goals in the area of capacity building in environmental law.

Bakary Kante
Director,
Division of Environmental Law and Conventions

PREFACE

The judicial training materials contained in this publication and accompanying CD Rom have been developed by UNEP in close partnership with the UNEP Ad-hoc Advisory Committee of Judges comprising senior judges representing many legal systems and geographical regions of the world. The close consultations with and engagement of this distinguished team of judges has made it possible for UNEP to ensure that the materials are responsive to the specific requirements of judiciaries in various legal systems and geographical regions of the world and apt and proper for use in UNEP's on-going regional, sub-regional and national judicial capacity building activities. This partnership has also helped to secure a high degree of coherence and consistency among the training programmes that are being undertaken in various countries and sub-regions around the world, while addressing the specific needs of different legal systems and traditions as well as language needs.

The judicial training programme contained in the publication and the CD Rom is supplemented by the valuable body of legal materials in environmental law developed by UNEP for capacity building of judges and other legal stakeholders, including, in particular, the UNEP Training Manual on International Environmental Law, the UNEP Judges Handbook on Environmental Law, the UNEP Guide to Global Trends in the Application of Environmental Law by National Courts and Tribunals, the UNEP Compendia of Summaries of Judgments in Environment-related cases, the UNEP Environmental Law website and the ECOLEX data base of UNEP, IUCN and FAO. Several of these publications directly relevant to judicial training have been included in electronic form in the CD Roms.

We are most encouraged in this work by the views expressed by members of the UNEP Ad-hoc Advisory Committee of Judges and other senior judges around the world, that there is a discernible increase in judicial decisions of national courts and tribunals in a number of countries in the field of environmental law, which they say, in several instances, could be directly responsive to UNEP's judicial capacity building programme. They have pointed to several specific instances in which the judges who have participated in UNEP environmental law training programmes have written landmark judgments in this field of law and also inspired other judges to apply and enforce national environmental laws. The views expressed by Judges in this regard are contained in the Report of the Second Meeting of the UNEP Ad-hoc Advisory Committee of Judges for the review of UNEP Judicial Training Materials, held in Geneva on 31 August -1 September, 2006, attached as an Annex to this Preface.

Against this background, the Judges have called for the further implementation of the UNEP Global Judges Programme with renewed vigour and resolve, focussing especially on the sub-regional and national levels, tailored to respective needs and in appropriate languages, conducted, wherever possible, through national institutions such as National Judicial Training Institutes and Universities, with the support of expert advice and materials from UNEP and other relevant organizations. In accordance with the recommendations of the UNEP Ad-hoc Advisory Committee of Judges, UNEP will make every endeavour to translate at least some of these UNEP publications into UN official languages and other national languages in order to facilitate their effective use and encourage their adaptation to the specificities of other legal systems such as the civil and Arab law systems in the process of their translation. UNEP looks forward to working closely with donor governments, institutions and foundations as well as our partner agencies to facilitate the financing of these activities.

It is important to underscore the need for further augmenting these materials at national level with relevant country-specific legal materials to be developed by national experts. Ultimately, each judge will be applying and interpreting domestic environmental law in his or her own country, and it is therefore imperative that there should be tailoring of this training course to

provide ample discussion of the respective judges' national laws and practices.

It must also be emphasized that while UNEP will continue to provide its leadership to the global judicial training programme, this area of work constitutes but one component of the overall UNEP capacity building programme in environmental law designed to facilitate the strengthening of legal capacities of all legal stakeholders, including judges, prosecutors, environmental lawyers, including those in civil society organizations, and the private sector, academics and enforcement officers. These materials are very likely to serve the information needs of many legal interest groups beyond the judiciary, especially in developing countries, in particular, lawyers, academics and students.

The Judicial Training Materials contained in the publication and CD Rom comprise ten Power Point Presentations on several themes of special relevance to adjudication of environmental disputes. Since judicial officers are the primary focus of this work, considerable effort has been made to illustrate the materials with relevant judicial decisions from various jurisdictions around the world. The growing jurisprudence of environmental law will also most likely serve the interests and needs of lawyers, academics, students and other users of these materials. The CD Roms contain, in addition to the ten Power Point Presentations, the texts of the UNEP Judicial Handbook on Environmental Law, the UNEP Compendium of Summaries of Environment-related Cases, the UNEP Training Manual on International Environmental Law and several other UNEP Environmental Law publications. The following are the themes of the ten Power Point Presentations.

1. Introduction
2. Major Environmental Problems
3. Role of The Judiciary in Promoting the Rule of Law in the Area of Sustainable Development
4. Scope and Content of Substantive Environmental Law
5. Scope and Content of National Environmental Law
6. How Environmental Law Cases Come Before Courts
7. Managing Environmental Cases
8. Evidence In Environmental Cases
9. Remedies In Environmental Cases
10. Resolving Environmental Disputes

On behalf of UNEP I wish to extend our deep appreciation and gratitude to a number of people who have been closely involved with us in the development of this publication and CD Roms. First of all, our grateful thanks go the members of the UNEP Ad-hoc Advisory Committee of Judges who gave of their best to this work to ensure its high quality and suitability for use in judicial capacity building. These judges are:

- Hon. Vladimir Passos de Freitas, President, Federal Court of Appeal, Brazil
- Rt. Hon Lord Justice Sir Robert Carnwarth, Court of Appeal of England and Wales
- Hon. Justice Adel Omar Sherif, Deputy Chief Justice, the Supreme Constitutional Court of Egypt
- Hon. Justice Amedeo Postiglione, Supreme Court of Italy
- Hon. Justice Charles Kajimanga, Supreme Court of Zambia
- Hon. Justice Luc Lavrysen, Arbitration and Constitutional Court of Belgium
- Hon. Justice Scott Fulton, Judge of the Administrative Court of the USA Environmental Appeals Board
- Hon. Justice Brian Preston, Chief Judge of the Land and Environment Court of New South Wales, Australia
- Hon. Judge Donald Kaniaru, Chairman, National Environmental Tribunal, Kenya

I wish also to express our sincere appreciation to several distinguished academics who contributed to the development of the curriculum and the texts of the presentations, including Professors Ben Boer, Nicholas Robinson and Gregory Rose.

I should like to thank our Director, Bakary Kante, for his far-sighted vision, direction and leadership that has enabled us to make significant progress in advancing the UNEP environmental law programme in several new areas that are responsive to global, regional and national needs and priorities in the field of environment and sustainable development.

Finally, I express my grateful thanks to my colleagues in the UNEP Environmental Law Programme, especially Sylvia Bankobeza, and to our former colleague Lal Kurukulasuriya for the dedication and commitment with which they have helped in the development of this publication and CD Rom.

Dr. Iwona Rummel-Bulska
Principal Legal Officer and Chief, Environmental Law Branch
Division of Environmental Law and Conventions

ANNEX
Report of the Second Meeting of the UNEP Ad-hoc Advisory Committee of Judges for the review of UNEP Judicial Training Materials
Geneva, 31 August -1 September, 2006

I. INTRODUCTION

The second meeting of the UNEP Ad-hoc Advisory Committee of Judges was held at the International Environment House, Geneva on 31 August and 1 September 2006 to review and finalise the UNEP Judicial Training Modules on the Application of Environmental Law by National Courts and Tribunals.

Dr. Iwona Rummel-Bulska, Principal Legal Officer and Chief of the Environmental Law Branch of the Division of Environmental Law and Conventions welcomed the participants and the Deputy Executive Director of UNEP, Mr. Shafqat Kakakhel. She outlined the work done by UNEP in the area of judicial capacity building and expressed the expectation that this meeting, following on the first meeting of the Ad-hoc Advisory Committee of Judges held on 7-8 June 2006, would help to review and finalise the UNEP Judicial Training Modules on the Application of Environmental Law by National Courts and Tribunals, so that these modules could be used in UNEP's on-going sub-regional and national judicial capacity building activities. She also gave an overview of several legal publications, the electronic information base and other materials that have been developed by UNEP in response to requests from judiciaries around the world, and mentioned that several of these materials are being translated, at the request of judges, to UN and other languages to facilitate their wider and more effective use. She expressed UNEP's deep appreciation to the members of the UNEP Ad-hoc Advisory Committee of Judges for the important contribution that they are making towards ensuring that UNEP's activities in this field were responsive to the specific requirements of judiciaries in the various regions and judicial systems and for their continuing advice and guidance on matters relating to the development and implementation of UNEP's programme of activities relating to training and capacity building of judges and other legal stakeholders in environmental law.

Mr. Shafqat Kakakhel, Deputy Executive Director of UNEP welcomed the participants and traced the development and implementation of the UNEP Global Judges Programme for implementing the Johannesburg Principles and the UNEP Governing Council decision 22/17, and the consultations with representatives of the judiciaries around the world on the kind of programmes and materials to be developed to meet the specific requirements of the judiciary. He thanked the members of the UNEP Ad-hoc Advisory Committee of Judges for their important contribution to this work. He outlined his vision for this area of UNEP's programme of work which he said has already begun to yield significant results.

He said that the programme of activities will henceforth focus primarily on activities at the sub-regional and national levels with the aim of sensitizing judges and related legal stakeholders at national level as well as most importantly, building institutional capacity of national judicial training institutions and national environmental protection agencies, so that they can include environmental law as part of their continuing legal education programmes. To achieve genuine institutional capacity, he said, UNEP is developing a comprehensive set of training modules and materials as source books and reference materials that can guide and assist national judiciaries and related institutions to develop their own national environmental law programmes, building upon UNEP's catalytic activities, including workshops and symposia as well as its major environmental law publications and training materials. He referred in this connection, to the UNEP Judges Handbook on Environmental Law, the UNEP Judicial Training Modules on the Application of Environmental Law by Courts and Tribunals, the UNEP Compendia of Summaries of Judicial Decisions in Environment-related Cases and the forthcoming publication UNEP Guide to the Application of Environmental Law by Courts and Tribunals as well as the dissemination of this material through the UNEP Environmental Law website.

The continuing and close consultations with the UNEP Ad-hoc Advisory Committee of Judges, he said, will ensure that these programmes and materials are of high quality and will meet the specific judicial requirements as well as strengthen coherence and consistency among the training programmes that are being undertaken in various countries and sub-regions around the world, while addressing the specific needs of different legal systems and traditions as well as language needs. He thanked the distinguished judges for finding the time amidst their busy schedule of judicial work to review the extensive work carried out by UNEP in the area of judicial capacity building at regional, sub-regional and national levels and to advise on the quality and content of the programmes.

II. VIEWS OF THE MEMBERS OF THE UNEP AD-HOC ADVISORY COMMITTEE OF JUDGES ON THE UNEP JUDGES PROGRAMME

The members of the Ad-hoc Advisory Committee of Judges then addressed the meeting to give their own perspectives and vision of the UNEP Judicial Capacity Building programme on Environmental Law.

Hon. Justice Omar Adel Sherif
Deputy Chief Justice,
Supreme Constitutional Court,
Egypt.

Justice Sherif commenced his intervention by referring to the highly productive and successful efforts that have been made by UNEP to promote the empowerment of judiciaries around the world in the field of environmental law, and to support them in their efforts to apply and enforce environmental laws. He said that UNEP's achievements in this field have far exceeded expectations and laid a strong foundation for an effective future programme of work. UNEP

activities in his words, not only contributed to better develop understanding of environmental law by individual judges, prosecutors and other legal stakeholders but also succeeded in getting the international judicial community together in a remarkable achievement that has triggered global cooperation among judiciaries in the field of environmental law. This is a turning point he said, where UNEP is heralding a new era where judges are becoming more engaged in the field of environmental law and taking into account the requirements of sustainable development in their judicial decision making.

One of the outstanding achievements of the UNEP law programme he said, has been the development and publication of several publications, reading and training materials on environmental law that will certainly enhance the quality of legal education as well as continuous judicial learning in all parts of the world for now and for future generations. These materials need to be put to good and effective use by UNEP through the organization of a series of train-the-trainers programmes in different sub-regions of the world, so that the judges so trained could conduct national training programmes in their respective countries in their respective national languages. He underscored the need for judges to be trained by fellow judicial officers and other resource persons who have judicial acceptance in the respective societies. The establishment of the proposed global training facility in Cairo, Egypt, in the light of on-going consultations between UNEP and the Supreme Constitutional Court of Egypt would, he said, definitely crown UNEP activities in this area and further promote judicial environmental education and capacity building, and for this reason should be supported by all relevant global, regional and national institutions.

Justice Sheriff expressed his deep appreciation to everyone who has supported and continues to support this important UNEP programme and lauded the leadership that UNEP has given to a global movement towards creating awareness and understanding of environmental law within judicial circles and beyond.

Hon. Justice Vladimir Passos De Freitas,
Federal Judge ,
Brazil.

Justice De Freitas said that his first contact with the UNEP judges programme was in January 2000 when he participated in one of UNEP's Regional Judicial Symposia on Environmental Law held in Mexico City. At this meeting, it became evident that none of the participating judges from Latin American countries had a sound knowledge of environmental law nor were there any judicial decisions of importance on environmental issues. However, the participating judges demonstrated eagerness to understand this new area of law which had important relevance to addressing environmental problems that the countries in the region faced and called on UNEP to carry out further activities in Latin American countries to enable judges to understand and apply environmental law in their courts.

After six years of sustained activity by UNEP in regard to its highly commendable programme on the judiciary and the environment, the situation, he said, is absolutely different. UNEP has held several meetings and workshops on environmental law around the world, including the historic Global Judges Symposium which was held in Johannesburg in August 2002, with the participation of more than one hundred Chief Justices and judges. Nowadays, he said, the situation in Latin America is much better. Following the meetings and other activities of UNEP, the mind-set of judges is changing. Courts and tribunals in several countries such as Brazil, Argentina, Paraguay and Chile have in recent years delivered important judgements on environmental issues, which serve as precedents for other courts and tribunals to follow.

There are a number of other benefits, he said, that also flow from these UNEP judicial meetings and the positive relationships and opportunity for exchange of ideas and experiences among judges, prosecutors and other legal stakeholders that these create. In this connection, he cited the example of the prosecutors from Parana State in Brazil and adjoining Paraguay working together on their common problems across national boundaries, following initial contacts at one of UNEP's meetings.

He thought that UNEP was taking a critical step forward in the direction of making environmental law more effective with the engagement of judges in the application and enforcement of environmental law, through the publication of the Judges Handbook and other materials and with its country-driven approach to judicial capacity building. In fact, he said, this UNEP initiative will "change the behaviour of judges in many countries and improve the application of Environmental Law."

In conclusion he said that UNEP is enhancing Environmental Law around the world and enabling the Judicial Power to advance Sustainable Development through their judicial decisions. This is a decisive step in the protection of the environment and he was proud and privileged to have the opportunity to participate as a member of the UNEP Ad-hoc Advisory Committee of Judges.

Hon. Justice Luc Lavrysen,
Judge, Arbitration and Constitutional Court,
Belgium.

Justice Lavrysen said that the UNEP Judges Programme is very important for enhancing the implementation and enforcement of environmental law worldwide. This is not the case only for developing countries, where the need for information on and training in environmental law among judges, public prosecutors and other stakeholders is pressing. The programme, he said, is also of great importance for judges in developed countries and referred in this regard to the action taken by Chief Justices and senior judges from the twenty five countries in the European Union and also from other candidate countries, as a follow up to the UNEP Judges Programme, to create within the European Union, an EU Forum of Judges for the Environment. It was the first time that judges from the 25 EU member states and some candidate states had met around a common body of law to learn from each other and share experiences. The Forum is now organising yearly conferences on environmental law and is also having a positive effect at the national level. He said that training in environmental law is generally not a high priority within the Ministries of Justice in the EU countries, but referring to the UNEP Programme, they have been able to convince national bodies to invest more in environmental law training for the judiciary. The results are there to see, he said, through enhanced quality of environmental case law and the better enforcement of environmental law, which is already leading to a better quality of the environment.

Hon. Justice Scott Fulton,
Judge, Administrative Court,
Environmental Appeals Board,
USA.

Justice Fulton stated that UNEP's efforts over the past ten years to train judges in environmental law have been commendable and have contributed greatly to the advancement of the rule of law and good governance in the environmental arena, particularly in the developing world. The training events thus far reflect a great hunger on the part of judges for better understanding of this subject. This hunger appears to be driven both by awareness that, given their lack of exposure to environmental law, they may be ill-equipped to properly administer those cases, and by their

desire to be part of the solution to a problem they perceive to be of great consequence at the national, regional and global level. Experience suggests that when this hunger for knowledge is fed, judges become, through their judgments, powerful catalysts for societal movement in the direction of environmental sustainability.

Hon. Justice Brian Preston,
Chief Judge,
Land and Environmental Court of New South Wales,
Australia.

Justice Preston commended the UNEP Global Judges Programme on environmental law. The programme is a recognition of the seriousness and importance of environmental issues, environmental law as a body of law and the role of the judiciary's involvement in environmental law. It raises the profile and status of these matters, he said. Justice Preston also noted that judicial capacity building activities of UNEP and other institutions have already made a significant difference. He cited examples of judges who had undertaken judicial training in environmental law who had delivered precedent-setting decisions upholding good governance and sustainable development. The examples he cited were from Bali (convicting and sentencing an offender who had smuggled the highly endangered Bali Starling), Sumatra (convicting and sentencing an offender who had lit forest fires to clear lowland dipterocarp rainforests for a palm oil plantation) and from Kenya (pollution of underground aquifer). These examples, he said, clearly establish the worth of the programme.

Hon. Judge Donald Kaniaru,
Chairman,
National Environmental Tribunal,
Kenya.

Judge Kaniaru said that he was privileged to have participated in the development and implementation of the UNEP Global Judges Programme while he was at UNEP and is now in a position as the Chairman of the National Environmental Tribunal of Kenya to see how judges are benefiting from this programme and making use of the UNEP materials in environmental law in their day-to-day judicial work. He wished the programme every success as it has clearly established itself as an effective vehicle for capacity building not only of judges but also of other key legal stakeholders, who directly contribute to the promotion of environmental protection and sustainable development.

III. SUMMARY OF DISCUSSIONS

1. The Ad-hoc Advisory Committee of Judges then discussed the work that has been carried out by UNEP in regard to the UNEP Global Judges Programme and commended UNEP on the development and dissemination of an extremely valuable body of legal materials in environmental law for capacity building of judges and other legal stakeholders, including, in particular, the UNEP Training Manual on International Environmental Law, the UNEP Judges Handbook on Environmental law, the UNEP Judicial Training Modules on the Application of Environmental Law at National Level, the UNEP Guide to Global Trends in the Application of Environmental Law by National Courts and Tribunals, the UNEP Compendia of Summaries of Judgements in Environment-related cases, the UNEP Environmental Law website and the ECOLEX data base of UNEP, IUCN and FAO as well as the convening several sub-regional and national training programmes.

2. They welcomed and fully supported UNEP's current focus on capacity building of judges at sub-regional and national levels, following the successful work at global and regional levels to sensitize Judiciaries on the crucial role that that they play in promoting the Rule of Law in the area of environment and sustainable development through the application, interpretation and enforcement of environmental law.

3. They also stated that since many judges work in their national languages, it was crucial to translate these valuable UNEP publications in to UN and other national languages in order to facilitate their effective use. They also underscored the importance of adapting some of these materials to the specificities of other legal systems such as the civil and Arab law systems in the process of their translation. There was also a need, they said, to further augment these materials with relevant country-specific legal materials, to be developed by national experts.

4. Several judges expressed the view that there is a discernible increase in judicial decisions of national courts and tribunals in a number of countries in the field of environmental law, which they said, in several instances could be directly related to UNEP's judicial capacity building programme. This augurs well, they said, for promoting the realisation of the goals of environmental protection and sustainable development through adherence to the Rule of Law and the better implementation of national environmental legislation, including those for the implementation of Multilateral Environmental Agreements.

5. They pointed out to several specific instances in which the judges trained at UNEP environmental law training programmes have written landmark judgements in this field of law inspiring other judges to apply and enforce national environmental laws. Against this background, the Judges called for the further implementation of the UNEP Global Judges Programme with renewed vigour and resolve, focussing especially on the sub-regional and national level capacity building.

6. The Deputy Chief Justice of the Supreme Constitutional Court of Egypt referred to the on-going consultations between UNEP and the Supreme Constitutional Court of Egypt relating to the establishment of a global training facility in Cairo, Egypt to serve as a centre to galvanize global cooperation in and support for advancing UNEP's capacity building activities in the field of environmental law, in particular its global judges programme. The centre would focus on the further development and dissemination of judicial training materials that meet the needs of judiciaries throughout the world in different regions and legal systems and also convene training workshops tailored to the specific needs of judges and other legal stakeholders. He said that the Government of Egypt has agreed to underwrite the construction of the Centre and the provision of the relevant equipment and facilities and that the discussions with UNEP were centred on the modalities for promoting an enduring partnership with UNEP and other international organisations active in the area of judicial capacity building such as IUCN and INECE and to its continuing operational viability in terms of its financial and human resources. The participating judges warmly welcomed this initiative and expressed their fullest support for a partnership between UNEP and the Supreme Constitutional Court of Egypt in regard to the establishment of the global training centre and for the development and implementation of its programme of activities within the framework of the Montevideo programme III and the Bali Strategic Plan for Technology Support and Capacity Building and UNEP Governing Council decision 22/17. They also thought that such a centre would go a long way towards mobilising international cooperation and support for the UNEP Global Judges Programme and strengthen the

cohesion, continuity and the sustainability of judicial capacity building in environmental law globally. They expressed the hope that these on-going consultations would lead to the establishment of the proposed centre in the near future.

7. Looking at the future UNEP programme of activities of the Judges Programme, the judges urged UNEP to support the capacity building of judges and other legal stakeholders as far as possible at sub-regional and national levels, tailored to respective needs and in appropriate languages, conducted, wherever possible, through national institutions such as National Judicial Training Institutes, Ministries of Justice, and Universities, with the support of expert advice and materials from UNEP and other relevant organisations.

8. They recognised the cost-effectiveness and value of approaching this work through a two-stage process starting with sub-regional train-the-trainers workshops targeting judges and other national resource persons to enhance their facility in using the recently developed UNEP judicial training materials. In the second stage, these trained judges would undertake national judicial training activities in environmental law in their respective countries. Such a process, they said, would enable national judicial training workshops to be held cost-effectively and on a sustained basis, and thereby reach a broader cross section of national judges. In this regard, they urged UNEP to consider favourably the offer of the Supreme Constitutional Court of Egypt to convene the first of the series of Train-the-Trainers Judges Workshops at the Supreme Constitutional Court in Cairo.

9. With regard to the scope of the UNEP capacity building programme of work, they stated that while giving its leadership to its highly commendable judicial training programme at national and sub-regional levels, UNEP should also facilitate the strengthening of legal capacities of other target groups such as prosecutors, environmental lawyers including those in civil society organisations and the private sector, academics and enforcement officers.

10. The judges then reviewed the ten Presentations of the UNEP Training Modules on the Application of Environmental Law by National Courts and Tribunals and provided detailed suggestions for its finalisation. It was agreed that UNEP secretariat would finalise the training modules in accordance with these comments and suggestions, translate the Modules into UN and other languages, and ensure their wide dissemination in the form of CD-ROMs, along with the other legal materials referred to above. They also underscored the crucial importance of ensuring effective distribution of the materials, wherever possible, through the Office of the Chief Justice of the respective countries.

11. They concluded the discussions by expressing their appreciation to UNEP for the excellent arrangements made for the meeting and reaffirming their continuing commitment and support to the UNEP Judges Capacity Building Programme, following which, the recommendations below were adopted by acclamation.

IV. RECOMMENDATIONS

The second meeting of the UNEP Ad-hoc Advisory Committee of Judges held in Geneva on 31 August - 1 September 2006, while endorsing the conclusions and recommendations of their first meeting held in Geneva on 6-7 June 2006, requests the Executive Director of UNEP:

1. To report to the forthcoming 24th session of the UNEP Governing Council, the achievements relating to the Global Judges Programme, UNEP's plans to continue with its further implementation, and, as appropriate, to request governments as well as United Nations and other institutions which have the capacity to do so, to collaborate with and support this important UNEP programme of work.

2. To consider the institutionalisation of the Ad-hoc Advisory Committee of Judges with a view to this Committee serving as an advisory body to the UNEP environmental law programme.

3. To convene regional/sub-regional "Train-the-Trainers" workshops targeting judges and other national resource persons to enhance their facility in using the recently developed UNEP judicial training materials, so that the Judges and other resource persons who are trained at these workshops, could undertake national judicial training activities in environmental law in their respective countries.

4. To ensure the translation of the environmental law materials prepared by UNEP into UN and other languages subject to available resources, and to have these adapted to the specificities of other legal systems, in particular, the civil law and Arab law systems, and to ensure their wide and effective dissemination.

5. To promote the establishment and utilization of a proposed global training centre in environmental law in Cairo in collaboration with the Supreme Constitutional Court of Egypt, to galvanize global cooperation in and support for advancing UNEP's capacity building activities in the field of environmental law.

6. To organise at the next session of the Governing Council in Nairobi, a side-event with the participation of selected judges for the presentation of the legal materials developed by the UNEP law programme to legal and other interested stakeholders.

TABLE OF CONTENTS

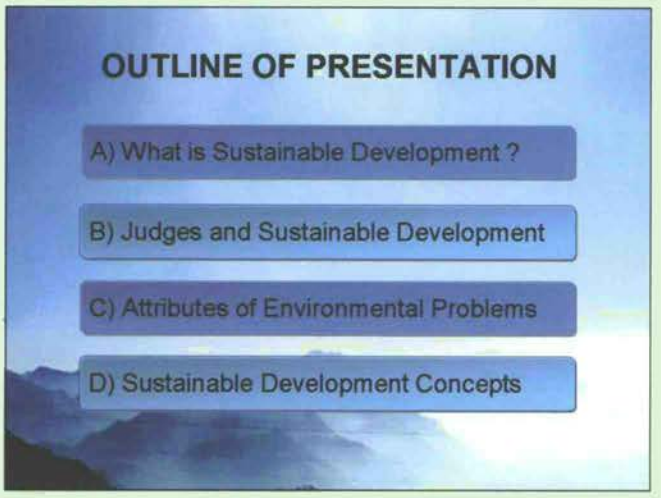
PRESENTATION 1

UNEP GLOBAL JUDGES PROGRAMME

APPLICATION OF ENVIRONMENTAL LAW BY NATIONAL COURTS AND TRIBUNALS

INTRODUCTION

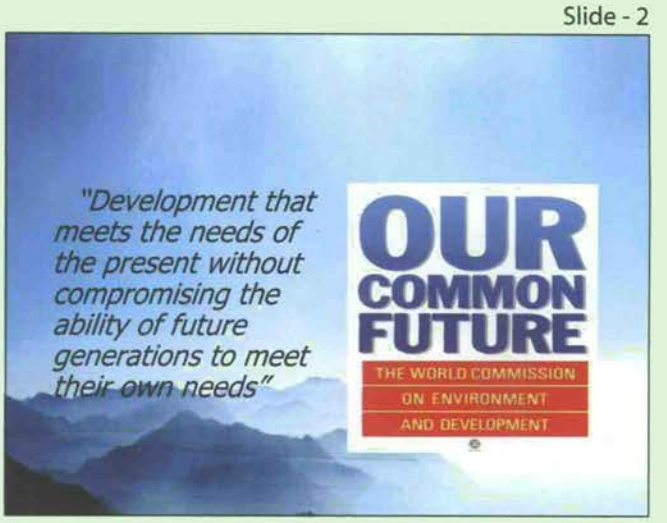
Slide - 1



In this presentation, we will be describing the environmental problems that the world faces today, recognizing that local impacts of these problems will vary to some degree from country to country. In particular, we will examine:

* The role and contribution of judges in the area of sustainable development
* The nature and attributes of environmental problems
* Elements of sustainable development
* Concepts of sustainable development

Slide - 2



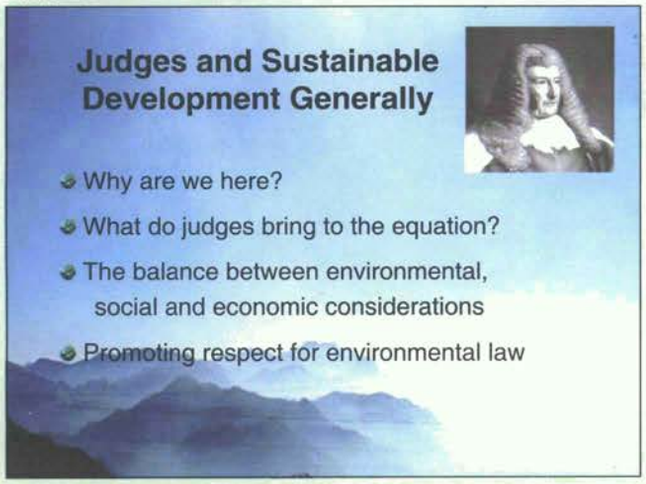
This definition was popularised by the World Commission on Environment and Development, Our Common Future, 1987.

As we will discuss further, since the release of the World Commission on Environment and Development's report, a number of UN conferences have adopted the notion of sustainable development as balancing the interdependent and mutually reinforcing pillars of economic development, social development, and environmental protection.

Reference:

* Our Common Future, Oxford 1987

Slide - 3



Why are we here? Why is this program being presented to judges?

The development of environmental policies and the enactment of environmental laws and regulations are, without implementation, empty gestures. They are not an end in themselves; rather, they are only the beginning of the process of protecting natural resources and minimizing pollution. Indeed, the development of legal regimes which remain unimplemented or under-implemented can be ominously counter-productive, engendering an illusion of progress where in truth, none exists.

The judiciary serves a vital link in the process of implementation of environmental law, and is a crucial partner in promoting environmental governance, upholding the Rule of Law and in ensuring a fair balance between environmental, social and economic considerations through their judgments and declarations. The courts of many countries have played a major role in promoting the rule of law in the field of environment and sustainable development.

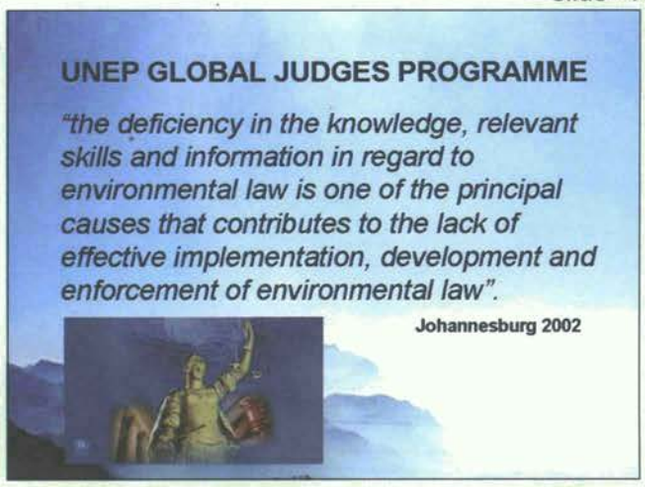
This program is part of a broader effort by UNEP to:

* Sensitize judges to the environmental challenge, introduce them to the growing jurisprudence in the field of environmental law, and enhance their capacity to manage environmental litigation and to apply and enforce environmental law. How? By:

  * Facilitating judicial awareness of the environmental problem and contemporary international developments relating to environmental protection and sustainable development, such as the Stockholm and Rio Principles, including access to justice, right to information and public participation; and

  * Allowing for international networking among judiciaries for exchange of judgments, information on environmental law and practice, and developments in the field.

Slide - 4



UNEP's work in support of the judiciary began in 1996 with the convening of series of Regional Judges Symposia on environmental law, sustainable development and the role of the judiciary in several regions of the world. In August 2002, UNEP convened the Global Judges Symposium on Sustainable Development and the Role of Law in parallel with the World Summit on Sustainable Development (WSSD).

The outcome of the Symposium was a unanimous recognition by these senior judges representing the various legal systems of the world of the crucial role that the judiciary plays in enhancing environmental governance and the rule of law, through the interpretation, application, and enforcement of environmental law in the new context of sustainable development.

The Global Judges Symposium and a follow-up meeting in Nairobi inspired the UNEP Governing Council to adopt Decision 22/17 II(A) which called upon the UNEP Executive Director to help improve the capacity of those involved in the process of developing, implementing and enforcing environmental law at the national and local levels, including judicial officers.

The goal of this programme of work is for UNEP, in cooperation with its many partner agencies, to carry out on a cohesive, structured and sustained basis, national activities for strengthening the role of the judiciary in securing environmental governance, adherence to the rule of law and the effective implementation of national environmental policies, laws and regulations including the national level implementation of multilateral environmental agreements.

Several governments, including the governments of the Netherlands, Belgium, Norway, the United States, France, and Egypt, have provided significant support to UNEP for the implementation of this programme of work.

The programme, is implemented by the Environmental Law Branch of UNEP's Division of Environmental Law and Conventions and delivered nationally, responding to the specific needs of each country. It includes developing training materials, formulating national capacity-building plans for judges, and conducting national level capacity building.

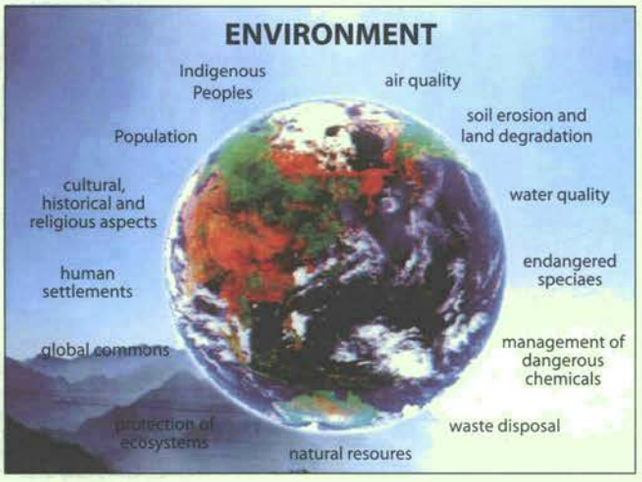
These national programmes of work will be implemented at the national level under the leadership of the various Chief Justices and the respective national judicial training institutions, and will be supported by UNEP in partnership with a global alliance of partners.

The Global Judges Program is a prime example of capacity building, as envisioned by the Bali Strategic Plan for Technology Support and Capacity Building

Reference:

* Bali Strategic Plan for Technology Support and Capacity Building: UNEP Governing Council
www.unep.org/GC/GC23/documents/GC23-6-add-1.pdf

Slide - 5

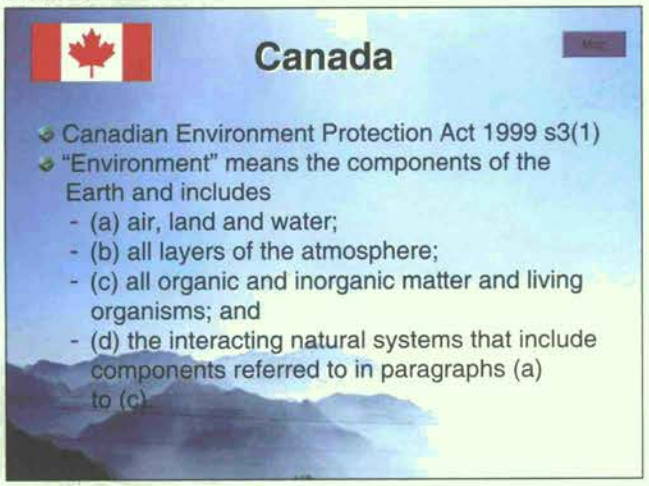


Slide - 6

Reference:

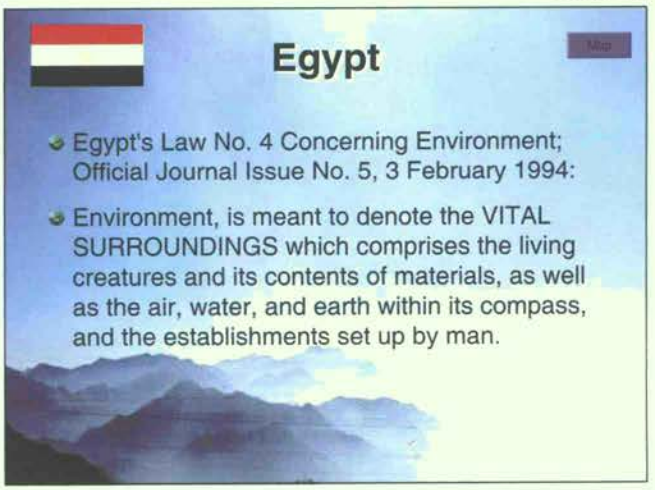
* Environmental Protection and Biodiversity Act 1999 http://www.austlii.edu.au/au/legis/cth/consol_act/epabca1999588

Slide - 7



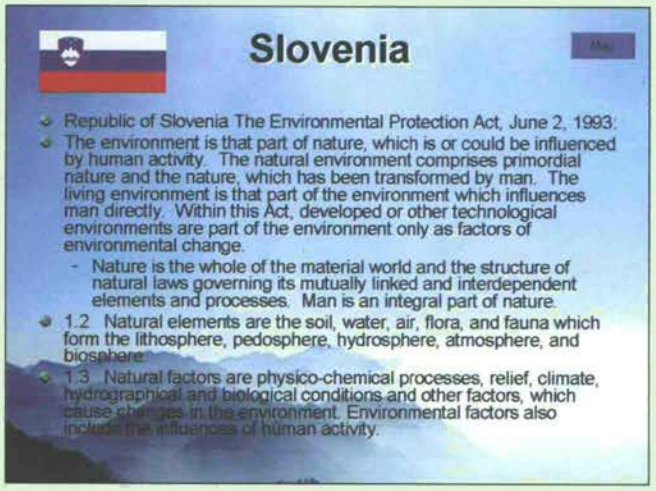
Reference:
* Canadian Environmental Protection Act 1999
http://lois.justice.gc.ca/en/C-15.31/225697.html

Slide - 8

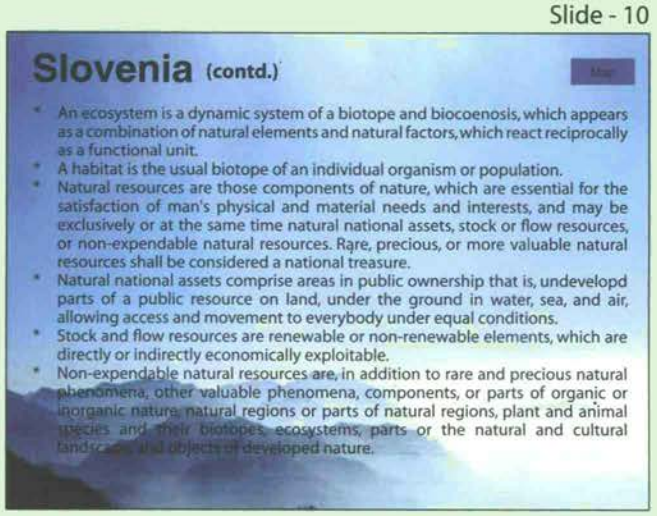


Reference:
* Egypt's law concerning Environment
http://disarmament2.un.org/committee1540/Datasheets/Egypt

Slide - 9



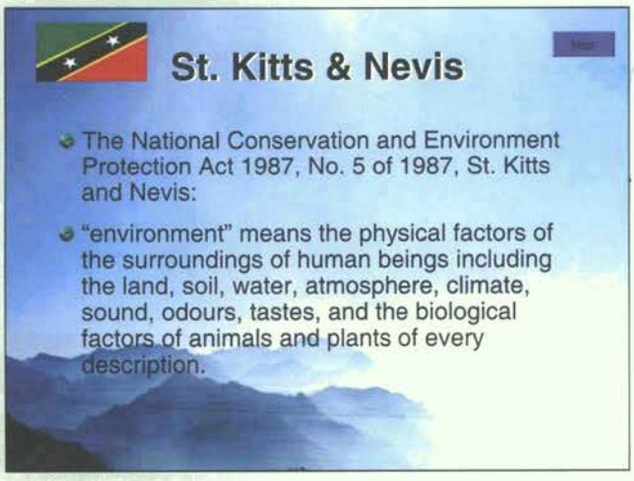
Slide - 10



Reference:

* Republic of Slovenia The Environmental Act1993
http://www.mop.gov.si (in Slovenian)

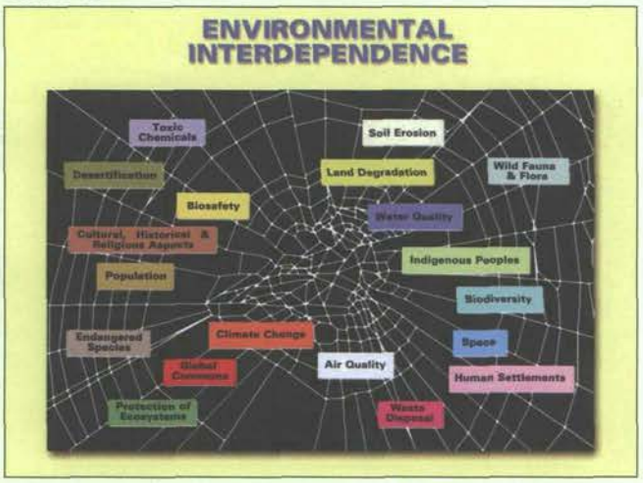
Slide - 11



Slide - 12

To begin to understand the environmental problem, one needs to examine it through a number of different but related lenses. Here are some of the key ones. We will discuss them in turn.

Slide - 13



First and foremost, one must understand the degree to which ecosystems are interconnected. Ecosystems are generally not only integrated systems within themselves, but also tend to be interrelated, one to other.

This slide demonstrates the delicate equilibrium among various elements of the environment. Human activities can unsettle the equilibrium that nature normally provides. Human activity regarding one element can affect the balance of various other elements.

These changes can be seen in both spatial and temporal dimensions. For example:

* Logging of forests results in the loss of biodiversity and a decrease in the ability of forest ecosystems to produce oxygen and absorb greenhouse gas emissions. This can affect local climate, can affect availability of water from rain and groundwater, and can reduce the productive capacity of the soil, resulting in loss of human and ecosystem sustenance.
* Failure to conserve soil resources and land degradation more generally can likewise contribute to climate change, desertification and loss of biodiversity.
* Climate change contributes to loss of biodiversity.
* Use of agricultural pesticides can produce water and land pollution.
* Air borne particulate matter returns to the earth to pollute water and soil.
* Improper land disposal of hazardous wastes can leach into groundwater, polluting drinking water supplies.
* Depending on the nature of the pollution, polluted water can lead to food contamination via uptake by fish and crops (e.g., where dirty water is used for irrigation).
* Groundwater and surface waters are most often part of larger integrated systems, such that pollution of one part conveys pollution to all parts.
* Destruction of one part of the animal food chain has implications for all creatures farther up the food chain, affecting biodiversity.
* Wetlands protect soil and water resources by serving as a buffer for storm events and by serving as a natural filter for pollution.
* Wetlands destruction affects habitat and the food chain needed for biodiversity.

Slide - 14

There is perhaps no more vexing problem created by modern civilization than the problem of pollution. Nearly all processes for producing goods, and many for delivering services, involve the generation of byproducts that find their way into the environment in various forms. Relatively few of these byproducts are truly innocuous. Rather, most have fairly serious implications for human health, biological health more broadly, the quality of various natural resources (such as water), and even on the functionality of natural systems, such as weather.

Apart from byproducts, materials that were once perceived as break-through products for the betterment of humankind, such as the fire retardants (asbestos and polychlorinated biphenyls (PCBs – used in electric transformers)) and some pesticides, have proven to be quite destructive when released into the natural world.

Complicating matters greatly, pollution tends to be ubiquitous in the environment, moving freely within ecosystems and between them. Air and water transport can carry pollutants thousands of miles -- indeed, around the world.

Additionally, pollution tends to be synergistic and cumulative in that various pollutants interact to increase the aggregate risk of toxicological response and disease.

While increasingly more is known about pollution impacts, there are still many circumstances in which pollution risks are difficult to assess or quantify.

Slide - 15

Some of the world's natural resources are, for all intents and purposes, non-renewable. Minerals and petroleum are classic cases in point. Once they have been fully consumed, they will no longer be available for humankind's use. A major challenge of each generation is to preserve natural resources of utilitarian importance for the use of future generations.

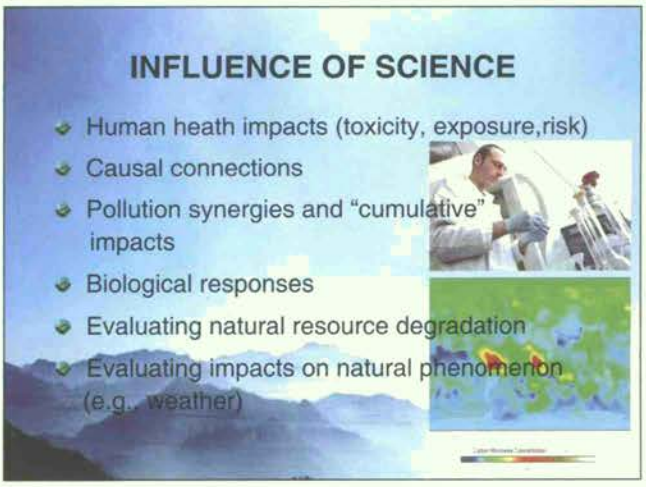
Even with respect to renewable resources, sound management is necessary to ensure regularity in supply and to avoid unintended ecosystem consequences associated with severe resource depletion (e.g., deforestation leads to local climate change and desertification). Some renewable resources, like timber and other vegetation, are now understood to play an important role in global ecology by, for example, reducing the amount of greenhouse gases in the earth's atmosphere.

Given new understandings about dependencies within the natural world, natural resource stewardship also considers the importance of protecting habitat upon which various living species of animal life depend for survival, as well as the effects that damaging one species may have for other species up the food chain.

Protection of the world's various natural treasures and parks from the potentially destructive effects of human activity is another area of challenge. Carefully managing the use of natural resources within such treasures is key to preserving their essential character for future generations.

Just as pollution poses serious risks for human health, so too does it hold implications for the quality of natural resources, such as air, water, and land.

Slide - 16



A meaningful approach to addressing environmental concerns necessarily requires resorting to environmental science. Environmental science is, essentially, the study of the interactions among the physical, chemical and biological components of the environment.

Science thus greatly informs the understanding of the natural environment and human impacts on that environment.

This slide shows some of the areas in which science figures centrally in the environmental arena.

Slide - 17

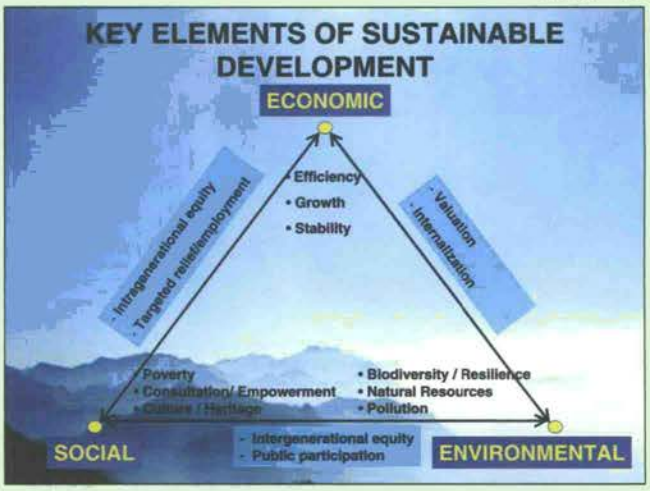
Pollution is costly in several respects. First, contaminants released into the waste stream often represent potential valuable chemicals lost because of production inefficiencies. Second, the health impacts of pollution can diminish worker productivity, and pollutant loadings can degrade valuable natural resources. Third, cleaning up pollution can be enormously expensive.

Natural resources are literally the bedrock of many economies. Loss of a precious resource can have far-reaching implications for a country's well- being, ranging from a reduction in employment opportunity relating to the management and harvesting of the resource to reductions in gross national product and trade imbalances. Loss of some resource, such as farm-quality land and water, threaten the very survival of a country.

The quest for access to natural resources and the competition for such resources on a regional or international level can be, and indeed is, a source of great tension in the world, sometimes leading to political instability and conflict. Proper stewardship of these resources can thus serve as an important part of the agenda for peace.

Pollution is, of course, border-blind. It is difficult to confine and contain, and certain kinds tend to move freely within and across political boundaries, with implications for the public health, well-being, and natural resources in a state or of down-stream or down-wind states. Naturally, this can also serve as a destabilizing influence not only internally but in state-to-state relations and could, left unabated, lead to conflict.

Slide - 18



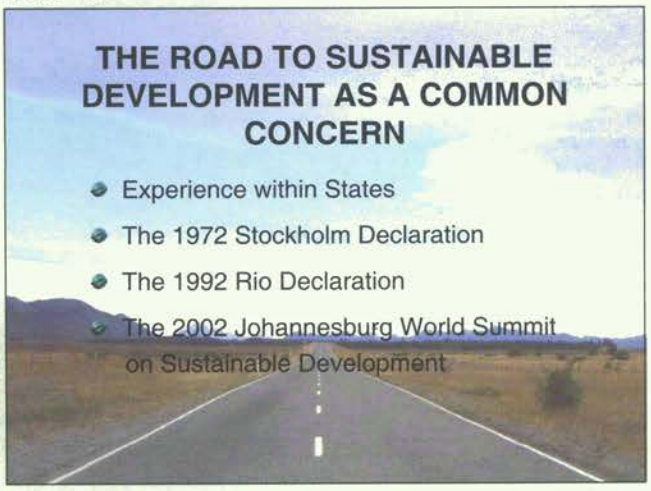
This slide demonstrates the integrated approach to human development and environmental management that is now promoted by the United Nations and other bodies. As we have noted, these economic, social and environmental aspects are commonly referred to as the "three pillars" of "sustainable development".

"... development, equity, and sustainability are integral elements of sustainable development. Although no universally accepted practical definition of sustainable development exists as yet, the concept now encompasses three major points of view, economic, social, and environmental, which need to be given balanced treatment ... Each viewpoint corresponds to a domain (and system) that has its own distinct driving forces and objectives. The economic domain is geared mainly toward improving human welfare (primarily through increases in the consumption of goods and services). The environmental domain focuses on protecting the integrity and resilience of ecological systems. The social domain emphasizes the enrichment of human relationships and achievement of individual and group aspirations."

References:

* Munasinghe, M. 2001. "Exploring the linkages between climate change and sustainable development: A challenge for transdisciplinary research". Conservation Ecology 5(1): 14. <http://www.consecol.org/vol5/iss1/art14/> (20060227)
* Johannesburg Plan of Implementation Chapter 1 para.2 http://www.un.org/esa/sustdev/documents/WSSD_POI_PD/English/POIChapter1.htm

Slide - 19



Sustainable development concepts have been evolving in various states since the 1960's, although they have been more commonly and coherently understood and articulated more recently.

On the international level, the road to sustainable development as an internationally embraced concept began with the Stockholm Conference on the Human Environment in 1972. That conference produced the 1972 Stockholm Declaration, which included a range of important fundamental principles and concepts. The Stockholm conference is widely recognized as being the progenitor of modern international environmental law.

The Rio Conference on Environment and Development in 1992 was the world's largest international conference on the environment. The main documents arising from the conference were: The Framework Convention on Climate Change, the Convention on Biological Diversity, Agenda 21 and the Rio Declaration on Environment and Development.

The World Summit on Sustainable Development in 2002, while not generating any new international environmental law as such, emphasized that there are three components of sustainable development economic development, social development and environmental protection, which act as interdependent and mutually reinforcing pillars.

References:

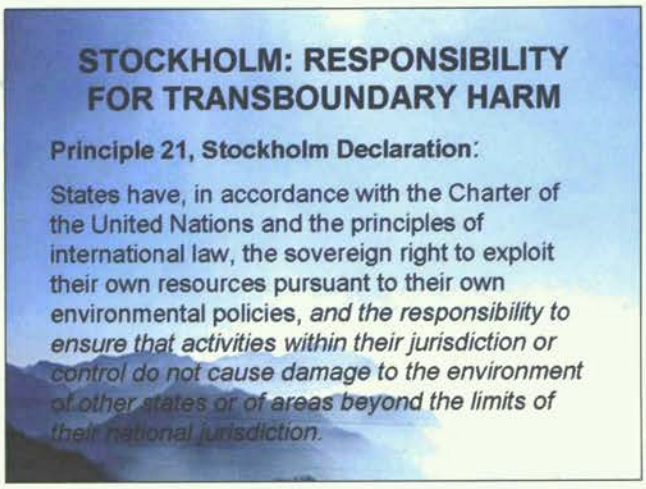
* UNEP Training Manual on International Environmental Law, 2006, Chapter 3
http://www.unep.org/DELC/law

* Stockholm Declaration
http://www.unep.org/Documents.multilingual/Default.asp?DocumentID=97&ArticleID=1503

* Rio Declaration
http://www.unep.org/Documents.multilingual/Default.asp?DocumentID=78&ArticleID=116303

* Johannesburg World Summit on Sustainable Development
http://www.un.org/esa/sustdev/documents/WSSD_POI_PD/English/POIToc.htm

Slide - 20



The first key international declaration relating to sustainable development, in a sense, served to qualify a state's otherwise inviolate right to develop as it sees fit. Stockholm Declaration Principle 21 contains two elements which cannot be separated without fundamentally changing their sense and effect. The first is the sovereign right of states to exploit their own natural resources, while the second is the responsibility, or obligation, not to cause damage to the environment of other states or of the areas beyond the limits of national jurisdiction.

Thus, while it is well recognized that states have the right to manage and utilize natural resources within their jurisdiction, and to formulate their own environmental and developmental policies, international law qualifies this right by requiring that states conduct their affairs in a manner that prevents environmental damage to neighbouring states. Where states fall short in meeting this obligation, which happens not uncommonly, Principle 21 serves as a key predicate for resolving the interstate dispute.

In short, Principle 21 was a formal recognition of the principle of state responsibility, recognized by the Trail Smelter Arbitration Panel in 1939/1941, which will be discussed later.

Reference:

* UNEP Training Manual on International Environmental Law, 2006, Chapter 3.

Slide - 21

The Rio Conference, among other things, set off a paradigm shift in the approach to environmental management. This slide illustrates the contrasts between traditional approaches to environmental management and law (left side), and the more integrated approaches (right side) contemplated by the Rio Declaration.

Since Rio, the trend towards integrated policy and management in environmental matters has been manifested increasingly in how environmental legislation has been formulated.

Agenda 21, the programme of action for sustainable development, emphasizes the need to provide an effective legal and regulatory framework to facilitate an integrated approach to environmental protection. Here are some representative provisions:
"8.13 Laws and regulations suited to country-specific conditions are among the most important instruments for transforming environment and development policies into action, not only through 'command and control' methods, but also as a normative framework for economic planning and market instruments...

8.14 To effectively integrate environment and development in the policies and practices of each country, it is essential to develop and implement integrated, enforceable and effective laws and regulations that are based upon sound social, ecological, economic and scientific principles. It is equally critical to develop workable programmes to review and enforce compliance with the laws, regulations and standards that are adopted...

8.15 The enactment and enforcement of laws and regulations (at the regional, national, state/provincial or local/municipal level) are also essential for the implementation of most international agreements in the field of environment and development, as illustrated by the frequent treaty obligation to report on legislative measures...

8.18 Governments and legislators, with the support, where appropriate, of competent international organisations, should establish judicial and administrative procedures for legal redress and remedy of actions affecting environment and development that may be unlawful or infringe on rights under the law, and should provide access to individuals, groups and organisations with a recognised legal interest.

References:

* Agenda 21, United Nations 1992
Arabic-http://www.un.org/arabic/conferences/wssd/agenda21/index.html
English -http://www.un.org/esa/susdev/documents/agenda21/english/agenda21toc.htm
Chinese- http://www.un.org/chinese/events/wssd/agenda21.htm
French- http://www.un.org/esa/sustdev/documents/agenda21/french/action0.htm
Russian -http://www.un.org/russian/conferences/wssd/agenda21/
Spanish- http://www.un.org/esa/susted/documents/agenda21/spanish/agenda21sptoc.htl

Slide - 22

The World Summit on Sustainable Development Plan of Implementation focused, among other things, on:-

* poverty eradication
* changing unsustainable patterns of consumption and production
* protecting and managing the natural resource base of economic and social development
* the recognition that globalization offers both opportunities and challenges for sustainable development; and
* the link between human health and sustainable development

The focus on good governance as an organizing principle is key to the work we are doing here, as a strong, vital, and informed judiciary is key to achieving good governance in the environmental context.

References:

* UNEP Training Manual on International Environmental Law, 2006, Chapter 3

* Johannesburg Plan of Implementation Chapter 1 para.2

http://www.un.org/esa/sustdev/documents/WSSD_POI_PD/English/POIChapter1.htm

Slide - 23

The Rio Declaration consists of 27 principles or concepts. Many of these concepts were already present in various forms in the laws of those states which had comprehensive environmental legislation at the time of the Rio Conference. Although nonbinding, with respect to those countries whose environmental legislation has emerged in the wake of the Rio Conference, these concepts have generally informed and shaped the contours of national law. They have also greatly influenced the structure and orientation of multi-lateral agreements developed in relation to the environment. Some of the more noteworthy Rio concepts are shown here.

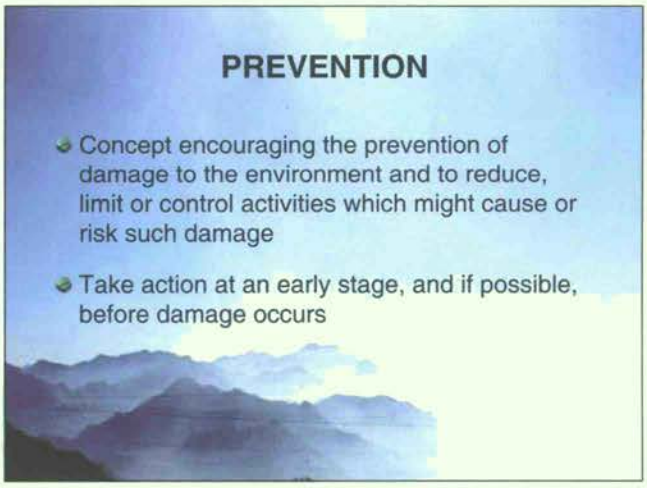
We will briefly discuss each of these in turn.

References:

* UNEP Training Manual on International Environmental Law, 2006, Chapter 3.

* Sands, P. Principles of International Law, Second edition, Cambridge 2003.

Slide - 24



The objective of most environmental laws is to prevent environmental harm, whether the laws concern pollution of inland waters or the sea, the atmosphere, soil, or the protection of human life or living resources.

The prevention concept can be considered as an overarching aim that gives rise to a multitude of legal mechanisms, including prior assessment of environmental harm, licensing or authorisation that sets out the conditions for operation and the consequences of violation of the conditions, adoption of national and international standards for certain activities bearing on the environment, as well as the adoption of preventative strategies and policies. The concept of environmental impact assessment is really a manifestation of the concept of prevention. Product or process standards, the use of best available techniques, etc. can all be seen as applications of the concept of prevention.

Among the values of prevention is that preventative measures are often far more cost effective than remediating environmental damage after they have already occurred.

Reference:

* UNEP Training Manual on International Environmental Law, 2006, Chapter 3.

Slide - 25

As noted, EIA derives from the more fundamental concept of prevention. Principle 17 of the Rio Declaration states:

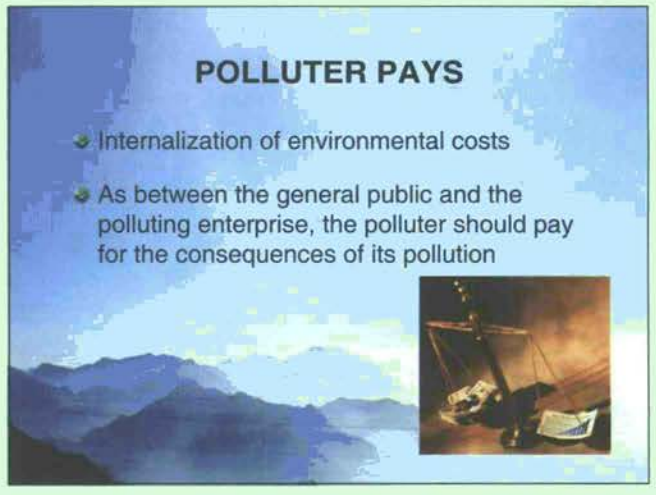
"Environmental impact assessment, as a national instrument, shall be undertaken for proposed activities that are likely to have a significant adverse impact on the environment and are subject to a decision of a competent national authority."
Environmental impact procedures were first adopted at the national level in the 1960s; shortly thereafter, national laws and international treaties began imposing EIA requirements that were increasingly broad in their scope and detailed in their requirements and provisions. At present, environmental impact assessment is singularly important in both domestic and international environmental law. International instruments today commonly provide that states should not undertake or authorize activities without prior consideration, at an early stage, of their environmental effects.

Environmental impact assessment (EIA) seeks to ensure that adequate and early information is obtained on likely environmental consequences of development projects, on possible alternatives, and on measures to mitigate harm. It is generally a prerequisite to decisions to undertake or to authorize designated construction, processes or activities. EIA procedures generally require that a developer or business owner submit a written document to a designated agency or decision-making body, describing the probable or possible future environmental impact of the intended action. An adequate and rigorous consideration of alternatives is at the heart of the EIA decision-making process. The study must produce sufficient information to permit a reasonable choice of alternatives as far as environmental consequences are concerned. Where decisions are made purely on economic and technical grounds without regard to environmental costs and benefits, the EIA may in most systems be rejected as seriously flawed. Not every proposed activity is subject to assessment, only those that may be or are likely to cause a stated level of harm to the environment. The threshold differs in the many treaty references to EIA, with some referring to "measurable" effects, others "appreciable" or "significant" harm. The most frequently stated formulation requires a comprehensive EIA where the extent, nature, or location of a proposed activity is such that it is likely to significantly affect the environment.

The requirement to conduct EIAs may be based upon:
* Lists of categories of activities that by their nature are likely to have significant effects
* Lists of areas that are of special importance or sensitivity (such as national parks) where the impact of any activity within or affecting such areas must be assessed
* Lists of categories of resources or environmental problems which are of special concern
* An initial environmental evaluation of all activities, with a quick and informal assessment to determine whether the effects are likely to be significant
* Defined and listed criteria, which make an impact "significant."

Reference:
* UNEP Judicial Handbook on Environmental Law, 2005, Chapter 4

Slide - 26



The "polluter pays" concept was originally enunciated by the Organization for Economic Cooperation and Development (OECD) to restrain national public authorities from subsidizing the pollution control costs of private firms. Instead, enterprises should internalize the environmental externalities by bearing the costs of controlling their pollution to the extent required by law.

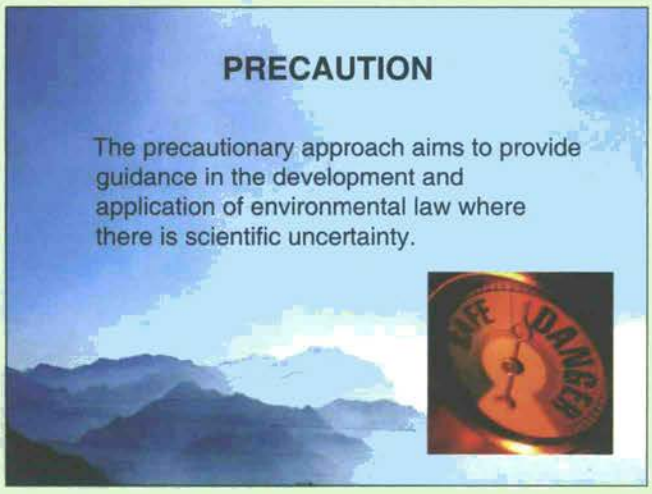
Principle 16 of the Rio Declaration expressed it this way:
"National authorities should endeavour to promote the internalization of environmental costs and the use of economic instruments, taking into account the approach that the polluter should, in principle, bear the cost of pollution, with due regard to the public interest and without distorting international trade and investment."

Cost internalisation operates on a number of different dimensions and requires accounting for both the short-term and long-term external environmental impacts of development and can be undertaken in a variety of ways. For example, environmental factors should be reflected in the valuation of assets and services; those who generate pollution and waste should bear the cost of containment, avoidance, or abatement; the users of goods and services should pay prices based on the full life cycle costs of providing goods and services, including the use of natural resources and assets and the ultimate disposal of any wastes; and those who violate the law should suffer financial sanctions sufficient to disgorge any economic benefit associated with the violation, thereby forcing them to internalise the true costs of their activity and eliminating the market distortion created when some engage in environmentally responsible behaviours and others do not.

The rationale underlying the internalisation of environmental costs is that if the real value of the environment, and components of it, are reflected in the costs of using it, the environment will be sustainably used and managed and not exploited wastefully. The idea can be expressed in the form of a "user pays" concept and a "polluter pays" concept.

Reference:
* UNEP Judicial Handbook on Environmental Law, 2005, Chapter 2.

Slide - 27



Principle 15 of the Rio Declaration on Environment and Development defines this concept as follows:

"In order to protect the environment, the precautionary approach shall be widely applied by states according to the capabilities. Where there are threats of a serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation."

Principle 15 was one of the first global articulations of the precautionary approach. It is also reflected in the Framework Convention on Climate Change and the Convention on Biological Diversity. That Convention provides: "where there is a threat of significant reduction of biological diversity, lack of full scientific certainty should not be used as a reason for postponing measures to avoid or minimize such a threat".

The concept of Precaution, on the one hand, is seen as essential to the protection of the environment, including human health, and is accordingly one of the most commonly encountered international environmental concepts. On the other hand, it is also one of the most controversial of the Rio principles because of disagreements about its precise meaning and legal status, and because of concern that it can lead to overregulation, can unduly limit acceptable and sustainable human development activity, and will be misused, particularly for trade protectionist purposes.

See for example **Greenpeace Australia v. Redbank Power Station, Land and Environment Court, New South Wales Australia, 1994**

Greenpeace objected to the building of a coal-fired power station. The power station was to depend on a new technological process involving the use of a fluidized bed combustion plant, which would use coal tailings as a fuel, rather than newly mined coal. This accorded with the principle of sustainable use. It would also dispense with the need for disposal of tailing in a tailings dam which caused land pollution. It would emit less of some types of greenhouse gas emissions, but would emit more of CO2 than conventional coal fired power stations. Greenpeace's main argument was that the impact of CO2 greenhouse gas emissions would unacceptably exacerbate the greenhouse effect in the earth's atmosphere, and that the court should apply the precautionary principle, and refuse the development.

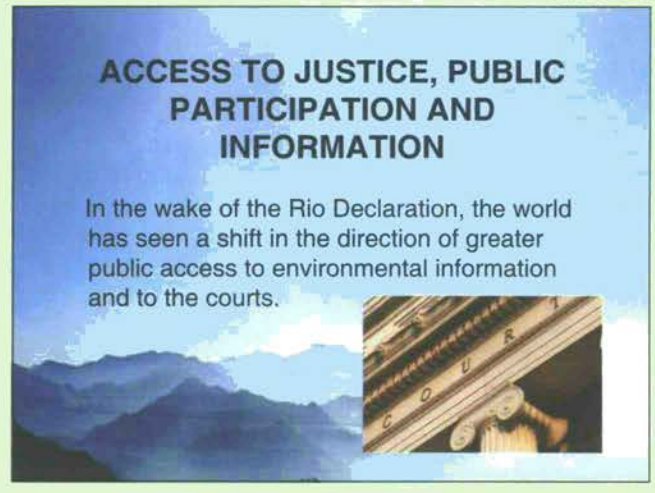
The court held that the development should be allowed to proceed. The precautionary principle, the court stated, does not require that the greenhouse issue should be given precedence over all others. The precautionary principle needs to be considered with other principles of sustainable development.

(Note that this case was decided before the precautionary principle was made a mandatory consideration in environmental impact assessment processes in New South Wales.)

References:

* UNEP Compendium of Judicial Decisions on Matters related to the Environment, National Decisions, 1998, Volume 1, Page 335.
* UNEP Compendium of Summaries of Judicial Decisions in Environment-related Cases, 2005, page 218.
* UNEP Training Manual on International Environmental Law, 2006, Chapter 3.
* Greenpeace Australia v. Redbank Power Station, Land and Environment Court, New South Wales Australia, (1994)NSWLEC 178(10 Nov. 1994) (199 http://www.austii.edu.au/au/cases/nsw/NSWLEC/1994/178.html

Slide - 28



The Rio Declaration, Principle 10, states

"Environmental issues are best handled with the 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."

Transparency and access to information are generally regarded as essential to effective public participation and sustainable development.

Public participation in the context of sustainable development requires, in particular, the opportunity to hold and express opinions, and to seek, receive and impart ideas. It also requires a "right of access to the reported, comprehensible and timely information held by governments and industrial concerns, on economic and social policies regarding the sustainable use of natural resources and the protection of the environment." This should be done without imposing undue financial burdens on applicants for information, and with adequate protection of privacy and business confidentiality.

The empowerment of people in the context of sustainable development also requires access to the effect of judicial and administrative proceedings.

Agenda 21 underlined that public participation in environmental decision-making is one of the fundamental prerequisites for the achievement of sustainable development.

The Aarhus Convention (Europe) concerning public participation and right of access to information and access to justice in environmental matters is a direct result of an expression of principle 10 of the Rio Declaration on Environment and Development.

In many countries, public participation rights are now grounded through environmental impact assessment processes, with broad public participation in terms of access to information, and the right to make submissions on environmental and impact statement.

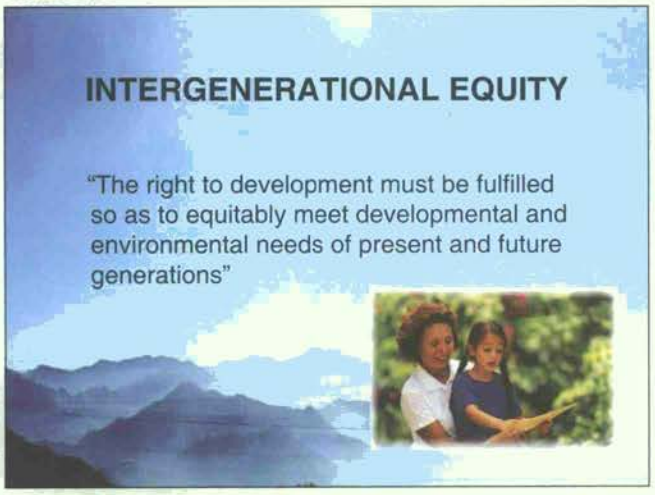
Many jurisdictions now also allow a right to judicial review of administrative decisions, and accord the right to be heard to both non-government organizations (NGOs) as well as individuals.

References:

* UNEP Training Manual on International Environmental Law, 2006, Chapter 3.
* Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters

http://ec.europa.eu/environment/aarhus

Slide - 29



Rio Declaration Principle 3 states: "'the right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations". This concept is an extension or derivation of the so-called "public trust doctrine", which posits that governments hold natural resources and the exercise of public power in trust for the citizenry, to be used for the public benefit.

Related to Principle 3 is Principle 5, which provides for the cooperation of all states "in the essential task of eradicating poverty as an indispensable requirement for sustainable development, in order to decrease the disparities in standards of living and better meet the needs of the majority of the people of the world".

Both the 1992 Framework Climate Change Convention and the 1992 Biodiversity Convention referred to the concept of intergenerational equity, as does the 1992 Convention on the Protection and Use of Transboundary Watercourses and International Lakes, the 1994 Desertification Convention and the 2001 Convention on Persistent Organic Pollutants.

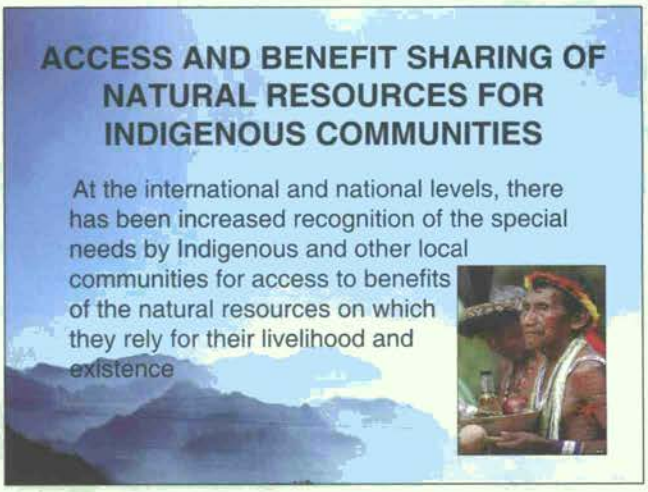
At bottom, this principle stands for the proposition that the present generation has a right to use and enjoy the resources of the Earth, but is under an obligation to take into account the long-term impact of its activities, and to sustain the resource base and global environment for the benefit of future generations. In this context, "benefit" is given its broadest meaning, as including, among other things, economic, environmental, social and intrinsic gain.

Some national courts have referred to the right of future generations. One of the best known of these cases is *Oposa v Factoran, Supreme Court of the Philippines 1993*, which allowed 43 minor petitioners, represented by their parents, to file a class suit, on behalf of their own generation and of behalf of all succeeding generations. The Supreme Court considered the concept of intergenerational responsibility, and recognized that every generation has a responsibility to the next to preserve for future generations a balanced and healthy ecology.

References:

*UNEP Training Manual on International Environmental Law, 2006, Chapter 3.
* UNEP Judicial Handbook on Environmental Law, 2005, Chapter 2
Philippines- Oposa et al. v. Fulgencio S. Factoran, Jr. et al. (G.R.No.101083)-07/30/1993 http://www.elaw.org/resources/text.asp?ID=278

Slide - 30



Principle 22 of the Rio Declaration observes: "Indigenous people and their communities and other local communities have a vital role in environmental management and development because of their knowledge and traditional practices. States should recognize and duly support their identity, culture and interests and enable their effective participation in the achievement of sustainable development."

As reflected by this principle, there is an emerging consensus around the world regarding the need for special attention to the needs of indigenous people and other local communities, who rely directly on natural resources for their livelihood and even for their existence, and often have unique cultural connections with natural resources.

Many of these communities have a sustainable orientation to these resources, as otherwise the resources would disappear and their cultures perish. As is clear from Principle 10 of the Rio Declaration, as well as emerging international human rights norms, these communities and the individuals comprising them should, at a minimum, have the right to participate in decision making processes relating to these resources. They may also have substantive rights to those resources, depending on the nature of the resource and the rights and entitlements within each jurisdiction.

Article 8 (j) of the Convention on Biological Diversity states that each contracting party shall: "..subject to its national legislation, respect, preserve and maintain knowledge, innovations and practices of indigenous people and local communities embodying traditional lifestyles ... and promote the wider application with the approval and involvement of the holders of such knowledge, innovations and practices and encourage the equitable sharing of the benefits arising from the utilization of such knowledge, innovations and practices".

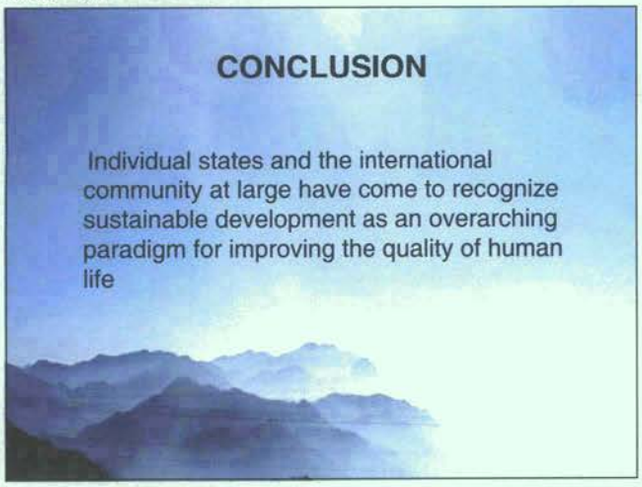
As a practical matter, the knowledge of indigenous and other local communities, and their participation in both decision making and in management can be of great value in protecting local ecosystems because of the traditional knowledge and cultural environmental awareness they bring to the equation. Their involvement in environmental impact assessment procedures is an example of a area in which they can valuably participate.

Among the legal questions in this area are whether indigenous and local communities have enforceable procedural and substantive rights, and whether there is a right to prior informed consent with respect to the use of their knowledge and the genetic resources on which they rely.

Reference:

* UNEP Training Manual on International Environmental Law, 2006, Chapter 3.

Slide - 31



We have discussed the nature of environmental problems and some of the key concepts that have emerged with respect to sustainable development.

We will next discuss the nature and impact of some of the major environmental problems.

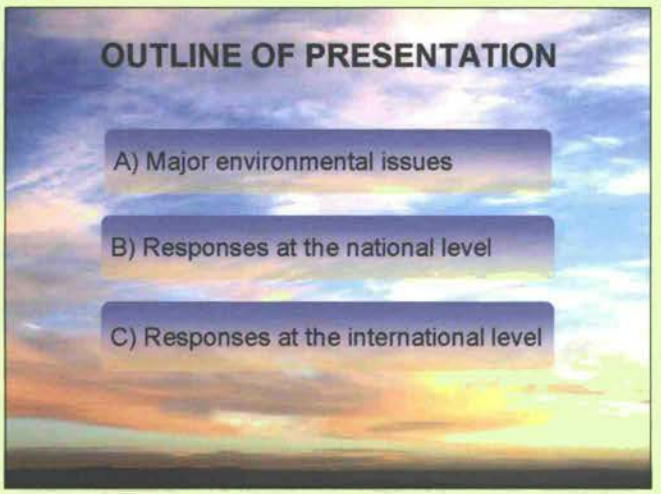
PRESENTATION 2

UNEP GLOBAL JUDGES PROGRAMME

APPLICATION OF ENVIRONMENTAL LAW BY NATIONAL COURTS AND TRIBUNALS

MAJOR ENVIRONMENTAL PROBLEMS

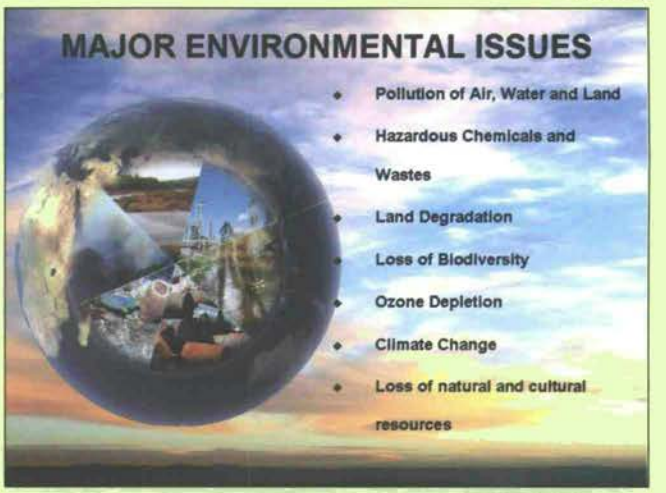
Slide - 1



In this presentation, we will be describing the environmental problems that the world faces today, recognizing that local impacts of these problems will vary to some degree from country to country. In particular, we will examine:

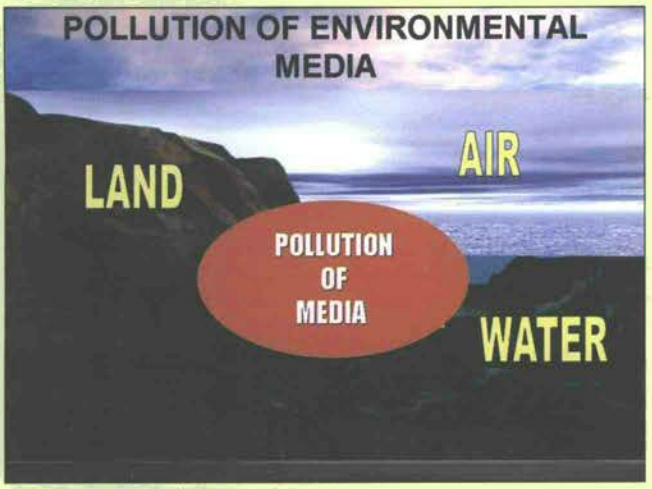
* Major environmental problems
* Responses to these problems at the national and international level

Slide - 2



Sustainable development depends on the capacity to ensure environmental protection in the midst of economic development. Some of the major environmental issues have been identified here.

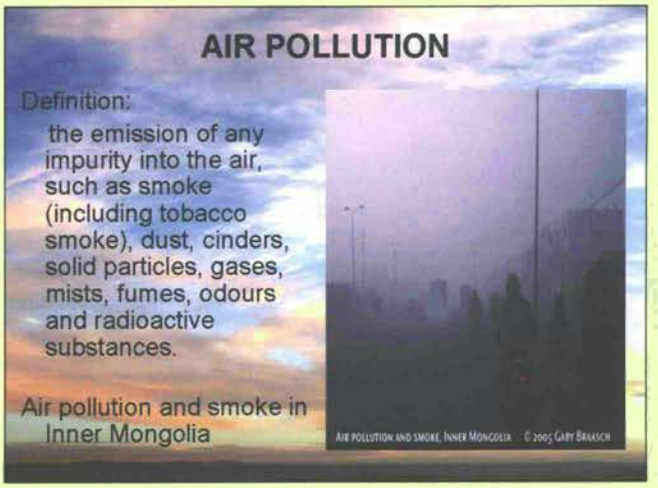
Slide - 3



This slide concerns pollution: the introduction by human beings, directly or indirectly, of substances or energy into the air, water, land and soil resulting in deleterious effects of such a nature as to endanger human health, harm living resources and ecosystems and material property, or impair or interfere with amenities and other legitimate uses of the environment.

Sources of pollution include, industry, land, air and water transport, agriculture as well as domestic and recreational activities.

Slide - 4



Air pollution

The impacts of air pollution are very serious.

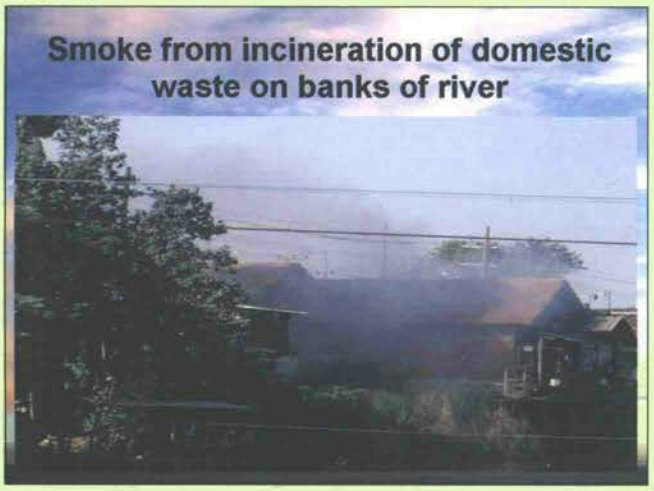
Harmful substances emitted to the air affect both human health and ecosystems. Indoor and outdoor air pollution is estimated to be responsible for nearly 5 per cent of the global burden of disease. Air pollution aggravates and, possibly, even causes asthma and other allergic respiratory diseases. Adverse pregnancy outcomes have also been associated with air pollution.

In developing countries about 1.9 million people die annually due to exposure to heavy pollution of the indoor air environment in rural areas.

Reference:

* UNEP Judicial Handbook on Environmental Law, 2005, Chapter 8.

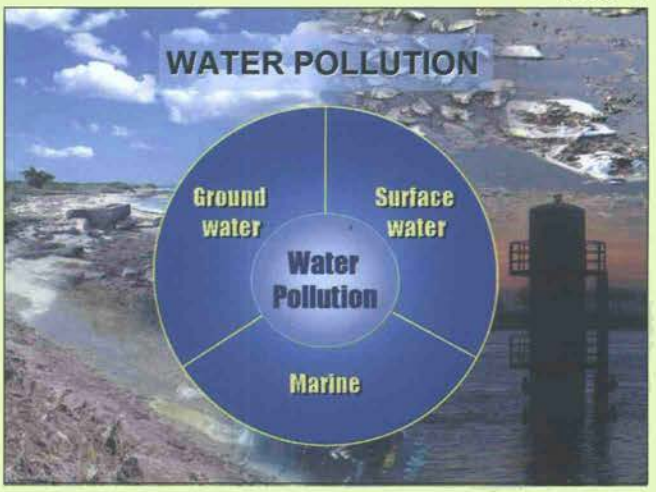
Slide - 5



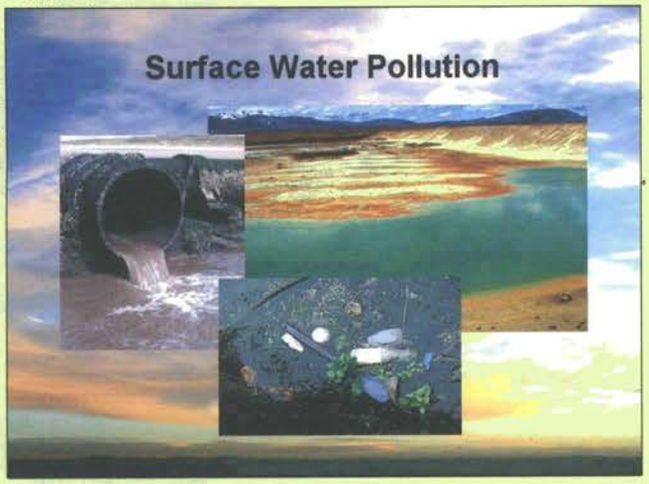
Smoke from incineration of domestic waste on banks of river

Because large concentrations of people live on the banks of or near rivers, the problems of pollution are compounded. Air, water, thermal and land pollution commonly occur at the same time.

Slide - 6



Slide - 7



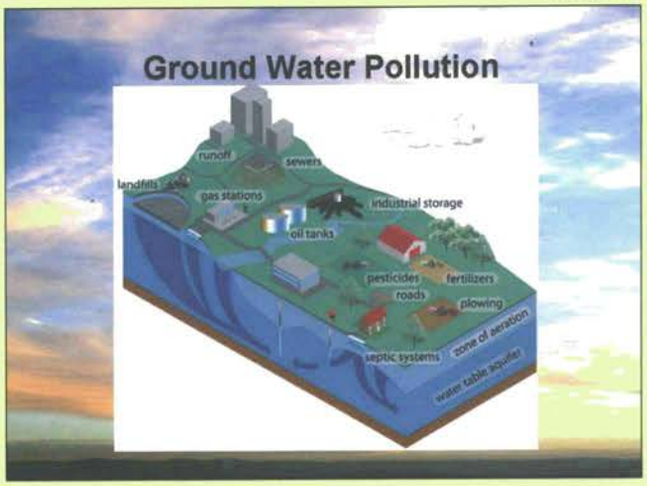
Main sources of surface water pollution:

* industrial discharge of chemical wastes and byproducts
* discharge of under-treated or untreated sewage
* surface run-off containing pesticides
* slash and burn farming practice
* surface runoff containing spilled petroleum products
* surface runoff from construction sites, farms, or paved and other impervious surfaces
* discharge of contaminated and/or heated water from industry
* acid rain caused by industrial discharge of sulfur dioxide (by burning high-sulfur fossil fuels) or fertilizers

Reference:

* Wikipedia: http://en.wikipedia.org/wiki/Water_pollution

Slide - 8



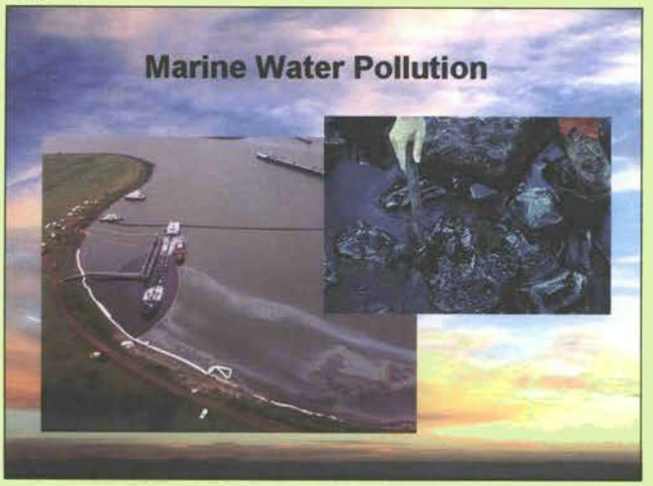
Ground water pollution has many of the same sources as surface water pollution. In addition, ground water pollution can be caused by underground storage tank leakage, leading to soil contamination, and subsequently aquifer contamination.

Groundwater pollution is much more difficult to abate than surface pollution because groundwater can move great distances through unseen aquifers. Non-porous aquifers such as clays partially purify water of bacteria by simple filtration (adsorption and absorption), dilution, and, in some cases, chemical reactions and biological activity: however, in some cases, the pollutants merely transform to soil contaminants. Groundwater that moves through cracks and caverns is not filtered and can be transported as easily as surface water. In fact this can be aggravated by the human tendency to use natural sinkholes as dumps in areas of Karst (usually limestone or dolomite rock) topography.

Reference:

* Wikipedia: http://en.wikipedia.org/wiki/Water_pollution

Slide - 9



Marine water pollution is the harmful entry into the ocean of chemicals or particles. A big problem is that many toxins adhere to tiny particles which are taken up within a few days by plankton and benthos animals, most of which are filter feeders, concentrating upward within ocean food chains. Because most animal feeds contain high fish meal and fish oil content, toxins can be found a few weeks later in commonly consumed food items derived from livestock and animal husbandry such as meat, eggs, milk, butter and margarine. One common path of entry by contaminants to the sea are rivers. Many particles combine chemically in a manner highly depletive of oxygen, causing estuaries to become anoxic

Reference:

* Wikipedia: http://en.wikipedia.org/wiki/Marine_pollution

Slide - 10

Few quality fish can survive in polluted rivers

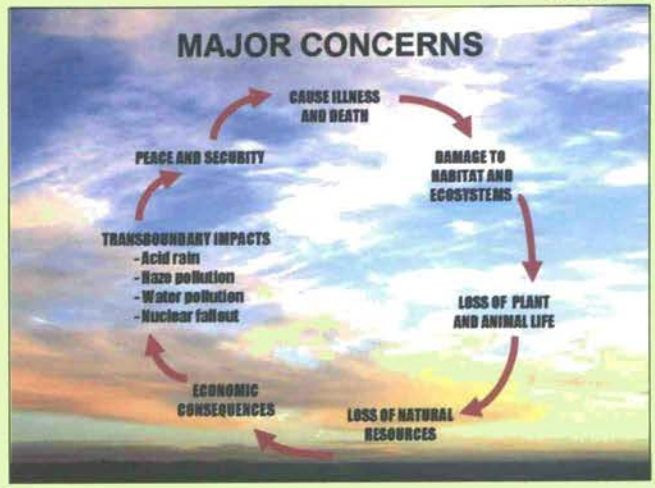
It is mainly very hardy fish that survive in polluted watercourses. These fish are of low eating quality, and are after contaminated with chemical absorbed from the water.

Slide - 11

Plastic bag and general waste dump beside communal toilets on riverbank

If there is little or no regulation of the construction of buildings, sanitary facilities can be wrongly sited, resulting in both land and water pollution, as well as odour. In this instance, sewage seeps into the river and garbage on the banks of the river also pollutes the water.

Slide - 12



ILLNESS AND DEATH
Pollutants may enter the body directly or increase the potency of disease vectors, such as the abundance of insect carriers, variously causing poisoning, infection, viruses, cancer, mutation, etc.

DAMAGE TO HABITAT AND ECOSYSTEMS
This results in changes in equilibrium between, or the chance of survival of, species, populations and ecosystems.

LOSS OF PLANT AND ANIMAL LIFE
The rate of species mass extinction is currently the highest it has been since the extinction of dinosaurs. An estimated one quarter of mammals might be extinguished by human intervention in the next 30 years. Endangered species are currently being lost to us and our descendants forever.

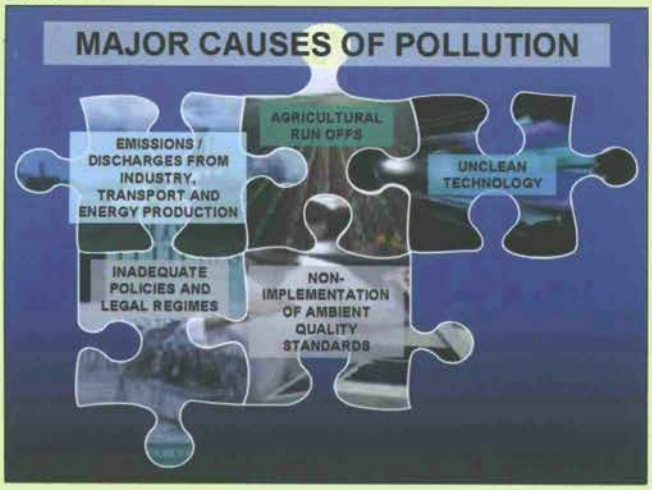
LOSS OF NATURAL RESOURCES
In addition to species, the water, minerals, environmental services and other components and inter-relationships of ecosystems are being lost. Their original structure cannot be recreated from them, eg. degraded soils cannot be reconstituted, just like burnt ashes cannot be remade into trees.

ECONOMIC CONSEQUENCES
The consequences of the above losses flow through industry sectors such as agriculture, pharmaceuticals, infrastructure, health, to permeate and burden the economy.

TRANSBOUNDARY IMPACTS
Acid rain – caused by the emission into the atmosphere of particles that are carried in the air and that acidify water vapour and precipitate in rain with harmful effects in water catchments and forests.
Haze pollution – haze of smoke caused by slash and burn land clearing that drifts across national borders disrupting health (eg. asthma) and economic activity (eg. airports).
Water pollution – deliberate or accidental discharges that travel along international watercourses resulting in deleterious effects such as fish kill and contamination for human consumption.

Political instability and conflict – E.g., Movements of environmental refugees from degraded land, upstream river water abstraction, etc.

Slide - 13



EMISSIONS/DISCHARGES IN INDUSTRY, TRANSPORT & ENERGY SECTORS

Burning of fossil fuels produces sulphurous and nitrous oxides, carbon dioxide and volatile organic compounds that are emitted to air. Other industry processes may discharge to water, eg. metal industries, sewage treatment, food processing.

AGRICULTURAL RUNOFFS

Catchments and waterways become burdened by the runoff into them from farmland of eroded soils caused by poor land management, by nutrients from agricultural fertilizers that eutrophicate lakes and slow watercourses and by broad scale application pesticides that persist in the environment.

UNCLEAN TECHNOLOGY

Unclean technologies are essentially inefficient. They produce waste because they do not make full use of raw materials fed into them. The materials are poorly suited to their utilisation, eg. energy production from lignite produces more waste than gas.

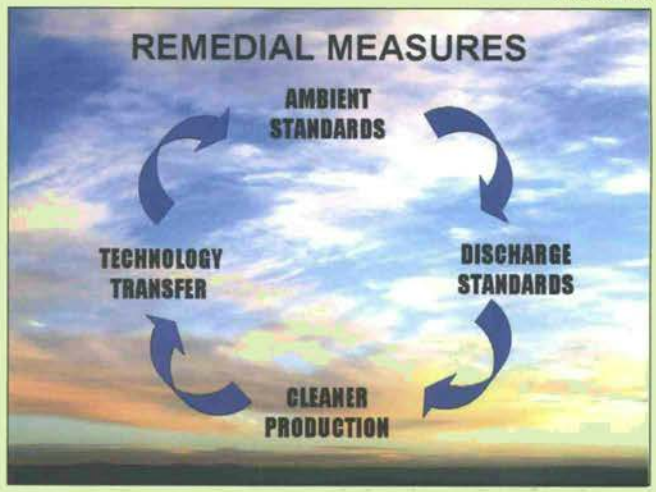
INADEQUATE POLICIES AND LEGAL REGIMES

These inadequacies may be caused by short-term social pressures and exigencies, or simply lack of knowledge and foresight.

NON-IMPLEMENTATION OF ENVIRONMENTAL STANDARDS

Often, standards already in place are not implemented, due to lack of human resources, other policy priorities, regulatory capture or corruption.

Slide - 14



Remedial measures designed to improve the quality of environmental management can take many forms, variously designed to address pollution at its source of generation or to limit its release into the environment.

AMBIENT STANDARDS

Ambient standards set targets for environmental quality. They are usually the maximum amount of a given pollutant allowed to be emitted to a given environmental medium. They are well suited to media that are impacted upon from multiple sources of pollutants.

DISCHARGE STANDARDS

Discharge standards set the maximum amount of pollutants that can be discharged from a point source. Typically, these are prescribed pollutant discharge limits for specific licensed discharge points, such as factories. They are described as "end of pipe" controls.

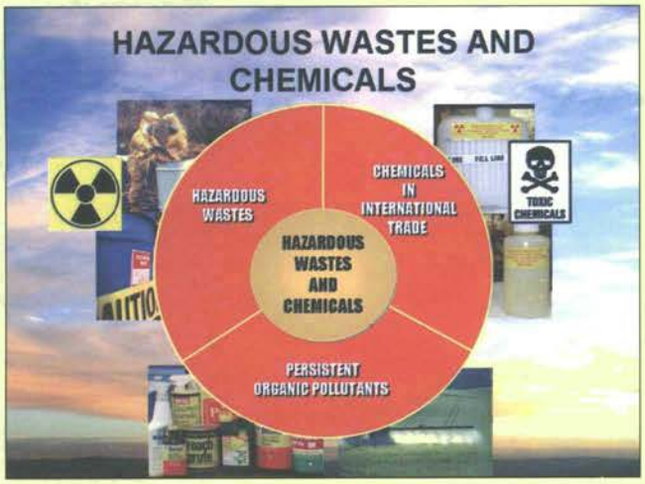
CLEANER PRODUCTION

Cleaner production standards seek to remedy pollution generation at its source by changing the technology that produces it. They are often implemented through policies and programs for industry restructuring, such as by subsidising the decommissioning of equipment.

TRANSFER OF TECHNOLOGY

International cooperation is often designed to support the transfer of clean technology, such as by financial or technical assistance, so as to enable cleaner production. Often, such transfers are facilitated through multilateral environment agreements (MEAs).

Slide - 15



Hazardous wastes and chemicals include a wide range of chemical substances capable of causing significant harm to human health, the environment, or both, and include substances that are explosive, flammable, oxidising, poisonous, infectious, corrosive, toxic, ecotoxic, radioactive, liable to spontaneous combustion, emit flammable gases upon contact with water, and those that are capable of yielding another material which possesses any of the previous characteristics.

Growth of international trade in chemicals during the 1960s and 1970s raised concerns about the potentially harmful results of such trade. Developing countries lacking adequate infrastructure to monitor the import and use of toxic chemicals were seen to be particularly vulnerable. The Prior Informed Consent (PIC) Convention seeks to ensure that governments have the necessary information to assess the risks of hazardous chemicals and to take informed decisions on their future import and management.

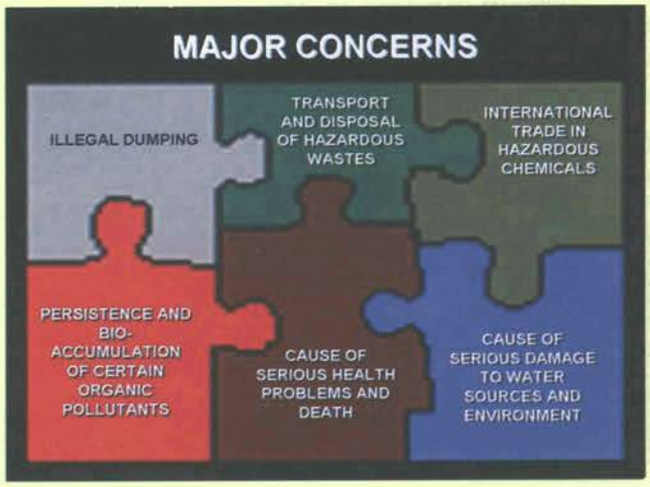
Certain persistent organic pollutants (POPs) are to be phased out of production by international agreement. They are chemicals which share the following properties:

High toxicity;
Persistence, lasting for years or even decades before degrading into less dangerous forms;
Mobility, as they evaporate and travel long distances through the air and through water; and
Higher concentration further up the food chain and accumulation in fatty tissues.

At the Ninth Special Session of the UNEP Governing Council held in Dubai in 2005, the Council/Forum adopted decision SS.IX/1, by which it endorsed the Strategic Approach to International Chemicals Management (SAICM) which is a policy framework for international action on chemical hazards.

Reference:
* http://www.unep.org/themes/chemicals

Slide - 16



ILLEGAL DUMPING
Illegal dumping is undertaken by local 'backyard' operators who expect to escape identification or is sometimes facilitated across borders by transnational criminal organisations.

TRANSPORT AND DISPOSAL OF HAZARDOUS WASTES
Transport of hazardous wastes poses high risks of accidental spills, that can be particularly harmful in densely populated or ecologically sensitive areas. Disposal needs to be subject to special precautions, such as immobilisation of the waste, to prevent it from leaching into water bodies and soils.

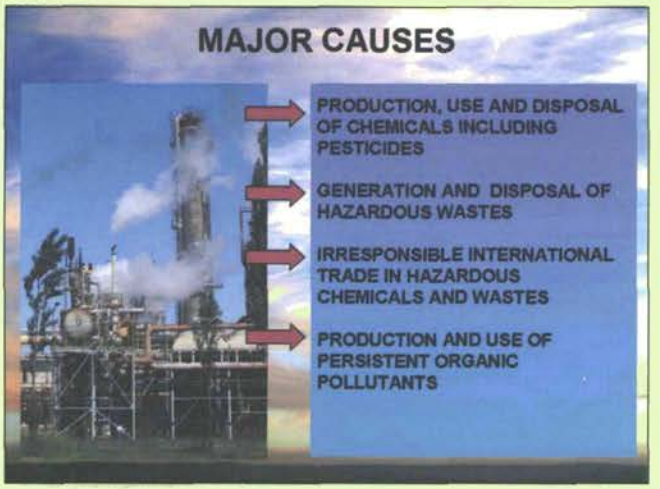
INTERNATIONAL TRADE IN HAZARDOUS CHEMICALS
The country of destination might lack the capacity to regulate and oversee the disposal of imported waste, or the waste stream from a local operation recycling imported waste.

PERSISTENCE & BIO-ACCUMULATION OF ORGANIC POLLUTANTS
Certain organic pollutants, such as pesticides, do not break down naturally, especially in colder climes. Instead they persist in the environment and gradually accumulate in the fatty tissues of animals, occurring in higher concentrations each step further up the food chain, impairing the health of those animals.

CAUSE OF SERIOUS HEALTH PROBLEMS AND DEATH
Hazardous wastes have been documented as causing poisoning, and persistent organic pollutants as causing cancer and mutation and impairing sexual function.

CAUSE OF SERIOUS DAMAGE TO WATER SOURCES AND ENVIRONMENT
The major example of environmental damage from hazardous wastes are tailings from mining operations that are released into watercourses, causing fish kills and forest dieback.

Slide - 17



PRODUCTION, USE AND DISPOSAL OF CHEMICALS, INCLUDING PESTICIDES

Pesticides are essentially poisons produced to target particular plant or insect pests. They are broadly applied across wide areas and are usually designed to continue working as long as possible, without a disposal strategy. Formal disposal may become necessary for expired batches.

GENERATION AND DISPOSAL OF HAZARDOUS WASTES

Hazardous wastes are generated by industrial production operations, such as in the printing, plastics, metals and mining industries. They are also generated by decommissioning operations, such as the disposal of industrial and transport equipment and plant. The high costs of hazardous waste disposal provide incentives to illegally dump them or to export them to countries where the disposal costs are lower.

IRRESPONSIBLE INTERNATIONAL TRADE IN HAZARDOUS CHEMICALS AND WASTES

International trade for final disposal or for recycling can be profitable for both the consignor and the consignee. Sometimes the distinction between final and disposal and recycling is difficult to make as a proportion of the waste imported for recycling will nevertheless need to be disposed of. The country of destination might lack the capacity to manage the environmental consequences of either operation. This is especially true for developing country destinations. Nevertheless, financial incentives may lead to irresponsible or illegal international trade in hazardous waste.

PRODUCTION AND USE OF PERSISTENT ORGANIC POLLUTANTS (POPs)

Many POPs are produced as pesticides (eg. chlordane, dieldrin, aldrin), others as industrial agents, such as insulators (eg. PCBs) or heat transferors (eg. CFCs), or as byproduct wastes (eg. dioxins).

Slide - 18

ENVIRONMENTALLY SOUND MANAGEMENT OF PRODUCTION, TRANSPORT, STORAGE AND USE OF CHEMICALS

Laws governing: production and importation, labeling, registration of users, handling, logging of movement, and responsible care of industrial and agricultural chemicals. Supporting these laws, there need to be administrative agencies and enforcement officers.

ENVIRONMENTALLY SOUND DISPOSAL OF HAZARDOUS WASTES

Disposal needs to minimise the risk of leakage or leaching of wastes into soil and water. Costs of disposal should be covered by the waste generator through price transfer to the consumer.

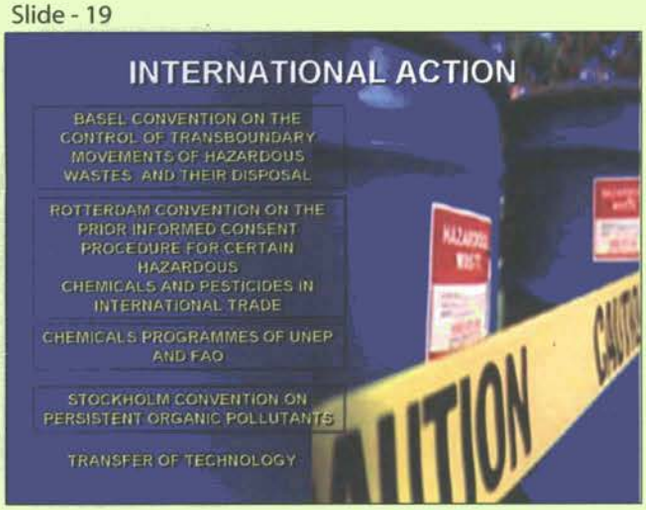
PHASING OUT PRODUCTION AND USE OF POPS

Phasing out production and use of POPs requires the development of alternative technologies that are not dependent on POPs.

DEVELOPMENT OF ALTERNATIVES

The development of clean technologies is essential to phasing out the production and use of POPs. Eg. replacing POPs with integrated pest management and alternative pesticides; developing technologies that do not generate dioxins; using insulators other than PCBs.

Slide - 19



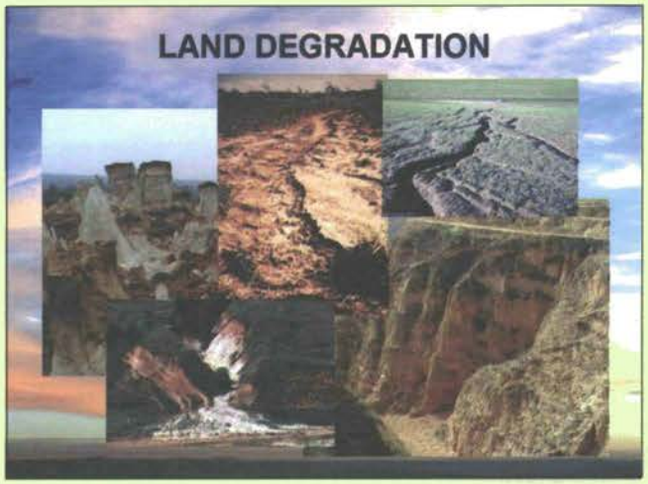
The Basel Convention on the Control of Transboundary Movement of Hazardous Wastes and Their Disposal ("1989 Basel Convention") and some regional agreements (not yet in force) provide measures to deal with the control of transboundary movement of hazardous wastes; environmentally sound management of hazardous wastes; and enforcement and implementation of the provisions of the convention at international and national levels.

The Rotterdam Convention on Prior Informed Procedure for International Trade creates a legally binding obligation for implementation of the Prior Informed Procedure for Certain Hazardous Chemicals and Pesticides in International Trade. It is a means for formally obtaining and disseminating the decisions of importing countries as to whether they wish to receive shipments of a certain chemical. It facilitates information exchange about characteristics of chemicals and thereby informs the importing country's national decision-making processes for their importation and use.

The Stockholm Convention on Persistent Organic Pollutants seeks to eliminate the most dangerous POPs which remain operative over long periods of time and to poison specific aspects of an ecosystem- and supports the transition to safer alternatives and cleaning-up old stockpiles and equipment containing POPs.

TRANSFER OF TECHNOLOGY
The development of alternatives requires investments of time, effort and capital that would be inefficient to duplicate across every country. International cooperation in the transfer of technology is more efficient and has mutual benefits in the prevention of transnational movements of POPs through environmental media.

Slide - 20



References:

* LAND DEGRADATION:
UNCCD - United Nations Convention to Combat Desertification http://www.unccd.int/

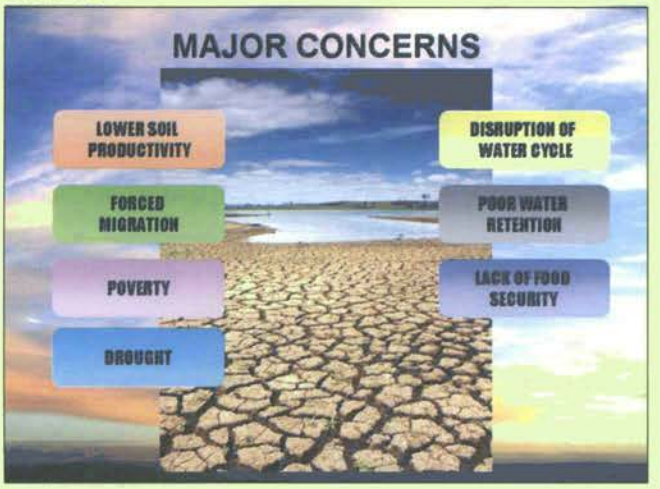
5th Special Session - Land degradation - United Nations Environment Programme http://www.unep.org/Documents.Multilingual/Default.asp?DocumentID=74&ArticleID=1054&l=en

FAO – Food and Agriculture Organisation of the United Nations: Land degradation in south Asia: Its severity, causes and effects upon the people http://www.fao.org/documents/show_cdr.asp?url_file=/docrep/V4360E/V4360E00.htm

Global Environment Facility: http://www.gefweb.org/projects/Focal_Areas/land/land.html

* DESERTIFICATION:
United Nations System-Wide EARTHWATCH http://www.un.org/earthwatch/desertification/landdegradation.html

Slide - 21



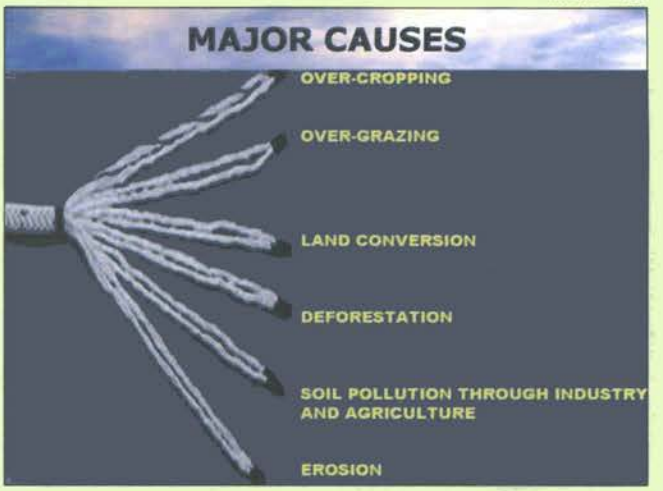
Land degradation problems raise a number of environmental issues requiring an effective response at both the national and international level. These issues include:

* Recognising that some lands are ecologically fragile and require proper management to avoid turning them into deserts;
* Controlling of human activities on ecologically fragile lands to prevent desertification;
* Creating regulatory control of deforestation and soil erosion, among others, to reduce and prevent land degradation;
* Controlling population growth to prevent and reduce negative population impacts on fragile lands;
* Rehabilitating desertified lands and lands experiencing impacts of drought that might eventually lead to desertification;
* Acting to address socio-economic impacts of desertification and drought in affected areas;
* Integrating the development of lands in environmentally sensitive areas to sustainable development of the areas; and,
* Encouraging diversification of cropping systems as well as the adoption of appropriate agricultural technologies, among others, to halt and reverse land degradation.

Land degradation also contributes significantly to:

* lower soil productivity
* poor water retention
* disruption of water cycle
* drought
* worsening poverty
* lack of food security
* forced migration

Slide - 22



Desertification is the result of complex interaction between physical, chemical, biological, socio-economic and political factors of local, national and global nature. The main causes of desertification include: deforestation, clearance of marginal lands for cultivation, poor management of arable land including over use of fertilisers and pesticides, poor irrigation practices, uncontrolled dumping of wastes, deposition of pollutants from the air, encroachment of desert sands onto croplands and poor land-use planning. Such human activities degrade soil fertility and other useful components, loosen soil structure and reduce vegetation cover, thereby exposing land to erosion by rain and wind. Landslides also occur easily.

Similarly, maintaining large numbers of livestock leads to overgrazing and to soil compaction due to constant trampling of the ground by animals. The impact loosens the soil structure, affects the health of plant communities, and exposes soil to erosion by wind and water. These ultimately render the land useless.

Another factor is chemical degradation of soils, which causes loss of nutrients and/or loss of organic matter, salinisation, pollution and acidification. The physical processes involved include compaction, sealing and crusting, waterlogging, and subsidence of organic soils. The other agents of soil degradation include rising sea-level due to either subsidence or climate warming, flooding of valleys for hydroelectric purposes, tourism development of long beaches and in the mountains, and expansion of urban and industrial areas.

In addition, the short-term exploitation of land resources to plant cash crops unsuitable for local soil conditions may deplete the soil without providing the community with sufficient funds to undertake land rehabilitation, and may also disrupt traditional and possibly more sustainable agriculture and land use patterns.

Climate change could also affect agriculture by causing long-term changes in agro-ecosystems through increased frequency and severity of extreme weather events, such as heat waves, droughts, flooding and cyclones, all of which could exacerbate soil erosion and affect patterns of plant diseases and pest infestation.

Slide - 23

* The only binding international agreement focusing specifically on the problem of desertification, land degradation and drought is the United Nations Convention to Combat Desertification in those Countries Experiencing Serious Drought and/or Desertification.

* The objective of the Convention, provided in article 2, is "to combat desertification and mitigate the effects of drought in countries experiencing serious drought and/or desertification, particularly in Africa, through effective action at all levels, supported by international cooperation and partnership arrangements."

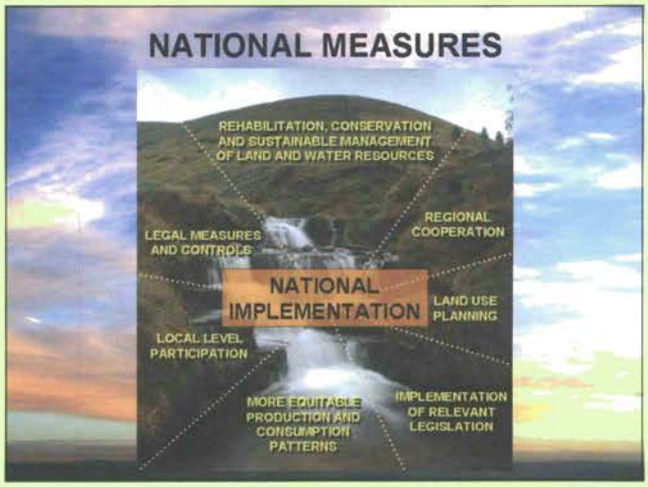
* The Convention creates three types of obligations on parties to be fulfilled as they are guided by the established principles- (1) general and specific obligations of all parties, (2) obligations of affected parties, and (3) obligations of developed countries that are parties to the Convention.

* Because of the limited financial resources of developing countries, especially those in Africa, developed countries that are parties to the Desertification Convention commit under articles 20 and 21 to financially support their developing counterparts. The Convention further requires developed country parties to mobilise funds from the Global Environment Facility ("GEF"), and from other sources, and to channel the resources to developing country parties in order to meet this requirement.

Reference:

* UNEP Judicial Handbook on Environmental Law, 2005, Chapter 9

Slide - 24



Parties to the international desertification convention agree to take a number of actions, including:

* Steps and actions within their countries to address the problems of desertification and drought and their underlying causes, including ecological and socio-economic actions such as minimising the intensive cultivation of marginal lands that leads to soil erosion and desertification, and taking measures to reduce the rate of population growth. Other measures include land use planning, legal measures and controls local level participation, rehabilitation, conservation and sustainable management of land and water resources, more equitable production and consumption patterns, implementation of relevant legislation and regional cooperation.

* Developing National Action Plans (NAPs)) to identify the factors contributing to desertification and practical measures necessary to combat desertification and mitigate the effects of drought in a given country; specification of roles to be played by governments, local communities and other users of natural resources in combating desertification and drought; resources available to combat desertification and drought and necessary resources that are still lacking.

* Improvement and/or establishment of the early warning systems and food security systems; development of sustainable irrigation programmes; establishment of institutional and legal frameworks; promotion of capacity-building, promotion of environmental education; and strengthening capabilities for assessment and observation of hydrological and meteorological services.

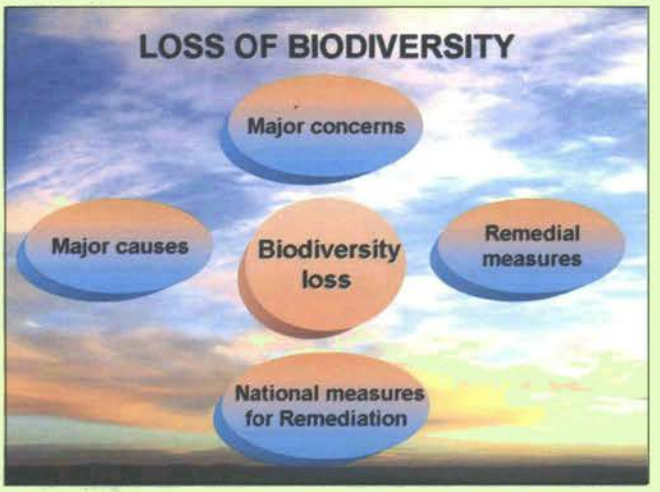
* To harmonise, complement and increase the efficiency of NAPs, affected countries that are parties to the Convention are also required under article 11 to jointly prepare and implement sub-regional and regional action programmes ("SRAPs" and "RAPs") that provide for the collecting, analysing and exchanging of information; to link national, sub-regional and regional data and information collection centres to the global institutions; and to promote and support research activities on relevant areas depending on their capacities.

* Furthermore, country parties are to undertake, consistent with their national laws, to promote, finance and/or facilitate the financing of the transfer, acquisition, adaptation and development of environmentally sound, economically viable and socially acceptable technologies relevant to combating desertification and/or mitigating the effects of drought.

Reference:

* Ian Hannam and Ben Boer Drafting Legislation for Sustainable Soils: A Guide, 2004 Environmental Law and Policy Papers No. 52, http://www.iucn.org/themes/law/pdfdocuments/EPLP52EN.pdf

Slide - 25

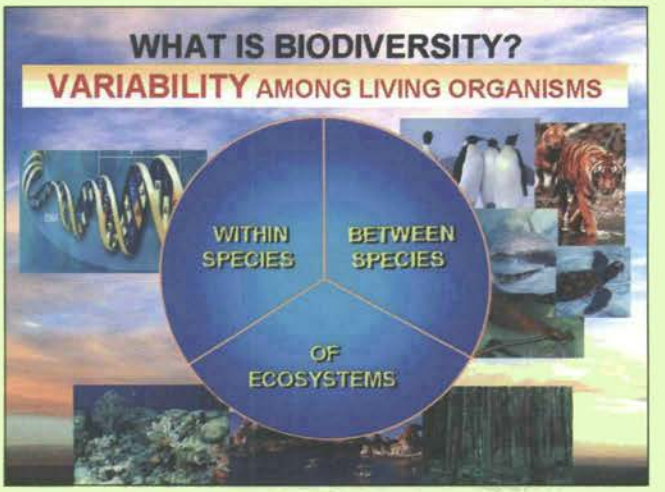


The series of slides that follow is intended to give an overview of the notion of biodiversity, why the loss of biodiversity is a major global problem, the human and natural activities that contribute to the loss of biodiversity, the international responses to arrest the loss of biodiversity and the national measures that are being taken to achieve these objectives.

Reference:

* UNEP Judicial Handbook on Environmental Law, 2005, Chapter 10

Slide - 26



Biological diversity is the variety of life in all its forms, levels and combinations. It represents the variability within and among all ecosystems, species and genetic material.

Biological diversity or biodiversity encompasses all genes, species, habitats and ecosystems on earth and is defined in Article 2 of the Convention on Biological Diversity as:

"the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems."

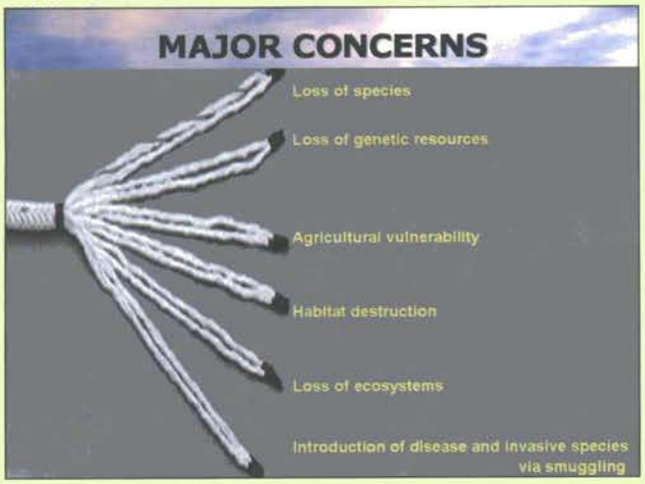
The Convention distinguishes three levels of biological diversity:

1) diversity within species
2) diversity between species; and
3) diversity of ecosystems.

Reference:

* Text of the Convention on Biological Diversity (1992) in Arabic, Chinese, English, French, Russian and Spanish: http://www.biodiv.org/convention/convention.shtml

Slide - 27



The extinction of species and their habitats and the destruction of ecosystems have profound implications for economic and social developments because of the goods and services they provide. The loss of the diversity of life diminishes the chances for medical discoveries, economic development and adaptive responses to challenges, such as climate change.

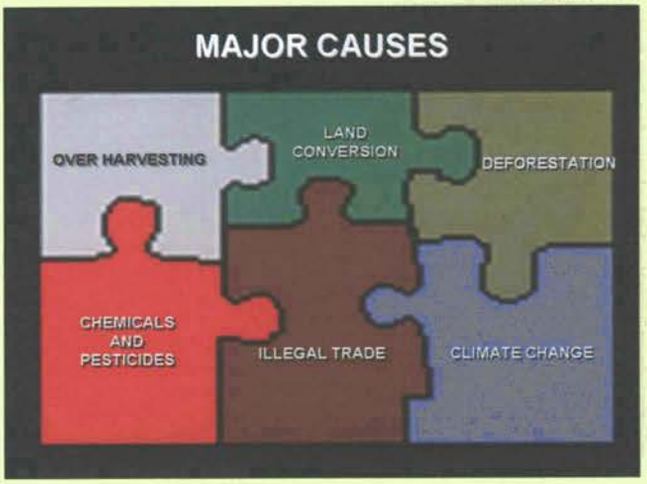
"Goods and services" provided by ecosystems include:

* Food, fuel and fibre
* Shelter and building materials
* Purification of air and water
* Detoxification and decomposition of wastes
* Climate stabilisation and moderation
* Moderation of floods, droughts, temperature extremes and the forces of wind
* Generation and renewal of soil fertility, including nutrient cycling
* Pollination of plants, including many crops
* Control of pests and diseases
* Maintenance of genetic resources as key inputs to crop varieties and livestock breeds, medicines, and other products
* Cultural and aesthetic benefits
* Ability to adapt to change

Reference:

* Millennium Ecosystem Assessment, 2005, Ecosystems and Human Well-being: Biodiversity Synthesis. World Resources Institute, Washington, DC. p 1 http://www.millenniumassessment.org/proxy/document.354.aspx

Slide - 28



Available evidence indicates that human activities are eroding biological resources and greatly reducing the planet's biological diversity.

The loss of biodiversity is due above all to economic factors: a UNEP expert panel has estimated that food, fibre, ornamental plants and raw materials of biological origin account for roughly half of the world's economy.

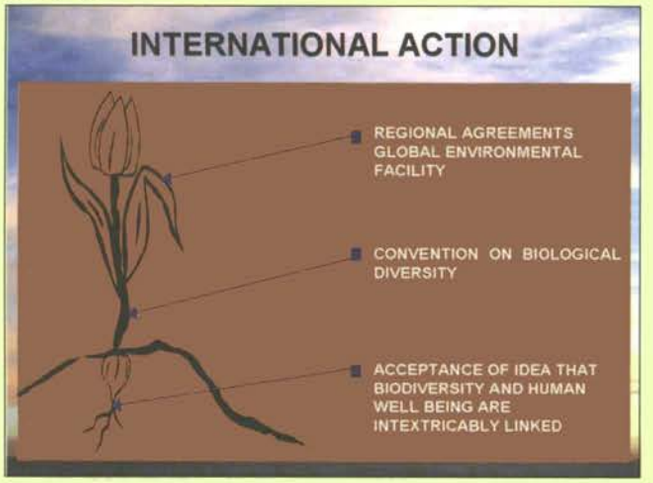
The direct causes of the extinction of species are the destruction of habitats, overexploitation, over-consumption, pollution and the wide range of activities which directly impact the environment. Other unintended factors can be added, such as incidental taking of species and the introduction of foreign species into habitats.

Given the projected growth in human population and economic activity, the rate of loss of biodiversity which accelerated during the last two centuries is likely to continue to increase.

Part of the problem is that biodiversity and essential ecological functions, such as watershed protection, pollution control, soil conservation, photosynthesis and evolution, tend to be undervalued. Still, these resources and the diversity of systems which support them are the essential foundation of sustainable development.

Biological resources are renewable and with proper management can support human needs. No single nation acting alone, however, can ensure that biological resources are managed to provide sustainable supplies of products; rather, a commitment is required on the part of all states and actors.

Slide - 29



The Convention on Biological Diversity was the first treaty to take a holistic, ecosystem-based approach to the conservation and sustainable use of biological diversity. It reiterates the status of biological diversity as a common concern of humankind and the imperatives of intra- and inter-generational equity.

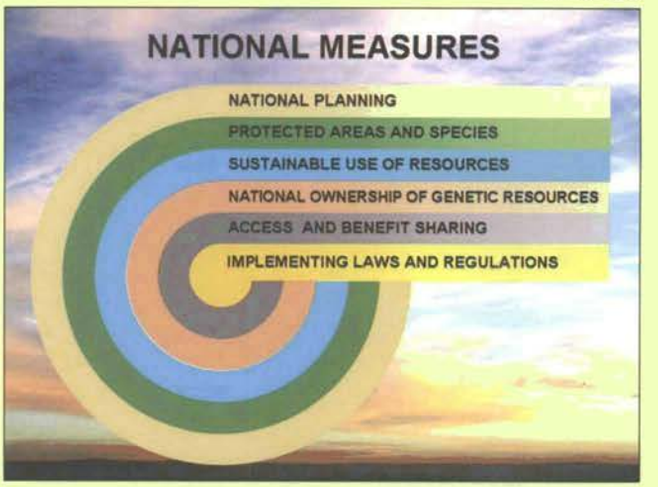
The three main objectives of the Convention are: the conservation of biological diversity; the sustainable use of the components of biological diversity; and the fair and equitable sharing of the benefits arising out of the utilisation of genetic resources, including by appropriate access to genetic resources and by appropriate transfer of relevant technologies and by appropriate funding.

Some of the key ideas the CBD expresses are:

* biodiversity rich countries typically need to exploit their biological resources for development purposes as well as benefit from the commercial utilisation of their genetic resources.
* the sovereign right of states over their own biological resources must be recognized, while the responsibility of states to conserve and sustainably use their biological diversity must also be underlined.
* rights of local and indigenous communities, including access to genetic resources and benefit-sharing, and conservation and sustainable use of biological diversity, must be recognized.
* states are responsible for ensuring that activities within their jurisdiction or control do not cause damage to the environment of other states or of areas beyond the limits of national jurisdiction.
* the conservation of biological diversity is a "common concern of humankind".
* states should conserve and sustainably use biological diversity for the benefit of present and future generations.
* lack of full scientific certainty should not be used as a reason for postponing measures to avoid or minimise a threat to biodiversity.

Other global treaties and instruments that impact on biodiversity issues include: 1971 Convention on Wetlands and Waterfowl Habitat (Ramsar); 1972 World Heritage Convention; 1973 Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES); 1979 Convention on Migratory Species (CMS); 1982 Convention on the Law of the Sea (UNCLOS); 1995 Straddling and Migratory Fish Stocks; 1997 International Watercourses Convention; 2000 Cartagena Protocol on Biosafety; 2002 Bonn Guidelines on Genetic Resources.

Slide - 30



The Convention on Biological Diversity commits parties to implement many examples of the concepts and principles that form the basis of contemporary environmental law. Some are set out in this slide.

National Planning
Adopting national policies that explicitly recognise the importance of and seek to ensure biodiversity conservation.

Protected areas and species
Declaring and protecting national parks and other categories of nature reserves, and the taking of measures, including controls over the conversion of habitat and harvesting of species whose survival is endangered.

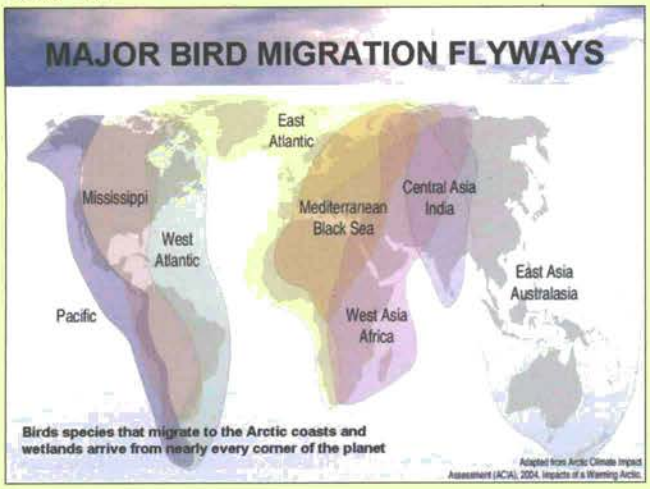
Sustainable use of resources
The use of natural resources in a way that maximises their long term values and utility, rather than exhausting them in the short term.

National ownership of genetic resources
Some states have vested exclusive property rights in themselves over genetic materials that naturally occur within their jurisdiction. These include national controls over foreign access, use and development over genetic material and information.

Access and benefit sharing
The granting of foreign access to national genetic resources for the purposes of research and development and the mutual sharing of the benefits derived.

Implementing laws and regulations
National measures to implement international commitments.

Slide - 31



The RAMSAR Convention on wetlands and waterbirds introduced the notion of international cooperation to protect a Flyway: (RAMSAR Guideline for Criterion 2)

" the concept developed to describe areas of the world used by migratory waterbirds and defined as the migration routes and areas used by waterbird populations in moving between their breeding and wintering grounds. Each individual species and population migrates in a different way and uses a different suite of breeding, migration staging and wintering sites. Hence a single flyway is composed of many overlapping migration systems of individual waterbird populations and species, each of which has different habitat preferences and migration strategies. From knowledge of these various migration systems it is possible to group the migration routes used by waterbirds into broad flyways, each of which is used by many species, often in a similar way, during their annual migrations. Recent research into the migrations of many wader or shorebird species, for example, indicates that the migrations of waders can broadly be grouped into eight flyways: the East Atlantic Flyway, the Mediterranean/ Black Sea Flyway, the West Asia/Africa flyway, the Central Asia/ Indian sub-continent Flyway, the East Asia/Australasia Flyway, and three flyways in the Americas and the Neotropics"

Reference:

* http://www.ramsar.org/about/about_glossary2_e.htm>

Source of graphic: <http://www.vitalgraphics.net/_documents/vitalarcticgraphics.pdf> (20060220) p11 Fig 6, Vital Artic Graphics: People and global heritage on our last wild shores, ISBN 82-7701-033-8

Slide - 32

The CITES Convention promoted the notion of endangered species and the need for coordinated efforts to protect them.

Example of endangered species listed in CITES Convention: Marine Turtle

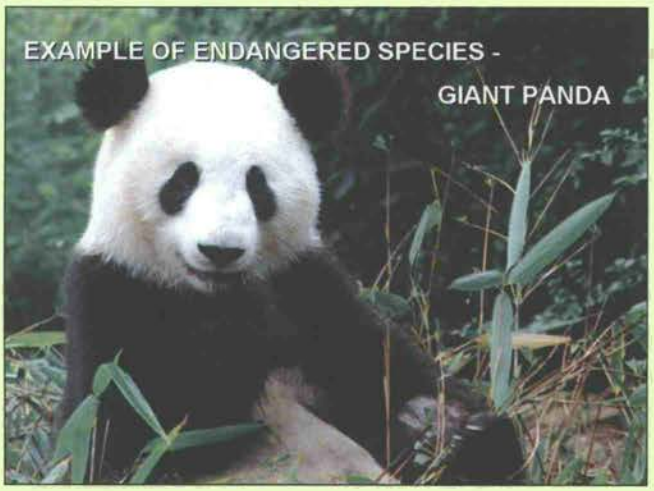
"Around the world, the survival of seven species of sea turtle is threatened by a variety of man-induced factors, including the direct and indirect harvest of adults and juveniles, threats to eggs and hatchlings, the degradation or loss of nesting habitat, and pollution of the seas. Perhaps no threat is as pervasive and devastating to declining populations as the persistent take of adult and juvenile turtles. The take continues, often in contravention of existing national and international legislation, largely because of familiar and ineffective "top-down" approaches to conservation, and a lack of grassroots support for or understanding of conservation initiatives. In response, conservation organizations and regulatory agencies alike are investing heavily in community-based conservation. Community-based conservation involves changing habits and outlooks, neither of which happens easily."

Reference:

* Gibson and Smith, in Eckert, K.L., K.A. Bjorndal, F.A. Abreu-Grobois, and M. Donnelly (Editors). 1999. Research and Management Techniques for the Conservation of Sea Turtles. IUCN/SSC Marine Turtle Specialist Group Publication No. 4.

<http://www.iucn-mtsg.org/Publications/Tech_Manual/Tech_Manual_en/29-marcovaldi&thome.pdf>

Slide - 33



Example of endangered species listed in CITES Convention – Giant Panda

"Found only in China, one of the world's most populous countries, the giant panda clings to survival, facing habitat fragmentation and poaching as its greatest threats. It is estimated that as few as 1,600 pandas remain in the wild today."

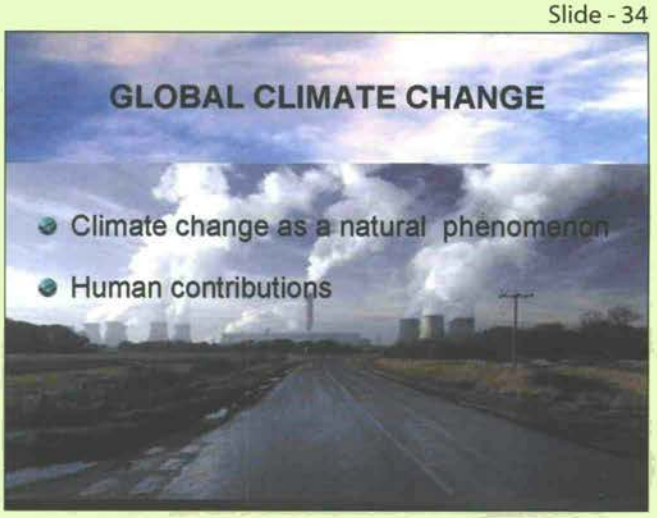
"Pandas have occurred on earth for over 3 million years. They are called "living fossils" because many species that survived together with pandas in the past, such as stegodon (a big tusked elephant) and Chinese rhinos, are extinct already."

Reference:

* http://www.cites.org/gallery/speciespics/mammal/panda2.jpg 20060220

(Image Source: CITES Species Photo Gallery
Photo: © WWF-Canon/Susan Mainka (taken at Wolong Nature Reserve, China)

Slide - 34

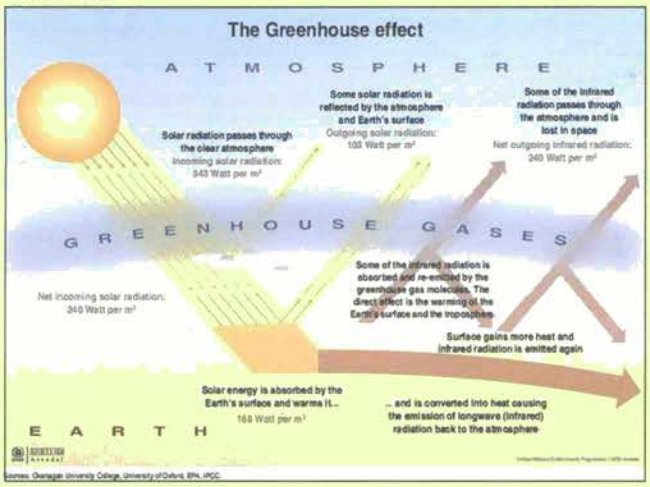


While there continues to be some debate regarding whether changes in climate that are being experienced in the modern age are caused principally by natural cycles in weather or principally by human activity, there is substantial consensus both that human activity contributes to the climate change phenomenon and that global climate change could have potentially grave implications for the planet and the human community. While our focus here is on global climate change, it bears mention that human activity (e.g., the destruction of forests, loss of productive soil, etc.) can also effect climate change at the local level.

References:

* Framework Convention on Climate Change Website: http://unfccc.int/2860.php
* UNEP Training Manual on International Environmental Law, 2006, Chapter 10

Slide - 35



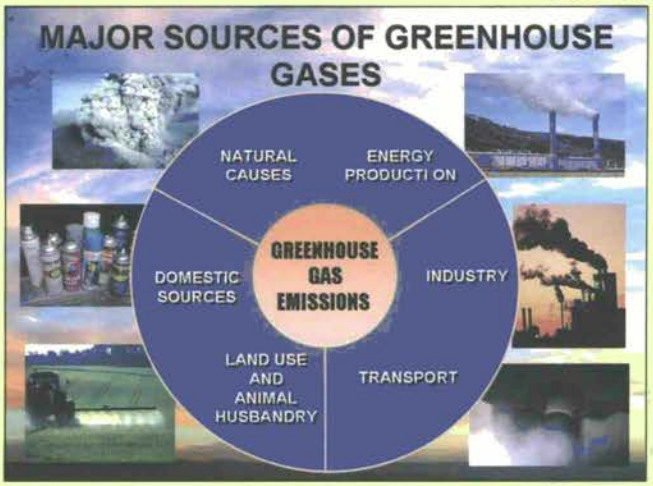
Greenhouse gases are a natural part of the atmosphere. Without these gases the global average temperature would be around -20ºC. The problem we now face is that human actions – particularly burning fossil fuels (coal, oil and natural gas) and land clearing – are increasing their concentrations. The more of these gases there are, the more heat is trapped. This is known as the enhanced greenhouse effect. Naturally occurring greenhouse gases include water vapour, carbon dioxide, methane, nitrous oxide, and ozone. Greenhouse gases that are not naturally occurring include hydro-fluorocarbons (HFCs), perfluorocarbons (PFCs), and sulphur hexafluoride (SF6), which are generated in a variety of industrial processes.

On average, about one-third of the solar radiation that hits the Earth is reflected back into space. The land and the oceans mostly absorb the rest, with the remainder trapped in the atmosphere. The solar radiation that strikes the Earth's surface heats it up, and as a result infrared radiation is emitted.

References:

* http://www.vitalgraphics.net/_images/climate2/thumbs/7.jpg @20060220
* http://www.vitalgraphics.net/climate2.cfm?pageID=6
* Vital Climate Change Graphics Update
* http://www.vitalgraphics.net/_documents/climate_change_update.v15.pdf

Slide - 36



* The burning of coal, oil, and natural gas, as well as deforestation and various agricultural and industrial practices, are altering the composition of the atmosphere, and land use changes, e.g., clearing land for logging, ranching, and agriculture, also lead to carbon dioxide emissions.

* Land use changes are responsible for 15 to 20% of current carbon dioxide emissions.

* Methane (natural gas) is the second most important of the greenhouse gases resulting from human activities. It is produced by rice cultivation, cattle and sheep ranching, and by decaying material in landfills. Methane is also emitted during coal mining and oil drilling, and by leaky gas pipelines. Human activities have increased the concentration of methane in the atmosphere by about 145% above what would be present naturally.

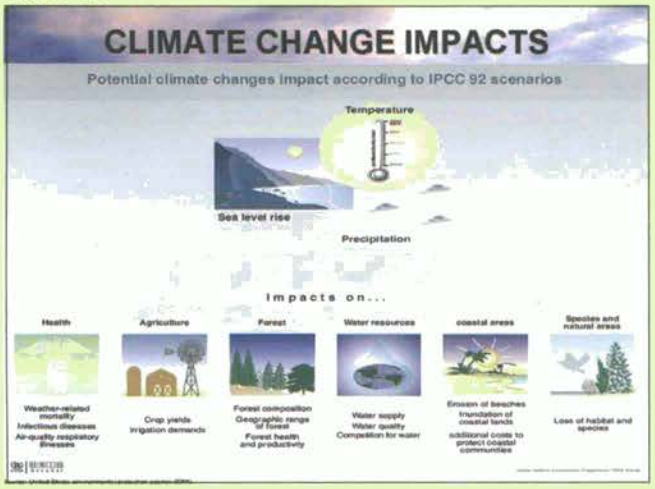
* Nitrous oxide is produced by various agricultural and industrial practices. Human activities have increased the concentration of nitrous oxide in the atmosphere by about 15% above what would be present naturally.

* Chlorofluorocarbons (CFCs) have been used in refrigeration, air conditioning, and as solvents. However, the production of these gases is being eliminated under existing international agreements because they deplete the stratospheric ozone layer. Although currently very small, their contributions to climate change are expected to rise.

References:

* UNEP-WMO Common questions about Climate Change http://environment.yale.edu/documents/downloads/o-u/UNEPWMO.pdf
* UNEP Judicial Handbook on Environmental Law, 2005, Chapter 8

Slide - 37

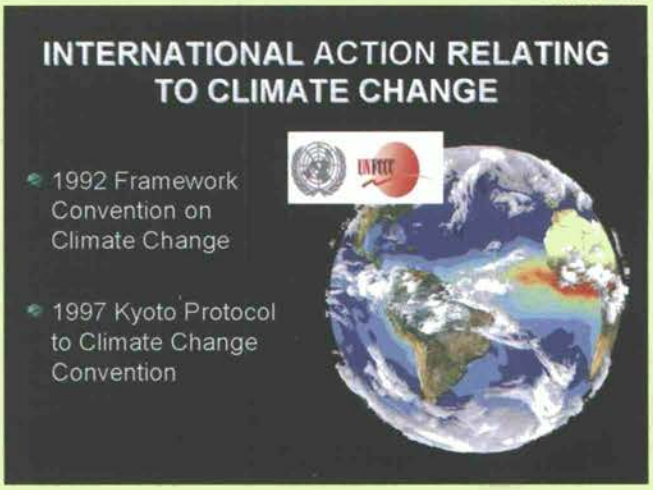


"...the focus on controlling emissions through international agreements and new technology in energy production and industries must be combined with strong efforts in minimizing damage through adaptation schemes. The most vulnerable ecological and socio-economic systems are those with the greatest sensitivity to climate change and with the least ability to adapt to new situation. As vulnerability defines the extent to which climate change may damage or harm a system, it depends not only on the system's sensibility, but also on its ability to adapt. Thus traditional knowledge should be complemented by new research and climate change considerations must be an integrated element of the nation's development agenda".

References:

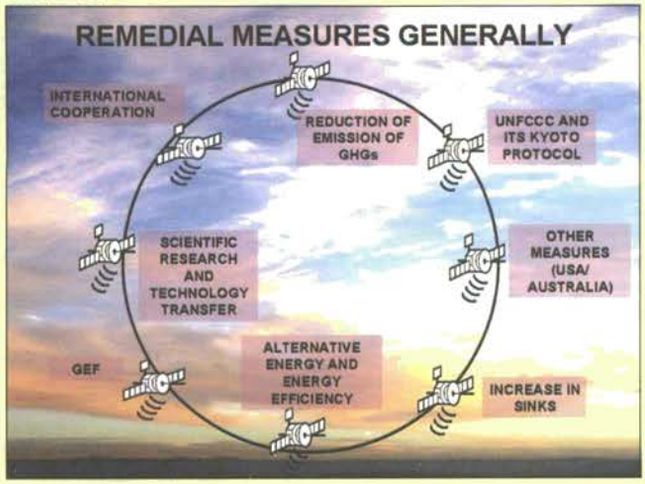
* http://www.vitalgraphics.net/climate2.cfm?pageID=10
* Vital Climate Change Graphics Update
* http://www.vitalgraphics.net/_documents/climate_change_update.v15.pdf
* UNEP Judicial Handbook on Environmental Law, 2005, Chapter 8

Slide - 38



* 1992 United Nations Framework Convention on Climate Change http://unfccc.int/2860.php
* 1997 Protocol to the United Nations Framework Convention on Climate Change http://unfccc.int/essential_background/kyoto_protocol/background/items/1351.php

Slide - 39



REDUCTION IN EMISSION OF GHGs

"stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. Such a level should be achieved within a time frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner." Art.2 UNFCCC

KYOTO PROTOCOL

The 1997 Kyoto Protocol shares the Convention's objective, principles and institutions, but significantly strengthens the Convention by committing Annex I Parties to individual, legally-binding targets to limit or reduce their greenhouse gas emissions. Only Parties to the Convention that have also become Parties to the Protocol will be bound by the Protocol's commitments. 163 countries have ratified the Protocol to date. Of these, 35 countries and the EU are required to reduce greenhouse gas emissions below levels specified for each of them in the treaty.

INCREASE IN SINKS

Increasing sinks that absorb carbon dioxide by reforestation, aforestation and the reductions of deforestation is also one way by which the net GHG emissions are sought to be reduced. There is also research underway regarding alternative means of carbon capture and storage.

ALTERNATIVE ENERGY AND ENERGY EFFICIENCY

Since the burning of fossil fuel for energy is the principal source of GHG emissions, the search for alternative fuels such as wind, solar and tidal energy has been intensified as required by the Convention. Also, there are numerous reports showing that if all buildings/appliances/tools/etc. were using the most energy efficient technologies available today, humankind would be using approximately 30% less energy.

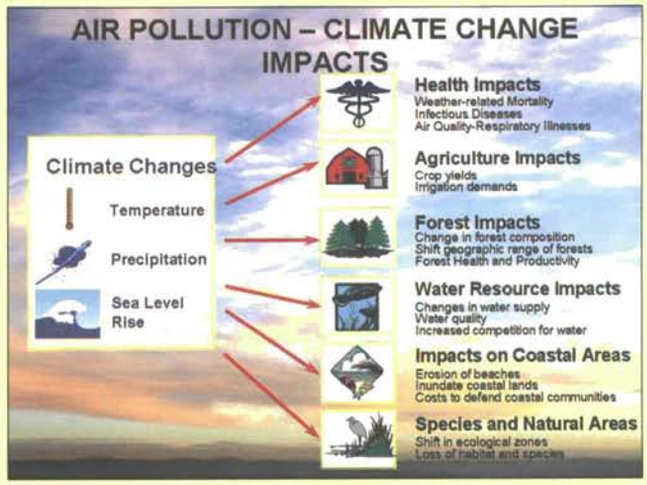
GEF

The Global Environmental Facility provided additional resources to developing countries for national measures for the implementation of the obligations under the climate change convention.

INTERNATIONAL COOPERATION

UNFCCC and the Kyoto Protocol have generated significant international corporation- both North-South and South- South. There are also many bi-lateral and multi-lateral agreements countries are undertaking to reduce climate change in addition to the work being done under the UNFCCC and the Kyoto protocol.

Slide - 40



Potential climate change impacts

Climate models project that:

the Earth's mean annual surface temperature will increase by about 1.4 to 5.8°C between 1990 and 2100 with land areas warming more than oceans.

precipitation will increase globally, with both increases and decreases locally, and with more heavy precipitation events.

sea level will rise between 9-88 cm between 1990 and 2100.

incidence of extreme weather events will increase, e.g., floods, droughts, heat waves.

stabilization levels between 450 and 1000 ppm of CO2 are projected to result in temperature and sea level increases of 1.5 to 9°C and 0.5 to 10 m.

Reference:

* United Nations Framework Convention on Climate Change Secretariat

(Diagram from Seth Osafo, Senior Legal Adviser UNFCCC, Bonn.)

Slide - 41

Whether as a result of international commitment or national-level policy, it is only through each country's development of appropriate policies to reduce their emissions, that global emission reductions will be achieved.

Under the UNFCCC, Article 4, all countries, developed and developing, are to:

* Take into account their common but differentiated responsibilities
* Promote sustainable management, and promote and cooperate in the conservation and enhancement, as appropriate, of sinks and reservoirs of all greenhouse gases
* Preparing for adaptation to the impacts of climate change; develop and elaborate appropriate and integrated plans for coastal zone management, water resources and agriculture, and for the protection and rehabilitation of areas, particularly in Africa, affected by drought and desertification, as well as floods;
* Take climate change considerations into account, and minimize adverse effects on the economy, on public health and on the quality of the environment, of projects or measures undertaken by them to mitigate or adapt to climate change
* Exchange information, scientific research, training and education
* Prepare national inventories of emission sources and sinks

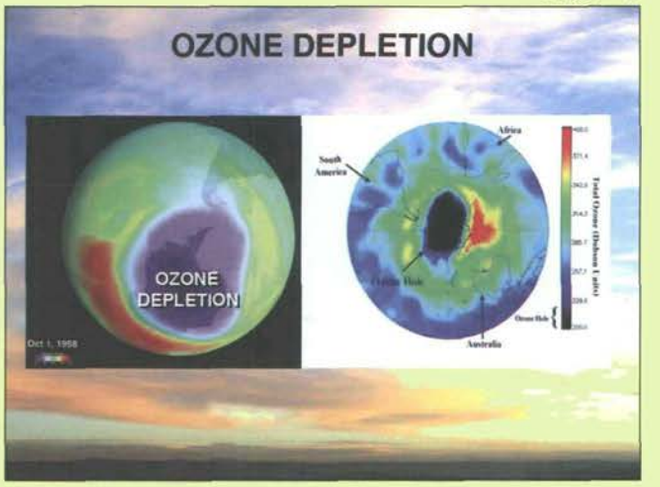
Industrialised countries:

1. Carry out policies and measures that demonstrate that they are taking the lead in modifying longer-term trends in anthropogenic emissions consistent with the objective of the Convention
2. Take all necessary measures aimed at returning to 1990 levels for all GHG emission. However, the Kyoto Protocol has required developed countries in Annex 1 to reduce their emissions of carbon dioxide to 5% below 1990 levels.
3. The developed country Parties and other developed Parties included in Annex II shall provide new and additional financial resources to meet the agreed full costs incurred by developing country Parties in complying with their obligations under Article 12 , paragraph 1.

Reference:

* UNEP Training Manual on International Environmental Law, 2006, Chapter 10

Slide - 42



The ozone layer occurs in the stratosphere, an upper part of the earth's atmosphere that contains a high concentration of ozone (O3). Although the concentration is high compared to ozone in other parts of the atmosphere, even there ozone is still a relatively small component gas, at only up to 8 ppm. The thickness of the ozone layer varies with season and latitude, being thickest during autumn and at high latitudes (over the Arctic and the Antarctic).

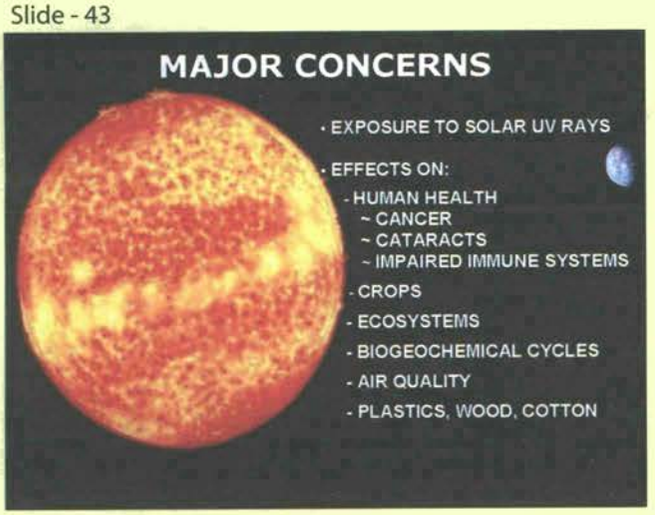
Ozone depletion is caused primarily by increases in stratospheric concentrations of reactive chlorine and bromine compounds. The Ozone Depleting Substances (ODS) are mostly freons (which are chlorine-based) and halons (which are bromine-based). Increasing concentrations of these compounds has been caused by the release into the atmosphere by humans of ODS that breakdown into reactive compounds by exposure to UV.

The ozone layer has been reduced globally by 4%. However, over Antarctica it has thinned during Spring to one third of its observed thickness or concentration prior to 1975, a phenomenon dubbed the 'ozone hole'. At its widest, it reaches to southern Australia and New Zealand.

Reference:

* Wikipedia:
http://en.wikipedia.org/wiki/Ozone_layer#Origin_of_ozone
http://en.wikipedia.org/wiki/Ozone_depletion

Slide - 43

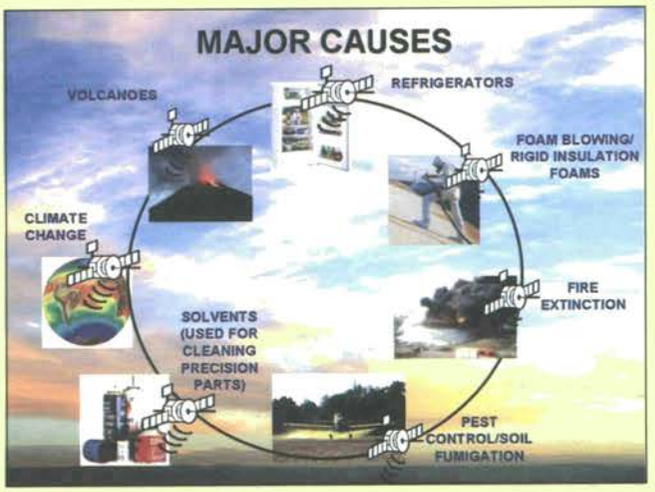


Stratospheric ozone absorbs ultra violet radiation from the sun (UV). It prevents all UV-C (i.e.. shortest wavelength range) and significant amounts of the UV-B from reaching the earth's surface. Most UV-A reaches the Earth's surface.

EXPOSURE TO SOLAR UV RAYS
UV-C is extremely harmful to humans. UV-B causes deleterious effects to human health by increasing the incidence of sunburn and DNA damage, such as melanomas and carcinomas (skin cancers), cataracts in the eyes and by damaging the human immune system. It also accelerates the deterioration of plastics, wood and cotton products.

It is estimated that, were the seasonal Antarctic ozone hole to become global, there would be substantial impacts on ecosystems (such as by killing off plankton), disrupting crops (such as by killing off the bio-geochemical cycles or bacteria on which some crops, like rice, are dependent), and by affecting air quality at the tropospheric level (i.e.. Earth's surface) where – paradoxically - ozone concentrations would be increased by the greater interaction with UV-B .

Slide - 44



Ozone depleting substances (ODS) are produced by design for use in a relatively limited range of industrial agricultural activities.

REFRIGERATORS
Due to the stability of CFCs and HCFCs despite temperature changes, they operate as heat transfer agents for refrigerators and air conditioners.

FOAM BLOWING/RIGID INSULATION FOAMS
Due to their stability they are also used as gases in the blowing of foam. They are also used as propellants, such as in canned sprays and medical inhalers.

FIRE FIGHTING
Halons are excellent agents in fire extinguishers as they are stable and non-combustible under heat and when pressurised in tanks.

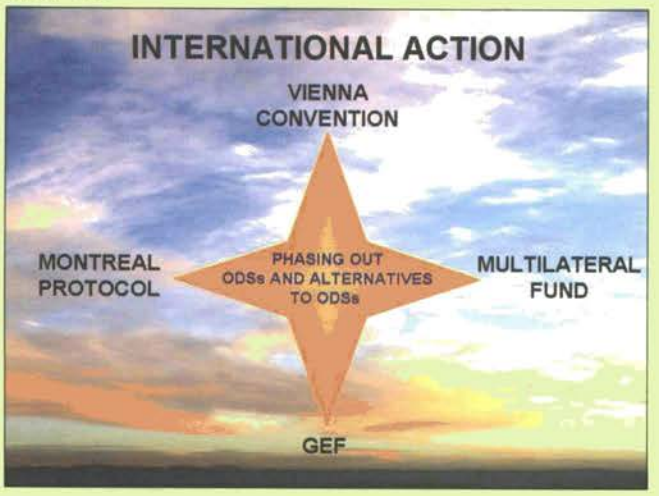
PEST CONTROL/SOIL FUMIGATION
Methyl bromide is widely used as a pesticide in the cultivation of soft fruits, such as melons and berries.

SOLVENTS
These are used for cleaning precision metal parts.

CLIMATE CHANGE is also accelerated by the presence in the atmosphere of ODS, many of which were designed to remain stable while holding and transferring heat.

VOLCANOES provide a natural source of ODS

Slide - 45



VIENNA CONVENTION

The international regulation of anthropogenic ozone depletion process started in 1985 with the Vienna Convention. It set out a framework for the gathering of scientific information on the stratospheric ozone layer and for general cooperation such as the later adoption of specific measures to reduce the loss of ODS into the atmosphere.

MONTREAL PROTOCOL

The Montreal Protocol was adopted in 1987 and came into force in 1989. It sets out specific standards for the global phasing out of ODS production and consumption for listed substances. The Protocol has ended production of most chlorofluorocarbons (CFCs), but led to increased use of substitutes which have their own issues, such as hydrochlorofluorocarbons (HCFCs), and the production of a wide range of other chemicals (hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and others). It is modified annually through processes of adjustment or amendment.

MULTILATERAL FUND

The fund set up under the Montreal Protocol in 1990 funds projects in developing countries to phase out ODS production and consumption. It provides over US$ 0.5 billion each triennium.

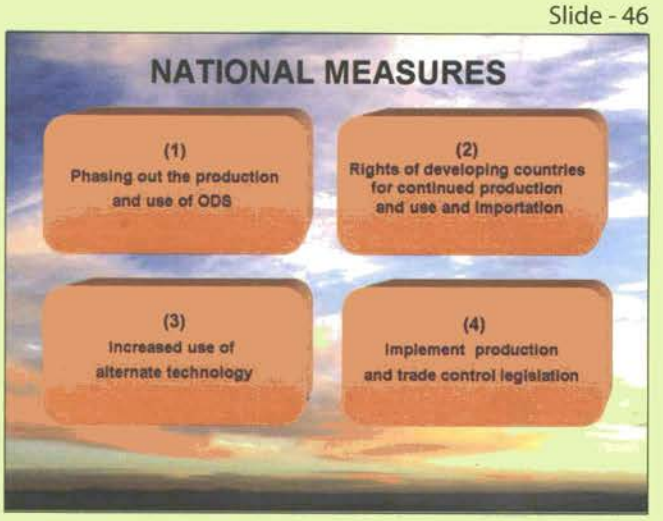
GLOBAL ENVIRONMENT FACILITY

The GEF is an environmental lending facility of the World Bank. Among its other focal areas, it funds projects in countries that are developing or have economies in transition to phase out production and consumption of ODS.

References:

* UNEP Ozone Secretariat Website: http://ozone.unep.org/index.asp
http://ozone.unep.org/Treaties_and_Ratification/2A_vienna_convention.asp
* The Vienna Convention for the Protection of the Ozone Layer:
English: http://ozone.unep.org/pdfs/viennaconvention2002.pdf
French: http://ozone.unep.org/pdfs/viennatext-fr.pdf
Spanish: http://ozone.unep.org/pdfs/viennatext-sp.pdf

Slide - 46



PHASING OUT THE PRODUCTION AND USE OF ODS

Under the Montreal Protocol, parties are to phase out production and consumption of listed ODS. Developing countries were given an 10 year 'grace period' before the obligations operate for them, although many have engaged in voluntarily phase outs for commercial reasons and with the financial assistance of the Multilateral Fund. Exemptions may be certified for critical uses where no replacement technology exists. Exemptions are certified by the Technical Advisory Panel under the Protocol.

The listed ODS include:
CFCs - the use of which has been decreasing in all regions of the world.
HCFCs - substitute compounds, also decreasing since the year 2000
Methyl bromide (MeBr) – the use of which has declined steadily since the mid-1990s. Allowances are made for "critical uses" in agriculture and food-processing.
Halons – are banked and reused rather than released into the atmosphere.

DEVELOPING COUNTRIES CONTINUED PRODUCTION, USE AND IMPORTATION

The Protocol allows developing countries to continue production, exportation or importation, and consumption of ODS for essential uses. Only India and China are major producers, others developing countries are importers.

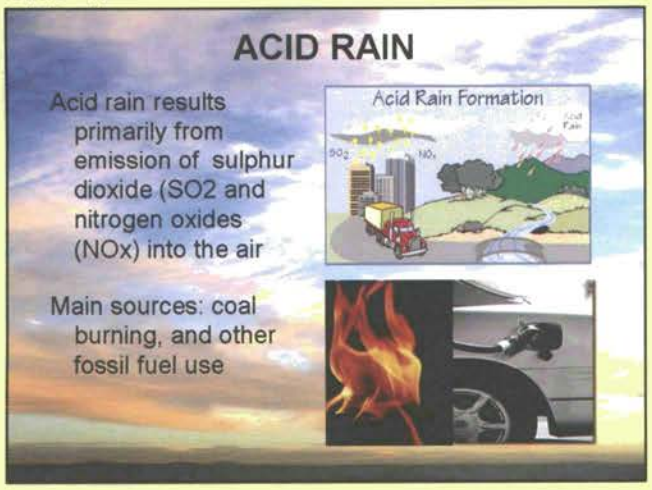
INCREASED USE OF ALTERNATE TECHNOLOGY

Alternative technologies to ODS have rapidly emerged for most uses, such as refrigerants and propellants.

IMPLEMENT PRODUCTION AND TRADE CONTROL LEGISLATION

National statistics on implementation are reported annually to the Protocol parties, which reviews their compliance with obligations.

Slide - 47



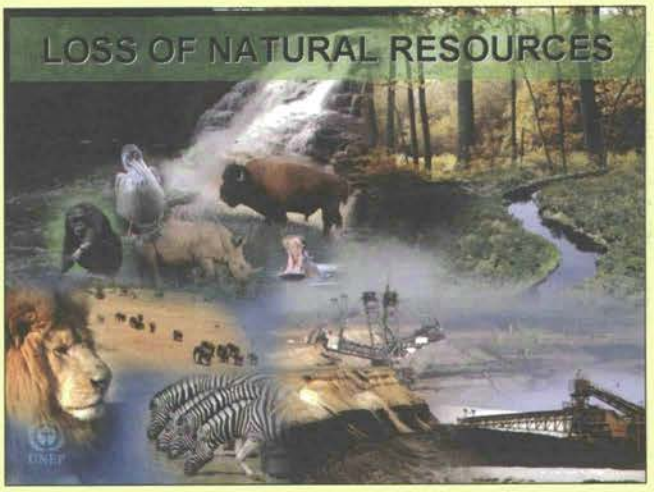
Acid rain

Acid deposition is one of the causes of acidification of soil and water that results in declining fish stocks, decreasing diversity in acid-sensitive lakes and degradation of forest and soil. Excessive nitrogen (as nitrate and/or ammonium) promotes eutrophication, particularly in coastal areas. Acid rain damages ecosystems, provokes defoliation, corrosion of monuments and historic buildings and reduces agricultural yields.

Reference:

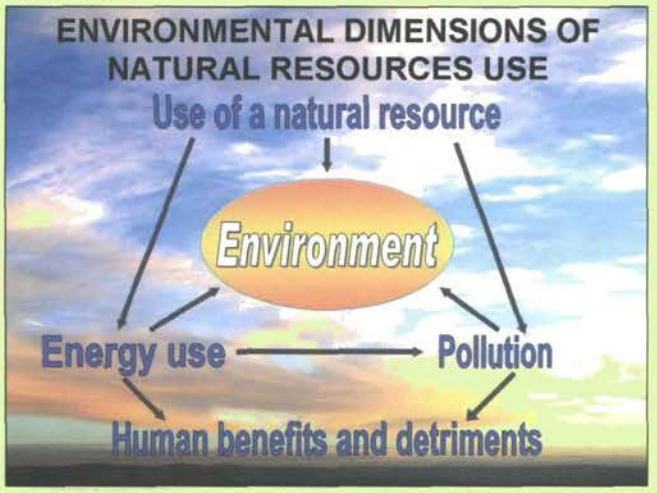
* UNEP GEO 3 http://www.unep.org/geo/geo3/english/366.htm
Source of acid rain diagram: http://www.epa.gov/maia/images/acid.jpg
Source of acid rain photo: http://www.eco-pros.com/images/Scenes/riverairgroundpollution.jpg

Slide - 48



"Natural resources" for current purposes, includes all of elements of the natural environment exploited by humans. These include:
* Forests and all other vegetation.
* Water bodies (rivers, lakes, estuaries, coastal and marine).
* Animals, including terrestrial, aquatic and avian species.
* Minerals: oil, coal, iron ore, gold, silver etc.

Slide - 49



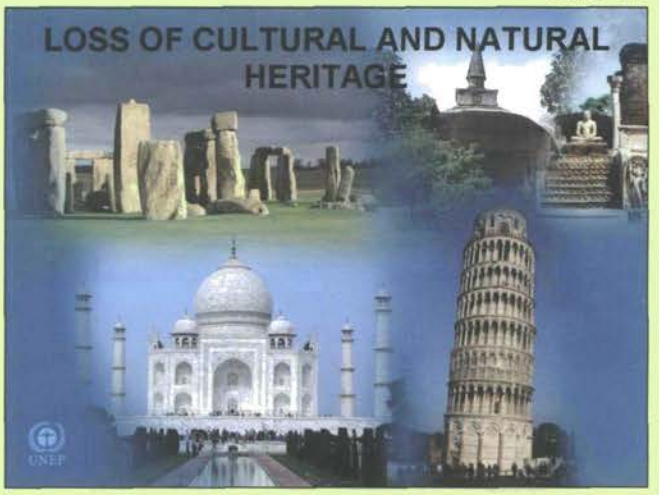
Environmental dimensions of natural resources use

This slide illustrates the relationships between the use of natural resources and some of the environmental effects.

The mining and use of coal, for example, includes

- Depletion of the coal resource itself
- The energy used to extract the coal
- The pollution caused by the extraction process
- The environmental degradation of open cut or underground mining of coal
- The need to rehabilitate the environment of the mine after the operation:
  - earth-moving, revegetation, filling in of tailings dams
- The effects of pollution from the burning of coal on human health and on the environment
- The effects caused by greenhouse gas emissions

Slide - 50



Conservation of cultural and natural heritage

Conservation of cultural and natural heritage is one of the more recent areas of concern.

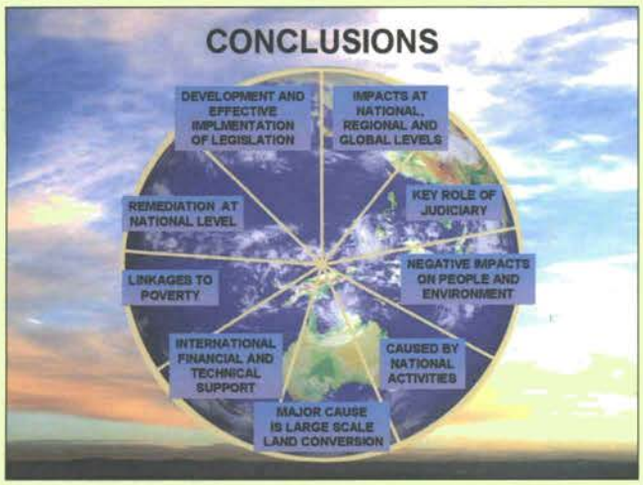
Natural heritage typically includes any aspect of the natural environment that is judged to have special values, and which attract conservation measures.

Cultural heritage typically includes any aspect of the built environment (all human-made structures), and objects, as well as the new category of intangible heritage, that are judged to have special values which attract conservation measures.

Reference:

* UNEP Judicial Handbook on Environmental Law, 2005, Chapter 12

Slide - 51



So, this is an introduction to an environmental dilemma. It is offered to sensitize you to the nature and magnitude of the environmental challenge. Some things to remember about environmental problems:

* They have serious negative impacts on people everywhere, their health and well being as well on the plant and animal life
* They can cause significant economic harm at the national and local level
* National implementation through national policies, programmes, legislation and regulations is critical to address all problems, whether national, regional, or international in nature
* The judiciary has a key role to play in interpreting, applying and enforcing national legal regimes designed to address these environmental problems

As noted, some problems tend to be local in nature; others have regional and even global implications. But even regional and global issues typically arrive before the judge in a focused manner, shaped by the national-level law relating to the issue that the judge is charged to uphold and the contours of the particular dispute that brings the issue to the courts. Thus, for example, the climate change phenomenon is of particular moment to the judge not in the abstract, but rather in context of a case to enforce national-level greenhouse gas emissions limits or logging restrictions, both of which connect to the broader issue of climate change.

These national level laws will neither have their intended localized benefits nor contribute beneficially to the broader global concerns to which they relate without the presence of an independent judiciary, prepared to deal aggressively and appropriately with those who violate these laws.

The next presentation will focus on the scope and sources of environmental law.

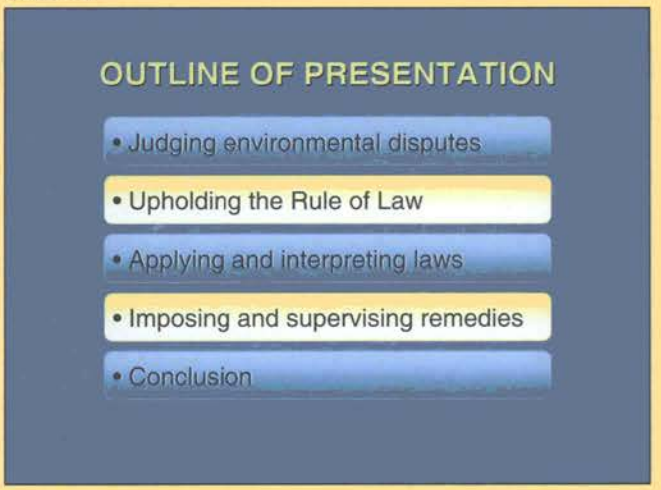
PRESENTATION 3

UNEP GLOBAL JUDGES PROGRAMME

APPLICATION OF ENVIRONMENTAL LAW BY NATIONAL COURTS AND TRIBUNALS

ROLE OF THE JUDICIARY IN PROMOTING THE RULE OF LAW IN THE AREA OF SUSTAINABLE DEVELOPMENT

Slide - 1



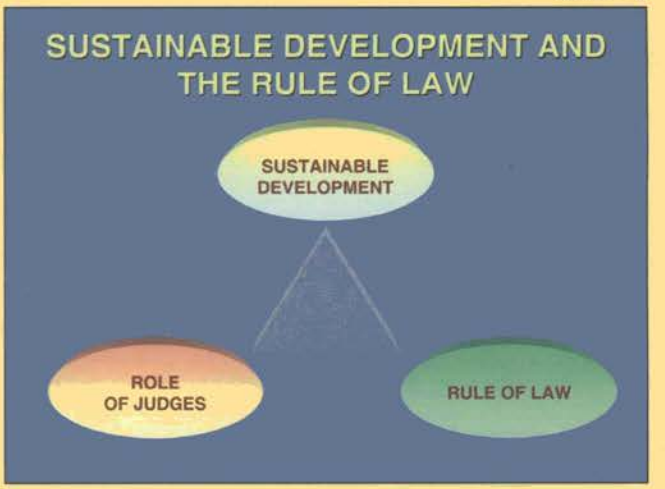
* It is through litigation that courts enjoy their unique role in upholding the environmental rule of law.

* Environmental litigation can take many forms, including civil actions based on tort; contract or property law; criminal prosecutions; public interest litigation that, e.g., challenges government action or inaction; or enforcement of constitutional rights.

* Environmental law is a comparatively new branch of domestic and international law. As such, it is in the process of being moulded, unlike older areas of law, which have already assumed fairly defined concepts, principles and procedures. In this process of moulding, the judiciary has a vital role to play.

* The fine nuances of particular situations which the judge encounters in individual cases are often not matters with which legislatures have time and resources to deal. It is often before the judiciary that they come up for the first time. Consequently it is often judicial decision-making that gives shape and direction to the new concepts and procedures involved.

Slide - 2



Principle 4 of the Rio Declaration states:
"In order to achieve sustainable development, environmental protection shall constitute an integral part of the development process and cannot be considered in isolation from it".

Principle 25 states that "peace, development and environmental protection are interdependent and indivisible".

Principles 4 and 25 make clear that policies and activities in various fields, including environmental protection, must be integrated in order to achieve sustainable development. They also make clear that efforts to improve society, including those to protect the environment, achieve peace, and accomplish economic development are interdependent.

Increasingly, with the integration of principles of sustainable development into national legal frameworks, environmental factors are given equal stature alongside economic and other considerations in governmental decision-making. In its most comprehensive form, an integrated approach to sustainable development pays explicit attention to social, cultural and environmental consequences of actions.

Because principles of sustainability are increasingly built into national laws and approaches, courts are, with increasing frequency, called upon to apply principles of sustainability to matters before them. In faithfully upholding these laws, the courts validate them and engender respect for the rule of law in the environmental context.

References:

* UNEP Training Manual on International Environmental Law, 2006 , Chapter 3.
* UNEP Judicial Handbook on Environmental Law, 2005, page XXII.
* Rio Declaration http://www.unep.org/Documents.multilingual/Default.asp?DocumentID=78&ArticleID=1163

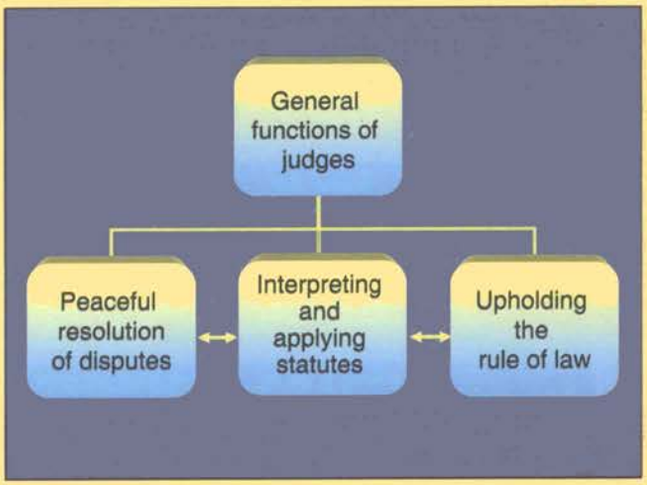
Slide - 3

ROLE OF THE JUDICIARY IN THE ENVIRONMENTAL ARENA

- Administering environmental litigation
- Promoting compliance by enforcing the law
- Serving as guarantor of public participation rights
- Balancing environment and development considerations
- Influencing societal attitudes towards the environment and the concept of sustainable development
- Through judgments, furthering the development of legal concepts in the area of sustainable development
- Furthering the implementation of regional and global environmental accords where part of the corpus of domestic law
- Serving as a check on executive inaction and overreaching in the environmental arena
- Protecting the rights of the accused

These are some of the primary roles of the judiciary in the environmental context. A number of these are discussed below while some, such as administering environmental litigation and promoting compliance through enforcement are discussed at some length in later presentations.

Slide - 4

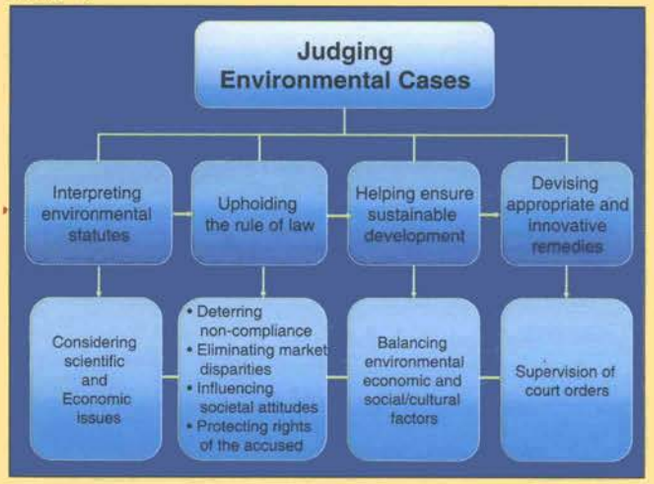


* Generally, judicial institutions serve several functions in society, among them:
    * The peaceful settlement of disputes
    * Upholding the rule of law
    * Applying and interpreting the law
* The role of the judge in environmental law is in principle no different from other settings, but for many judges the subject matter may seem complex and unfamiliar.
* Judges, as guardians of the rule of law, are uniquely positioned to give environmental law force and effect. They can bring integrity and certainty to the process of environmental protection, and help to ensure environmental responsibility and accountability within the government and the private sector. Environmental and natural resource issues can sometimes generate vigorous responses from the community, as well as from the private sector, when objecting to development proposals or asserting development rights. There are many pressures on Ministers and civil servants in these circumstances, making it even more important for judges to uphold the rule of law.
* Judges also advance the development of environmental law by their traditional task of interpreting and filling the gaps in the legal texts.
* The judiciary is seen as one of the most stable and respected institutions of the society it serves. As such, the judiciary both reflects and sets the tone for a society at large. The voice of the judge represents reason, impartiality, and understanding of all the interests at stake. A judge's serious response to a given case helps to shape and reinforce a society's view of the seriousness of the problem represented by that case. Accordingly, through their judgments, judges are able to encourage all groups in society – government, industry and citizens – to share in the task of environmental stewardship.
* Protection of the environment may require rethinking and changing economic practices and even ways of life, as well as assuming and sharing new responsibilities and costs. The judge is the ultimate arbiter of the resulting tensions and conflicting interests. He or she is called upon to apply the law in a just manner – a manner that will be respected by the parties and those affected.
* Judges are unable to achieve this result by themselves. Their knowledge of the facts rests on the evidence before them, and their understanding is informed by the issues and arguments presented. Indeed, even a well-informed and effective judiciary amounts to relatively little if cases are not brought forward to the courts, and effectively advocated once there.

Reference:

* UNEP Judicial Handbook on Environmental Law, 2005, Chapter 5

Slide - 5



This slide gives a slightly more detailed look at some of dimensions of judging environmental cases.

* When interpreting environmental statutes, judges must come to grips with:
* Scientific issues, including risk analysis and managing uncertainty
* Economic issues, including the internalization of environmental costs and cost benefit analysis
* Judges are the guardian of the rule of law. In this sense,
* Their judgments must project a message of deterrence to those who might otherwise violate the law
* Their judgments must eliminate the unfair competitive advantage that emerges between those who do not engage in environmentally responsible behaviors and those who not
* While ensuring the environmental laws are honored, judges also must be seen as the check against executive overreaching and as protector of the rights of the accused
* The manner in which judges perform these functions will ultimately shape public attitudes towards the environment and the importance of environmental protection
* Judges have a range of remedies at their disposal in environmental enforcement cases, including incarceration, fines and community service orders. These remedies are discussed more fully in later presentations.
* In adjudicating environmental cases, judges are often called upon to balance environmental, economic and social/cultural factors
* Some courts have been innovative in devising appropriate remedies. For example in *MC Mehta v Kamal Nath* (Supreme Court of India 1997), concerned pollution emanating from earthmoving works in and beside the River Beas for construction of a motel. The Court ordered the Government to take over the area, the defendant was ordered to pay compensation to restore the environment and construct a boundary wall around an area not to encroach on any part of the river basin. The motel was also prohibited from discharging untreated effluent into the river.

Reference:
* UNEP Judicial Handbook on Environmental Law, 2005, page XXII

Slide - 6

Environmental cases are often quite complex. Many involve multiple issues or multiple interests, technical evidence, and science-based issues.

* Dealing with Scientific Issues -- Different sides in a case may bring forward different interpretations of the available science and may even cite different bodies of scientific evidence.
* Managing uncertainty and dealing with risk -- Managing against the uncertainty of whether a given event has or has not produced harm, or will or will not produce harm, is a difficult and important aspect of judging environmental cases. This topic will be discussed more fully in a subsequent presentation.
* Sustainable development -- Increasingly, with the integration of principles of sustainable development into national legal frameworks, environmental factors are given equal stature along-side economic and other considerations in governmental decision-making
* Diversity of issues and settings -- Matters of environment and development which surface in courts are not limited to disputes between the specific parties alone, but could have wide ranging implications of national and international significance.
* Individuals and society -- A challenge for judicial decision-making in this field is to determine the appropriate balance between individual entitlements and more general societal concerns.
* Economics -- Economic principles provide important background for the adjudication of environmental disputes. For example, the notion of an external cost – one that burdens anyone other than the actor – is essential to effective establishment of environmental remedies.
* Retroactive effect -- Law is presumed to be prospective only, but environmental law that seeks to address ongoing harm to the environment may need to apply to pre-existing activities and operations if it is to be effective. Criminal laws however, do not operate retrospectively.
* Remedies and continuing jurisdiction – As we have noted, environmental cases often call for complex remedies, which in turn can require the court's continued jurisdiction to ensure implementation. This topic will be discussed more fully in a subsequent presentation.

Reference:
* UNEP Judicial Handbook on Environmental Law, 2005, pages XXI - XXIV

Slide - 7

UPHOLDING THE RULE OF LAW

- Ensuring justice, fairness and inclusiveness
- Recognizing constitutional supremacy
- Protecting inalienable individual rights
- Stemming the arbitrary exercise of power by government agencies
- Serving as guarantor of public participation rights
- Holding violators accountable

* Modern constitutionalism is firmly anchored in the concept of separation of powers.

* Rule of Law contemplates a respect within a society for the laws of the State. To be a reality, Rule of Law requires acceptance of an intricately inter-linked chain of fundamental ideas including equality before the law; that government and the governed are subject to the same laws; the independence of the judiciary; transparency,consistency and accountability in the administration of law; the notions of equity, justice and fairness; that justice must not only be done, but must appear to be done; that everyone has access to the law; and in the context of the packed rolls of court, that justice delayed is justice denied. Like all chains, the Rule of Law is only as strong as its weakest link.

* Judicial thinking founded on the tradition of settling disputes inter parties by identifying the primacy of competing interests before them, has now to deal with matters that impinge crucially on the quality of life, if not survival, of present and future generations. Even though they may not carry the epithet of an "environmental case", cases that on a daily basis judges are called upon to address affect environment, social justice and economic development whether these come before them as alleged infringement of constitutional or fundamental rights, a statutory violation, a non-statutory civil action or even a criminal prosecution.

* In other words, even though procedurally it may be a matter between two parties, in substance it could be a matter that affects the wider community, a nation, a region or even the world at large.

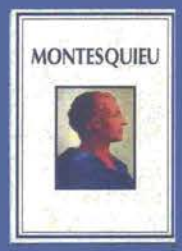
Reference:
* UNEP Judicial Handbook on Environmental Law, 2005, Chapter 4

Slide - 8

THE SPIRIT OF LAWS

Charles de Secondat,
Baron de la Brède et de Montesquieu

(1689-1755)



* Montesquieu wrote:

"There is no liberty, if the judicial power be not separated from the legislative and executive. Were it joined with the legislative, the life and liberty of the subject would be exposed to arbitrary control; for the judge would be then the legislator. Were it joined to the executive power, the judge might behave with all the violence of an oppressor"

" In republican governments, men are all equal; equal they are also in despotic governments: in the former, because they are everything; in the latter, because they are nothing." Bk. VI, Ch. 2

"Luxury is therefore absolutely necessary in monarchies; as it is also in despotic states, In the former, it is the use of liberty, in the latter, it is the abuse of servitude...

"Hence arrives a very natural reflection. Republics end with luxury; monarchies with poverty."Bk. VII, Ch. 4

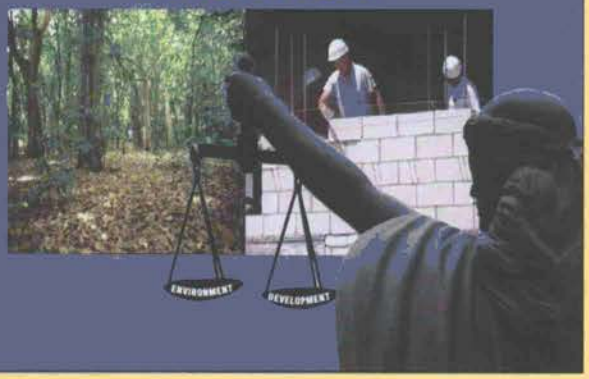
"As distant as heaven is from the earth, so is the true spirit of equality from that of extreme equality...

"In a true state of nature, indeed, all men are born equal, but they cannot continue in this equality. Society makes them lose it, and they recover it only by the protection of laws."Bk. VIII, Ch. 3

References:
* Montesquieu, The Spirit of Laws
* UNEP Judicial Handbook on Environmental Law 2005, pXXI

Slide - 9

BALANCING ENVIRONMENT AND DEVELOPMENT



The courts can provide an objective approach to balancing need to conserve the environment and to ensure that needs of a community are being met.

For such an approach to be applied, the ecological, economic and social/cultural needs of the relevant community need to be understood.

Modern environmental legislation calls for the courts to take into account the scientific evidence concerning ecological carrying capacity, along with community needs and governmental aspirations for sustainable development, to apply the balance contemplated by the legislation.

"...it is essential for the judiciary to have an understanding of environmental problems and a creative vision of how the law can deal with them, failing which environmental law can be rendered ineffective or retarded in its development and implementation..... Particular challenges that may need to be addressed include:

(a) Dealing with scientific issues

(b) Managing uncertainty

(c) Sustainable development

(d) Diversity of issues and setting

(e) Individuals and society

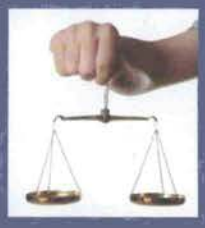
(f) Economics"

Reference:
* UNEP Judicial Handbook on Environmental Law, 2005, page XXII.

Slide - 10

APPLYING AND INTERPRETING THE LAW

- Reasoned judicial decisions
- Context
- Statutory interpretation
- Legislative history
- Precedent
- Reviewing government decisions



When applying and interpreting environmental law, judges need to understand the economic, social, cultural and political context of environmental decisions, and be able to apply the necessary discretion in the admission or rejection of scientific evidence. In resolving these issues, judges will use the ordinary techniques of legal interpretation as developed in their own courts, but will need to adapt them to the special context.

Some particular areas of note in this regard:

(a) **Reasoned judicial decisions** - Fully reasoned decisions are important in shaping the law and explaining the consequences of individual behaviour, especially when decisions of broad social impact are issued. A fully reasoned opinion not only cloaks judicial decision-making in transparency and fairness, but also provides a more effective basis for review by the higher courts, and the development of a consistent and principled system of law.

(b) **Statutory Interpretation** - Judicial decision-making begins with the texts of the applicable laws, whether treaty (if self-executing or implemented as a matter of national law), constitutional, statutory or administrative. The words used in the enactment are the best guide to its meaning. If the text is clear then the task is simply to apply it to the case. Where there is uncertainty, further reading may help to put the language in the context of the entire enactment, looking at it as an integrated whole to determine its object and purpose. Canons of construction may help to resolve some ambiguities.

(c) **Legislative History** - In many legal systems, judges may look at the legislative history, including records of the legislative or administrative process, in order to determine the purposes of the enactment and how its authors intended it should be interpreted. In others, consultation of legislative history is disfavoured, typically out of concern regarding the difficulty of ascribing a common intention to a group such as a legislature or administrative body. The extent to which legislative history can be considered will be determined by national law and practice, which, in turn, may be influenced by legislative procedures and the manner in which legislative history is developed and expressed.

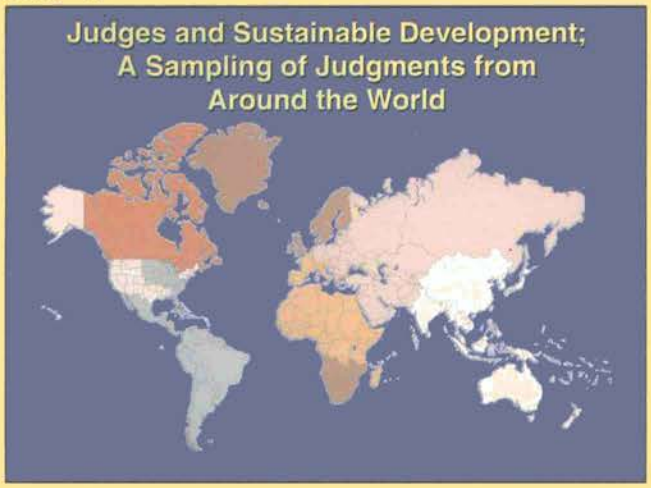
(d) **Precedent** - Legal systems vary in the extent to which they require precedent to be followed. Even where there is no formal obligation to follow precedent, there are sound reasons for treating previous decisions of parallel or higher courts as a guide:

* As a general principle of justice and fairness, equals should be treated equally. Thus, where an issue or case is presented that is in all essential respects the same as one previously addressed, the same result should ordinarily obtain.
* Following precedent can promote judicial efficiency. Where individuals believe that every issue that has been decided is open for repeated challenge, judicial case loads tend to increase. In addition, precedent can provide a quick reference for the judicial solution of the case, avoiding the need to "reinvent the wheel" or undertake original primary research of the issue.
* Major changes in interpreting or applying statutory law from one case to another may be criticized as unprincipled.

(e) **Reviewing government decisions and interpretations** – Systems differ in their approach to judicial review of administrative decisions by government agencies. While some courts review all administrative decisions de novo and give no particular deference to agency factual determinations and legal interpretations, other accord some measure of deference to the conclusions of specialized agencies and limit their review of the administrative record that was before the administrative agency at the time of the decision (the so-called "record of decision").

Reference:
* UNEP Judicial Handbook on Environmental Law, 2005, page XXII

Slide - 11



When applying and interpreting environmental law, judges need to understand the economic, social, cultural and political contexts of environmental decisions, and be able to apply the necessary discretion in the admission or rejection of scientific evidence. In resolving these issues, judges will use the ordinary techniques of legal interpretation as developed in their own courts, but will need to adapt them to the particular context.

The random selection of judgements that follow is designed to illustrate how the judiciary has contributed to the development of environmental jurisprudence.

Slide - 12

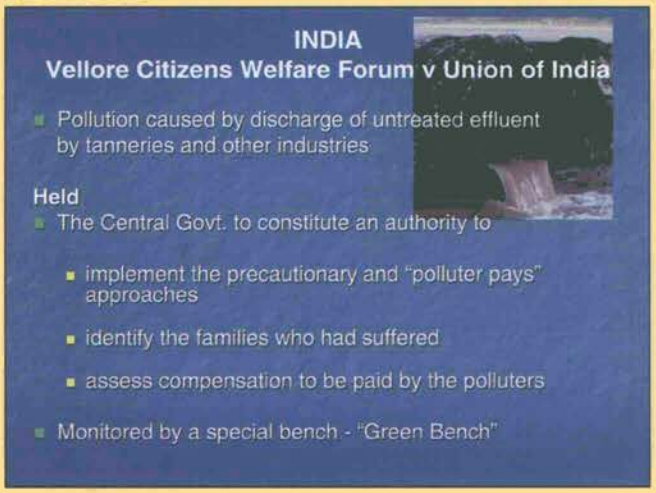
Following a public interest petition addressed to the Supreme Court by the Rural Litigation and Entitlement Kendera of Dhera Dun in the State of Uttar Pradesh, the Court directed that all fresh quarrying in the Himalayan region of the Dhera Dun District be stopped. Subsequently, acting on the basis of the reports of the Bandyopadhyay Committee and a three man expert committee, both of which were appointed by the Court, the Court ordered the closure of several mines in the area. Thereafter, the lessees of the mines submitted a scheme for limestone quarrying to the Bandyopadhyay Committee. The Committee rejected the scheme and the lessees challenged the decision of the Committee in the Supreme Court.

The Court stated that this case brings into sharp focus the conflict between development and conservation and serves to emphasise the need for reconciling the two in the larger interests of the country. The environmental disturbances caused by limestone mining has to be weighed in the balance against the need of limestone quarrying for industrial purposes. Having given careful consideration to these aspects of the case, the Court rejected the petition, expressing its approval of the decision of the Committee. However, in rejecting the Petition, the Court also stated that it was conscious of the fact that as a result of the closure of the mines workmen employed in the mines will be out of work and directed that immediate steps be taken for reclamation of the areas forming part of such quarries and that the affected workmen be as far as possible and in the shortest possible time, be provided employment in the reforestation and soil conservation programmes to be undertaken in the area.

Reference:

* UNEP Compendium of Summaries of Judicial Decisions in Environment-related Cases, 2005, page 151

Slide - 13



The Petitioner, the Vellore Citizens Welfare Forum, filed this action to stop tanneries in the State of Tamil Nadu from discharging untreated effluent into agricultural fields, open lands and waterways. Among other types of environmental pollution caused by these tanneries, it is estimated that nearly 35,000 hectares of agricultural land in this tanneries belt has become either partially or totally unfit for cultivation, and that the 170 types of chemicals used in the chrome tanning processes have severely polluted the local drinking water. The Court has passed other orders relating to this case, and has monitored this petition for almost five years.

The Supreme Court noted that although the leather industry is a major foreign exchange earner for India and provided employment, it does not mean that this industry has the right to destroy the ecology, degrade the environment or create health hazards.

Sustainable development, and in particular the "polluter pays" and precautionary approaches, have become a part of customary international law. Even though section 3(3) of India's Environment Protection Act 1986, allows the Central Government to create an authority with powers to control pollution and protect the environment, it has not done so. Thus, the Court directed the Central Government to take immediate action under the provisions of this Act.

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. This authority shall implement the precautionary principle and the polluter pays principle, and identify the (1) loss to the ecology/environment; and (2) 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. The Collector/District Magistrates shall collect and disburse this money.

If a polluter refuses to pay compensation, his industry will be closed, and the compensation recovered as arrears of land revenue. If an industry sets up the necessary pollution control devices now, it is still liable to pay for the past pollution it has generated.

Each tannery in the listed district is subject to a Rupees 10,000 fine which will be put into an "Environment Protection Fund". This fund will be used to restore the environment and to compensate affected persons. Expert bodies will help frame a scheme to reverse the environmental pollution. All tanneries must set up common effluent treatment plants, or individual pollution control devices, and, if they do not, the Superintendent of Police and the Collector/District Magistrate/Deputy Commissioner in each of the respective districts is authorised to close the plants down. No new industries shall be permitted to be set up within the listed prohibited areas.

This matter will now be monitored by a Special Bench- "Green Bench"- of the Madras High Court.

Reference:
* UNEP Compendium of Summaries of Judicial Decisions in Environment-related Cases, 2005, page 119

Slide - 14

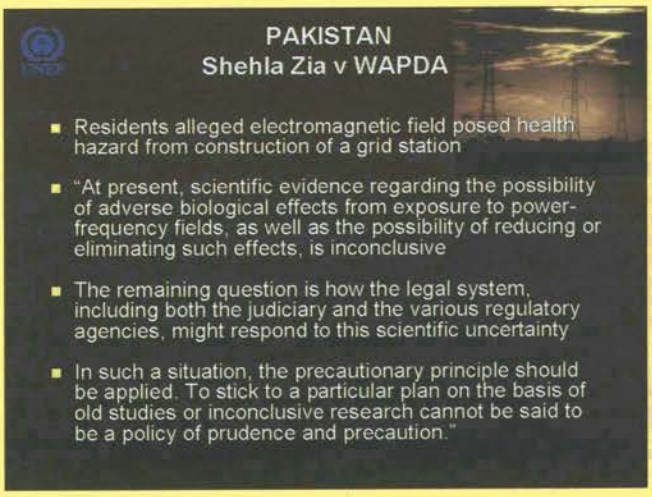
Reference:
* UNEP Compendium of Summaries of Judicial Decisions in Environment-related Cases, 2005, page 158

Slide - 15

Reference:

* UNEP Compendium of Summaries of Judicial Decisions in Environment-related Cases, 2005, page 200

Slide - 16



In *Shehla Zia v WAPDA,* 250 citizens were concerned about the construction and operation of a grid station, in particular about being exposed to the hazards of electromagnetic fields. The citizens petitioned the Supreme Court of Pakistan for consideration as a human rights case, questioning whether a government agency has a right to endanger the life of citizens by its actions without the latter's consent.

The Supreme Court noted that there was scientific uncertainty as to the likelihood of adverse effects of electromagnetic fields on human health. The Court stated:

"There is a state of uncertainty and in such a situation the authorities should observe the rules of prudence and precaution. The rule of prudence is to adopt such measure which may avert the so-called danger, if it occurs. The rule of precautionary policy is to first consider the welfare and safety of the human beings and the environment and then to pick up a policy and execute the plan which is more suited to obviate the possible danger or make such alternate precautionary measures which may ensure safety. To stick to a particular plan on the basis of old studies or inclusive research cannot be said to be a policy of prudence and precaution.... It is highly technical subject upon which the Court declined to give a definite finding particularly when the experts and the technical evidence produced is inconclusive. In these circumstances the balance should be struck between the rights of the citizens and also the plan which are executed by the power authorities for welfare, economic progress and prosperity of the country".

The Court referred to Principle 15 of the Rio Declaration, noting:
"According to it if there are threats of serious damage, effective measures should be taken to control it and it should not be postponed merely on the ground that scientific research and studies are uncertain and not conclusive. It enshrines the principle that prevention is better than cure. It is a cautious approach to avert a catastrophe at the earliest stage. Pakistan is a developing country. It cannot afford the researches and studies made in developed countries on scientific problems particularly the subject at hand. However, the researchers and their conclusions with reference to specific cases are available, the information and knowledge is at hand and we should take benefit out of it. In this background if we consider the problem faced by us in this case, it seems reasonable to take preventative and precautionary measures straightaway instead of maintaining status quo because there is no conclusive finding on the effect of electromagnetic fields on human life. One should not wait for conclusive finding as it may take ages to find out and, therefore, measures should be taken to avert any possible danger and for that reason one should not go to scrap the entire scheme but could make such adjustments, alterations or additions which may ensure safety and security or at least minimise the possible hazards".
The Court concluded:
"Therefore, a method should be devised to strike balance between economic progress and prosperity and to minimise possible hazards. In fact a policy of sustainable development should be adopted. It will thus require a deep study into the planning and the methods adopted by Authority for the construction of the grid station"

Reference:

* UNEP Compendium of Summaries of Judicial Decisions in Environment-related Cases, 2005 page 176:
Shehla Zia v. WAPDA, P L D 1994 Supreme Court 693 (Pakistan) http://www.elaw.org/resources/text.asp?ID=280

Slide - 17

PHILIPPINES
Oposa v. Factoran

- 43 Minors represented by their parents brought case against government to cancel timber licenses on ground that destruction of natural resources affected rights of present and future generations.
- Held: rights of future generations recognised as an expression of "inter-generational justice"


The Petitioners were a group of Filipino minors, who brought this action on their own behalf and on behalf of generations yet unborn, through their respective parents together with the Philippine Ecological Network Incorporated. They claimed that the country's natural forest cover was being destroyed at such a rate that the country would be bereft of forest resources by the end of the decade if not sooner. They brought their action as a taxpayers' class suit claiming that as citizens and taxpayers they were entitled to the full benefit, use and enjoyment of "the natural resource treasure that is the country's virgin rain forests." They also asserted that they represented their generation as well as "generations yet unborn". They sought an order directing the Secretary to the Department of Environment and Natural Resources (DENR) to cancel all existing timber licence agreements and cease from accepting or approving new agreements.

The Petitioners presented extensive scientific evidence to support their case that the widespread granting of timber licence agreements by the first respondent and his predecessors had resulted in a vast depletion of the country's natural forest cover, and that at the present rate of deforestation the Philippines would be bereft of forest resources at the end of the decade, if not earlier. The Petitioners also presented evidence of the adverse environmental effects already experienced by the present generation of Filipinos and the even more serious effects that would be experienced by the Petitioners and their successors if licences were given to continue the deforestation.

The Petitioners pleaded that the acts of the Respondent constituted a misappropriation and/or impairment of the natural resource property held in trust for the benefit of the plaintiff minors and succeeding generations. The Petitioners further pleaded that they had a constitutional right to a "balanced and healthful ecology" and were entitled to the protection of the State in its capacity as "parens patriae".

The Supreme Court ruled as follows:

* Since the subject matter of the complaint was of common and general interest to all citizens and it was impracticable to bring them all before Court, Petitioners' suit was a valid class action under Section 12, Rule 3 of the Revised Rules of Court.

* The Petitioners had the right to sue on behalf of succeeding generations because every generation has a responsibility to the next to preserve the rhythm and harmony of nature for the full enjoyment of a balanced and healthful ecology.

* The Petitioners' complaint focused on one specific fundamental right, namely the right to a balanced and healthful ecology, which was incorporated in Article 16 of the 1987 Constitution. The fact that it was included under the Declaration of Principles and State Policies and not under the Bill of Rights did not make it any less important. This right implied, among other things, the judicious management and conservation of the country's forests.

* The Petitioners' right to a balanced and healthful ecology and the Department of Natural Resources duty to protect and advance that right were both clear, and gave rise to a cause of action as defined by the law.

The Court observed: "Unless the rights to a balanced and healthful ecology and to health are mandated as State policies by the Constitution itself, thereby highlighting their continuing importance and imposing upon the State a solemn obligation to preserve the first and protect and advance the second, the day would not be too far when all else would be lost not only for the present generation, but also for those to come- generations which stand to inherit nothing but parched earth incapable of sustaining life."

Accordingly, the Petitioners' application to set aside the Trial Judge's order of dismissal was accordingly allowed. The case was sent back to the Regional Trial Court with a direction to the Petitioners to proceed against the holders of the questioned timber licences as defendants.

Reference:

* UNEP Compendium of Summaries of Judicial Decisions in Environment-related Cases, 2005, page 179: Antonio Oposa & others v The Honourable Fulgencio S. Factoran & another, G.R.No: 101083 Supreme Court of the Philippineshttp://www.elaw.org/resources/text.asp?ID=278

Slide - 18

MALAYSIA
Kajing Tubik & others v Ekran Biid & others (Bakun Dam case)

- Petitioners deprived of right to obtain copy of EIA to make public representation, as the Minister had issued an Order declaring that EQA would not apply to Sarawak
- Held: Public participation under EQA mandatory and as of Right
- Declared Ministers Order Invalid

The plaintiffs were residents of long houses in Belaga, Sarawak who were affected by the Government's proposed development of a hydroelectric project in Bakun covering approximately 69,640 hectares of land ("Bakun HEP"). The first defendant was the project proponent of the Bakun HEP; the second defendant was the Director General of Environmental Quality; the third defendant was the Government of Malaysia; the fourth defendant was the Natural Resources and Environment Board and the fifth defendant was the Sarawak State Government.

The plaintiff sought a declaration that before the first defendant carried out the construction of the Bakun HEP, they had to comply with the Environmental Quality Act of 1974 (the 'EQA'), the guidelines prescribed under s 34A of the Act, and the regulations made thereunder.

Where public participation is guaranteed by law, courts may enforce the entitlement by ordering compliance and invalidating any EIA approved in violation of the public's opportunity to comment. *Kajing Tubik & Others v. Ekran Biid & Others*, High Court, Kuala Lumpur, 1996).

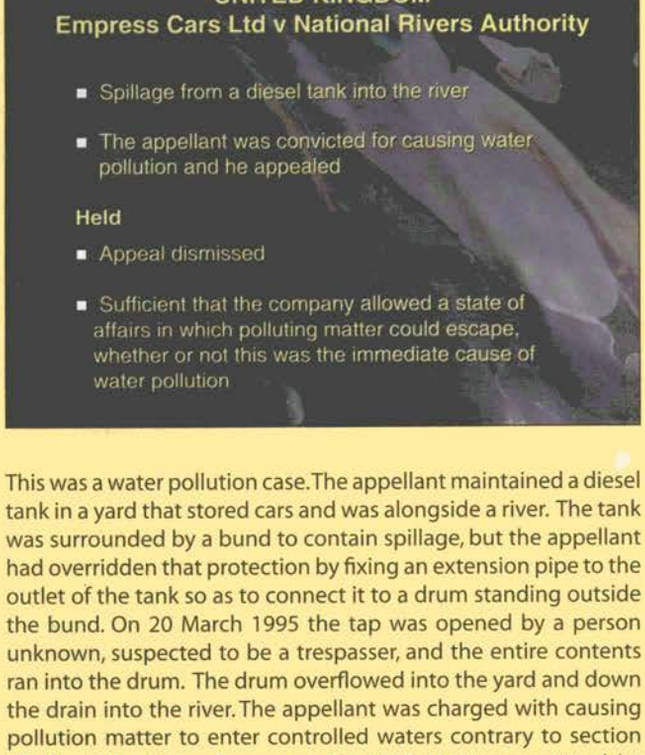
The court would not refuse the plaintiffs' application solely on the ground that an alternative remedy was available. The court would consider the granting of the form of relief most likely to resolve the disputes between the parties.

References:

* UNEP Compendium of Judicial Decisions on Matters Related to the Environment: National Decisions, pages 50 -58,
Kajing Tubik & Ors V. Ekran Biid & Ors (21 June 1995) High Court (Kuala Lumpur) http://www.unescap.org/drpad/vc/document/compendium/my1.htm

* UNEP Judicial Handbook on Environmental Law, 2005, Chapters 4 & 5

Slide - 19



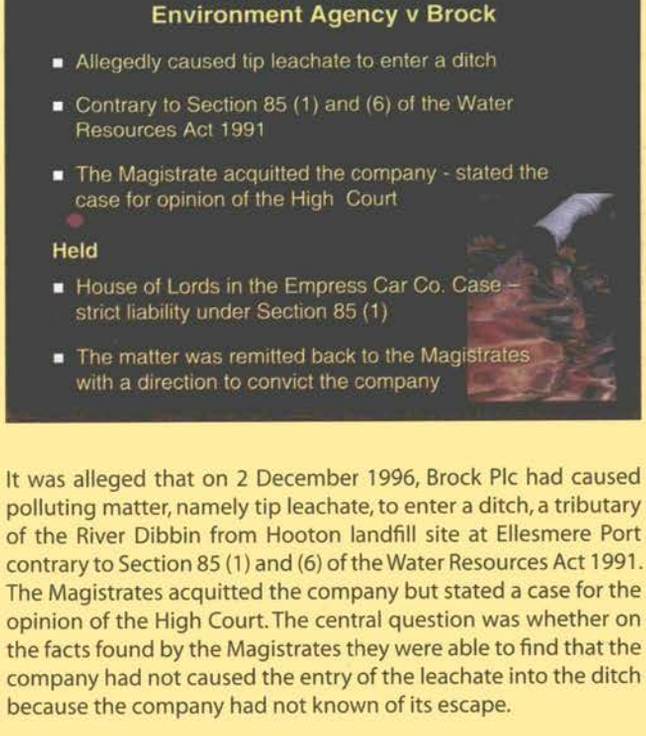
This was a water pollution case. The appellant maintained a diesel tank in a yard that stored cars and was alongside a river. The tank was surrounded by a bund to contain spillage, but the appellant had overridden that protection by fixing an extension pipe to the outlet of the tank so as to connect it to a drum standing outside the bund. On 20 March 1995 the tap was opened by a person unknown, suspected to be a trespasser, and the entire contents ran into the drum. The drum overflowed into the yard and down the drain into the river. The appellant was charged with causing pollution matter to enter controlled waters contrary to section 85 (1) of the Water Resources Act 1991. He was convicted by the Justices and his appeals to the Crown Court and OBD were dismissed.

The Law Lords dismissed the appeal. On a prosecution for causing pollution under Section 85 (1) of the Water Resources Act 1991 it was necessary to identify what the defendant was alleged to have done to cause the pollution. There was ample evidence upon which the lower courts had been entitled to find that the appellant had caused the pollution. It was sufficient that the company did something that allowed a state of affairs in which polluting matter could escape, whether or not this was the immediate cause of water pollution.

Reference:

* UNEP Compendium of Summaries of Judicial Decisions in Environment-related Cases, 2005, page 208
  Empress Car Company (Abertillery) Ltd. v. National Rivers Authority
http://www.publications.parliament.uk/pa/ld199798/ldjudgmt/jd980205/empre01.htm

Slide - 20



It was alleged that on 2 December 1996, Brock Plc had caused polluting matter, namely tip leachate, to enter a ditch, a tributary of the River Dibbin from Hooton landfill site at Ellesmere Port contrary to Section 85 (1) and (6) of the Water Resources Act 1991. The Magistrates acquitted the company but stated a case for the opinion of the High Court. The central question was whether on the facts found by the Magistrates they were able to find that the company had not caused the entry of the leachate into the ditch because the company had not known of its escape.

The Magistrates were not aware at the time of their decision of the decision of the House of Lords in the Empress Car Co. Case (UK Case 4, above) making it clear that liability under Section 85 (1) is not based on negligence but is strict. The matter was remitted back to the Magistrates with a direction to convict the company.

References:

* UNEP Compendium of Summaries of Judicial Decisions in Environment-related Cases, 2005, page 209
* Environment Agency v Brock [1884 4 PLR 37; Queen's Bench Division (United Kingdom)

Slide - 21

SOUTH AFRICA
Wildlife Society of Southern Africa & others v Minister of Environmental Affairs & Tourism & others

- Coastal conservation area – dwellings & roads → environmental degradation
- No preventive measures by Ministers responsible
- Application for Order compelling respondents to enforce legal provisions

Held

- Locus standi of applicants conceded by Constitution
- Take steps to enforce provisions of Decree 9 (Environment Conservation) 1992

The applicants applied for an order compelling the respondents to enforce the provisions of Decree 9 (Environment Conservation) 1992. The first applicant was the Wildlife Society of Southern Africa and the second its Conservation Director. The third and fourth applicants were two lawful occupiers of cottages located on the coast and members of the (Wild) Coast Cottage Owners' Association. The first respondent was Minister of Environmental Affairs, the second the Premier of the Eastern Cape, the third the Minister of Agriculture and Environmental Planning and the fourth to seventh respondents were the chiefs or headmen of the Eastern Cape. The applicants contended that the fourth to the seventh respondents had granted rights of occupation and allocated sites within the coastal conservation area to private individuals for very small considerations. Shacks, dwellings, roads, pathways and tracks had been constructed on the sites resulting in environmental degradation but, the applicants argued, the Ministers responsible had taken no preventive measures.

The locus standi of the applicants was challenged but later conceded by reason of the constitutional provisions and the Court ordered the first respondent to take such steps necessary to enforce the provisions of S.39(2) of Decree 9 (Environment Conservation) 1992 promulgated by the Government of Transkei. The 4th-7th respondents were restrained from granting any rights in land which formed part of the territory that formerly constituted the Republic of Transkei.

Reference:

* UNEP Compendium of Summaries of Judicial Decisions in Environment-related Cases, 2005, page 22

Slide - 22

TANZANIA
Festo Balegele & 749 others v Dar es Salaam City Council

- The applicants sought orders of:
  - certiorari - quash decision of dumping waste
  - prohibition - barring future use of site
  - mandamus - establish a suitable site
- The respondent – dumping temporary, sought order to continue
- locus standi of applicants upheld & orders granted
- Life deliberately exposed to danger
  - Denial of a basic right

The applicants sought orders of: (i) certiorari - to quash the decision of the respondent to allow the dumping of the city waste at Kunduchi Mtongari; (ii) prohibition - barring the future use of the refuse dump site; and (iii) mandamus - to direct the respondent to establish an appropriate refuse dumping site. It was not disputed that Kunduchi Mtongani lay within the jurisdiction of the city council and that, although that the site was zoned as a residential area and the applicants resided there, the respondent had been dumping the city refuse and waste at the site. The burning of the waste had generated smoke and offensive smells and had attracted flies. The respondent contended that the disposal of refuse in the area was temporary and sought an order to continue dumping as without this facility it could not perform its statutory duty of collecting refuse for disposal.

The court upheld the locus standi of the applicants and granted them orders sought. The court ruled that it was a denial of a basic right deliberately to expose anybody's life to danger and it was eminently monstrous to enlist the assistance of the court in this infringement.

Reference:

* UNEP Compendium of Summaries of Judicial Decisions in Environment-related Cases, 2005, page 28
Felix Joseph Mavika v. Dar es Salaam City Commission, Civ. Case No. 316 of 2000 http://www.elaw.org/resources/text.asp?ID=808

Slide - 23

KENYA
Waweru V Republic of Kenya 2006

- Development that threatens life is not sustainable and ought to be halted
- "The council is in a position of public trust to … ensure that adequate land is available for sewage treatment works"
- Government is under the law under an obligation to approve sustainable development and nothing more, which is development that meets the needs of the present without compromising the ability of future generations to meet their needs"
- At this time and age, no development is valid which cannot answer the requirements of sustainable development"

Reference:
* Waweru v Republic of Kenya, Supreme Court of Kenya, 2006

Slide - 24

KENYA
Adnan Karama Petroleum Ltd. Vs.
National Environment Management Authority

- Order to close a petrol filling station as it posed a serious threat to the environment and human health.
- Pertinent issues: a chance to be heard; whether petrol station and its operations are in compliance with the law; whether it posed actual and potential threats of damage to human health and the environment; notice to close down the Respondent's powers; whether prompted by malice and bad faith; who has responsibility to carry out an environmental audit.
- Held: Location of facility inappropriate, and it does not allow for necessary remedial measures to be taken to bring the facility and its operations into compliance with the law. The deficiencies of the facility are not capable of being remedied.
- Reasonable to require the facility to be closed down completely.
- Authority can ask proprietors to conduct environmental audits and ensure compliance.

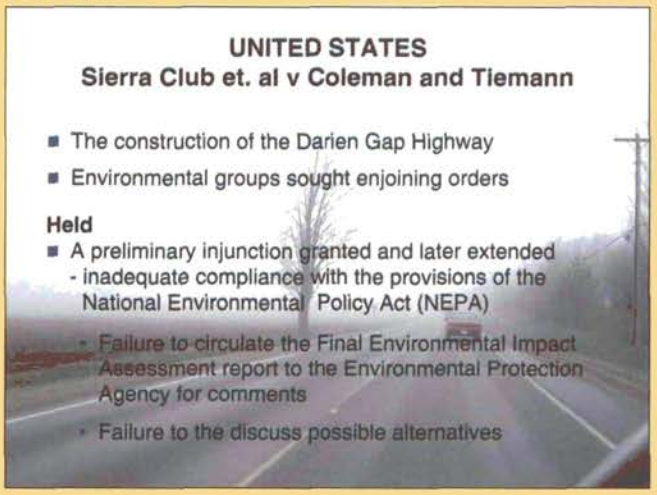
1. Appeal against an order issued by the Respondent to close a facility used as a petrol filling station on the basis that it was in violation of the provisions of the Environmental Management and Co-ordination Act (EMCA) and that it posed a serious threat to the environment and human health.

2. Pertinent issues arising for the Tribunal's consideration are: whether the Respondent gave the Appellant a chance to be heard; whether the Appellant's petrol station and its operations are in compliance with the law; whether the Appellant's petrol station and its operations pose actual and potential threats of damage to human health and the environment; whether the Respondent's notice to the Appellant to close down operations is *ultra vires* the Respondent's powers; whether in issuing a notice to the Appellant to close down operations, the Respondent was prompted by malice and bad faith; whether it is the Respondent that has the responsibility to carry out an environmental audit; whether the Appellant's facility and operations allow for implementation of mitigation measures to bring the Appellant into compliance with the law; whether it is reasonable for the Respondent to require the Appellant to close down the petrol station; and who pays litigation costs.

3. Tribunal found that the location of the Appellant's facility is inappropriate and its situation does not allow for necessary remedial measures to be taken to bring the facility and its operations into compliance with the law. The place is too small to allow for construction of a canopy, proper underground storage tanks, a proper drainage system and interceptor. Therefore, the deficiencies of the facility are not capable of being remedied, no matter how much time the Appellant is given and therefore, it is reasonable for the Respondent to require the facility to be closed down completely. Even if the environmental audit had been re-done, it would not have changed the decision to close down.

4. The Tribunal also found that the Authority can ask proprietors of on-going activities to conduct environmental audits and ensure that they comply with the recommendations of such audit. For the reasons explained, the Tribunal unanimously finds that the appeal fails and directs that the petrol filling station should immediately cease operation.

Slide - 25



The construction of a highway to link the Pan American Highway system of South America with the Inter-American Highway was authorized by Congress in 1970. The actual administration of the project was left to the Secretary of Transportation. Thereafter the Department of Transportation and the Federal Highway Administration (FHWA) took the preliminary steps for the construction of a highway through Panama and Colombia. In view of the extensive environmental impact of the proposed highway, which was known as the Darien Gap Highway, the FHWA prepared and issued an Environmental Impact Assessment in order to comply with the provisions of the NEPA. The Sierra Club and three other environmental organisations, instituted action to obtain a preliminary injunction, restraining the FHWA from taking any further action on the project, on the basis that the preparation and insurance of the Assessment satisfied neither the procedural nor the substantive requirements of the NEPA. A preliminary injunction was accordingly granted.

Subsequently, the defendants prepared a Final Environmental Impact Statement (EIS), in order to comply with the provisions of the NEPA and to proceed with the proposed construction of the Darien Gap Highway. Upon a motion filed by the plaintiffs, on the basis that the EIS was defective in certain critical areas, the preliminary injunction was extended.

As a result of the above decision and also several other similar cases, the Council on Environmental Quality (CEQ) issued a memorandum entitled "Memorandum on the Application of the EIS Requirement to Environmental Impacts Abroad of Major Federal Actions".

Preliminary Injunction

The Court issued the injunction prayed for on the grounds, inter alia, that the FHWA 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 NEPA. The Court held that "(t)here is no question but that the environmental effects of a major highway construction is within the expertise of EPS, and that agency might well have had valuable comments which could have affected FHWA's judgment as the Assessment was considered in the decision-making process in the selection of the highway's route". In fact, when the EPA finally learned of the existence of an Assessment, it drew attention to a major deficiency, viz. the lack of discussion in the Assessment, regarding the domestic consequences of the transmission of "foot and mouth disease" or "aftosa " into the United States along the proposed highway. The Court cited this major deficiency as one of the principal reasons, which warranted the issuance of an injunction.

The Court also said that the discussion of possible alternatives is 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 has been chosen for the highway, was a defect of a substantive nature. Except for a fleeting reference to the "no build" alternative without any discussion of its relative environmental impact, the bulk of the section titled "Alternatives To The Proposed Project" was devoted to an analysis of why the proposed shorter route, the Atrato route was preferable to the longer route, the Chocó route, from an engineering and cost perspective. A discussion of the relative environmental impact of other land routes, such as the Chocó route was an indispensable requirement, though the latter route might have costed more or have been less feasible from an engineering perspective. This would also enable a complete analysis of the impact of the proposed highway on the lives of the Chocó and Cuna Indians.

Accordingly, the Court by its order dated 17th October, 1975 issued a preliminary injunction restraining the defendants from taking any action whatsoever, in furtherance of the construction of the Darien Gap Highway, pending final hearing and disposition of the action or until the defendants had taken all necessary action to comply fully with the substantive and procedural requirements of the National Environmental Policy Act.

Extension of the Preliminary Injunction

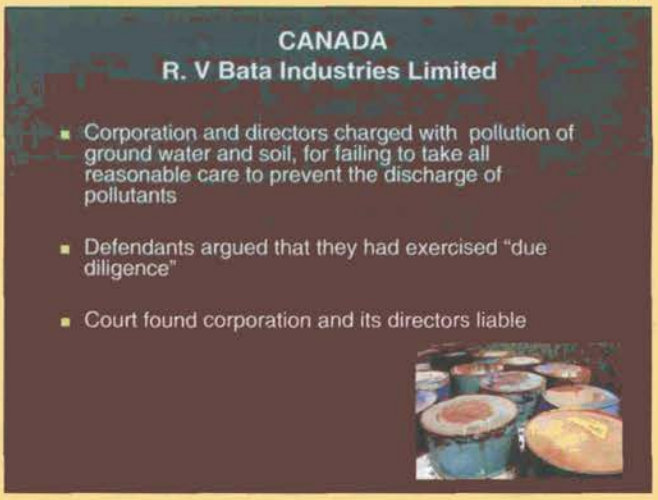
In allowing the plaintiffs' motion for extension of the preliminary injunction, the Court held that the defendants' assessment contained in the EIS, still constituted inadequate compliance with the provisions of the NEPA.

Reference:

* UNEP Compendium of Summaries of Judicial Decisions in Environment-related Cases, 2005, page 66

Sierra Club Et. Al V. Coleman and Tiemann 14 ILM P.1425 (1975) & 15 ILM P.L417 (1976) United States: District Court For The District Of Columbia http://www.unescap.org/drpad/vc/document/compendium/us1.htm

Slide - 26



Here, the corporation and three directors were charged under the Ontario Water Resources Act and the Environment Protection Act concerning pollution of ground water and soil, for failing to take all reasonable care to prevent the discharge of pollutants. Defendants argued that they had exercised "due diligence".

The company was fined a total of Can$120,000 inclusive of a contribution to an environmental project. The two directors found in breach of their respective duties were each fined and the Company was ordered not to indemnify them in respect of the ordered fines. A probation order was also imposed against the Bata Shoe Organisation (world-wide) requiring among other things the funding of a local toxic waste disposal program to pick up various household wastes in a number of regions in the countries where the accused company operated.

On Appeal to the High Court, the fines against both the company and the directors were reduced. The probation order was affirmed, applying only to its organisation in Canada and not world-wide. The Trial Judge's order that the directors should not be indemnified was upheld on the grounds of policy.

However, the Court of Appeal struck out the condition relating to indemnification on the basis that it was difficult to enforce. All the company need do was to allow the period of probation to expire and then indemnify the directors. Moreover, such a condition was found to be in conflict with a statutory provision in the Ontario Business Corporation Act.

The case established criteria for the defence of due diligence for directors of corporations charged with violations of environmental legislation in Ontario, Canada. In particular, the following factors were considered relevant:

Did the directors establish a pollution prevention system?

Was there supervision or inspection?

Was there improvement in business methods?

Did the directors exhort those they influenced or controlled?

Did the directors ensure that company officers were instructed to set up a system to ensure compliance with environmental laws?

Did they ensure that company officers reported back to the company board on the operation of the system?

Did they ensure that officers were instructed to report any substantial non-compliance to the company board in a timely manner?

Did the directors check that officers were promptly addressing identified environmental concerns?

Did directors pursue awareness of industry standards concerning environmental pollutants or risks?

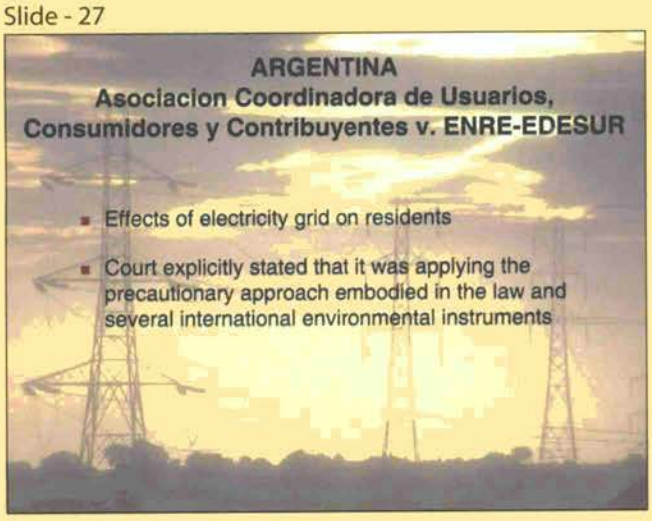
Did directors immediately and personally react when given notice that the system had failed?

Reference:

* UNEP Compendium of Summaries of Judicial Decisions in Environment-related Cases, 2005, page 42

R v Bata Industries Limited & others (1992) 70 C.C.C. (3rd) 395, Ontario Provincial Court. : http://www.unescap.org/drpad/vc/document/compendium/ca2.htm

Slide - 27



Representing the inhabitants of the Ezpeleta locality, the plaintiff sought a court order that the defendant suspend the works establishing an electric grid above the locality and relocate it elsewhere. The plaintiff argued that the electromagnetic fields created by the grid were polluting the environment of Ezpeleta and resulting in harm to health of its residents, in certain cases by producing cancerous pathologies.
The plaintiff's request for an order was denied. There was insufficient evidence to establish a causal link between the operation of the grid and the health disorders of the inhabitants.

On appeal an order of certiorari (quashing the decision) was granted demanding the immediate suspension of the works performed by the defendant, which was ordered to produce a report on the prevention of the probable negative effects on the health of Ezpeleta's occupants by the electromagnetic field. Such a report should be drawn up with the participation of the inhabitants. This was in accordance with the principle demanding a precautionary approach to scientific uncertainty embodied in Law 25675 of 2002 and several international environmental law documents.

Reference:
* UNEP Compendium of Summaries of Judicial Decisions in Environment-related Cases, 2005, page 71

Slide - 28

One of the earliest applications of the precautionary approach is seen in a case of Leatch and the National Parks and Wildlife Service, in New South Wales, Australia. The case involved the Giant Burrowing Frog, an endangered species. The applicant challenged a license issued by the National Parks and Wildlife Sup. to take or kill protected fauna in the course of carrying out a road development project.

The court observed that when there is a threat of significant reduction in biological diversity, lack of ability to project a species viability with certainty should not be used as a reason for postponing measures to avoid or minimize such a threat. It was noted that this principle is directed towards the prevention of serious or irreversible threats to the environment in situations of scientific uncertainty.

Its premise is that where uncertainty or ignorance exists concerning the nature or scope of environmental harm (whether this follows from policies, decisions or activities), decision-makers should be cautious. Leatch suggests that application of the precautionary principle appears to be most apt in a situation of a scarcity of scientific knowledge of species population, habitat and impacts.

References:
* UNEP Compendium of Summaries of Judicial Decisions in Environment-related Cases, 2005, page 221
Leatch v National Parks and Wildlife Service and Shoalhaven City Council, Land and Environment Court, New South Wales, Australia, 1993. (1993) 81 LGERA 270
http://www.austlii.edu.au/cgi-bin/disp.pl/au/cases/nsw/NSWLEC/1993/191.html?query=%7e+leatch
http://www.unescap.org/drpad/vc/document/compendium/au2.htm
* See also Telstra Corporation v Hornsby Shire Council Land and Environment Court, New South Wales, Australia 2006, comprehensive overview of the application of the precautionary principle.

Slide - 29

AUSTRALIA
Booth v Bosworth

Case concerned killing of spectacled flying foxes to protect lychee orchard situated near a World Heritage area, which was the main habitat of the flying fox

Spectacled Flying Fox (Fruit bat)

Dr. Booth applied to the Federal Court of Australia for an injunction restraining the respondents from killing spectacled flying foxes on or near their lychee orchard at Dallacy Creek Kennedy, in Queensland. The orchard is approximately 60 hectares in area. A series of 14 aerial electric fences erected in a Grid pattern has been constructed within the lychee orchard to electrocute flying foxes that approach, fly between or depart over the respondents' orchard. The orchard is in close proximity to the Wet Tropics Heritage Area which is a listed property under the International Convention For the Protection of World Cultural and National Heritage. The Australian Parliament has enacted The Environmental Protection and Biodiversity Conservation Act 1999 for implementing Australia's international obligations under the World Heritage Convention. 377 spectacled flying foxes were being electrocuted per night and expert evidence showed that the number killed by the Grid during 2000 - 2001 lychee season was between 9,900 - 10,800. The respondents did not give evidence and chose not to participate at all in the proceedings.
The Federal Court of Australia's accepted expert evidence and concluded that the probable impact of the Grid will be to halve the Australian population of spectacled flying foxes in less than five years rendering the species endangered within that time frame. The Court was satisfied that the spectacled flying fox contributes to the heritage values of the Wet Tropics World Heritage Area, a very significant regional ecosystem of the World and concluded that an injunction should be issued restraining the operation of the Grid. But as the respondents' action in operating the Grid constitutes a contravention of the Act only while there is no approval of the taking of the action by the respondents in operation under the Act, the injunction will be conditional as the person authorized by the Act to grant such approval is the Minister for the Environment.

This case illustrates the reliance on international obligations under the World Heritage Convention. The Convention concerns the protection of both the natural and the cultural environment. It is one of the few cases globally which analyses national obligations under the Convention.

Reference:
* UNEP Compendium of Summaries of Judicial Decisions in Environment-related Cases, 2005, pages 224-225

Slide - 30

JUDICIAL OBSERVATIONS ABOUT SUSTAINABLE DEVELOPMENT

Slide - 31

Brazil

"..., neither the Constitution, nor any other Brazilian law mentions the words "sustainable development". The judicial decisions do not use this expression either. We have thousands of precedents in Brazil and no one refers to sustainable development. However, in many of them, it is possible to find it used in other words where the economic exploitation is linked to respect towards the environment...".

Hon. Justice Vladimir Passos De Freitas
President, Federal Court, Brazil

Reference:

* Constitution of Brazil http://www.v-brazil.com/government/laws/constitution.html

Slide - 32

Canada

The question of Sustainable Development, as many have already said, is to bring together all debates on Law: International Law, Public Law, International Private Law, Comparative Law and as was said this morning, the Philosophy of Law too, to contribute to the emergence of universal legal values, a sort of common law for sustainable development

Hon. Justice Charles D. Gonthier
Judge
Supreme Court of Canada

Slide - 33

India

While dealing with such cases, an important principle which has been applied and followed is that considering the need for economic growth, there has to be sustainable development. It is now recognized that environment and development must co-exist. There cannot be protection of environment at the cost development, or development at the cost of environment. The two must co-exist. A proper balance must be struck.

Hon. Mr. Justice B.N. Kirpal
Chief Justice of India

Slide - 34

South Africa

Of course, we do not invent the text. We do not invent the principles. We do not invent the norms. They are to be found in international instruments; they are to be found in legislation, in constitutions. So we work from the instruments that are there, if we look hard enough to find them, and we put them together. But we interpret them and use them and implement them in an active kind of way. And that's where the principles that we profess become important. We need to have coherence. We need to have guiding themes to the huge multiplicity of measures that give underlying rationale for what we are doing so that it is organized and fruitful. We also need sustainable forms of remedy. And again this puts pressure on us as judges to be creative. Remedies that themselves are sustainable. It is very easy to fall into the temptation of judicial populism, to become a hero denouncing the polluters, denouncing those destroying the environment. But if we don't come up with a remedy that is effective and is itself a sustainable remedy, then we are simply trivializing the very enterprise that we are seeking to pursue.

Hon. Justice Albi Sachs - Justice of the Constitutional Court of South Africa

Constitution of South Africa Environment
24. Everyone has the right -
to an environment that is not harmful to their health or well-being; and
to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that -

- prevent pollution and ecological degradation;
- promote conservation; and
- secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.

Reference:

* Constitution of South Africa http://www.polity.org.za/html/govdocs/constitution/saconst.html?rebookmark=1

Slide - 35

United Kingdom

: "...it is my firm belief that the judiciary of different jurisdictions have an immense amount to learn from each other. Our legal systems may differ. They may fall on one side or the other of the divide between the common law and civil law systems, or they may be a mixture of both systems or even unrelated to either of those systems. Yet, the problems with which they are confronted today are still very similar ...One of the problems, is how to protect the environment, the critically important subject of this conference."

Rt. Hon. Lord Justice Woolf, Lord Chief Justice of England and Wales

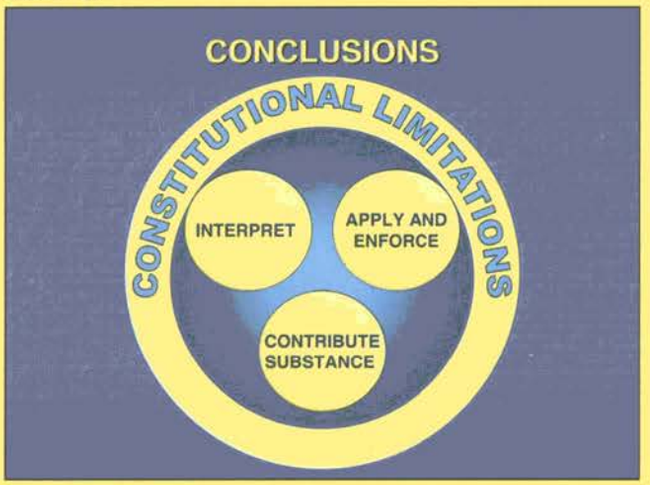
Slide - 36

USA

So, my view is that the rule of law is where we should begin and that the rule of law is best observed through sustaining and improving the democratic process. It may take longer than the non-rule of law process, but in the long run society and society's choices will be enhanced. I do not disagree with the importance of environmental law. I do not disagree with the importance of sustainable development. What I do propose is that we do it in a democratic process ensuring and understanding the procedures which make life worth living in countries with liberty and the democratic process.

Hon. Justice J. Clifford Wallace
Chief Judge Emeritus
United States Court of Appeals

Slide - 37



The judiciary plays a key role in weaving the ideal of sustainable development into the fabric of our societies. Law remains one of the most effective means for translating environment and development policies and practices into action.

By reason of their novelty, environmental problems present various challenges to the judge – whether in substantive areas of law such as principles of law, interpretation of legal concepts and norms or in procedural matters such as evidence, access to the judicial process, appropriate court procedure, methodology of judicial investigation, reception of scientific testimony, burdens of proof and the like.

The role of national level judges is, at bottom, to enforce and apply the law of the state, and to do so in manner that conforms with constitutionally established rights and constitutional limits on judicial authority. Indeed, through their judgments and remedies, judges validate, and breathe life into, the law. This is particularly true with an area like environmental law, which is new and evolving.

Where the law is unclear in its application to a given situation, judges bridge the gap via legal interpretation. In so doing, judges necessarily contribute to the evolving substantive content of environmental law.

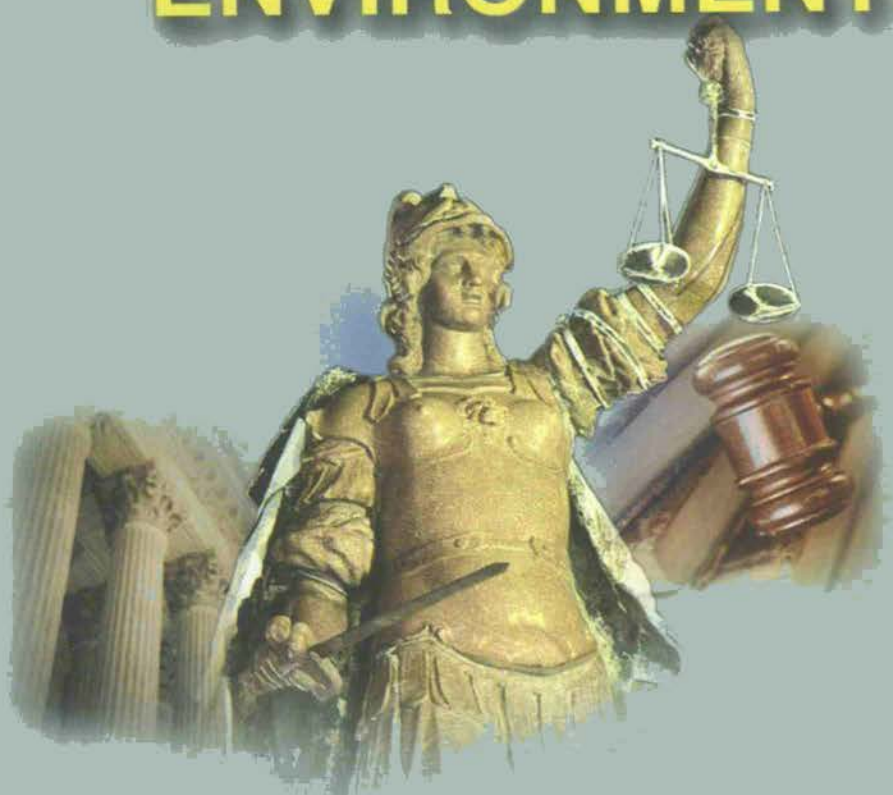
Judges can profit from knowledge of how their colleagues in diverse jurisdictions have addressed this problem. Judges in diverse jurisdictions, faced with problems for which there is no precedent, have sometimes worked out innovative devices and measures wherewith to handle them, whether in the procedures for assessment of fact situations on the ground or for ensuring continuing compliance with a judicial order once made, or for assessing the environmental impact of an action which is the subject of inquiry.

PRESENTATION 4

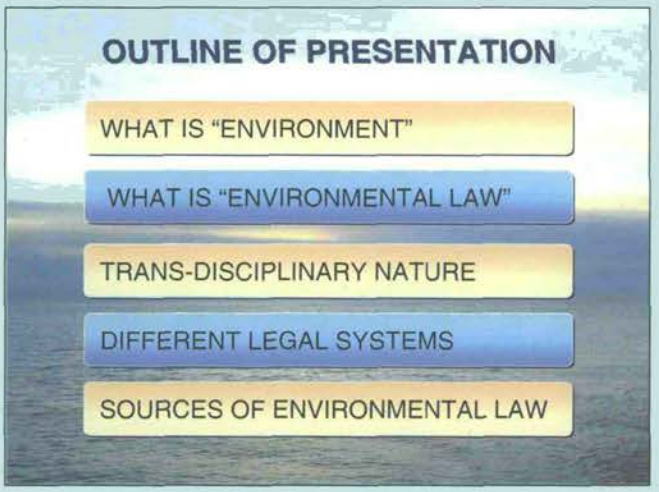
UNEP GLOBAL JUDGES PROGRAMME

APPLICATION OF ENVIRONMENTAL LAW BY NATIONAL COURTS AND TRIBUNALS

SCOPE AND CONTENT OF SUBSTANTIVE ENVIRONMENTAL LAW



Slide - 1



1. Environmental law is a comparatively new branch of domestic and international law. As such, it is in the process of being moulded, unlike older areas of law, which have already assumed fairly defined concepts, principles and procedures. In this process of moulding, the judiciary has a vital role to play. The fine nuances of particular situations which the judge encounters in individual cases are often not matters with which legislatures have time and resources to deal. It is often before the judiciary that they come up for the first time. Consequently it is often judicial decision-making that gives shape and direction to the new concepts and procedures involved. As more such situations come before judges, these individual decisions initiate trends, which give the newly emerging discipline of environmental law the requisite conceptual framework and momentum for its development.

2. This presentation explores various legal definitions of "environment". Definitions help to establish the contours of any area of the law, by helping to delineate the scope of the subject, determine the application of legal rules, and establish the extent of liability when harm occurs.

3. Jurisdictional aspects of environmental law are also set out, to understand the potential relationships between international, national and local environmental law.

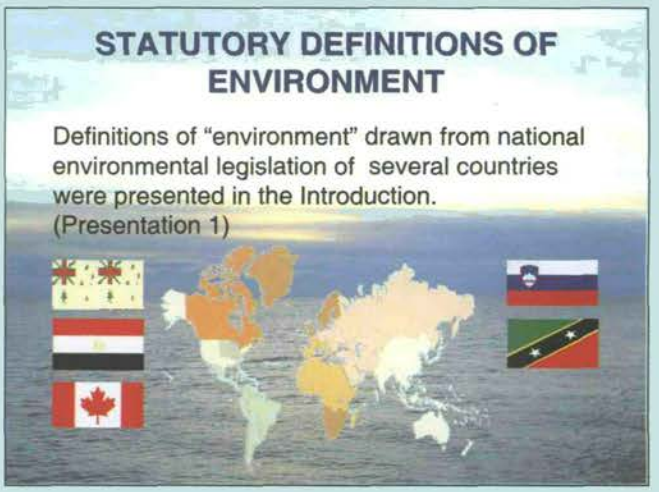
4. The discussion of the content and categories of environmental law follows from, flowing from the definitions and the jurisdictional aspects.

5. Comparing different systems of environmental law can assist judges and legal drafters to understand and improve their own systems.

6. The discussion of hierarchies involved in environmental law relates to the various levels of decision-making.

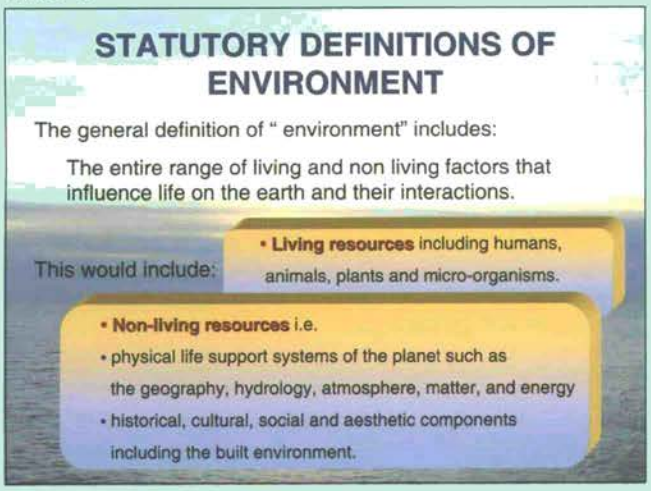
Reference:
* UNEP Judicial Handbook on Environmental Law, 2005

Slide - 2



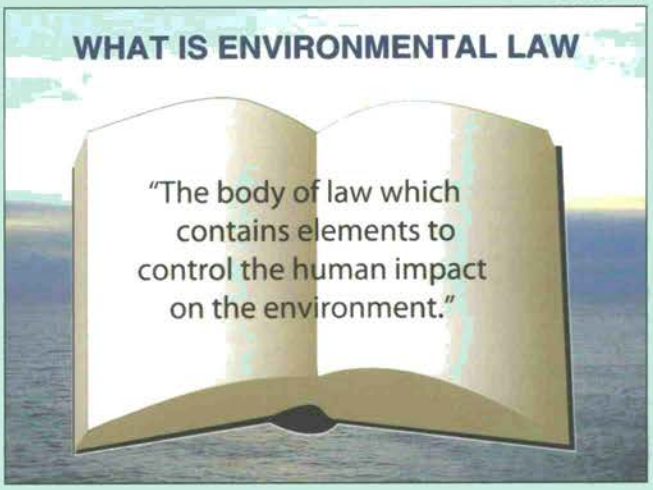
Reference:
* UNEP Judicial Handbook on Environmental Law, 2005

Slide - 3



Reference:
* UNEP Judicial Handbook on Environmental Law, 2005

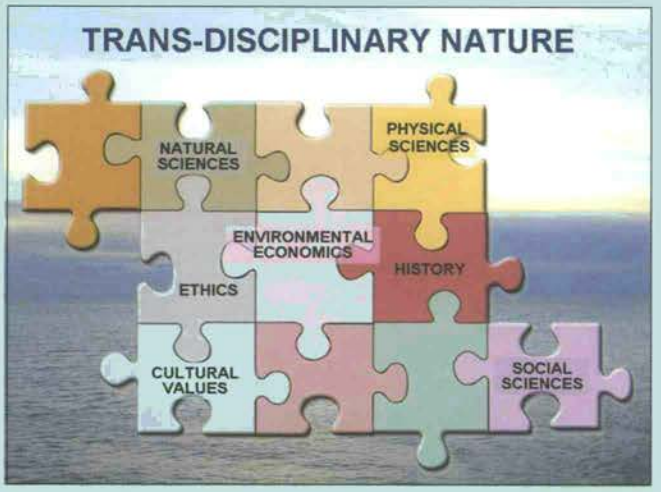
Slide - 4



* The scope of environmental law in any given jurisdiction is often determined by how the word environment is defined.
* Environmental law can be generally described as the body of law which contains elements to control the human impact on the environment.
* Environment being a dimension of every sector of activity, elements of environmental law can be found throughout the laws of a country, whether specifically referred to as "environmental" or not.
* Environmental law can be divided into two major streams - international environmental law and national environmental law. For the judge, national environmental law is of course most germane, however international environmental law may also be relevant. The extent to which international environmental law is relevant to the judge depends on the extent to which international environmental law has effectively become part of the corpus of national law that judges are charged to uphold. The nationalization of international law will be discussed later in Presentation 5.
* Over the past several decades governments began to demonstrate concern over the general state of the environment and, beginning in the 1960s, introduced legislation to combat pollution of inland waters, oceans, air, and land and to safeguard certain cities or areas. Simultaneously, they established special administrative organs, ministries or environmental agencies, to preserve more effectively the quality of life of their citizens. In some states, comparable laws and structures have been replicated by provincial and local governments. Developments in international environmental law paralleled this evolution within states, reflecting a growing consensus to accord priority to resolving environmental problems.
* There have been significant changes in environmental legislation and institutions in developing countries since the Stockholm Conference, in 1992. This momentum for change has been further encouraged by UNCED in 1992. It is possible to identify several emerging trends in this evolution: the crystallisation of environmental issues in constitutional and broad policy documents; more comprehensive coverage of environmental issues; establishment of environmental standards and norms; use of economic instruments for environmental management; recognition of international norms; environmental impact assessment (EIA); effective co-ordination of environmental management; efforts towards ensuring coherence of legislative framework; establishment of mechanisms for facilitating compliance with environmental regulations and measures for more effective law enforcement; and provisions for public participation and review.

Reference:
* UNEP Judicial Handbook on Environmental Law, 2005

Slide - 5

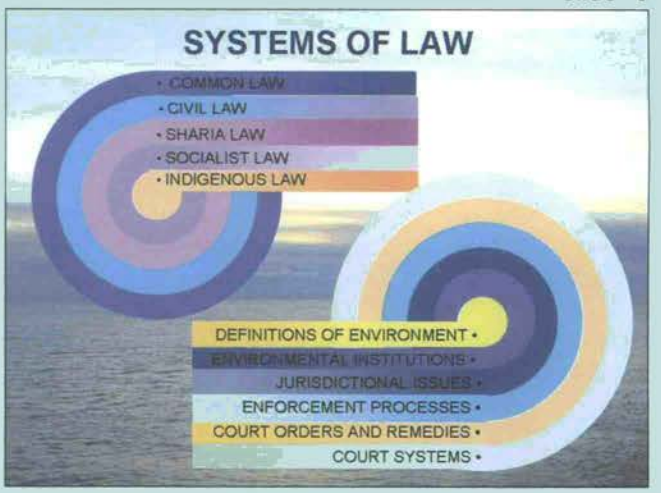


1. The development of environmental law has been largely shaped by scientific findings and anthropological study relating to the impact of human activities on the environment. Among the disciplines having an impact on environmental equation are:
   * Natural, physical and social sciences: biology, geography, chemistry, physics, engineering, sociology, psychology, anthropology, archaeology
   * Environmental economics: the use of economic instruments, cost benefit analysis, measuring the economic benefit of environmental noncompliance, measuring natural resource damages, etc.
   * Ethics: ethical underpinnings of environmental issues
   * Cultural values: different cultures value their environments in a range of ways
   * History: awareness of historical background of cities and towns, the history of human interactions with particular environments, etc.
2. Environmental law is a comparatively new branch of domestic and international law. As such, it is in the process of being moulded, unlike older areas of law, which have already assumed fairly defined concepts, principles and procedures. In this process of moulding, the judiciary has a vital role to play.
3. The fine nuances of particular situations that the judge encounters in individual cases are often not matters with which legislatures have the time and resources to deal. It is often before the judiciary that they come up for the first time. Consequently, it is often judicial decision-making that gives shape and direction to the new concepts and procedures involved. As more such situations come before judges, these individual decisions initiate trends, which give the newly emerging discipline of environmental law the requisite conceptual framework and momentum for its development.
4. Viewed in this light, it is essential for the judiciary to have an understanding of environmental problems and a creative vision of how the law can deal with them, failing which environmental law can be rendered ineffective or retarded in its development and implementation.

Reference:

* UNEP Judicial Handbook on Environmental Law, 2005, page XV1:

Slide - 6

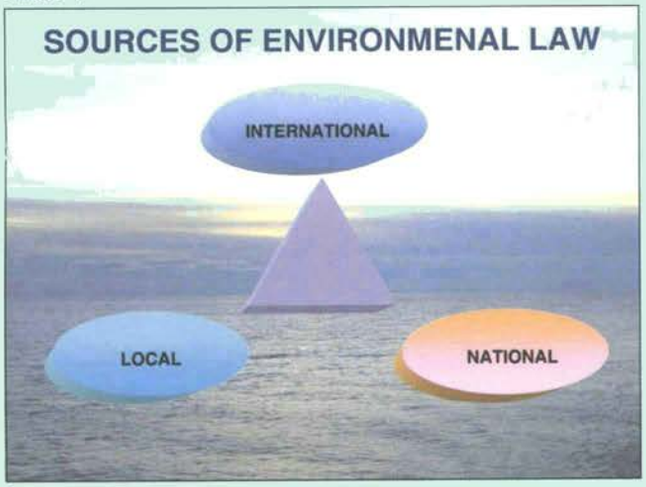


* Law emerges from the cultural traditions and moral and religious values of each society. These traditions and values continue to impact on the development of legal norms. In the context of environmental protection, cultures, religions and legal systems throughout the world contain elements that respect and seek to conserve the natural bases of life, maintaining concepts that can enhance and enrich the development of modern environmental law.
* Judges may sometimes benefit from referring to legal precedents and practice from systems other than their own. The process of legal comparison can be an aspect of developing new doctrines in a particular jurisdiction.
* Legal systems can address environmental regulation in different ways:
  Common Law: mainly English-speaking countries of the British Commonwealth
  Civil Law: European countries and countries applying civil law
  Sharia Law: Mainly Islamist countries. Mainly a blend of civil and religious law systems
  Socialist Law: Mainly communist and formerly communist countries; a blend of civil law and socialist ideology
  Indigenous Law: traditional or customary law concerning land use, methods of cultivation and management and use of taboos; usually not part of mainstream law, but some jurisdictions recognize aspects of Indigenous law by constitutional provisions and/or legislation

Reference:

* UNEP Judicial Handbook on Environmental Law, 2005, Chapter 1

Slide - 7



* This slide recognizes that environmental law may be established on a number of different levels: international, national, state and local.
* International environmental law regulates relationships between states pertaining to the environment.
* The key question for the national judge is, of course, what laws are operative at the national level. In other words, when does international law operate to create obligations of citizens to the state, or of the state to citizens?
* International law only has meaning to the national level judge to the extent that it has become part of the corpus of domestic law or offers persuasive guidance in applying or interpreting national law. As will be discussed, the question of when and whether international law becomes operative and enforceable at the national level by national level judges is a complicated question.

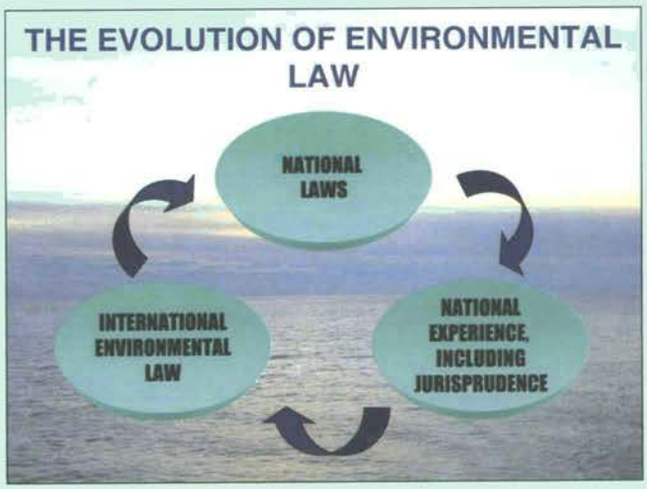
* An example of an international concept having been adopted at the national level is the Environment Protection and Biodiversity Conservation Act 1999 (Australia)
"The following principles are **principles of ecologically sustainable development:**
(a) decision-making processes should effectively integrate both long-term and short-term economic, environmental, social and equitable considerations;
(b) 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;
(c) the principle of inter-generational equity—that the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations;
(d) the conservation of biological diversity and ecological integrity should be a fundamental consideration in decision-making;
(e) improved valuation, pricing and incentive mechanisms should be promoted."

National laws take several forms:
* Organic legislation: legislation which sets up environmental agencies, and include environmental regulatory mechanisms
* Sectoral legislation: legislation focusing on particular subject matter which also contains environmental management provisions; for example, forestry, coastal zone management, land use planning etc.
* Integrated legislation: this refers to legislation which covers a range of environmental matters, and is governed by common principles, concepts and remedies
* Case law: refers decisions of national, state/provincial and tribunals, and decisions of local courts. Judicial decisions have binding or persuasive precedential effect in many jurisdictions.

* Local legislation
* The same legal tools present at the national level are subject to replication at the provincial and local levels in many states. Local laws are often particularly concerned with land use planning.
* Supranational law e.g. – EU directives

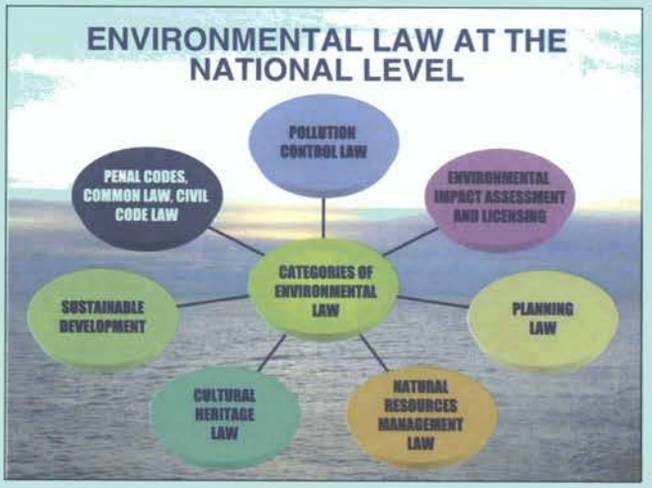
Reference:
* UNEP Judicial Handbook on Environmental Law, 2005, Chapter 1

Slide - 8



There has always been a strong relationship and synergy between national and international law, although many lawyers are not necessarily aware of it. It must be borne in mind that international environmental law continues to be informed by experiences at the national level. That experience, galvanized by a shared concern regarding degradation of the planet, has given birth to a range of concepts and principles relating to sustainable development. Those concepts are now increasingly expressed in a number of environmental treaties at multilateral, regional and bilateral level. These various treaties or agreements have in turn influenced national laws and shaped national experience, which have then served to further refine the operative concepts at the international level. In addition, the rulings of international tribunals in environmental matters also contribute to the contours of international environmental law, which in turn serves to shape the development of law at a national level."

Slide - 9



Chapter 8 of Agenda 21 from the Rio Conference declared as its basis for action that laws and regulations suited to country-specific conditions are among the most important instruments for transforming environment and development policies into action, not only through "command and control" methods, but also as a normative framework for economic planning and market instruments.

The 2002 World Summit on Sustainable Development (WSSD) Plan of Implementation also calls upon countries to promote sustainable development at the national level by, inter alia, enacting and enforcing clear and effective laws that support sustainable development. As for the kind of institutions national environmental legislation should set up or strengthen, the WSSD Plan of Implementation underlines the importance of national governments to strengthen institutional frameworks for sustainable development at the national level. Paragraph 162 of the Plan of Implementation calls for states to promote coherent and co-ordinated approaches to institutional frameworks for sustainable development at all national levels, including through, as appropriate, the establishment or strengthening of existing authorities and mechanisms necessary for policy-making, co-ordination and implementation and enforcement of laws. Countries have a responsibility to strengthen governmental institutions, including by providing necessary infrastructure and by promoting transparency, accountability and fair administrative and judicial institutions. Paragraph 164 calls upon all countries to promote public participation, including through measures that provide access to information regarding legislation, regulations, activities, policies and programs.

Inspired in part by these international pronouncements, laws at the national level increasingly include the following elements:

* Pollution control laws, which address, among other things:
    * Air Quality
    * Water Quality and Quantity
    * Soil Erosion and Land Degradation
    * Proper Management of Dangerous Chemicals
    * Adequate Treatment and Proper Disposal Of Waste

* Biodiversity protection laws which includes, among other things, protection of Endangered Species
* EIA and Licensing: most systems provide for pre-approval of certain classes of activities via operating licenses with environmental impact assessment informing the granting of licenses.
* Planning law: also called spatial planning law: includes industry, roads, bridges and other infrastructure in both urban and rural areas
* Natural resources law: covers conservation and exploitation of land (forests, soil, minerals) water: fisheries, minerals, energy sources this provides for the protection and control of exploitation of water, forests, soil, minerals, fisheries
* Sustainable development laws that attempt to ensure the integration of environmental conservation and development initiatives in decision-making at all levels, by taking into account economic, environmental and social/ cultural needs
* Apart from law developed specifically for the environmental context, there are various sources of penal and general law that may have application in the environmental context. Some examples might include smuggling and fraud in the penal context, and nuisance in the civil context (in states with a common law tradition).
* Beyond the elements that are generally conceived of as being "of nature", there are also laws relating to human elements of the environment, such cultural and religious heritage protections.

References:

* UNEP Training Manual on International Environmental Law, 2006, Chapter 2.
* Agenda 21, 1992

Slide - 10

* Constitutions: some countries include environmental rights in their Constitutions. In other jurisdictions, judges have inferred such rights, based for example on provisions concerning the right to life.
* Legislation: must be valid under the Constitution. In various federal jurisdictions, the Constitution sets out what powers the federal and state or provincial governments exercise over the environment.
* Regulations: must conform with relevant statutes under which they are made. In environmental law, regulations often set out the details of what is required in planning, environmental impact assessment, pollution control, etc.
* Licenses, Permits and Authorizations: frequently, the expectations set forth in national legislation and regulations require further translation into facility-specific requirements via licenses, permits and authorizations.
* Political hierarchies in environmental law
* In unitary, or non-federally organised countries, the central government law governs all aspects of environmental regulation; regional and local governments can, however, be given decision-making power by the central government.
* In federally organised countries, the constitution will often set out the relationship between the Federal and state or provincial governments
* State or provincial governments, where they exist, often have their constitutionally-based legislative power over environmental issues.
* Local governments frequently have less law making power, and are usually a legal creation of a State. Local government law must conform with the laws of the central, state/provincial governments. Where they have law-making functions, local government's environmental focus is typically on local land use planning.

Reference:

* UNEP Judicial Handbook on Environmental Law, 2005, Chapter 1

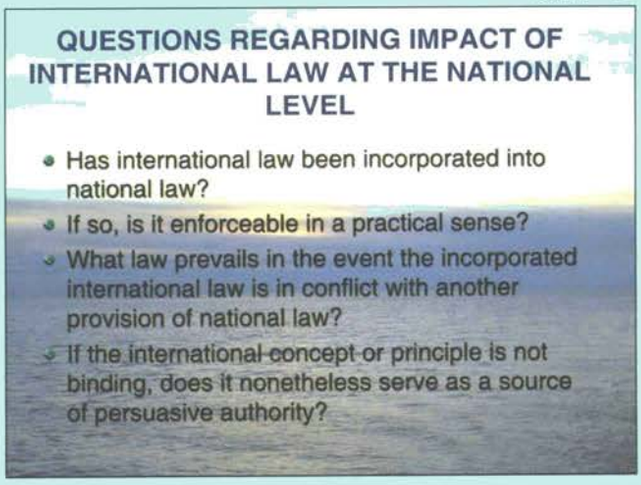
Slide - 11

International law typically focuses in the first instance on state-to-state obligations, but can significantly influence environmental law at the national level and local levels. Sources of international law include:
* Multi-lateral Agreements (MEAs) - global and regional agreements
* International case law: decisions of International Court of Justice, International Tribunal for the Law of the Sea, European Court of Justice.
* Customary law

* In addition to binding law, there are numerous persuasive authorities that are present in the environmental context, including:
* The writings of eminent jurists: judges sometimes rely on the analysis of eminent academic commentators in articles and books, especially when there are no relevant legal precedents available.
* Non-binding international instruments (soft law) may also be a source of guidance. For example, principles contained in the Rio Declaration on Environment and Development are sometimes referred to by judges at the national level.

Reference:
* UNEP Judicial Handbook on Environmental Law, 2005, Chapter 1.

Slide - 12



The key question for the national level judge is whether international law has become part of the corpus of national law. If it has, then the judge is duty-bound to apply it as national law. Some constitutions explicitly call for judges to consider international or foreign law in interpreting domestic law; others do not.

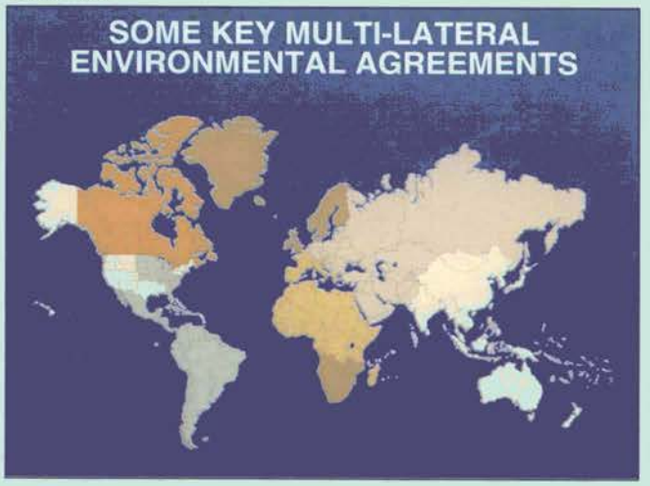
The extent to which norms arising from international law are justiciable in national courts thus necessarily depends on the manner in which these norms are incorporated in the constitutions as well as on the legal system and jurisprudence of each country. Where international law has been incorporated into the national legal system, judges apply the norms and standards when presented with them in an appropriate case. *See Raul Arturo Rincon Ardila v. Republic of Colombia*, Constitutional Court, Apr. 9, 1996 (applying the Biodiversity Convention, ILO Convention 169 on Indigenous Peoples and GATT's TRIPs Agreement).

An important question when international treaties are properly incorporated into national law, is what status does it have? In some countries, international law is considered equal to legislation; in other countries it is considered to have a higher or lower status in the hierarchy of a country's legal structure.

In some cases, even where international law has not been incorporated into domestic law, it may play an indirect role, by providing a tool, or a point of reference that you may find useful, in interpreting national laws and regulations, and in resolving ambiguities that might be found in those laws. It is important to keep clear, however, the distinction between international environmental law as properly incorporated into national law (mandatory), and international law when it is serving this more indirect function of assisting in interpreting national law (persuasive authority).

References:
* UNEP Compendium of Summaries of Judicial Decisions in Environment-related Cases, 2005
* UNEP Training Manual on International Environmental Law, 2006, Chapter 2
* UNEP Judicial Handbook on Environmental Law, 2005, pages XX to XXI, Introduction, and Chapter 1, "International Law".

Slide - 13



There are a significant number of global, regional and bi-lateral environmental agreements. These agreements cover such topics as:

* Transboundary pollution: ozone depleting gases, greenhouse gas emissions, contamination of marine waters, transboundary rivers and lakes, transboundary marine pollution, groundwater, use, transport and disposal of hazardous chemicals and wastes

* Biodiversity conservation: in situ conservation of wetlands, world heritage, biosphere reserves; ex situ conservation (seed banks, botanical institutions), trade in endangered species.

* Natural resources management: timber, energy sources, mineral exploration, water.

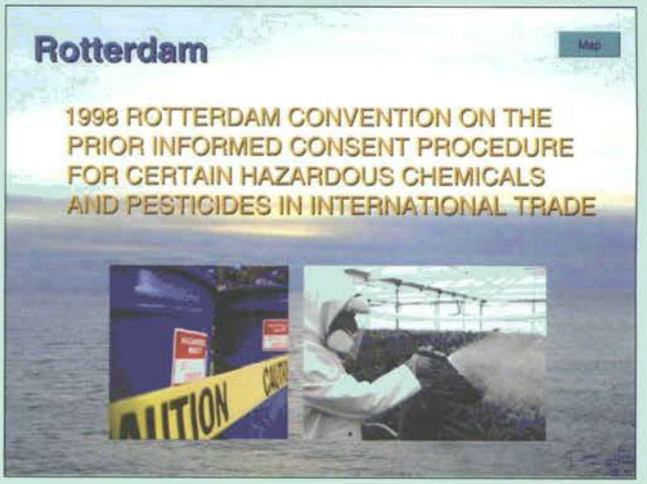
* Cultural heritage: protection of heritage structures and objects, protection of the same during times of armed conflict, illegal trade in heritage objects, intangible heritage

This slide allows reference to a number of MEAs by the Regions in which the agreements were established.

References:

* UNEP Training Manual on International Environmental Law, 2006, Ch 7 "Freshwater resources"; Ch 8, "Transboundary Air Pollution"; Ch 13 "Marine Pollution"; Ch 14, "Conservation of Species and Habitats"; Ch 15 "Biodiversity", Ch 17 "Marine Biodiversity including through sustainable fisheries".
* UNEP Judicial Handbook on Environmental Law, 2005, Ch 9 "Soil"; Ch 10 "Biological Diversity and Nature Conservation"; Ch 11 "Agriculture and Forestry"; Ch 12 "Protection of Cultural and Natural Heritage".

Slide - 14



The Convention creates a legally binding obligation for implementation of the Prior Informed Consent procedure. The procedure is a means for formally obtaining and disseminating the decisions of importing countries as to whether they wish to receive shipments of a certain chemical. It facilitates information exchange about characteristics of chemicals and thereby informs the importing country's national decision-making processes for their importation and use. The Convention does not ban the global trade or use of specific chemicals.

The chemicals covered are divided into two categories: chemicals that are banned or severely restricted for health or environmental reasons, and severely hazardous pesticide formulations that present problems under conditions of use in developing countries or countries with economies in transition.

The Convention covers a number of chemicals including pesticides, severely hazardous pesticide formulations and industrial chemicals. Many more are expected to be added to the list in the future.

Reference:

* PDF versions of the Convention text in Arabic: http://www.pic.int/en/ConventionText/ONU-A.pdf
Chinese: http://www.pic.int/en/ConventionText/ONU-C.pdf
English: http://www.pic.int/en/ConventionText/ONU-GB.pdf
French: http://www.pic.int/en/ConventionText/ONU-FR.pdf
Russian: http://www.pic.int/en/ConventionText/ONU-R.pdf
Spanish: http://www.pic.int/en/ConventionText/ONU-SP.pdf

Slide - 15

The Convention seeks to protect human health and the environment from chemicals that are persistent organic pollutants. It does so by eliminating the most dangerous POPs, supporting the transition to safer alternatives and by cleaning-up old stockpiles and equipment containing POPs.

The Stockholm Convention addresses the challenge posed by POPs by starting with 12 of the worst; also referred to as the dirty dozen.

The POPs Convention bans all production and use of the pesticides *endrin and toxaphene and requires all parties to stop production of* aldrin, dieldrin and heptachlor. Those wishing to use remaining supplies of the latter three substances must publicly register for exemptions for narrowly allowed purposes and limited time periods . The production and use of chlordane, hexachlorobenzene and mirex is restricted to narrowly prescribed purposes and to countries that have registered for exemption.
Imports and exports of the 12 intentionally produced POPs are restricted and their transport is permitted only for environmentally sound disposal or for specified uses for which the importing country has obtained exemption.

Reference:
* Stockholm Convention on Persistent Organic Pollutants 2001
Home page: http://www.pops.int/
Convention text:
Arabic: http://www.pops.int/documents/convtext/convtext_ar.pdf
Chinese: http://www.pops.int/documents/convtext/convtext_ch.pdf
English: http://www.pops.int/documents/convtext/convtext_en.pdf
French: http://www.pops.int/documents/convtext/convtext_fr.pdf
Russian: http://www.pops.int/documents/convtext/convtext_ru.pdf
Spanish: http://www.pops.int/documents/convtext/convtext_sp.pdf

Slide - 16

Recognizing the need for closer cooperation among designated national law enforcement agencies to save African wild fauna and flora from the illegal trade, several African States concluded under UNEP auspices the Lusaka Agreement on Cooperative Enforcement Operations Directed at Illegal Trade in Wild Fauna and Flora ("Lusaka Agreement") in 1994. To date, six governments are parties to the Lusaka Agreement, which entered into force on 10 December 1996. The parties are Kenya, Tanzania, Uganda, Lesotho, Congo, and Zambia. Other states and invited organizations send observers to the Governing Council meetings. The Agreement seeks to reduce and ultimately eliminate illegal trade in wild fauna and flora, and to establish a permanent Task Force for this purpose. It seeks to do so without compromising national sovereignty.

Reference:
* Lusaka Agreement on Co-Operative Enforcement Operations Directed at Illegal Trade in Wild Fauna and Flora 1994
Convention text: http://www.internationalwildlifelaw.org/lusaka.pdf

Slide - 17

The Basel Convention is the first global environmental agreement that address the transboundary movement of hazardous wastes and other wastes. The Convention controls hazardous wastes of categories listed in Annex I and III of the Convention, including wastes from hospitals and those possessing toxic and other hazardous characteristics. The Convention does not address radioactive materials that are regulated by the International Atomic Energy Agency.

The Convention recognizes the risk of damage to human health and the environment that is posed by hazardous wastes and other wastes, and by the transboundary movement of such wastes. Its purpose is to protect human health and the environment against the adverse effects that may result from the generation and management of hazardous wastes and other wastes. To accomplish its goal, the Basel Convention provides for three key measures with binding obligations on parties, namely:

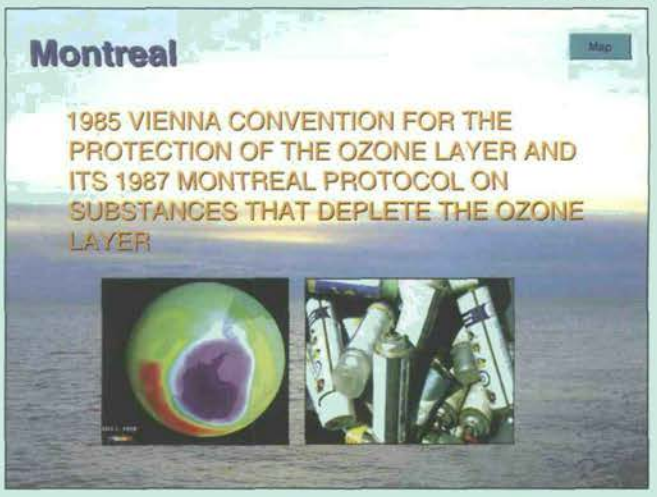
* Strict control of transboundary movement of hazardous wastes;
* Environmentally sound management of hazardous wastes; and
* Enforcement and implementation of the provisions of the convention at the national and international levels.

Reference:

* Home Page: http://www.basel.int/

Convention text in : English Chinese Arabic French Russian Spanish http://www.basel.int/text/documents.html

Slide - 18



The overall objective of the Vienna Convention for the Protection of the Ozone Layer, which was adopted in March 1985 is to protect human health and the environment against the effects of ozone depletion. As a framework convention, it does not establish any specific controls on ozone depleting substances. Instead, the Vienna Convention establishes a general obligation upon the parties to protect the ozone layer and emphasizes the need for international cooperation, including measures for the adoption of legislative and administrative measures, cooperation on research and scientific assessment, information exchange, and development and transfer of technology.

The Montreal Protocol establishes firm targets for reducing and eventually eliminating consumption and production of a range of ozone depleting substances. These substances are enumerated in Annexes to the Protocol and are to be phased out within the certain scheduled timeframes. The Montreal Protocol includes special provisions for the needs of developing countries, taking into account the fact that these countries have historically not contributed significantly to ozone depletion.

Reference:

* Vienna Convention for the Protection of the Ozone Layer 1985

Home Page http://www.unep.ch/ozone/Treaties_and_Ratification/2A_vienna_convention.asp

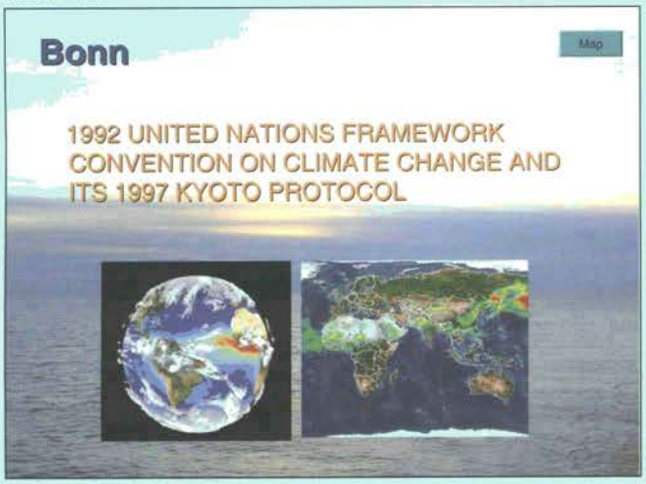
Convention text:

English: http://www.unep.ch/ozone/pdfs/viennaconvention2002.pdf

French: http://www.unep.ch/ozone/pdfs/viennatext-fr.pdf

Spanish: http://www.unep.ch/ozone/pdfs/viennatext-sp.pdf

Slide - 19



The Convention's stated aim is to stabilize greenhouse gases at a level that allows ecosystems to adapt naturally to climate change so that food production is not threatened, while enabling economic development to proceed in a sustainable manner (Article 2). In achieving this aim, the parties to the Convention are to be guided by a range of principles which reflect the understanding of global environmental responsibility elaborated in the Rio Declaration and Agenda 21. These principles include inter-generational equity, the precautionary approach, the right to sustainable development and the principle of common but differentiated responsibilities (Article 3).

Industrialized countries classified as Annex I parties, have additional commitments in that they are required to adopt national policies and measures to mitigate the negative effects of climate change by both limiting the emission of greenhouse gases and by protecting greenhouse gas sinks. These obligations were further elaborated in the Kyoto Protocol which requires Annex I parties to achieve quantified emission reductions within specific timeframes.

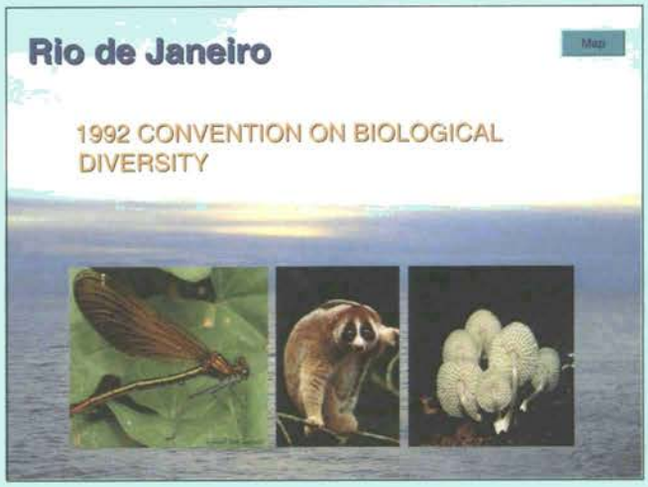
The key areas of focus of the climate change regime are:

1 Mitigation of climate change,
2 Adaptation to the impacts of climate change,
3 Support to developing countries with technical and financial resources required for them to implement their obligations effectively,
4 Provide national communications on national measures taken to mitigate anthropogenic greenhouse gas emissions,
5 Develop and publish national inventories of sources of anthropogenic greenhouse gas emissions, and
6 Provide education and outreach on climate change.

Reference:

* Home Page: http://unfccc.int/2860.php
Convention text:
Chinese: http://unfccc.int/resource/docs/convkp/convchin.pdf
English: http://unfccc.int/resource/docs/convkp/conveng.pdf
French: http://unfccc.int/resource/docs/convkp/convfr.pdf
German: http://unfccc.int/resource/docs/convkp/convger.pdf
Russian: http://unfccc.int/resource/docs/convkp/convru.pdf
Spanish: http://unfccc.int/resource/docs/convkp/convsp.pdf

Slide - 20



The Convention on Biological Diversity adopted by the Intergovernmental Negotiating Committee for a Convention on Biological Diversity during its fifth session, held in Nairobi from 11-22 May 1992, is the first international treaty to take a holistic, ecosystem-based approach to the conservation and sustainable use of biological diversity. It is a framework instrument laying down broad goals, key objectives and general principles which are to be operationalised through concrete measures and actions at the national level on the basis of guidance, inter alia, provided by the decisions of the Conference of the Parties ("COP") to the Convention. The Preamble sets out the ethical and socio-economic underpinnings of the Convention. These include the intrinsic, ecological and anthropocentric value of biological diversity and its components; the status of biological diversity as a common concern of humankind; the current rate of biodiversity loss due to human activities; and the imperatives of intra- and inter-generational equity.

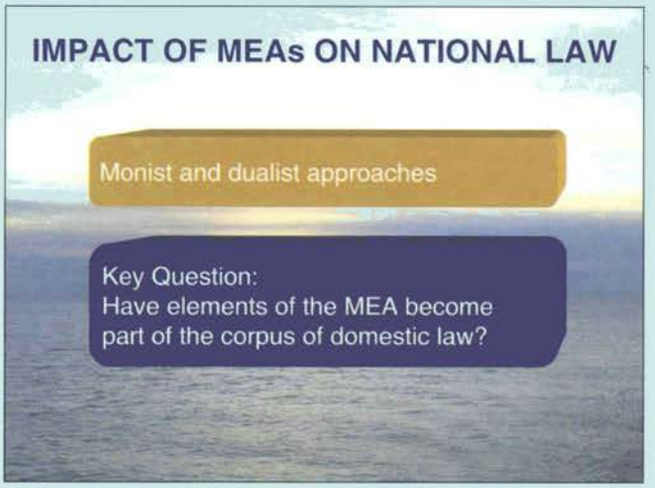
The Convention has three main objectives (Article 1):

* The conservation of biological diversity;
* The sustainable use of the components of biological diversity; and,
* The fair and equitable sharing of the benefits arising out of the utilisation of genetic resources, including by appropriate access to genetic resources and by appropriate transfer of relevant technologies and by appropriate funding.

Reference:

* Home Page: http://www.biodiv.org/default.shtml
Convention text:
Arabic: http://www.biodiv.org/doc/legal/cbd-un-ar.pdf
Chinese: http://www.biodiv.org/doc/legal/cbd-un-zh.pdf
English: http://www.biodiv.org/doc/legal/cbd-un-en.pdf
French: http://www.biodiv.org/doc/legal/cbd-un-fr.pdf
Russian: http://www.biodiv.org/doc/legal/cbd-un-ru.pdf
Spanish: http://www.biodiv.org/doc/legal/cbd-un-es.pdf

Slide - 21



In the domestic adoption of international law, there is a degree of divergence between countries that follow the Anglo-American legal system and those that follow European civil law systems. Those that employ the Anglo-American common law system typically adopt a dualist approach to the adoption of international law into national jurisprudence. Thus, international laws are not automatically incorporated into domestic law and are said to require an act of legal "transformation" into domestic law. This is especially true in relation to international treaty laws. These require national legislation in order to have legal effect at the domestic level, although certain treaties may be treated as self-executing. In other cases, judges may utilise them for the purposes of statutory interpretation when legislation has been based upon, or is in fulfilment of, a treaty obligation.

In practice, it is unclear how sharp the distinction is between monist and dualist states, in that legislative implementation of treaty obligations is often necessary either to translate the obligations into enforceable domestic norms or to enhance that the acceptance of the international commitment within the policy, legal and administrative structure of a particular jurisdiction. When the discrete elements of the treaty are implanted into the national governance apparatus and the routine motions of regular administration, they are then assured of application, in the same manner as the ordinary law of the land.

Treaty law, in these respects, typically undergoes a process of transformation and assimilation into domestic law. In this way, it is possible to achieve the most effective scheme of implementation for treaty law.

References:

* UNEP Compendium of Summaries of Judicial Decisions in Environment-related Cases, 2005
* UNEP Training Manual on International Environmental Law, 2006, Chapter 2
* UNEP Judicial Handbook on Environmental Law, 2005, pages XX to XXI, Introduction, and Chapter 1, "International Law".

Slide - 22

Another source of international law is case law from international tribunals established to address State-to-State conflicts. While decisions by these tribunals are generally not binding on national courts, they may nonetheless offer persuasive insights on questions that appear with equal force in national level cases.

Examples of environmental decisions by international tribunals include:

Trail Smelter Arbitration (1938/1941) 3 R.I.A.A. 1905 Arbitral; Tribunal: U.S. And Canada

The Columbia River originates in Canada and flows past a lead and zinc smelter at Trail, British Columbia. The climate in the region is dry, but not arid. The smelter had been built under U.S. auspices, but had been taken over by a Canadian company in 1906. In 1925 and 1927, stacks 409 feet high were erected, and the smelter increased its output, resulting in more sulphur dioxide fumes. The higher stacks increased the area of damage in the United States. From 1925 to 1931, damage had been caused in the State of Washington by the sulphur dioxide coming from the Trail Smelter.

Held: Referring to international law on various matters and decisions of the U.S. Supreme Court, the Tribunal found that taken as a whole, these decisions constitute an adequate basis for its conclusions, namely, that under the principles of international law, as well as the law of the United States, no state has the right to use or permit the use of its territory in such a manner as to cause injury by fumes in or to the territory or the properties or persons therein, when the case is of serious consequence and the injury is established by clear and convincing evidence. Considering the circumstances of the case, the Tribunal held that the Dominion of Canada is responsible by international law for the conduct of the Trail Smelter. Apart from the undertakings of the Convention, it is therefore the duty of the Government of the Dominion of Canada to see to it that this conduct should be in conformity with the obligation of the Dominion under international law as herein determined.

ICJ 1997 General List No. 92, 25 September 1997, Case Concerning The Gabcikovo-Nagymaros Project (Hungary/Slovakia)

Several differences had arisen between Czechoslovakia and Hungary regarding the implementation and the termination of the Treaty on the Construction and Operation of the Gabcikovo-Nagymaros Barrage System signed in Budapest on 16 September 1977, concerning the construction and operation of the Gabcikovo-Nagymaros System of Locks and related instruments, and on the construction and operation of the "provisional solution". By a Special Agreement that had been signed at Brussels on 7 April 1993, Hungary and Slovakia submitted to the International Court of Justice a range of questions for adjudication.

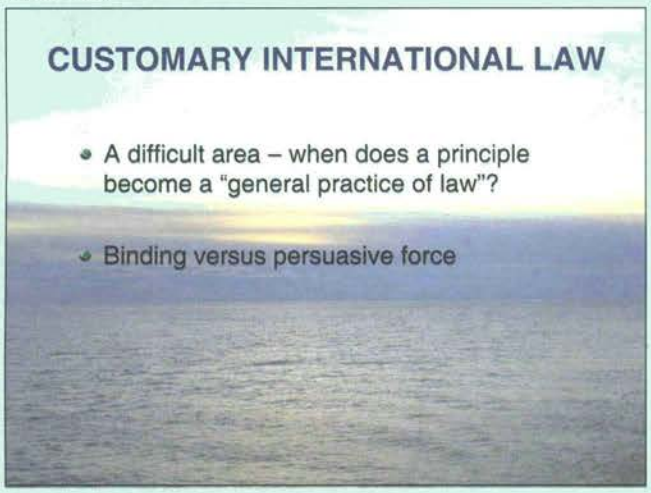
Among other things, the Court recalled that it has recently had occasion to stress, in the following terms, the great significance that it attaches to respect for the environment, not only for States but also for the whole of mankind:

"The environment is not an abstraction but represents the living space, the quality of life and the very health of human beings, including generations unborn. The existence of the general obligation of States to ensure that activities within their jurisdiction and control respect the environment of other States or of areas beyond national control is now part of the corpus of international law relating to the environment."

References:

* UNEP Training Manual on International Environmental Law, 2006, Chapter 3.
* UNEP Judicial Handbook on Environmental Law, 2005,

Slide - 23



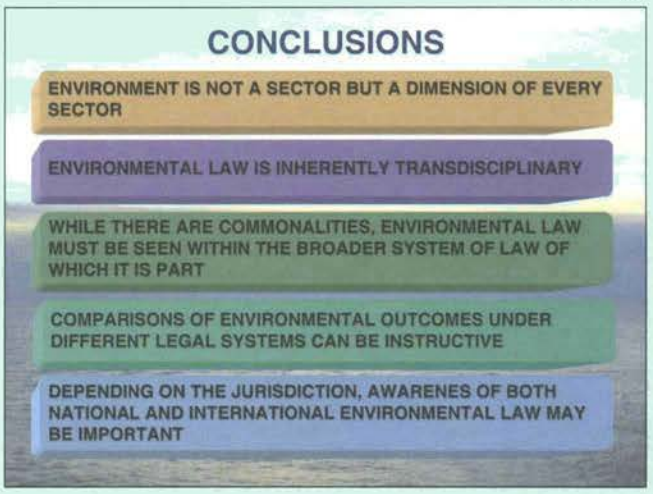
International law can also become part of the corpus of domestic law when recognized as "customary law" because of widespread recognition and application by the courts and legislatures at national level. Customary international law is defined as a "general practice of law" that states follow out of a sense of legal obligation. Rules or principles must be accepted by the states as legally binding in order to be considered part of the corpus of the general practice of law. Thus, the mere fact that a custom is widely followed does not make it a rule of international law. States must also view it as obligatory to follow the custom, and not believe that they are free to depart from it whenever they choose or to observe it only as a matter of courtesy or moral obligation.

The Anglo-American dualist legal systems are typically less receptive to incorporation of customary international law than civil law systems following a monist approach to the adoption of international law into national jurisprudence.

Significantly, even if a judge in one state finds that a practice is a rule of customary international law, a judge in another state is not constrained by such a decision and may reach a different conclusion, making it all the more difficult to definitively label a body of law "custom."

Notably, even if a principle in the international domain does not have the status of custom, and is therefore not binding, it still may carry persuasive force.

Slide - 24



* Environmental legislation in some jurisdictions is underdeveloped, and judges can assist the development of environmental law in their jurisdictions where the legislation is incomplete or unclear.

* Judges need to be aware of both international and domestic environmental law; there is an increasing influence of international environmental law and broadly accepted principles, especially in relation to sustainable development

* Comparisons of environmental legal systems can be very instructive: the process of comparison can assist in developing the environmental law in a particular area, both in terms of procedure as well as substance

* The sources of environmental law are very broad; they include international environmental law, legislation, case law and administrative regulations

* Environmental law is inherently transdisciplinary: judges and lawyers need to have a good understanding of related disciplines. This is demonstrated in particular in Presentation 9, focusing on Evidence in Environmental Cases.

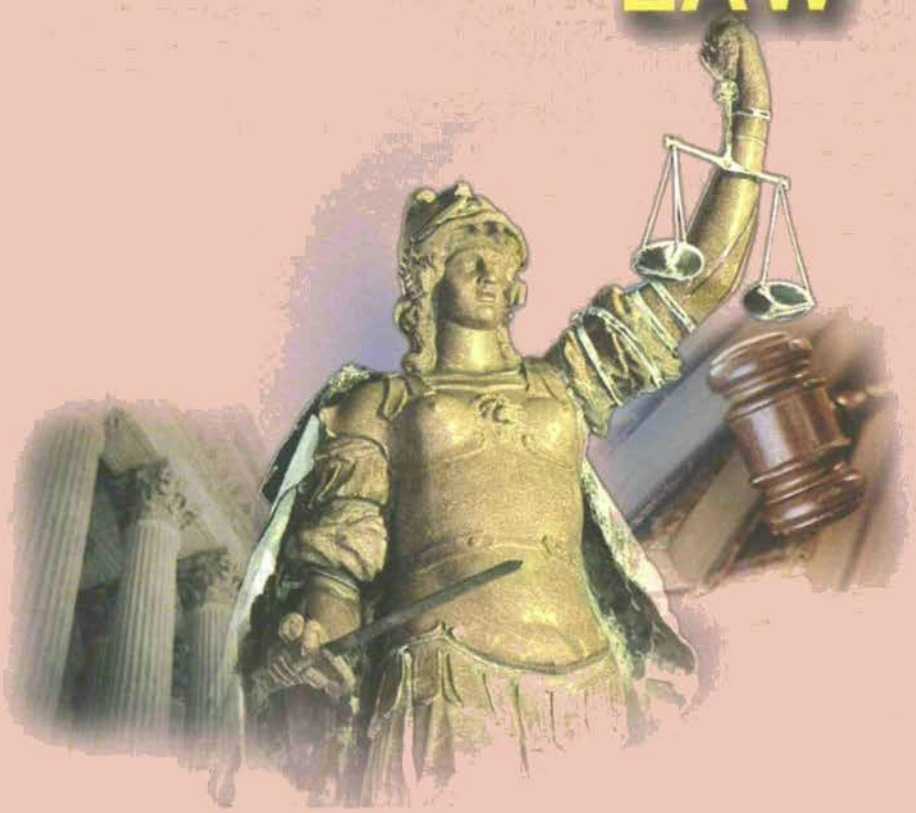
* Environmental law is a comparatively new branch of domestic and international law. As such, it is in the process of being moulded, unlike older areas of law, which have already assumed fairly defined concepts, principles and procedures. In this process of moulding, the judiciary has a vital role to play.

PRESENTATION 5

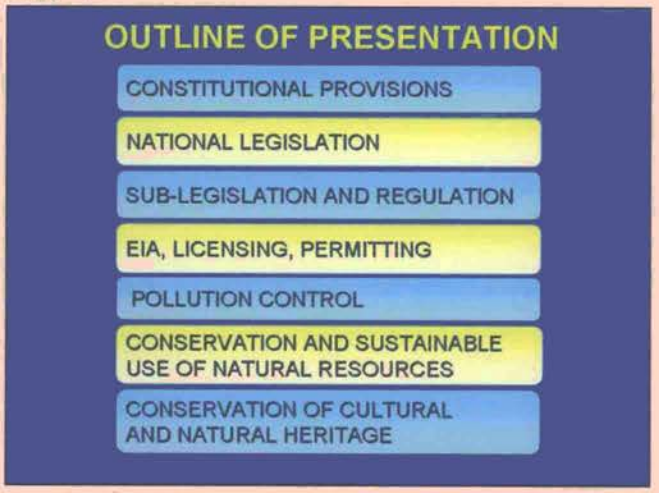
UNEP GLOBAL JUDGES PROGRAMME

APPLICATION OF ENVIRONMENTAL LAW BY NATIONAL COURTS AND TRIBUNALS

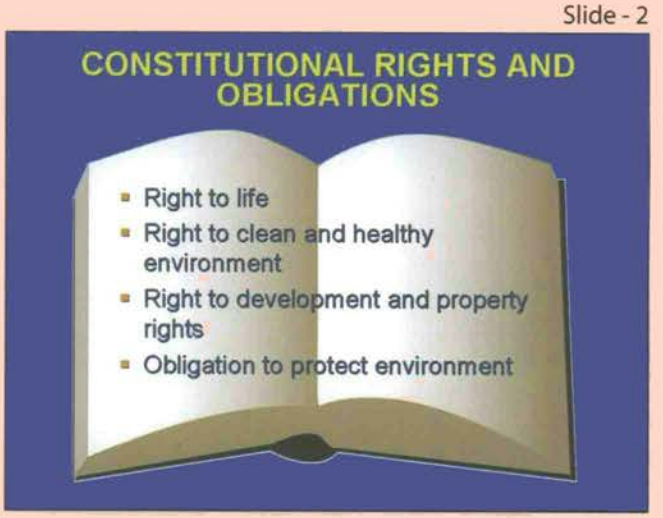
SCOPE AND CONTENT OF NATIONAL ENVIRONMENTAL LAW



Slide - 1



Slide - 2



Fundamental rights are now embodied in many constitutions (right to life, right to clean and healthy environment). In some jurisdictions, where these rights are not explicitly included in constitutions, they have been inferred from other rights or legislation specifically providing for them, for example, in several framework environmental coordination and management statutes.

Example

Constitution of the Republic of South Africa, April 27: the full text of s 24 is:

> Environment
> 24. Everyone has the right -
> to an environment that is not harmful to their health or well-being; and
> to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that -
> prevent pollution and ecological degradation;
> promote conservation; and
> secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development

"Almost every constitution adopted or revised since 1970, either states the principle that an environment of a specified quality constitutes a human right or imposes environmental duties upon the state. Article 50 of the Constitution of the Ukraine, adopted 28 June 1996, is an example. It states: *'Every person has the right to a safe and healthy environment and to compensation for damages resulting from the violation of this right.'"*

Other constitutions refer to a decent, healthy (Hungary, South Africa, Nicaragua, Korea, Turkey), pleasant (Korea), natural, clean, ecologically-balanced (Peru, Philippines, Portugal), or safe environment or one free from contamination (Chile). Within federal systems, including those whose federal constitution lacks mention of the environment, state or provincial constitutions often contain environmental rights."

Reference:

* UNEP Judicial Handbook on Environmental Law, 2005, Chapter 3

Slide - 3

CONSTITUTIONAL PROVISIONS ON THE ENVIRONMENT

Slide - 4

BRAZIL

Ch. VI, Art. 225: Everyone has the right to an ecologically balanced environment, an asset for the common use of the people and essential to the wholesome quality of life. This imposes upon the Public Authorities and the community the obligation to defend and preserve it for present and future generations.

Slide - 5

INDIA

- Part 4 Art 37 'Application of the principles contained in this Part – The provisions contained in this part shall not be enforceable by any court, but the principles therein laid down are nevertheless fundamental in the governance of the country and it shall be the duty of the State to apply these principles in making laws'
- Part 4 Art. 48A 'Protection and improvement of environment and safeguarding of forests and wild life – The State shall endeavour to protect and improve the environment and to safeguard the forests and wild life of the country.' [inserted by the Constitution (42nd Amend.) Act, 1976 s. 9 (w.e.f. 3-1-1977).]
- Part 4A Art. 51A 'Fundamental duties – It shall be the duty of every citizen of India –
  (g) to protect and improve the natural environment including forests, lakes, rivers and wild life, and to have compassion for living creatures ....' [inserted by the Constitution (42nd Amend.) Act, 1976 s. 11 (w.e.f. 3-1-1977).]

(Constitution of India of Nov. 26, 1949, as amended up to the constitution (52nd Amend.) Act, 1985, 7 constitution of the Countries of the World (OCEANA) 33-239 (A.P. Blaustein & G.H. Flanz eds.))

Slide - 6

THAILAND

(Constitution (No. 13) of the Kingdom of Thailand, effective Dec. 22,1978 (replacing Interim Constitution No. 12 of Nov. 9, 1977) 15 Constitutions of the Countries of the World (OCEANA) 1-14 (A.P. Blaustein& G.H. Flanz eds.))

Ch. III, Sec. 33: '....
The expropriation of immovable property shall not be made except by law specifically enacted for the purpose of .... Exploitation of national resources, ... land reform, or other public interests ...."

Ch. V, Sec. 65: The State should conserve the balance of environment and eliminate pollution which jeopardizes the health and hygiene of the people."

Ch. V, Sec. 69: "The State should have demographic policy appropriate for natural resources, economic and social conditions, and technological progress for the purpose of economic and social development and for the security of the State."

Slide - 7

GUYANA

(Constitution of the Cooperative Republic of Guyana, Act No. 2 of 1980, 6 Constitutions of the countries of the World (OCEANA) 25-26 (A.P. Blaustein & G.H. Flanz eds.))

- Art. 25: "Every citizen has a duty to participate in activities designed to improve the environment and protect the health of the nation."
- Art. 36: "In the interests of the present and future generations, the state will protect and make rational use of its land, mineral, and water resources, as well as its fauna and flora, and will take all appropriate measures to conserve and improve the environment."

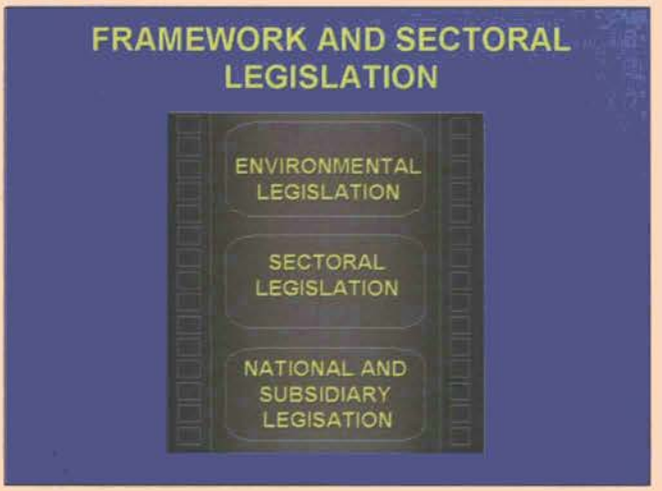
Slide - 8

PHILIPPINES

(Constitution of the Republic of Philippines, adopted Oct. 15, 1986, effective upon ratification in the plebiscite, 12 Constitutions of the Countries of the World (OCEANA) 1-227 (A.P. Blaustein & G.H. Flanz eds.))

- Art. XII, Sec. 2: "All lands of the public domain, waters, minerals, coal, petroleum and other mineral oils, all forces of potential energy, fisheries, forests or timber, wildlife, flora and fauna, and other natural resources are owned by the State. With the exception of agricultural lands, all other natural resources shall not be alienated. The exploration, development and utilization of natural resources shall be under the full control and supervision of the State."
- Art. XII, Sec. 3: "Lands of the public domain are classified into agricultural, forest or timber, mineral lands, and national parks. Taking into account the requirements of conservation, ecology, and development, and subject to the requirements of agrarian reform, the congress shall determine, by law, the size of lands of the public domain which may be acquired, developed, held, or leased and the conditions therefor."

Slide - 9



There is a wide variation in the models of environmental legislation from one country to another. Some countries have adopted comprehensive legislative schemes, while others have enacted a number of separate statutes, often without coherence in substance or approach. This lack of coherence can be the result of legislation being enacted over a long period of time, sometimes by governments of quite different outlooks.

In recent years there has been a growing tendency to enact more coherent and integrated legislation, which recognizes the interconnectedness of many environmental questions. Some countries have adopted broad legislative schemes – sometimes with comprehensive coverage, other times with significant gaps in certain areas – while other countries have enacted a number of separate statutes – sometimes with appropriate detail for citizens, the regulated community, and the judiciary to know what is expected, other times with a fragmented and hence confusing approach. Other countries are moving to consolidate legislation relating to particular aspects of environmental protection, such as placing all pollution control regulation under one legislative umbrella.

Issues of environmental management also span a range of sectors. Land use, forestry, industrial management, natural resource exploitation are some of the key sectoral areas in which newer legislation has incorporated environmental provisions.

Reference:

* Lye Lin Heng with Maria Socorro Manguiat, Towards a "Second Generation" in Environmental Laws in the Asian and Pacific Region http://www.iucn.org/themes/law/pdfdocuments/EPLP48EN.pdf

Slide - 10

Legislation dealing with the following areas, among others, would most likely contain environmental management provisions.

* land use planning and development control;
* sustainable use of renewable resources, and non-wasteful use of non-renewable resources
* prevention of pollution (e.g., to air, water and land), through imposition of emission, environmental quality, process and product standards designed to safeguard human health and ecosystems;
* efficient use of energy, through the establishment of energy efficient standards for processes, buildings, vehicles and other energy-consuming products;
* control of hazardous substances, including measures to prevent accidents during transportation;
* waste disposal, including standards for minimisation of waste and measures to promote recycling;
* conservation of species and ecosystems, through land-use management, specific measures to safeguard vulnerable species and the establishment of a comprehensive network of protected areas.

National legal systems also increasingly provide for:

the use of best available technology, when standards for pollution are set;

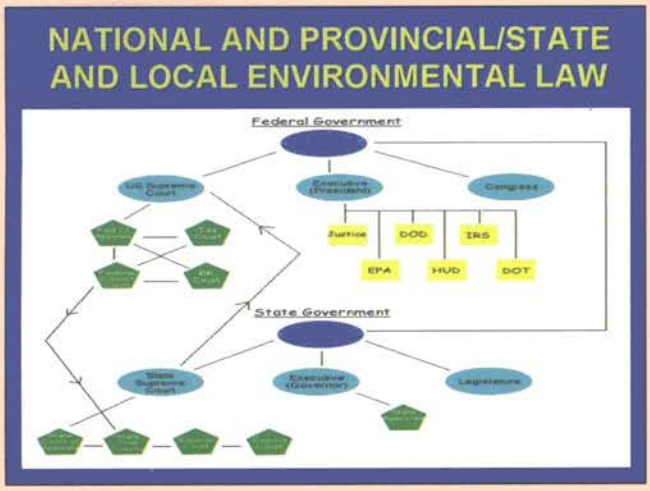
the use of economic incentives and disincentives, based on appropriate taxes, charges and other instruments;

the requirement that proposed new developments and new policies should be subject to environmental impact assessment;

the requirement that industries and government departments and agencies be subject to periodical environmental audit;

effective monitoring, permitting detection of infringements and adjustment of regulations where necessary.

Slide - 11



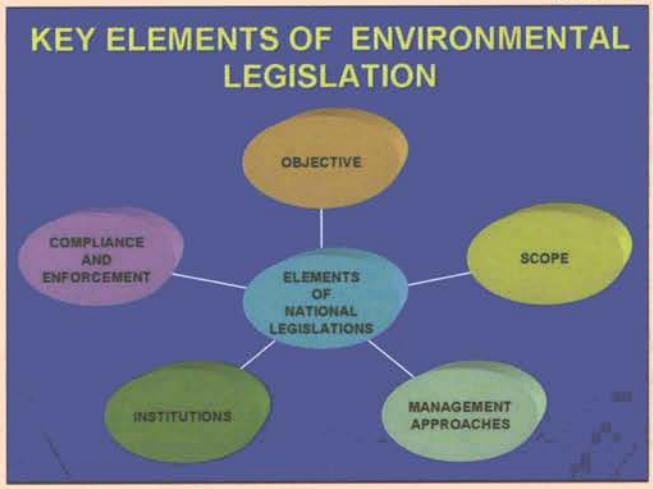
National and provincial/state environmental law

Where countries are federally organized (e.g. India, Malaysia, Australia, US, Canada), it is important to understand the constitutional relationship between the two levels, federal and state/provincial.

In both federal and unitary counties, provincial, state, and/or local governments are often given, or retain, the authority to deal with a number of environmental issues, including pollution events, land use planning, and allocation of some natural resources. Indeed, in some jurisdictions, provincial or state governments have a capacity to regulate that is equivalent in many respects to that of the national government. In such circumstances, it is often necessary to define roles and rules of engagement between levels of government in responding to environmental problems, as divisions of responsibility between levels of government are frequently not spelled out with clarity in national constitutions. This is sometimes addressed through delegations of authority or authorization decisions by which national governments give provincial or state governments a "first response" opportunity for certain environmental problems. The division of authority will often turn on the competencies of each level of government concerning environmental and resource matters. Where it cannot be negotiated or otherwise resolved, the division of authorities question is sometimes sorted through litigation.

Source of graphic: http://www.uncwil.edu/evs/module/graphics/government.png

Slide - 12



Elements of Comprehensive National Legal Regimes

General Objective of the legislation. Example: **Pollution prevention and control** (Reduce risk, improve maintain and restore environmental quality, prevent and control pollution, sustain environmental uses, clean up past contamination.)

Scope or Relevant Areas of Regulation. Examples: Air pollution – (sources (industries) and pollutant types (e.g., ozone depleting substances, forest fire causing haze)); ***Freshwater pollution*** (pollution from sewage and or industrial effluent, standards of treating waste, pollution of rivers, lakes, dams and underground waters and other sources of drinking water); ***Protection of the Coastal and Marine environment from pollution and damage*** (from sewage disposal, from built structures around the coast including industrial effluent, from ships, and from dumping of wastes, protection from coastal erosion, destruction of habitats and breeding grounds); ***Land degradation and soil pollution*** (caused by bad agricultural practices, unplanned towns and settlements, pollution from different sources, industry, dump sites, mining, etc.); ***Environmental Impact Assessment*** (requiring consideration of likely environmental impacts prior to approval of activity in question); ***Sustainable use of environmental resources*** (manage and control use at a standard which can protect, conserve and sustain the resources); ***Noise pollution*** (noise in residential areas causing nuisance and town planning for example near airports, industrial premises/occupational health regulating acceptable noise levels).

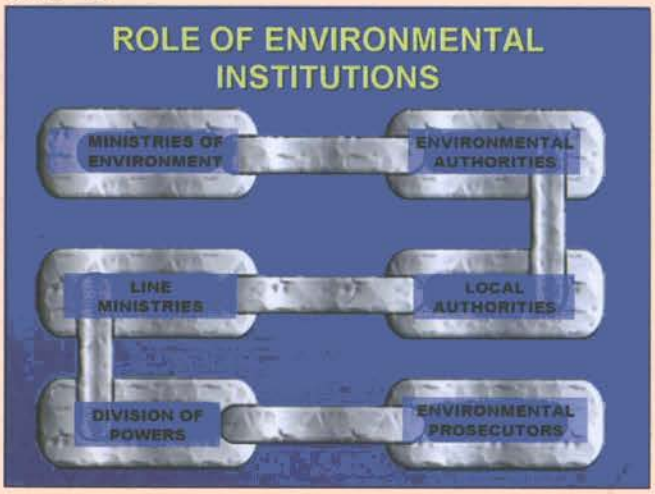
Selection of Environmental Management Approaches. Examples include: command and control, the use of economic and market based instruments, risk based instruments, pollution prevention, standard setting (ambient, technology, performance, economic and voluntary standards), permits/authorization, inspection and monitoring compliance, use of economic instruments and the polluter pay principle to internalize the cost, use of market based mechanisms to discourage or encourage behaviour with its incentives or disincentives, self regulation, clean development mechanisms, land use planning and zoning, international co-operation, environmental impact assessment, integrated resource management, training, education and public awareness, etc.

Types of national actions and laws: Legislation, regulations, permits and licences, court cases/precedents, taking administrative action, setting up compliance programs.

Institutions: Creation of the institutions and organs necessary to achieve the objectives and implement the requirements of the legislation.

Ensuring Compliance and Enforcement of laws: Provision of tools necessary to promote and monitor for compliance, and enforce in the event of non-compliance.

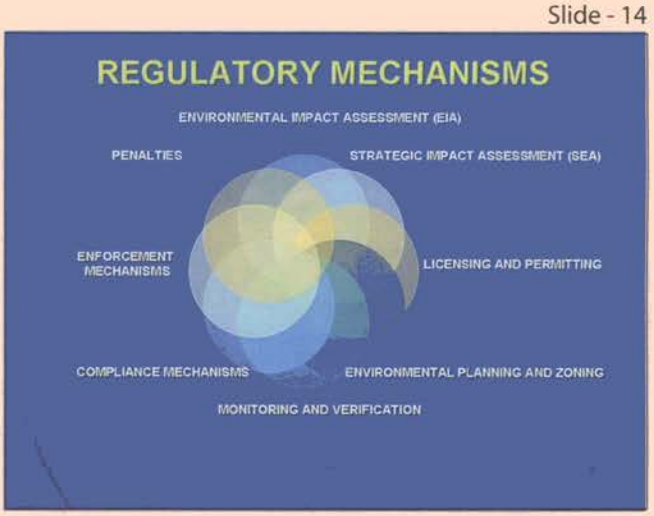
Slide - 13



Most countries now have an agency, department or unit responsible for the administration of environmental protection laws and policies. The structure, scope of functions and independence of such bodies varies considerably. Some are part of a natural resource ministry, some are constituted under separate environment ministries and some operate as agencies with a degree of independence from the rest of the government. Whatever structure is adopted, other line ministries and departments are often given particular environmental responsibilities for their own sector. For example, a Ministry of Industry can be given responsibility for industrial pollution. On the other hand, devolved environmental responsibilities in many countries are nevertheless supervised by the environment ministry or department, through processes such as environmental impact assessment. In many systems, prosecution of environmental cases in court is handled by yet another entity – the Justice Ministry.

One of the major institutional challenges facing many countries is to streamline institutional responsibilities in regard to environmental protection, management and enforcement.

Slide - 14



Some of the regulatory mechanisms used for environmental management include: environmental impact assessment, regulatory limits backed by penalties, standard setting (ambient, technology, and performance standards), permits/authorization, inspection and monitoring compliance, the use of economic and market based instruments (e.g., taxes, subsidies and emission trading systems), risk based instruments, pollution prevention (regulatory, voluntary, liability), self regulation, clean development mechanisms, land use planning and zoning, international co-operation, integrated resource management, training, education and public awareness, etc.

Slide - 15

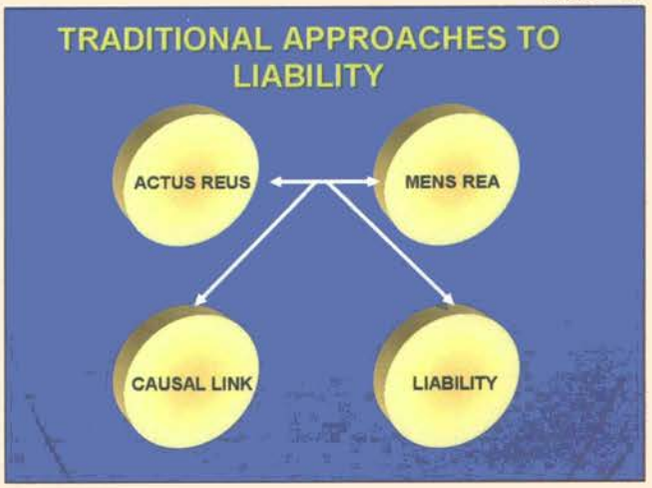
National statutory laws often address the liability of those who run afoul of the law. In some cases, the liability regime is set forth with clarity and specificity in the environmental statute; in others, the environmental statute simply sets forth the obligations, and it is left to general liability principles and laws to determine what happens in the event of a breach.

Whether guided by specific coverage in the environmental statute or covered by general rules of liability, the conceptual framework is likely the same.

This slide addresses some of the liability concepts that are often in operation in the environmental setting, whether or not specifically addressed in the environmental statute.

For example, in the environmental sphere, in some jurisdictions corporations and their officers and directors are to subject to liability for their own acts and omissions causing environmental violations, irrespective of any corporate liability shield that might otherwise be present.

Slide - 16



Liabilities established by environmental law and/or general law often have the following elements:

An unlawful act or omission
Actus reus encompasses the whole offence, except for the mental element
Actus reus includes the physical act of the defendant
Actus reus normally requires a positive act of the defendant

The commission of the positive act with the requisite state of mind (*mens rea*). The positive act: can be of three types:
The direct act of the defendant OR
The defendant does an act which *causes* the occurrence of the prohibited act OR
The defendant does an act which *permits* the occurrence of the prohibited act

Examples of positive acts:
Disposal of waste
Causing or allowing substances to leak, spill or escape
Placing or introducing substances into waters
Placing substances where it enters or is likely to enter waters

The causal link between the unlawful positive act and the prohibited consequence must be proved.

Slide - 17

MENS REA; THE MENTAL ELEMENT

- The *mens rea* element may be required:
  - In full: for wilful criminal violations
  - In part: for negligence-based violations
  - Not at all for strict liability offences

Offenses can also be defined as requiring a mental element of intention, negligence, or no mental element at all.

Intention: Defendant must have intended to do the prohibited act and thereby cause harm. It is enough if the defendant has knowledge of the circumstances which make the doing of the act a criminal offence. Knowledge can be wilful blindness, reckless indifference to facts or disregard of facts. Example: Where a defendant wilfully or negligently disposes of waste in a manner that harms or is likely to harm the environment.

Negligence: Negligence is defined as the failure to exercise such care, skill and foresight that would be expected of a reasonable person in the particular situation of the defendant. That is, the defendant should have reasonably known that the act would result in environmental pollution. The objective test of negligence is whether a reasonable person in the defendant's circumstances can appreciate the risk of harm to the environment.

Strict Liability: An offence of strict liability does not require proof of either intention or negligence. However, in some jurisdictions, an offence of strict liability will not be found if the offender has an honest and reasonable belief in a state of affairs which, if true, would make the conduct of the offender innocent.

Absolute Liability: Under a true absolute liability offence, no mental element is required to be proved; the offender is found guilty on proof that he or she committed the relevant act. The element of fault is irrelevant and no defenses are available: if you do the act, you are guilty of the offence. Absolute liabilities offences are usually restricted to administrative breaches such as littering, motor vehicle noise or emission breaches, etc. Few jurisdictions have true absolute liability offences; normally offences sound in strict liability and provide for a few limited defenses (e.g., act of an unrelated third party, act of God or nature).

Slide - 18

DEFENCES TO *MENS REA* OFFENCES

- No exercise of control
- Reasonable precautions taken
- Exercise of due diligence

Often the following kinds of defences exist to *mens rea* based offences:

That the person exercised no control over the causes of the offence
That the person took reasonable precautions to prevent the commission of the offence
That the person exercised due diligence to prevent the commission of the offence

Notably, under strict liability regimes, these same kinds of considerations are often treated as justification for a penalty reduction, even though the defendant is strictly liable.

Slide - 19

ENVIRONMENTAL LEGISLATION: SOME AREAS OF EMPHASIS

- Sectoral legislation
- Air, water and land pollution control statutes
- Natural resource management statutes
- Heritage protection statutes
- Environmental impact assessment
- Legislation to improve Multilateral Environmental Agreements

Moving on from liability principles that may be embedded in national laws, let us look at areas of coverage by national laws.

National laws often regulate a single environmental milieu, or medium, e.g. water, air, soil, or biological diversity, due to the particular environmental problems facing a given area, political or economic priorities, or the ease of achieving consensus on a specific environmental issue.

For judges, environmental legislation may at times present problems of reconciling divergent requirements or establishing priorities among the competing laws. To address this phenomenon, some jurisdictions have developed sectoral legislation, which simultaneously addresses all environmental impacts from a particular economic sector, e.g. chemicals or agriculture.

Some sectoral laws do not obviously raise environmental issues; for example, laws regulating coal mining or logging. Judges must be alert to the possibility that implementation and enforcement of such laws often has an environmental dimension.

Environmental impact assessment is quintessentially a cross-sectoral matter and includes the assessment in advance of any major development activity of the possible significant impacts on the environment of the proposed activity, and should cover all aspects of the environment tangible and intangible.

The term environmental planning is relatively new. It includes forward physical planning of a town or rural area, ecosystem orientation, including assessment and sustainable use of the natural and other resources as well as development of national and sub-national strategies for sustainability that integrate conservation and development.

The implications of this broadening of environmental planning, to include national, regional and local planning of both land use and policies and programs, calls for the integration of formerly disparate governmental functions and processes, and the provision of access for the relevant communities of information to allow for adequate input into the decision making process.

Another major area of focus in environmental legislation is conservation of natural resources. In many jurisdictions substantive law intends in part to implement obligations agreed to through multi-lateral environmental agreements (MEAs).

One of the most difficult areas of domestic environmental legislation is that of enforcement. The basic approaches employed are criminal, civil and administrative enforcement. However today a twin approach of sanctions and economic incentives is used in many countries.
A further issue relates to enforcement agencies as enforcement is the responsibility of a variety of government agencies or line ministries.

Reference:
* UNEP Judicial Handbook on Environmental Law, 2005 , Chapter 1

Slide - 20

POLLUTION CONTROL LEGISLATION

These are some examples of areas addressed through pollution control laws

Slide - 21

While most jurisdictions have pollution legislation, standards and implementation vary considerably. Nonetheless, most laws attempt to speak to the issues listed here in some way, shape, or form.

In terms of methods of regulation, many jurisdictions have licensing regimes pursuant to which licenses are issued that set facility-specific discharge standards.

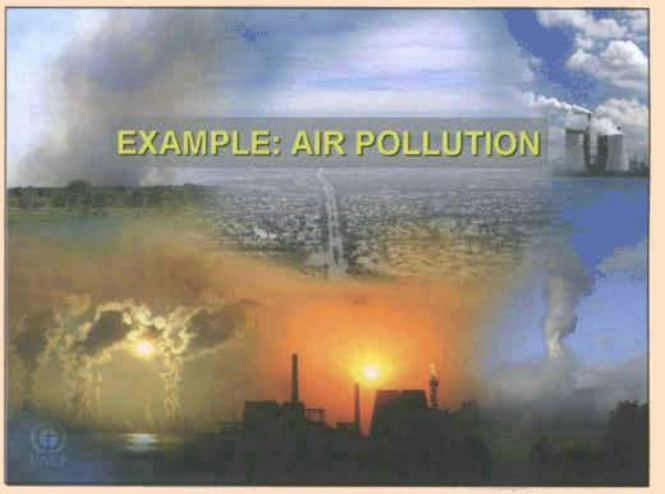
Authorised Inspectors usually have the power to enter premises to check on pollution breaches.

Where the breach of a licence is proved, a criminal and/or civil offence is committed.

Most jurisdictions only have the resources to prosecute a small percentage of license breaches. Other methods short of criminal or civil charges are used, including warning letters and stop notices.

The penalties for pollution offences are very high in some jurisdictions. Often, defendants can be penalized for every day that the pollution continues to occur. In some jurisdictions, penalties are set at a higher level for corporations, and at a lower level for individuals. Ideally, the penalties should be sufficient to disgorge the economic benefit of noncompliance (to ensure that the violator is no better off financially than it would have been had it complied), as well as an additional punitive amount to deter future violations by the violator and others similarly situated.

Slide - 22



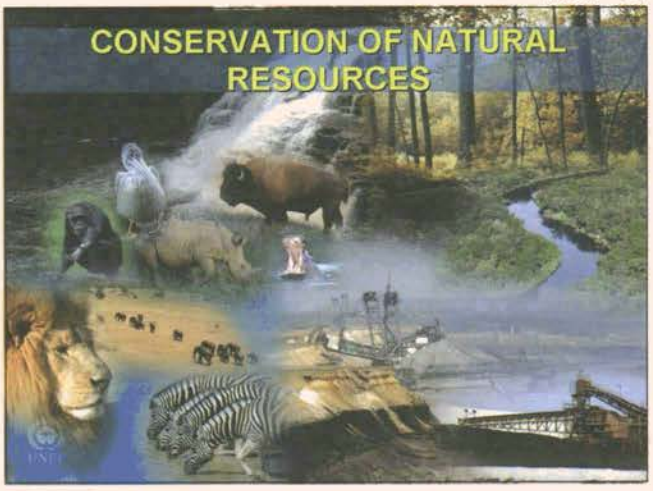
Slide - 23

AIR POLLUTION CONTROL LEGISLATION

- Provides for the setting of ambient air quality standards and best technology requirements
- Establishes a regime for issuance of licenses and permits consistent with technology requirement and geared to meeting ambient standards
- Establishes monitoring and reporting obligations
- Provides authority for government to inspect, monitoring and enforcing standards
- Establishes offences and penalties

These are some of the elements commonly seen in air pollution control legislation.

Slide - 24

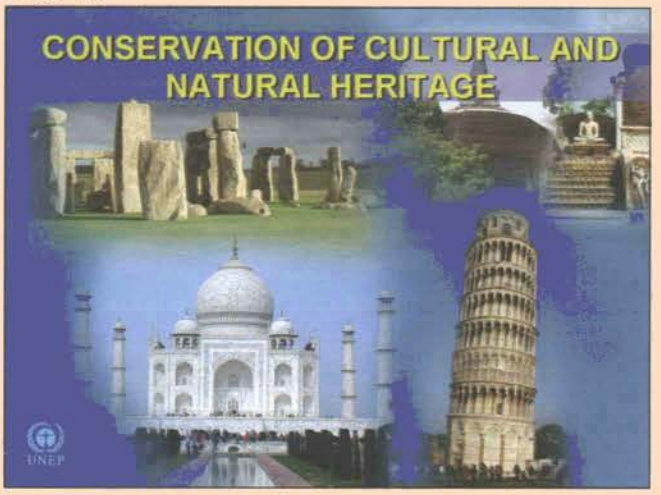


"Natural resources" potentially includes all of the elements of the natural environment exploited by humans.

Natural resource laws often utilize licensing systems to control access to and consumption of natural resources. Such legislation often addresses these kinds of resources:

* Forests
* Animals, including terrestrial, aquatic and avian species
* Minerals: oil, coal, iron ore, gold, silver etc.

Slide - 25

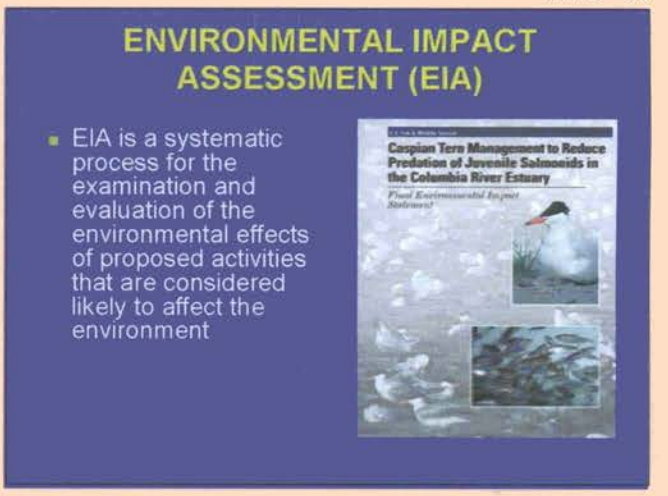


Conservation of cultural and natural heritage is a more recent area of legal regulation.

Natural heritage typically includes any aspect of the natural environment that is judged to have special values, and which attracts conservation measures.

Cultural heritage typically includes any aspect of the built environment (all human-made structures), and objects, as well as the new category of intangible heritage, that are judged to have special values which attract conservation measures.

Slide - 26



Environmental Impact Assessment (EIA)

Human activity can have, and has had over the years, major impacts on the environment, by degrading soils and waterways, altering landscapes, and threatening biodiversity. In addition to harming our surroundings, these impacts can and do have significant economic costs and negatively affect human health. Environmental Impact Assessments ("EIA") provides a tool that would assist in the anticipation and minimisation of human activity's negative effects. Undertaken in the early stages of project planning and design, EIA could help shape development in a manner that best suits the local environment and is most responsive to human needs.

EIA arose out of the pollution and unnecessary degradation of natural resources caused by rapid population growth, industrialisation, agricultural development, and technological progress. EIA recognises that natural resources are finite and incapable of absorbing the unchecked demands of modern society.

EIA assesses the impacts of a proposed project before work on the project begins.

EIA serves three main functions:

* Integration of environmental issues into planning and decision-making;
* Anticipation and minimisation of environmental damage; and,
* Public participation in decision-making and environmental conservation.

The EIA process ordinarily requires consideration of alternatives, including the "no-go" alternative.

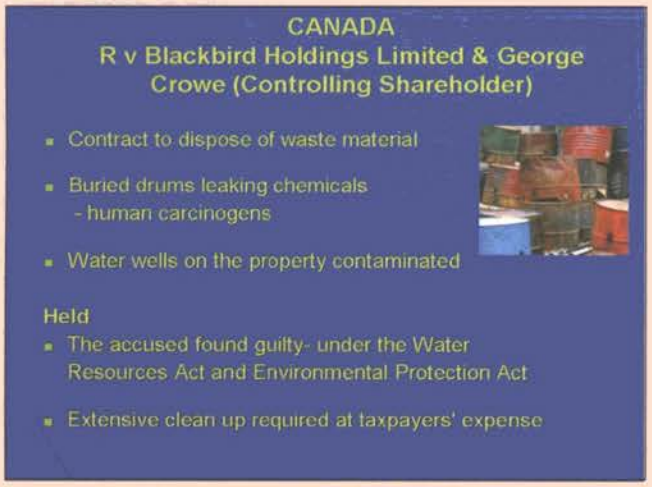
An extension of EIA includes monitoring of developments once built or in operation, as well as systematic auditing. Monitoring and auditing are, however, normally considered as processes separate from EIA.

In some circumstances, where the impact of policies, EIA is carried out as a strategic environmental assessment ("SEA"), which intends to provide decision makers with additional information about the consequences of the development programmes under consideration. SEA is a formalized, systematic and comprehensive process of evaluating the environmental impacts of a Policy, Plan or Program and its alternatives, including the preparation of written report on the findings of that evaluation, and using the findings in publicly accountable decision-making.

Reference:

* UNEP Training Manual on International Environmental Law, 2006, Chapter 21, "Environmental Impact Assessment", Introduction.
Source of definition: Therivel R, Wilson E, Thompson S, Heaney D, Pritchard D. Strategic environmental assessment. London: Earthscan; 1992

Slide - 27

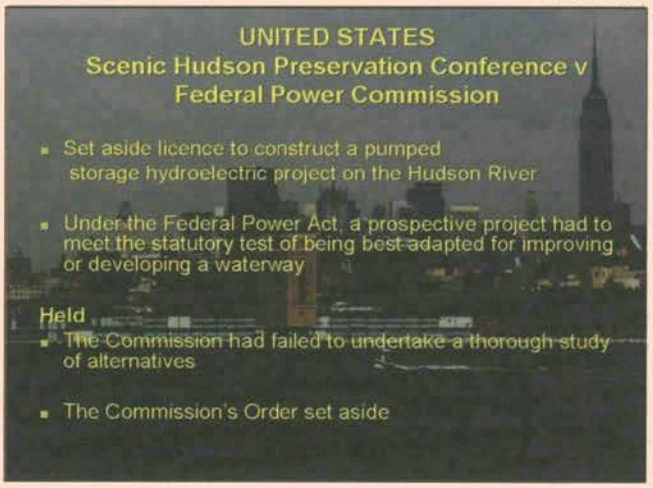


* Under a contract the Burprom company purchased empty drums and disposed of waste material from Goodyear's property. Blackbird Holdings owned the property on which the drums were buried
* Water taken from wells on the property contaminated
* Drums excavated from the site were found leaking, many buried without lids
* The chemicals leaking from the drums were human carcinogens

Held
* The accused found guilty
* Sentenced under the Water Resources Act and the Environmental Protection Act
* Extensive clean up required at taxpayers' expense

Reference:
* UNEP Compendium of Summaries of Judicial Decisions in Environment-related Cases, 2005, page 44.

Slide - 28

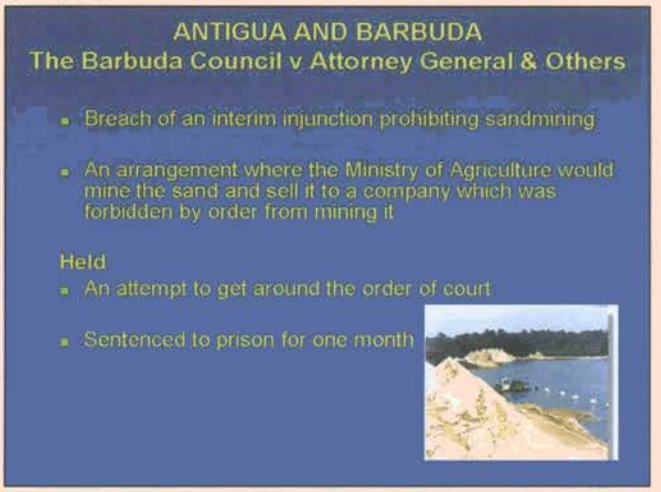


* Sought orders to set aside a licence to construct a pumped storage hydroelectric project on the Hudson River
* Under the Federal Power Act, to be licensed by the Commission a prospective project had to meet the statutory test of being "best adapted to a comprehensive plan for improving or developing a waterway"

Held
* The Commission had failed to compile a proper record and to make a thorough study of the alternatives
* The Commission's order was therefore set aside

Reference:
* UNEP Compendium of Summaries of Judicial Decisions in Environment-related Cases, 2005, page 57.

Slide - 29



* Alleged breach of an interim injunction prohibiting sand mining
* An arrangement where the Ministry of Agriculture would mine the sand and sell it on the spot to SANDCO, which was forbidden by order from mining it

Held
* An attempt to get around the order of court and do that which the court order forbade
* Sentenced to prison for one month

Reference:
* UNEP Compendium of Summaries of Judicial Decisions in Environment-related Cases, 2005, page 70.

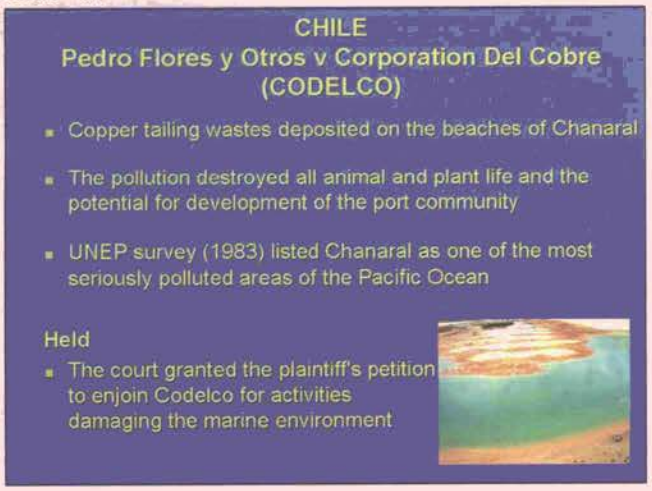
Slide - 30

* Alleged that former and the present Municipal Prefects of Rolante-RS had continuously exposed human beings, animals, and vegetation to health hazards by waste deposits made without an environmental licence
* The waste dumps had caused environmental degradation; polluted the soil and the atmosphere. Irreparable damages caused to the fauna, flora, and the environment, by destructing aboriginal vegetation, causing sporadic fires over the waste dumps, and emitting polluting gases and other leachates

Held
* The Tribunal concluded that there was sufficient appropriate documentary evidence to support the allegations of environmental damage
* Criminally liable for the environmental damage

Reference:
* UNEP Compendium of Summaries of Judicial Decisions in Environment-related Cases, 2005, page 73.

Slide - 31



* For fifty years, a mining company deposited its copper tailing wastes directly on to the beaches of Chanaral
* The pollution affected more than fifteen miles of coastal zone killing all forms of animal and plant life and all potential for development and growth of the Chanaral port community
* A 1983 UNEP survey listed Chanaral as one of the most seriously polluted areas of the Pacific Ocean

Held
* The court compelled Codelco to disclose all relevant information and ordered an inspection report under the court's "personal survey"
* The court granted the plaintiff's petition to enjoin Codelco for activities damaging the marine environment of Chanaral

Reference:
* UNEP Compendium of Summaries of Judicial Decisions in Environment-related Cases, 2005, page 85.

Slide - 32

* Defendant - Tiomin Kenya Ltd. had obtained licences to prospect for minerals.
* Plaintiffs –
    * local inhabitants who sought orders to restrain the defendants from mining in any part of land in the Kwale District of Mombasa, Kenya.
    * The licences threatened the security of their environment and health and the environmental impact report was misleading and inappropriate.

Held
* Defendant had not taken any environmental factors into account in proposing the project.
* Injunction was granted.

Reference:
* UNEP Compendium of Summaries of Judicial Decisions in Environment-related Cases, 2005, page 11.

Slide - 33

* Appeal against refusal of consent for a proposed geothermal power station
* The Tauhara Hapu have a special relationship with the Tauhara geothermal resource -sought exclusive and undisturbed possession of the resource

Held
* The modified proposal would overall serve the purpose of sustainable management of natural and physical resources
* The resource consents should be granted subject to conditions imposed by the court

Reference:
* UNEP Compendium of Summaries of Judicial Decisions in Environment-related Cases, 2005, page 237.

Slide - 34

The development of policies and the enactment of laws and regulations can never be a substitute for action. These are not an end in themselves; rather, only the beginning of a structured and orderly process to be earnestly pursued, marshalling the resources and support of all stakeholders until a tangible and discernible change is achieved in the form of utilizing natural resources within their carrying capacities, and minimizing pollution to levels that will not adversely affect the well-being of present and future generations.

Indeed, the development of legal regimes which remain unimplemented or under-implemented can be ominously counter-productive: engendering an illusion of progress where in truth, none exists.

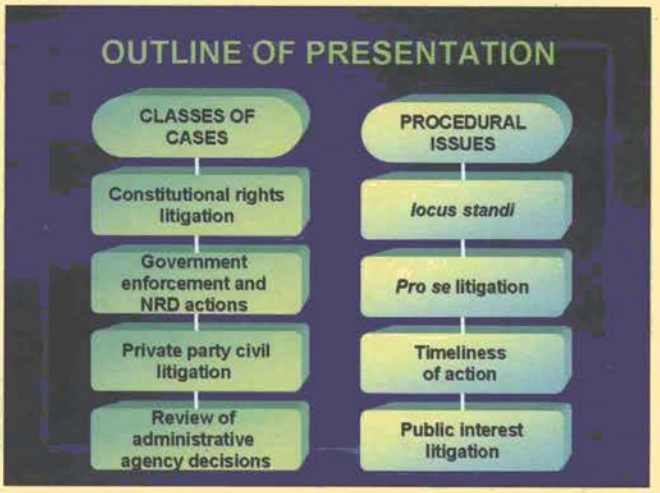
PRESENTATION 6

UNEP GLOBAL JUDGES PROGRAMME

APPLICATION OF ENVIRONMENTAL LAW BY NATIONAL COURTS AND TRIBUNALS

HOW ENVIRONMENTAL CASES COME BEFORE COURTS

Slide - 1



In the area of environmental law, courts must deal with a wide range of laws and regulations and a number of different vehicles by which issues are brought to the courts. In this Presentation we will deal with how environmental law comes before courts in two ways:

1. By the cause of action or type of cases (substantive law)
2. By how the proceedings originates in a court – (procedural law)

Types of Cases

In terms of substantive law, judges are often asked to examine the constitutional aspects of environmental issues, such as the right to life or the right to a clean and healthy environment, to judge whether a particular action is within the power of a legislature or decision-maker, and judge whether a particularly course of conduct falls within the proscription of environmental legislation.

These actions take a number of different forms. For example, judges must often preside over criminal enforcement actions brought by the government. These actions can be brought under legislation concerning, for example, pollution control, forestry management, fisheries national parks and wildlife, and heritage protection.

In some jurisdictions, the government also has the authority to institute civil enforcement actions to assess penalties, compel cleanup, etc. Such authorities are increasingly being established due to the fact that the evidentiary burden of proof is generally lower in civil enforcement than in criminal enforcement and that a more flexible array of remedies can be made available.

Private citizens or non-government groups are also often empowered to bring civil actions to remedy or restrain the breach of an environmental statute.

In common law jurisdictions, tort actions based on negligence and other theories are often brought by private citizens or non-government groups, and can involve applications for injunction as well as compensation claims.

The courts are also often given an important role in hearing challenges to the actions of administrative agencies, including challenges to regulations and permits issued by an agency.

Procedural Issues

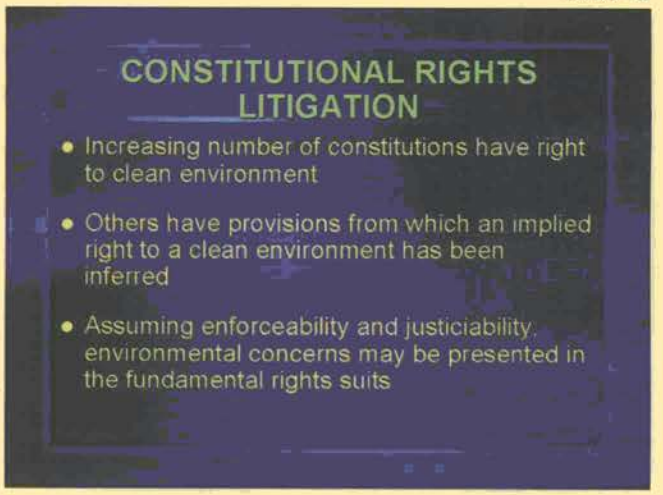
Procedural law, also known as adjectival law, refers to the rules that govern the process by which a court hears and determines cases before it. One of the recurring procedural issues in the environmental arena involves the question of whether the plaintiff has legal standing, or locus standi, to bring the action.

In some jurisdictions, in the interests of increasing access to the courts, judges have relaxed pleading requirements to some degree in cases in which citizens are not represented by counsel. In India, judges have ruled that citizens can bring claims initiated by a letter or telegram; this is known as the epistolary jurisdiction of the court.

Most jurisdictions have procedural rules that ensure that actions are timely, i.e., neither premature nor stale. The idea of a would-be litigant exhausting administrative remedies before proceeding to the court is an example a rule to avoid premature judicial engagement. Statutes of limitation and mootness doctrine are geared towards avoiding stale actions.

Public interest litigation, whereby members of the public, in groups or individually, can bring actions to involves a number of procedural innovations, including expanded standing, new costs rules, and specialized remedies.

Slide - 2



We will be discussing constitutional rights pertaining to the environment in the next presentation. Here, we identify constitutional rights litigation as one of several vehicles that may bring environmental concerns to the courts.

Slide - 3

ENFORCEMENT ACTIONS

- Civil and criminal enforcement actions brought under pollution control and natural resource laws such as
  - Air, water and land pollution statutes
  - Natural resource management statutes
  - Planning statutes
  - Heritage protection statutes

Sectoral statutes are directed to more focused aspects of environment protection and natural resource management. Examples are air, water and noise pollution control statutes, forestry and mining planning statutes and heritage protection statutes.

In addition to general framework laws, national laws often regulate a single environmental milieu, or medium, e.g. water, air, soil, or biological diversity, due to the particular environmental problems facing a given area, political or economic priorities, or the ease of achieving consensus on a specific environmental issue.

While such media-specific legislation can often deal more thoroughly with a particular sector than framework legislation, one difficulty with such medium-by-medium regulation is that it can sometimes overlook the interrelated and interdependent nature of the environment.

For judges, such laws may present problems of reconciling divergent requirements or establishing priorities among the competing laws.

One means to address this is sectoral legislation, which simultaneously addresses all environmental impacts from a particular economic sector, e.g. chemicals or agriculture.

Some sectoral laws do not obviously raise environmental issues; for example, laws regulating coal mining or logging.

Judges must be alive to the possibility that implementation and enforcement of such laws often has an environmental dimension.

Reference:

* UNEP Judicial Handbook on Environmental Law, 2005, Chapter 1

Slide - 4

CIVIL ENFORCEMENT ACTIONS

- Lower standard of proof
- Lower standard of proof can result in lower prosecution costs
- Easier to reach settlement because of diminishing stigma
- Wide array of remedies

* The standard of proof in a civil case is a "balance of probabilities" test or a "preponderance of the evidence." In other words, one can prevail on a claim if the facts supporting the claim are deemed more likely than not to have occured as alleged.

* The balance of probabilities standard is in contrast to the criminal standard of proof, which is proof "beyond reasonable doubt". The criminal standard therefore makes it more difficult to prove an offence.

* If a civil enforcement action is taken, then judges are more restricted in terms of demonstrating the approbation of the community in relation to the environmental degradation.

* Deterrence is commonly seen as the main aim of punishment. Civil sanctions can be seen as generally less serious than criminal sanctions, both in the eyes of defendants as well as the community. But, as we will see in Presentation 9 on Remedies, with the right approach, civil sanctions can still make a significant contribution from the standpoint of deterrence.

Reference:

* UNEP Judicial Handbook on Environmental Law, 2005, Chapter 6

Slide - 5

The foundation of a civil law claim in tort is an injury or damage caused to a person or property. If the injury is caused by a public body in the context of the exercise of public powers or the performance of a public duty the cause of action is in public law. If it is caused by a private person the cause of action is in private law.

The causes of action in public law include *ultra vires*, natural justice and error of law.

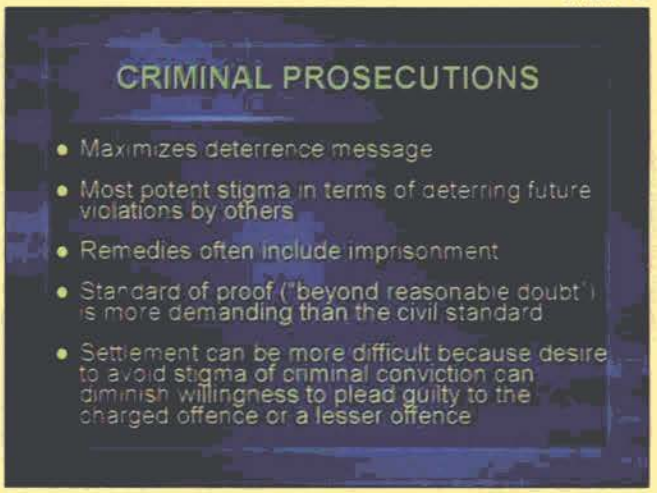
The remedies for their redress include *certiorari*, prohibition, *mandamus*, and declaration. The main causes of action in private law are trespass, nuisance, and negligence.

The remedies for their redress are an award of damages, injunction and a declaratory judgment.

In some circumstances, where the legislature of a state has decided to address a particular environmental problem in a comprehensive manner, it may choose to give the legislation preemptive effect with respect to causes of action that existed at common law.

Reference:
* UNEP Compendium of Judicial Decisions on Matters Related to the Environment: National Decisions, Volume I, page 9.

Slide - 6

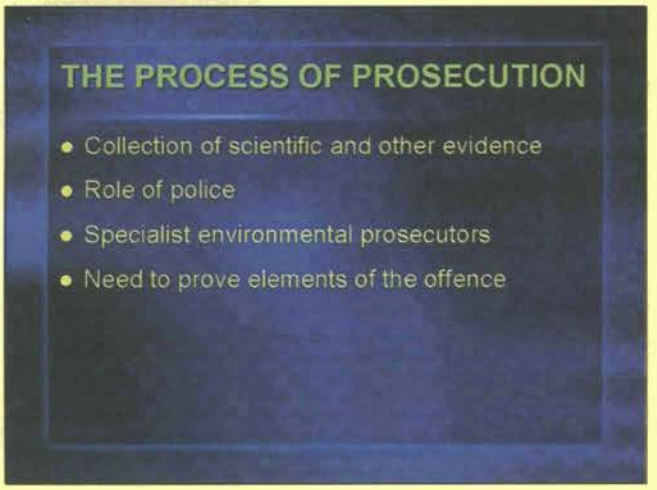


As noted, in most countries, the standard of proof is "beyond reasonable doubt". This is a higher criminal standard of proof than the civil standard of "on the balance of probabilities". The violation of the statute is thus more difficult to prove. It can involve much more intensive collection of evidence, with higher standards being imposed by the court in terms of proving every element of the case.

Criminal proceedings usually have greater potential to generate negative publicity for the offender. This is particularly important in relation to commercial enterprises, especially when corporations are required to publicize the fact that they have been criminally prosecuted as part of the relief ordered by the court.

Reference:
* UNEP Judicial Handbook on Environmental Law, 2005, Chapter 6

Slide - 7



The shape of the case that arrives before the judge is necessarily influenced by the process that generated it. In some jurisdictions, police are the first to be notified of pollution events, especially regarding noise pollution. Few are specially trained to deal with pollution offences, but in some jurisdictions, special units have been established to deal with pollution offences.

Some jurisdictions include prosecutors who are expert in the prosecution of environmental offences. For example, in offences involving the illegal taking of wildlife (flora or fauna), experts need to be able to recognize the species, and to distinguish sub-species, as one sub-species may be listed as vulnerable or in danger of extinction, and another sub-species may not be listed.

In order to launch a successful prosecution, the range of common steps need to be taken:-

There must be collection of scientific and other evidence, which must be carefully analyzed.

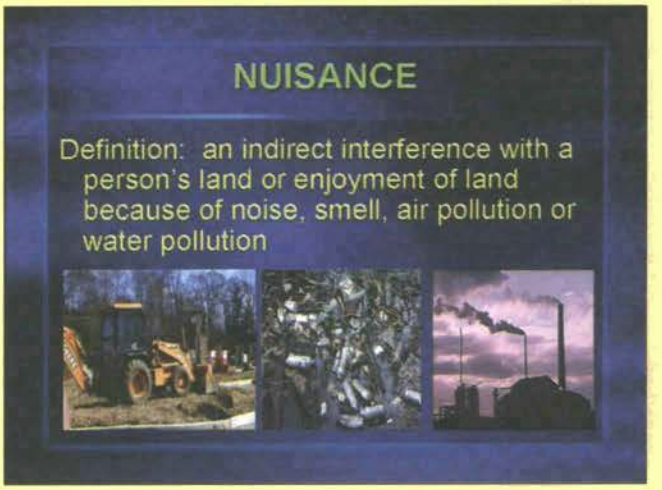
Second, reports must then be compiled, often including graphs, maps and photographs, depending on the evidence to be presented.

In many jurisdictions, the police are also involved in the collection of evidence and the launching of the prosecution.

Some jurisdictions have appointed specialist environmental prosecutors to advise the environment protection authority, who work closely with investigators to prepare prosecution cases.

In a criminal prosecution it is essential to prove each element of the offence.

Slide - 8



Nuisance is either public or private, depending on whether only private landowners or the wider public are affected.

Unlike negligence, it is not necessary to show a particular legal duty to take reasonable care.

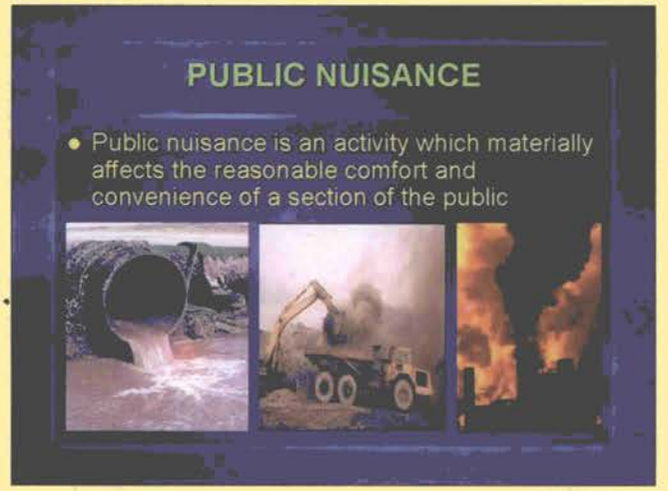
Some material injury from the pollution must be shown before nuisance can be alleged.

The defendant does not have to occupy the land from which the nuisance comes; it is only necessary that they are in control or have responsibility for management of the land.

Reference:

* Lipman Z. and Bates, G. Pollution Law in Australia Lexis/Nexis Butterworths, 2002, Chapter 6.

Slide - 9



Public nuisance is an activity which materially affects the reasonable comfort and convenience of a section of the public, such as polluting emissions (e.g., dust, air pollution) which may be dangerous to health and welfare of people.

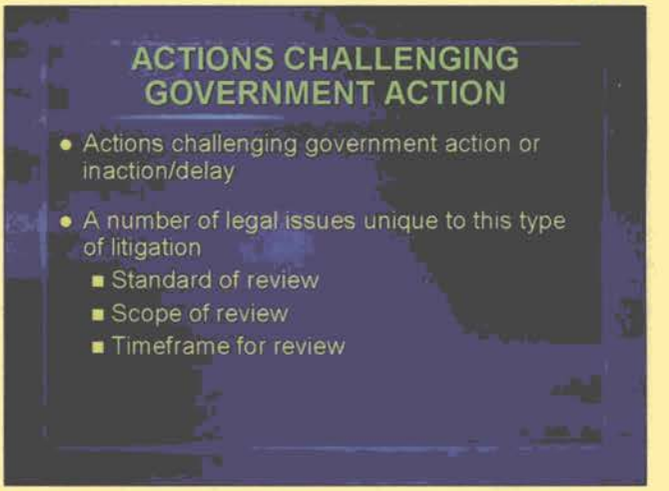
No interest in land or other proprietary interests is necessary; anyone affected can complain.

The plaintiffs must however be affected in some way over and above the rest of the community.

They must show some special damage peculiar to them by reason of interference with the public right.

Reference:
* UNEP Judicial Handbook on Environmental Law, 2005, Chapters 1 & 2

Slide - 10

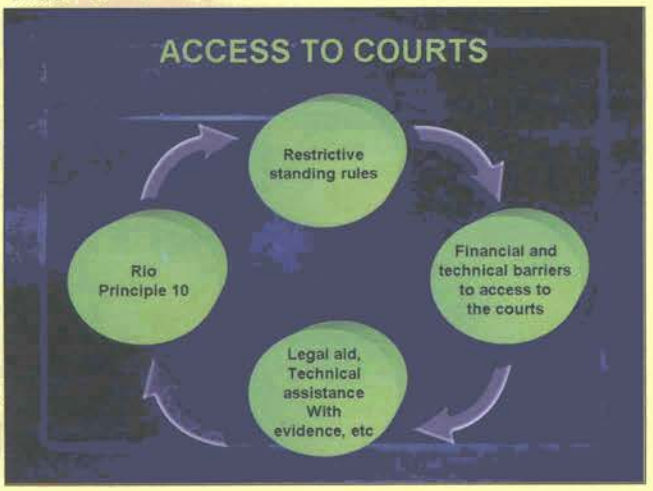


Increasingly, environmental legislation, and/or framework legislation concerning administrative procedures, afford parties aggrieved by the action or inaction of an administrative agency to bring their concern to the courts. Generally, this right to appeal is available to those immediately affected by the action (i.e., who have "standing"), whether this is a company with respect to whom a licence has issued or denied, a neighbour of facility to whom a licence has been issued, or an entity adversely affected by a newly promulgated agency regulation.

There are a number of legal questions fairly unique to this type of litigation, the answer to which depends on local law and practice.
* Standard of review – Does the court review the case according to a preponderance of the evidence standard or one that is more deferential to the administrative agency (e.g., reversal only if decision is determined to have been "clearly erroneous", or "arbitrary and capricious")
* Scope of review – Is judicial review *de novo* or does the court limit itself to the "record of decision" before the administrative agency?
* Timeframe for review – Is judicial review available only after all administrative remedies have been exhausted? Must judicial review be sought within a certain timeframe after the decision is issued?

Reference:
* UNEP Judicial Handbook on Environmental Law, 2005, Chapters 1 & 5

Slide - 11



In terms of procedural law in the environmental context, perhaps the most important area concerns access to the courts. Restrictive standing rules, coupled with the cost of litigation, can serve as a significant impediment to actions brought to assert environmental claims.

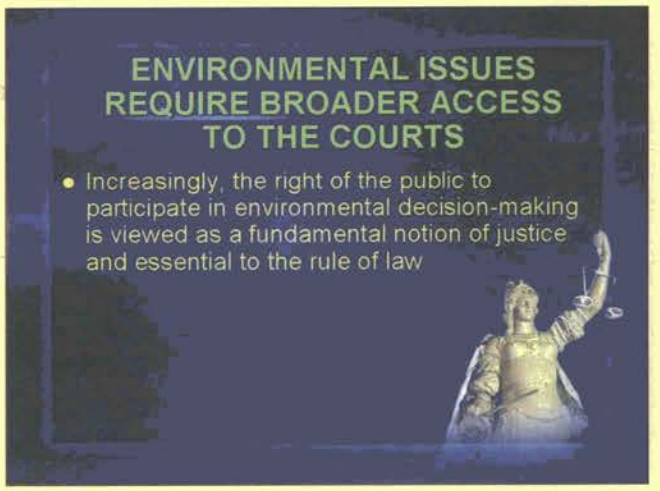
As we have noted, this issue is addressed in Principle 10 of the Rio Declaration, which states:

"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."

Reference:

* Rio Declaration on Environment and Development, 1992, United Nations Economic Commission for Europe
1998 Convention on Access to Information, Public Participation and Access to Justice (Aarhus Convention) www.unece.org/env/pp/documents/cep43e.pdf

Slide - 12



Fundamental notions of justice and the rule of law are linked to the way in which decisions are made. In environmental matters, involvement of relevant stakeholders is vital. Public participation has therefore become an important aspect of environmental decision-making.

Courts and tribunals now accept and often encourage a wider range of participants, as evidenced by broader standing rules developed by legislatures and/or the courts, as well as legislative reform to ensure that there is access to the courts by way of judicial review and appeals on the merits of environmental decisions.

Recent jurisprudence and the pronouncements made by Chief Justices and other senior judges from around the world demonstrate that there is an increasing willingness among judges to maximize public participation opportunities within the constitutional limitations of the separation of powers. In doing so, they seek to reconcile the series of compelling and conflicting interests in order to achieve a perceptive and sensitive equilibrium. Their decisions will balance the wider social, economic, and environmental interests that deliver justice within the framework of the Rule of Law.

By providing judicial recognition to the set of emerging concepts, norms, and principles that comprise environmental law, these judiciaries are playing a primary role in strengthening environmental governance.

Reference:

* Kurukulasuriya, Lal "The Role of the Judiciary in Promoting Environmental Governance and the Rule of Law" http://www.yale.edu/gegdialogue/docs/dialogue/oct03/papers/Kurukulasuriya%20final.pdf

Slide - 13

In addition to Principle 10 of the Rio Declaration, public participation rights were addressed in the 1998 Aarhus Convention. Although a European convention, it allows States outside the European Union to accede to the Convention with the consent of the Meeting of the Parties. Article 1 sets out the objective of the Convention:

"In order to contribute to the protection of the right of every person of present and future generations to live in an environment adequate to his or her health and well-being, each Party shall guarantee the rights of access to information, public participation in decision-making, and access to justice in environmental matters in accordance with the provisions of this Convention."

Aarhus Convention Article 9 Access to Justice

1. Each Party shall, within the framework of its national legislation, ensure that any person who considers that his or her request for information under article 4 has been ignored, wrongfully refused, whether in part or in full, inadequately answered, or otherwise not dealt with in accordance with the provisions of that article, has access to a review procedure before a court of law or another independent and impartial body established by law. In the circumstances where a Party provides for such a review by a court of law, it shall ensure that such a person also has access to an expeditious procedure established by law that is free of charge or inexpensive for reconsideration by a public authority or review by an independent and impartial body other than a court of law. ....

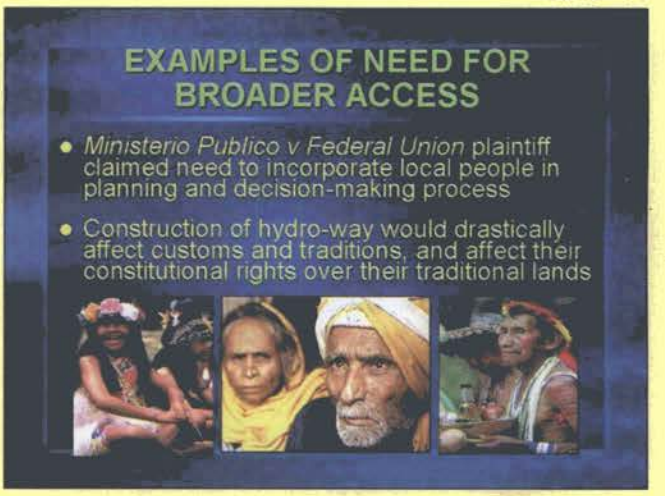
2. Each Party shall, within the framework of its national legislation, ensure that members of the public concerned, (a) Having a sufficient interest or, alternatively, (b) Maintaining impairment of a right, where the administrative procedural law of a Party requires this as a precondition, have access to a review procedure before a court of law and/or another independent and impartial body established by law, to challenge the substantive and procedural legality of any decision, act or omission... What constitutes a sufficient interest and impairment of a right shall be determined in accordance with the requirements of national law and consistently with the objective of giving the public concerned wide access to justice within the scope of this Convention. To this end, the interest of any non-governmental organization meeting the requirements referred to in article 2, paragraph 5, shall be deemed sufficient for the purpose of subparagraph (a) above.

References:

* 1998 Convention on Access to Information, Public Participation and Access to Justice (Aarhus Convention) www.unece.org/env/pp/documents/cep43e.pdf

* UNEP Training Manual on International Environmental Law, 2006, Chapter 3, "Principles and Concepts of International Environmental Law" Heading (d): "Transparency, Public Participation and Access to Information and Remedies"

Slide - 14



Examples of why broader access is necessary.

The plaintiff started a civil public action against the Federal Union, and requested the immediate suspension of any activity leading to the construction of the Paraguay Paraná hydro-way. The project consisted of a navigation system along 3,440 kms in two of the largest rivers (Cáceres in Brazil and Nueva Palmira in Uruguay) in the second most important river basin of Latin America (basin of La Plata shared by Argentina, Bolivia, Brazil, Paraguay, and Uruguay) by the Intergovernmental Committee of the Paraguay-Paraná hydroway (CIH), an executive body created in 1989. On June 26, 1992, the River Agreement of Transportation was enacted, and it entered into force March 13, 1995, among the countries interested in carrying out the hydroway under the principles of free traffic, liberty of navigation, free participation of flags in the traffic among the signatory countries, equality and reciprocity of treatment, and security of navigation.

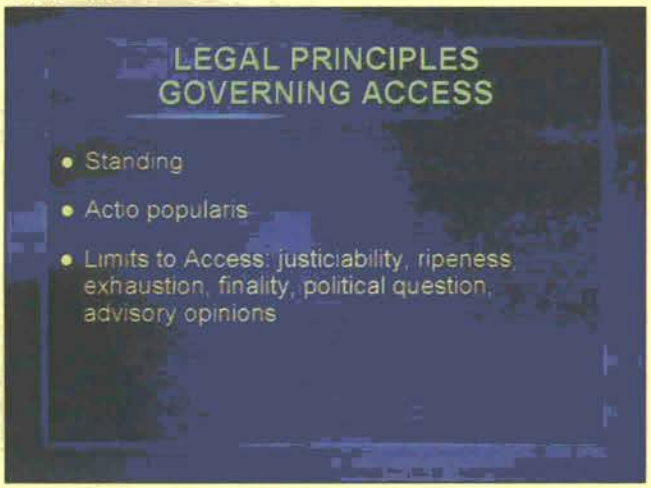
The plaintiff claimed that there was an urgent need to immediately incorporate the local populations in the respective planning and decision-making process, bearing in mind that the construction of the hydroway would drastically affect their customs and traditions, and affect their constitutional rights over their traditional lands. Indigenous lands are, according to the Brazilian constitution, federal public goods within a special protection regime. Hence, any alteration of the native territories and of the nearby water resources violates the spirit and the letter of the Constitution. Thus, Congress may only authorize the hydroway once those affected have been heard.

Held: The Judge decided to grant the legal order sought and restrain the Federal Union from: carrying out or authorizing the execution of any study or work of implementation of the hydroway; or from initiating its operation; or from any arrangement of resources for a similar end; before Congress, having heard the native communities, authorized the announced project. It also set a daily fine of 100,000 reales in the event of any breach of the order.

Reference:

* Ministerio Publico v Federal Union,, State of Mato Grosso January 19 1998, UNEP Compendium of Summaries of Judicial Decisions in Environment-related Cases, 2005, page 77.

Slide - 15



Legal Foundations for Broader Access

1. Standing also referred to as Locus Standi. Legal standing is the right to bring a case to court. To do so a person generally must be affected by the matter and there must be a case or controversy that can be resolved by legal action. Environmental cases can push the bounds of standing rules because people often do not hold individual, immediate or exclusive interests in the thing harmed. Environmental concerns often have a collective or shared nature.

   Example: In U.S. law to have standing a person must show: (1) injury in fact, which means an invasion of a legally protected interest that is (a) concrete and particularized, and (b) actual or imminent, not conjectural or hypothetical; (2) a causal relationship between the injury and the challenged conduct, which means that the injury fairly can be traced to the challenged action of the defendant, and has not resulted from the independent action of some third party not before the court; and (3) a likelihood that the injury will be redressed by a favorable decision, which means that the prospect of obtaining relief from the injury as a result of a favorable ruling is not too speculative. *Lujan v. Defenders of Wildlife,* 112 S. Ct. 2130, 2136 (1992). An impaired ability to use recreational areas and injury to aesthetic values is sufficient to confer standing to sue. *Friends of the Earth v. Laidlaw,* 528 U.S. 167 (2000).

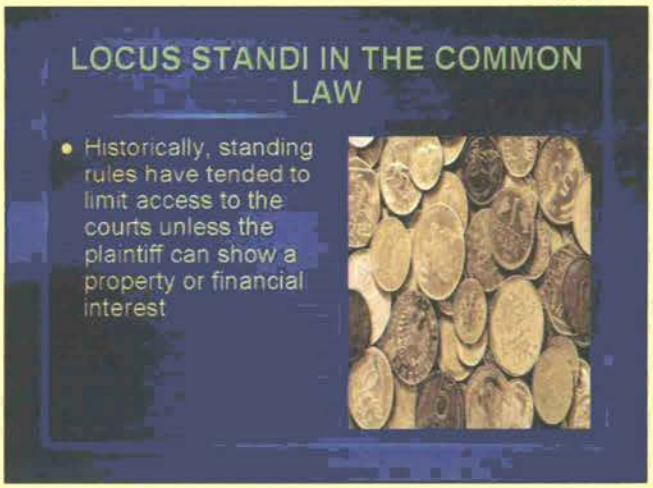
2. Actio popularis. Meaning an action to obtain a remedy by a person or a group in the name of the general public, without the necessity of representation authorization from the victims of the harm. Some states recognize this notion as an exception to standing limits.

   For example, Portugal's constitution provides everyone the right to actio popularis in the case and under the conditions provided by law, notably the right to promote the prevention, the suppression, and the prosecution of offences against public health, the environment, the quality of life, and the cultural heritage.

3. Other limits: ripeness, exhaustion, finality, justiciability, political question, advisory opinions, forum non conveniens

* Justiciability asks whether a dispute is capable of being settled by a court of law. Generally, there must be an actual controversy that is ripe and is not a political question, and the initiating party must have standing.
* Ripeness asks whether an injury has occurred or is imminent; the goal is to prevent premature adjudication. For example, if a dispute is insufficiently developed, any potential injury is too speculative to warrant judicial action. To be ripe, any available administrative remedies must have been pursued and exhausted, and if it is an appeal, the trial court decision must be final.
* Exhaustion. The exhaustion doctrine requires that parties first pursue any remedies they may have from administrative agencies before seeking relief from the court. This doctrine requires both seeking relief in an available administrative proceeding and a showing that the arguments made in court were first presented to the agency.
* Finality. The finality doctrine bars appeal until all issues of law and fact have been determined and the case fully disposed of by the trial court. When appeals are permitted before the complete disposition of the issues before the trial court, the delay and inefficiency can be considerable.
* A political question is an issue that properly belongs to the decision-making authority of elected officials, such as the executive or legislature, rather than the courts, or where there are no identifiable and workable standards for resolving the case.
* An advisory opinion is an opinion issued by a court that does not have the effect of resolving a specific legal case, but merely advises on interpretation of a law. Some countries have procedures by which the executive or legislative branches may certify important questions to the judiciary and obtain an advisory opinion, other countries prohibit courts from issuing advisory opinions.

Slide - 16



Locus standi in the common law

1. The basic rules on standing in the common law were established by the English case of :
Boyce v Paddington Borough Council (1903): "A plaintiff can sue without joining the Attorney-General in two cases: first, where the interference with the public right is such as that some private right of his is at the same time interfered with (e.g., where an obstruction is so placed in a highway that the owner of premises abutting upon the highway is specially affected by reason that the obstruction interferes with his private right to access from and to his premises to and from the highway); and, secondly, where no private right is interfered with, but the plaintiff, in respect of his public right, suffers special damage peculiar to himself from the interference with the public right."

2. These restrictive rules have been followed in many cases in common law countries. However, in recent years, though judicial innovation as well as legislative intervention, rules on locus standi have been relaxed to a large extent.

Reference:
* UNEP Judicial Handbook on Environmental Law, 2005, Chapter 3 "Access to Justice"

Slide - 17

Many jurisdictions have passed legislation modifying or abolishing the common law rules (see slides below)

Cases where standing was relaxed:
Nairobi Golf Hotels v Pelican Engineering and Construction, High Court of Kenya 1997: Plaintiff, as riparian owner of river land was entitled to apply for an injunction to restrain the defendant from making extra-ordinary use of river water for irrigation purposes.

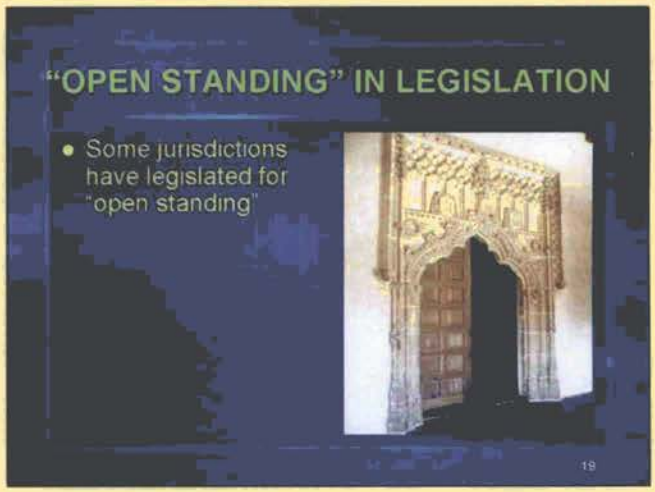
Farooque v Bangladesh, Supreme Court of Bangladesh, 1996: Life, property and environmental security threatened by a flood control plan; "person aggrieved" not confined to individual affected persons, but extends to people in general, as a collective and consolidated personality. The Bangladesh Environmental Lawyers Association was held to be a "person aggrieved".

Kajin Tubik v Ekran High Court of Malaysia, 1996: plaintiffs claimed right to obtain an environmental impact statement concerning construction of the Bakun Dam; court held that although there were only three plaintiffs in a community of 10,000, this did not in itself disentitle them to the relief claimed.

References:
* UNEP Compendium of Summaries of Judicial Decisions in Environment-related Cases, 2005
Page 3: Nairobi Golf Hotels v Pelican Engineering and Construction
Page 105: Farooque v Bangladesh
Page 96: Regina v Secretary of State for the Environment
Page 159 (Kajin Tubik v Ekran)

* UNEP Compendium of Judicial Decisions on Matters Related to the Environment: National Decisions, Volume 1, 1998; pages 2 to 108

Slide - 18



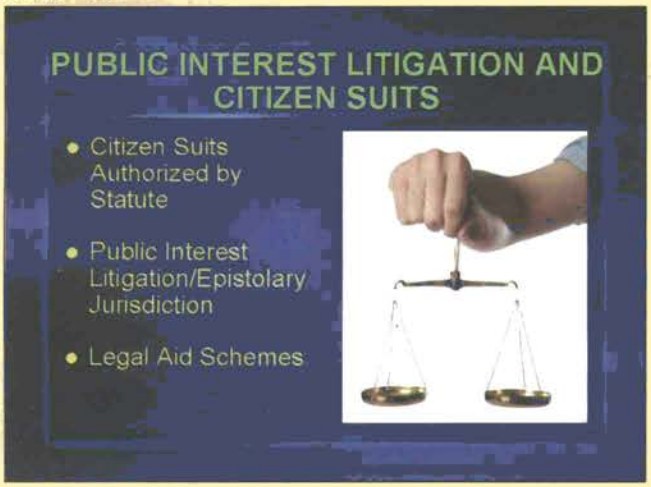
Some jurisdictions, such as New South Wales, Australia, now have statutes that provide that any person may bring an action to remedy or restrain a breach of an Act, regardless of financial or property interest.

This has allowed more cases to be brought to the courts, without the possibility that plaintiffs are challenged for lack of standing to sue.

References:
* UNEP Compendium of Judicial Decisions on Matters Related to the Environment: National Decisions, page xxxiii.
* Working paper on Access to Justice: http://www.elaw.org/resources/text.asp?ID=1704
* Articles and cases on standing in environmental matters: http://www.elaw.org/search/results.asp?words=standing&x=12&y=13

Source of graphic: http://philo.ucdavis.edu/home/cmc/SPA143/gothicB/gothicB38L.jpg Valladolid, San Gregorio, court door. (15th Century)

Slide - 19



Public interest litigation or citizen suits are actions brought by individual citizens and/or environmental groups to force the adequate implementation of environmental legislation or to stop the activity of any person, including governments or governmental bodies or agencies, alleged to be in violation of any part of the legislation or a regulation issued under the relevant legislation.

Citizen Suits Authorized by Statute. While recognizing the primary responsibility of governments to deal with environmental problems, many national legislatures have given their citizens authority to enforce laws. Citizen suits under enacted environmental laws commonly enable private plaintiffs to seek penalties, court ordered injunctive relief, and attorneys fees and costs. Citizen suits may challenge, for example, construction of a facility or its operations, or may seek to enforce the law or to remedy historic pollution.

Why do legislatures grant citizens the authority to enforce laws? Legislatures recognize that governmental agencies sometimes lack resources or political will to enforce the enacted laws. Citizen's suits help push government officials, and industry, to take the necessary and appropriate action to control pollution.

Public Interest Litigation/Epistolary Jurisdiction. In 1982, the Supreme Court of India concluded that unusual measures were warranted to enable people to obtain protections contemplated by the Indian Constitution. In the case of *People's Union for Democratic Rights (PUDR) vs. Union of India* [1982 (2) S.C.C. 253], the Supreme court held that a third party could directly petition, whether through a letter or other means, the Court and seek its intervention in a matter where another party's fundamental rights were being violated. In this case, adverting to the Constitutional prohibition on "begar", or forced labor and traffic in human beings, PUDR submitted that workers contracted to build the large sports complex at the Asian Game Village in Delhi were being exploited. PUDR asked the Court to recognize that "begar" was far more than compelling someone to work against his or her will, and that work under exploitative and grotesquely humiliating conditions, or work that was not even compensated by prescribed minimum wages, violates fundamental rights. The court held that it had a mandate to advance the rights of the disadvantaged and poor, even when requested by individuals or groups who themselves claimed no disability. Such litigation, termed Public Interest Litigation, seeks redress for

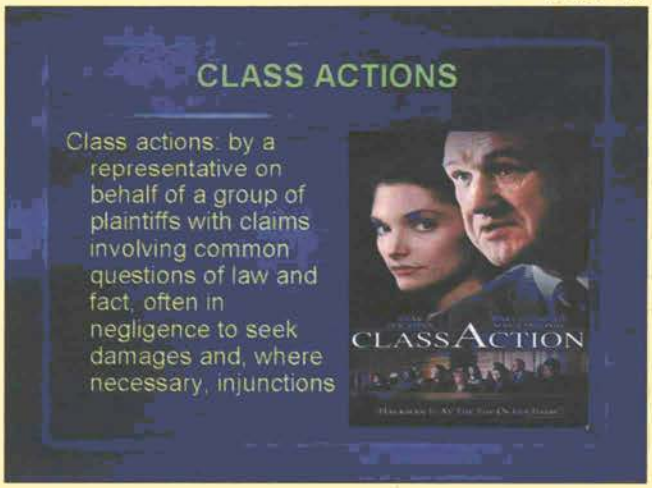
- Violation of basic human rights of the poor
- Violation of an important government policy
- When municipal authorities fail to perform a public duty
- Violation of religious rights or other basic fundamental rights.

Legal Aid Schemes. Eligible applicants receive legal aid that is publicly funded to ensure that a person who has reasonable grounds for pursuing or defending a legal action is not prevented from doing so by lack of means. Publicly funded legal services are provided by governments for a wide variety of litigation, including protection of environmental rights in some countries. In some jurisdictions, members of the Bar are encouraged to spend some of their time providing legal services *pro bono* to indigent litigants.

Reference:

* UNEP Judicial Handbook, on Environmental Law, 2005, Chapter 5,

Slide - 20



Class actions are becoming increasingly common in environmental and consumer protection litigation, in both developed and developing countries.

A procedure initially developed in the United States; many other countries now have similar devices for allowing litigation of a large number of claims against a few defendants. The procedure for filing a class action is to file suit with one or several named plaintiffs on behalf of a putative class. The putative class must consist of a group of individuals or business entities that have suffered a common wrong.

Usually, these kinds of cases are connected to some standard action on the part of a business, or some particular product defect or policy that was applied to all potential class members in a uniform manner.

After the summons and complaint is filed, the plaintiff usually has to bring a motion (sometimes at the same time as filing the summons and complaint) to have the class certified.

The defendants may challenge whether the issues are appropriately handled as class litigation, whether the named plaintiffs are insufficiently representative of the class, and whether their relationship with the law firm or firms handling the case is legitimate.

Issues common to the entire class may be decided first. Alternatively, a test case may be litigated, and if successful a class action by the rest of the claimants can be commenced.

The court will ordinarily examine the ability and financial capacity of the representative to prosecute the claim for the plaintiffs; the court may have notices sent, published, or broadcast to the public, in any place where the class members can be found.

Example: Indonesian Supreme Court has issued specific rules concerning class actions which can be brought under the Environment Act (Act No 23 of 1997).

Toxic torts often affect large numbers of persons. Such mass torts may lead plaintiffs to file a class action suit, where such actions are permitted. A class action was filed after the Bhopal disaster and similar suits have been filed over asbestos and tobacco. See In re Union Carbide Corp. Gas Plant Disaster at Bhopal, India in December 1984, 809 F.2d 185 (2d Cir. 1987).

References:

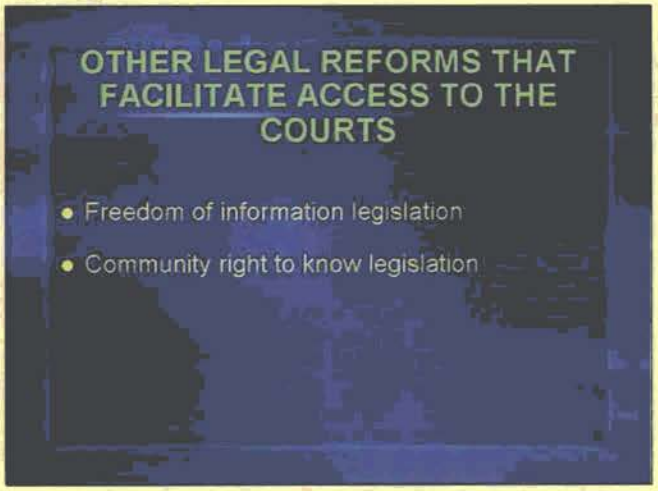
* UNEP Judicial Handbook on Environmental Law, 2005, Chapter 1 and 5;

* UNEP Compendium of Judicial Decisions on Matters Related to the Environment, National Decisions, Volume III, 2001, page 11, 12, 28

* UNEP Compendium of Summaries of Judicial Decisions in Environment-related Cases, 2005, page 54 (Canada);page 83 (Chile), page 94 (Colombia), page 179 (Philippines)

Source of graphic: http://images.amazon.com/images/P/B0006HBZBA.01._PE40_.Class-Action._SCLZZZZZZZ_.jpg

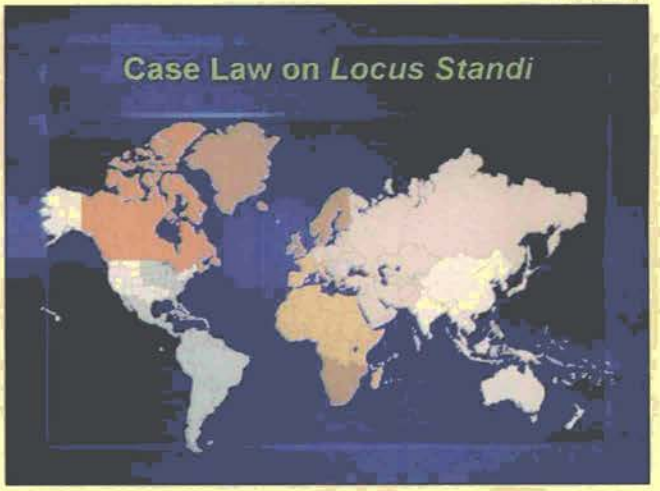
Slide - 21



Access to the courts necessarily depends to some degree on access to the information upon which a case can be premised. Generally, the freer the public's access to environmental information, whether that information pertains to the compliance status of licensed facilities, EIA analyses, or ambient sampling date, the better able the public is to identify concerns and support, through the acquired evidence, litigation brought to address those concerns.

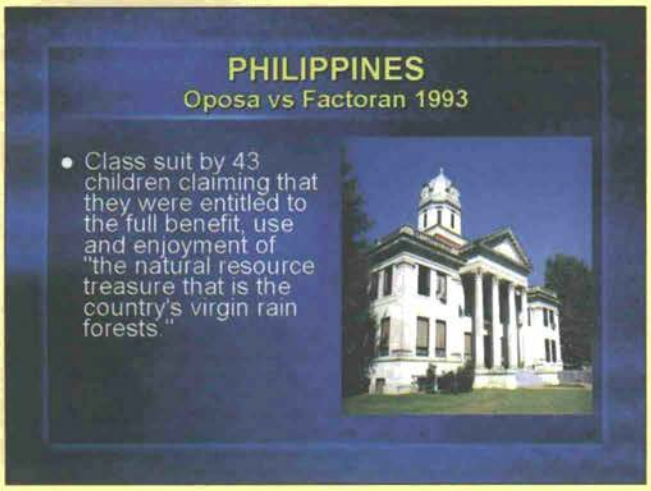
Freedom of Information legislation generally provides for public access to environmental information maintained by the government; where as Right to Know legislation typically requires public reporting by businesses on potentially hazardous activities undertaken on their premises. Both significantly enable citizen initiated litigation.

Slide - 22



The random selection that follows is designed to illustrate how the 'judiciary' can develop environmental jurisprudence.

Slide - 23



One of the most interesting class action cases in the environmental arena was brought in the Philippines: *Oposa and Others v Factoran*, Philippines Supreme Court, where 43 petitioners, who were minors represented by their parents, brought an action on their own behalf and on behalf of generations yet unborn, claiming that the country's natural forest cover was being destroyed at such a rate that the country would be bereft of forest resources by the end of the decade if not sooner.

They brought their action as a taxpayers' class suit claiming that as citizens and taxpayers they were entitled to the full benefit, use and enjoyment of "the natural resource treasure that is the country's virgin rain forests." They also asserted that they represented their generation as well as "generations yet unborn".They sought an order directing the Secretary to the Department of Environment and Natural Resources (DENR) to cancel all existing timber licence agreements and cease from accepting or approving new agreements.

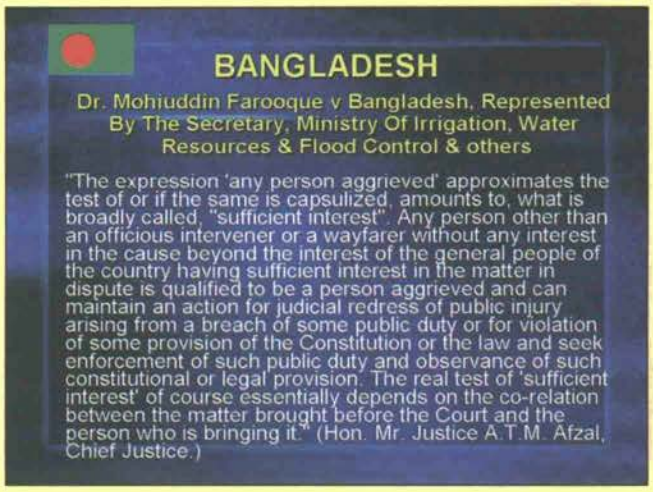
The court held that since the subject matter of the complaint was of common and general interest to all citizens and it was impracticable to bring them all before Court, the Petitioners' suit was a valid class action.

The Petitioners had the right to sue on behalf of succeeding generations because every generation has a responsibility to the next to preserve the rhythm and harmony of nature for the full enjoyment of a balanced and healthful ecology.

References:

* UNEP Compendium of Summaries of Judicial Decisions in Environment-related Cases, 2005, Pages 179 - 181
* UNEP Judicial Handbook on Environmental Law, 2005, Chapter 5

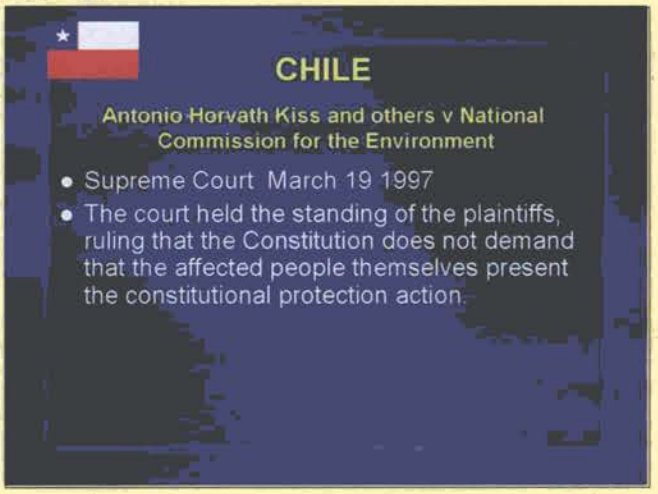
Slide - 24



Reference:

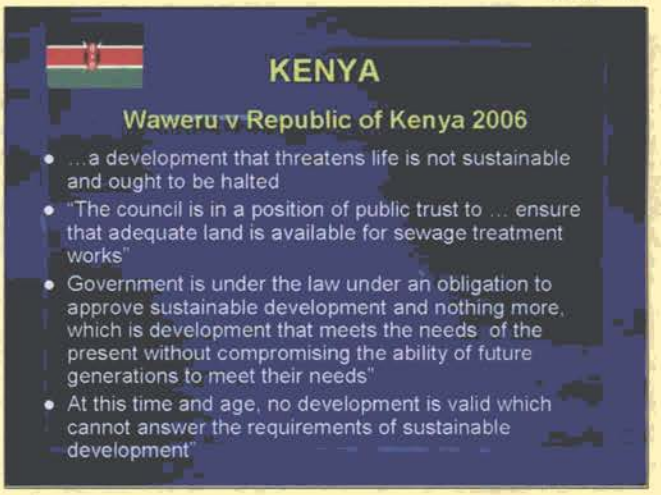
* UNEP Compendium of Summaries of Judicial Decisions in Environment- related Cases, 2005, page 105

Slide - 25

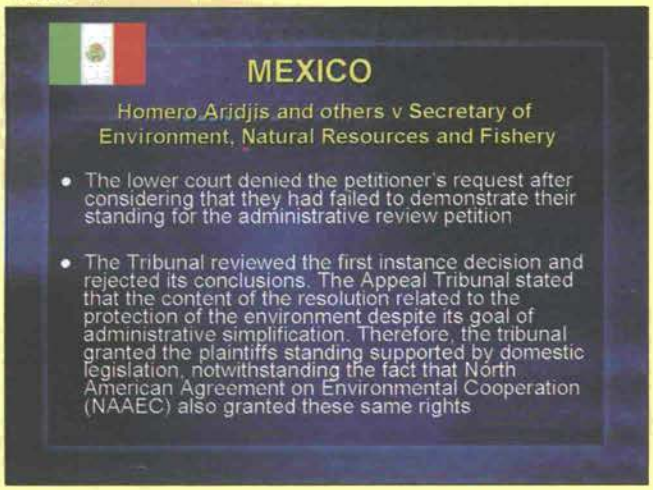


Reference:
* UNEP Compendium of Summaries of Judicial Decisions in Environment-related Cases, 2005, page 83.

Slide - 26



Slide - 27



Reference:

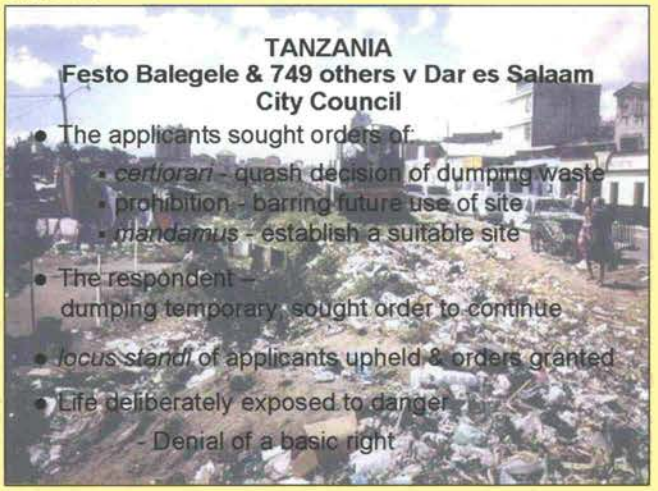
* UNEP Compendium of Summaries of Judicial Decisions in Environment-related Cases, 2005, Page 97.

Slide - 28

Reference:

* UNEP Compendium of Summaries of Judicial Decisions in Environment-related Cases, 2005, Page 22.

Slide - 29



* Dumping of city waste in a residential area
* The applicants sought orders of
    * certiorari - to quash decision of respondent to allow dumping of waste
    * prohibition - barring future use of dump site
    * mandamus - to direct respondent to establish an appropriate dumping site
* Burning the waste generated smoke, offensive smells
* Dump also attracted flies
* The respondent - disposal of refuse in the area was temporary; sought an order allow dumping to continue

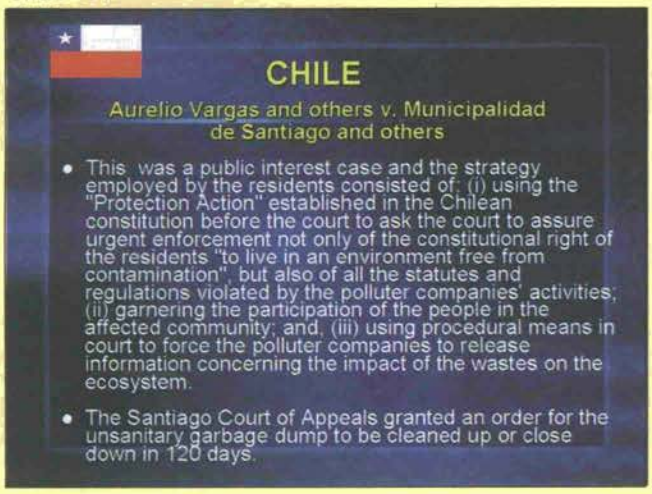
Held
The court upheld the locus standi of the applicants and granted them orders sought. The court ruled that it was a denial of a basic right deliberately to expose anybody's life to danger and it was eminently monstrous to enlist the assistance of the court in this infringement.

Reference:
* UNEP Compendium of Summaries of Judicial Decisions in Environment-related Cases, 2005, page 28.

Slide - 30

Reference:
* UNEP Compendium of Summaries of Judicial Decisions in Environment-related Cases, 2005, page 212.

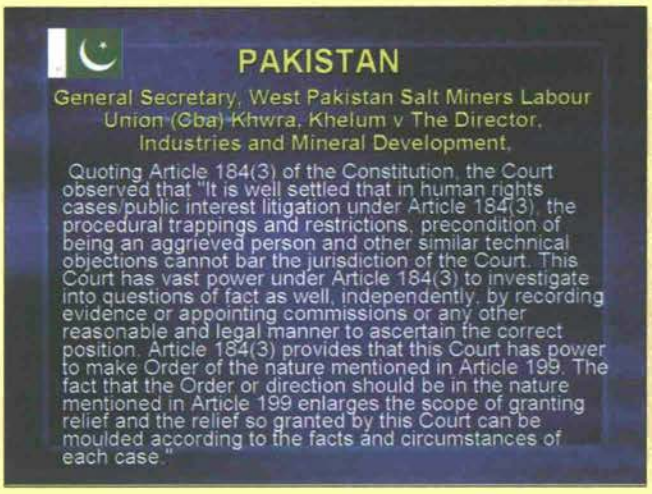
Slide - 31



Reference:

* UNEP Compendium of Summaries of Judicial Decisions in Environment- related Cases, 2005, page 86.

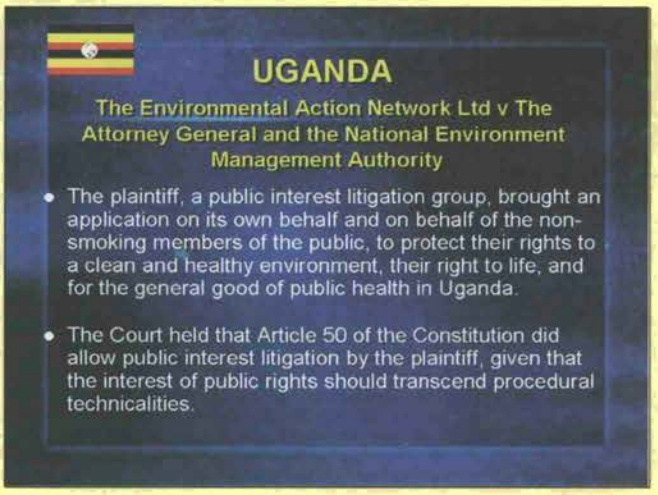
Slide - 32



Reference:

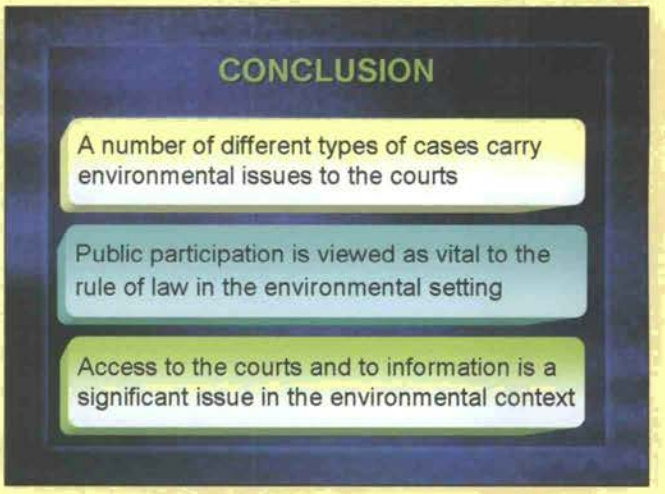
* UNEP Compendium of Summaries of Judicial Decisions in Environment-related Cases, 2005, page 172.

Slide - 33



Reference:
* UNEP Compendium of Summaries of Judicial Decisions in Environment-related Cases, 2005, page 36.

Slide - 34



This presentation has canvassed a range of what ways in which cases can come before the courts. It illustrates the variety of procedural issues that need to be considered by judges, including locus standi and innovative processes for initiating cases.

A point to emphasize is that even though a case may not be brought before a court as " an environmental case", there can be a range of incidental environmental dimensions and issues which the court may need to adjudicate upon. The environmental dimension is not always evident. For example, illegal logging is a statutory offence, relating primarily to the taking of timber without a licence, but the broader environmental dimension can be a factor in the imposition of penalties.

PRESENTATION 7

UNEP GLOBAL JUDGES PROGRAMME

APPLICATION OF ENVIRONMENTAL LAW BY NATIONAL COURTS AND TRIBUNALS

MANAGING ENVIRONMENTAL CASES

Slide - 1

OUTLINE OF PRESENTATION

- Case Management Generally
- Common Complaints About Litigation
- Case Dynamics in the Environmental Context
- Influence of Environmental Protection Principles on Case Mgt.
- Priorities for Case Management in the Environmental Context
- Case Management Capacity is Variable Across Jurisdictions
- Attributes of Effective Case Management
- Objectives of Case Management
- Tools for Case Management
- Conclusions

This presentation focuses on the procedural aspects of managing complex environmental cases. It begins with some general principles to guide judges in their own conduct and in how to direct the litigants to efficiently move complex cases to conclusion.

Then specific techniques or methods are reviewed. Judges can use these to control the case and to help the parties focus their efforts and define the issues that must be decided by the court.

Methods for handling trials to avoid wasting the court's valuable time while ensuring that stakeholders have an opportunity to be heard are also looked at. The focus here is on methods for efficient management of trials.

In the next presentation, the unique issues that arise regarding complex or scientific evidence that may be at issue in environmental cases are examined.

Slide - 2

WHAT IS JUDICIAL CASE MANAGEMENT?

Judicial Case Management: Judicial intervention in the litigation process to influence, guide or direct the course of litigation in a manner that enhances its efficiency, affordability, rationality and fairness.

Judicial case management is a move by courts away from the traditional adversarial case management which had left the pace of litigation primarily in the hands of the legal practitioners, with the court's role being simply to respond to processes initiated by practitioners, toward courts taking an interest in cases at an earlier stage in the process and actively managing them through a series of litigation milestones and check-posts. It invites courts to anticipate problems before they arise rather than waiting passively for matters to be presented by counsel.

Generally, citizens trust courts only if judgments are viewed as fair and efficient. Case management undertaken by courts can affect both the pace of litigation and perception of whether the resolution is fair. Empirical studies suggest that courts which took the longest time from commencement to disposition were those that exercised little control over the pace of litigation and developed little understanding of complex cases prior to the point of trial.

References:

* H.K. Woolf, Access to Justice (Final Report to the Lord Chancellor on the civil justice system in England and Wales) London 1996;
* H.K. Woolf, Access to Justice (Interim Report to the Lord Chancellor on the civil justice system in England and Wales) London 1995;
* J. Wood, 'The Changing Face of the Case Management: The New South Wales Experience, Paper, Aug. 1994; Mahoney, et al "Changing Times in Trial Courts," National Center for State Courts, Williamsburg 1988.

Slide - 3

JUDICIAL CASE MANAGEMENT CAPACITY IS JURISDICTION-DEPENDENT

- Civil law tradition versus common law tradition
- Variation in local procedural rules

The extent to which judges can "manage" litigation necessarily depends on the procedural rules of the jurisdiction in question. For example, courts in countries based on the civil law tradition generally have fewer opportunities to influence through judicial intervention the pace or structure of litigation than courts in systems based on the common law tradition.

Courts in some jurisdictions have developed detailed rules and practice directions to ensure that trials are expeditiously and appropriately conducted.

Recognizing the variability across jurisdictions in this area, the purpose of this presentation is to point out the positive role that judicial case management can play in the environmental litigation context and to stimulate thinking about how to utilize whatever intervention opportunities may be available in the jurisdiction in question.

To the extent that the courts in a given jurisdiction find that national law precludes constructive judicial intervention in the litigation process, the methods and techniques in this presentation may offer ideas in terms of how national law might be adjusted, as appropriate.

Slide - 4

COMMON COMPLAINTS ABOUT LITIGATION GENERALLY

- Too expensive
- Too slow in resolving disputes
- Too complex
- Inequitable and inaccessible, favoring wealthy litigants over those that are under-resourced

These are some of the common concerns regarding the litigation process. As will be seen, they have particular significance in the environmental context.

Reference:

* H.K. Woolf, Access to Justice (Final Report to the Lord Chancellor on the civil justice system in England and Wales) London 1996.

Slide - 5

WHY "MANAGE" ENVIRONMENTAL CASES?

- Environmental cases can be complex, and complex cases in particular benefit from active judicial case management
- Judicial case management can substantially help achieve foundational environmental protection principles

Why manage environmental cases? Here are two of the reasons:

* Environmental cases can be complex, and complex cases in particular can benefit from active judicial case management

* Judicial case management can serve as an important vehicle for achieving foundational environmental protection principles in the litigation context

Slide - 6

CASE DYNAMICS IN THE ENVIRONMENTAL SETTING

- Environmental degradation is often associated with enterprises having both the incentive to avoid the costs of environmentally responsible behavior and the finances needed to litigate aggressively
- Environmental impacts often borne by ordinary citizens and public resources
- Frequently an imbalance in the capacity to litigate in environmental cases

The types of issues common to the litigation process arise with particular force in the environmental context, as environmental degradation is typically associated with for-profit enterprises, and is often the product of efforts to avoid the sometimes significant costs of environmentally responsible behavior. Moreover, these enterprises frequently have the resources to aggressively defend themselves in litigation. Meanwhile, environmental impacts are often borne by ordinary citizens and the public at large; hence, there is frequently an imbalance between those who degrade and those who suffer the degradation in terms of the capacity to litigate.

Slide - 7

A "PRINCIPLED" LOOK AT MANAGING ENVIRONMENTAL LITIGATION

- Principle of Prevention: Justice delayed is justice denied, particularly in environmental context
- Rio Principle 10 calls for effective access to judicial and administrative proceedings, including redress and remedy

It is often significantly more costly and difficult to remediate environmental harm once suffered than to prevent it from occurring in the first instance. Indeed, sometimes complete recovery from an environmental tragedy is simply not possible. Accordingly, a justice system that is slow to respond can, contrary to the principle of prevention, exacerbate environmental problems.

Recall that Principle 10 of the Rio Declaration includes the idea that "Effective access to judicial and administrative proceedings, including redress and remedy, shall be provided." Effective access to justice necessarily requires justice that is comprehensible and affordable. A similar concept is imbedded in the Aarhus Convention (Europe), which seeks to enhance public participation and right of access to justice in environmental matters.

Incentives are sometimes present on the part of well-financed litigants to drive up the cost of environmental litigation, or to attempt to protract litigation, in order to make the process unaffordable to ordinary citizens and poorly financed litigants. To the extent that they are successful in such efforts, access to justice in the environmental setting is plainly frustrated.

Reference:

* UNEP Training Manual on International Environmental Law, 2006, Chapter 3.

Slide - 8

A PRINCIPLED APPROACH (CONT.)

A principled approach to environmental case management attempts to produce a litigation process that is:

- Just and fair
- Speedy
- Inexpensive
- Proportionate
- Simplified

Priorities for case management in the environmental context are as follows:

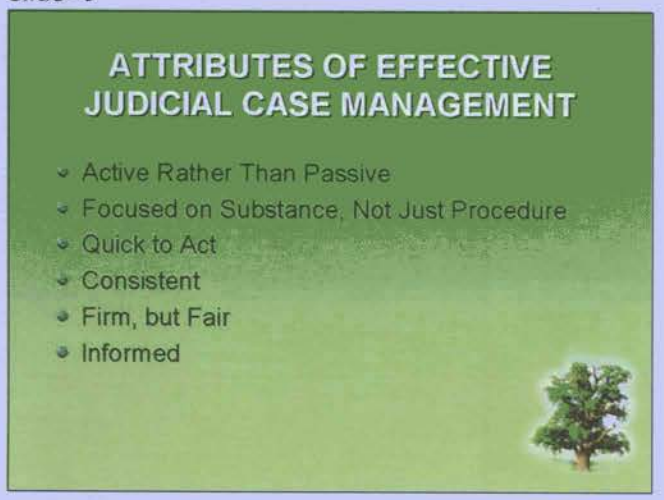
* Just and fair: This is of course the foundational priority for case management. Whether justice is done in a given case often turns on success in achieving the other priorities listed below.
* Speedy: Again, environmental cases frequently need to move quickly to avoid aggravation of environmental conditions, which can lead to more costly and difficult remedies.
* Inexpensive: Vindication of public and citizen rights often depends on the affordability of the litigation process.
* Proportionality: The idea here is that, with the court's assistance, the cost and complexity of litigation should be proportionate to the complexity and importance of the case.
* Simplified: To the extent that the litigation process can be simplified, all of the foregoing priorities become much more readily achievable.

So, at bottom, the central objective of case management in the environmental context is to secure a just, speedy and inexpensive determination of every action.

Reference:

* H.K. Woolf, Access to Justice (Final Report to the Lord Chancellor on the civil justice system in England and Wales) London 1996.

Slide - 9



Effective judicial management generally has the following characteristics:

* **Taking an Active Role.** The judge attempts to anticipate problems before the problems arise, rather than waiting passively for matters to be presented by counsel. Because the attorneys may become immersed in the details of the case, it may fall to the court to provide the innovation and creativity needed to bring the case forward in an orderly manner.

* **Looking at Substance, Not Just Procedure.** The judge's involvement is not limited to procedural matters. Rather, the judge becomes familiar at an early stage with the substantive issues in order to make informed rulings that help define the central issues, as well as rulings on related matters, such as scheduling, bifurcation of trial, and consolidation of related proceedings.

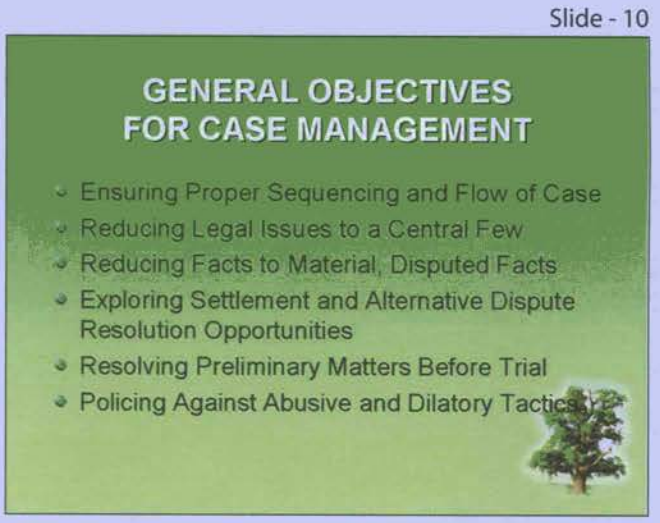
* **Acting Quickly.** The judge decides disputes promptly, particularly those that may affect the course or scope of further proceedings. Delayed rulings may delay other litigation events, increase the cost and burden for litigants, and ultimately lead to even more of the court's time being consumed.

* **Staying Involved.** The judge's presence in the case is consistent and persistent, and includes monitoring the progress of the litigation to see that schedules and other judicial directives are being followed. The judge may call for interim reports between scheduled conferences.

* **Firm, but Fair.** Time limits and other controls and requirements are not imposed arbitrarily or without considering the views of counsel, and are revised when warranted by the circumstances. Once having established a schedule or plan, however, the judge insists that schedules be met and, when necessary, imposes appropriate sanctions for delays, especially delays that appear to be tactical by a litigant. At the same time, judges remain open to adjusting the schedule or plan as changing circumstances arise or new information becomes available.

* **Informed About the Case.** The judge's preparation sets a positive tone for the litigation and enhances the judge's credibility and effectiveness with counsel and those they represent.

Slide - 10



General Principles or Goals for Efficient Case Management:

* **Attention to Proper Sequence or Chronological Order.** For example, the court's checking early to assure that all necessary or appropriate parties are before the court can avoid the late appearance of a necessary party, or a finding that a necessary party is not in the court's jurisdiction -- issues that can cause much delay or wasted litigation activity if they surface later in the litigation.

* **Encourage Parties to Identify the Central Issues.** Where possible, the judge should encourage the parties to focus on the litigation on those issues that are central to resolution of the case. This may mean pushing the parties to abandon weak arguments and disputes over minor issues that will not affect the outcome of the case. Parties must also be encouraged to identify those issues about which they can agree. If these issues are not eliminated early, the court may spend time later ruling on such issues. Judges must also recognize that reaching agreement over the non-central issues may take some time as the parties learn more about the facts of the case.

* **Encourage Parties to Agree to Facts That are not Genuinely in Dispute.** To the extent that the parties can agree on the facts in the case, only on those facts genuinely in dispute will require attention at trial.

* **Explore Settlement and Alternative Dispute Resolution Opportunities.** Except where precluded by national law, the judge should, at all stages of the case, should encourage the parties to settle the case and explore alternative dispute resolution opportunities. Generally, litigants are more satisfied and comply better with agreements they have reached to settle disputes. Alternative dispute resolution is discussed further in Presentation 10.

* **Carefully Choose When to Hold Hearings.** Hearings can be useful to focus the parties attention on issues, but should not be scheduled for matters that can be resolved based solely on the papers filed with the court.

* **Resolve Pretrial and Preliminary Matters before the Trial Date.** Trial typically requires the presence of many people in the courtroom – lawyers for parties, witnesses, etc. Expense and burden to both the court and the parties can be avoided by resolving before the trial date all matters that do not need or deserve attention at trial.

Slide - 11

POTENTIAL TOOLS FOR MANAGING ENVIRONMENTAL CASES

- Pre-trial Orders and Hearings
- Litigation Plans
- Alternative Dispute Resolution
- Use of Non-Judges for Ministerial Acts
- Court Management of Expert testimony
- Stipulation to Facts and Evidence
- Bifurcation, Summary Judgment, and Other Expediters

Although the capacity of the court to manage the litigation process varies from jurisdiction to jurisdiction, it bears noting that there are a number of tools that have been put to good use by courts in some jurisdictions to manage environmental litigation. Courts can consider these as appropriate and to the extent permitted within their judicial systems. Some of the primary tools in the case management tool kit are listed on the slide.

Slide - 12

PRE-TRIAL ORDERS: PROVISIONAL OR INTERIM REMEDIAL MEASURES

- Where environmental damage may continue pending trial
- Where there is risk that evidence may be destroyed

Generally, pre-trial orders and pre-trial hearings can be used by the judge to direct the proper course and chronological ordering of the litigation. They can also be used to help focus issues and allow the judge to learn about the central contentions and undisputed facts before trial.

Some cases present urgent issues whose resolution may be frustrated if the judiciary does not issue preliminary orders preserving the status quo while the case is pending trial. Such preliminary orders can include a temporary injunction (also called a temporary or interim injunction), or an order of mandamus to order a government agency or public body to do something which it must do by law but has neglected or refused to do. Preliminary injunctions and mandamus orders are discussed further in Presentation 9.

Preliminary orders may be needed if the environmental damage or harm is continuing and judicial intervention is necessary to prevent further irreparable harm, or where there is risk that evidence will be lost or destroyed.

In some jurisdictions, truly urgent matters can be addressed by the court on *ex parte* basis (ordinarily followed as soon as practicable by a hearing involving both parties). In some instances an undertaking or security for possible damages may be required to insure against possible losses.

References:

* UNEP Judicial Handbook on Environmental Law, 2005, Chapter 5
* UNEP Compendium of Summaries of Judicial Decisions in Environment-related Cases, 2005, Sibaji Waiswa v. Kakira Sugar Work Ltd. 2001 (High Court of Uganda), page 35; Sierra Club v Coleman, 1975, page 66.

Slide - 13

PRE-TRIAL ORDERS: SCHEDULING AND INFORMATION EXCHANGE

- Requiring Counsel to Meet and Confer
- Requiring Counsel to Submit a Draft Schedule
- Requiring Counsel to Identify Any Related Litigation
- Requiring a Joint Statement of the Case Identifying Agreements and Disputes
- Requiring Parties to Exchange Witness Lists and Exhibits to be Presented as Evidence at Trial

Pre-trial orders can also be used to set a schedule for the litigation and require information exchange.

Requiring counsel to meet and confer over a joint statement of the case can be a useful device both for focusing the issues and identifying areas of agreement, which may in turn foster settlement. Some courts have had good success treating joint statement as tentative and non-binding on any party. Early in the case parties are often reluctant to preclude any possible argument, even if only remote.

Courts frequently have considerable authority in terms of how to manage the litigation before them, and many courts deploy these authorities to desirable ends in environmental cases, which tend to be complex. For example, many courts issue case management orders early in litigation which address such matters as:

- A date for an initial settlement conference with the court to determine whether dispute settlement is possible;
- A deadline for completion of any discovery allowed by local rules;
- A deadline for the filing of motions for summary judgment and other dispositive motions;
- A deadline for the filing of motions *in limine* (for example a motion to strike out evidence) and other evidentiary motions;
- A deadline for submission of stipulated facts and evidence; and
- A date for trial.

Besides enabling the court to maintain control over the proceeding, such orders may reinforce in the minds of the parties the expense and difficulty of litigation and may thus encourage settlement.

Pre-trial orders can also be used to require the parties to exchange key information prior to trial. Justice is rarely served by surprise, and case resolution can be greatly facilitated through such an exchange. Examples of information that can be exchanged include exhibits intended for use as evidence, identification of witnesses that will be presented and a summary of their testimony, identification of contested facts, etc. Such exchanges can help the parties better prepare for trial, thereby allowing for more efficient participation, but also hold potential for narrowing the issues and for resolving evidentiary challenges before trial begins.

Slide - 14

PRE-TRIAL HEARINGS: WHY HOLD THEM?

- Check whether all necessary parties are before the Court
- Check for issues requiring recusal by the judge
- Identify need for interim or protective orders
- Focus issues
- Establish, or check compliance with, deadlines
- Help the Judge learn about the case
- Rule on pre-trial motions
- Check on readiness for trial
- Explore whether settlement is an option

Why hold pre-trial hearings? They serve a number of purposes, including those listed on the slide here. They also can be used to facilitate agreement on evidence to be submitted, confirm the witnesses to be called and subjects to be addressed through testimony, and estimate the length of trial.

Slide - 15

PRE-TRIAL HEARINGS: WHEN TO HOLD THEM?

- Early in the Case
- After All Necessary Parties are Joined
- After Discovery is Completed

Options in terms of when to hold pre-trial hearings include:

Early in the litigation. This has a number of advantages. It allows the court to ensure that all necessary parties are before the court; make sure that the court has jurisdiction and that the venue is appropriate; make sure that there are no grounds for recusal or disqualification of the assigned judge; explore possibility of settlement; establish expectations for future pre-trial hearing (i.e., requirement that the parties meet and confer before the next hearing). The first pre-trial hearing also presents an opportunity to determine whether there are any related cases pending before the court or in other jurisdictions, and whether any orders need to be entered to protect evidence from being destroyed, or to maintain the status quo or avoid irreparable harm.

After all Necessary Parties are Joined. After all necessary parties have been joined, the convening of a case management conference can be useful. The conference can be used to identify early in the litigation points of fact and law that are not in dispute; establish a plan for discovery where permitted by national law (i.e., document exchanges, depositions of witnesses, written interrogatories), along with procedures for resolving any discovery disputes; establish deadlines for motions; explore settlement; set a trial date; and discuss whether the trial should be split. Notably, parties can be required to meet and confer before the case management conference and to file a report identifying issues in dispute.

Post-Discovery Conference. In jurisdictions allowing for discovery, a post-discovery conference can be used to identify any disputes regarding admissibility of documentary evidence, rule on any pre-trial motions, explore settlement, confirm the trial date, consider split trial of specific issues, and establish any other case-specific rules for conduct of the trial (i.e., time limits for each side to present their case, limit the time allowed for cross-examination of witnesses, limit the number of witnesses, etc.). Here again, parties can be required to meet and confer before the post-discovery conference to finalize stipulations, witness lists, exhibits, and identify factual issues for trial and any disputed propositions of law.

Slide - 16

LITIGATION PLAN

A Litigation Plan sets procedural steps with deadlines for the case to move through pretrial proceedings to summary disposition or trial. It often includes:

- Description of factual disputes and stipulations
- Deadlines for discovery and/or information exchange, witness identification, deadline for pretrial motions, anticipated trial date
- Establish procedures for handling documents/evidence at trial

In some jurisdictions, the parties are required to develop a Litigation Plan, with guidance from the judge, identifying the chronological steps to be taken by the parties to get ready for trial. This is most common in the context of complex litigation.

A litigation plan typically prescribes a series of procedural steps with deadlines that collectively establish a timetable for the case to progress through pretrial proceedings to summary disposition or trial. It also typically requires the parties to meet and confer regarding: factual issues of disagreement and stipulations, when disclosure of documentary evidence is to occur and what documents must be disclosed, identification of witnesses and the subject of their testimony, deadlines for filing pre-trial motions, including evidentiary motions, motions to dismiss, and motions for summary judgment.

The attorneys for the parties are often assigned responsibility for developing the litigation plan since they are most familiar with the claims and underlying facts, and can be held accountable for complying with the plan. The judge typically provides supervision, maintains control, and sets a tone that demands both respect and cooperation not only between the court and the attorneys, but also among the attorneys.

Slide - 17

CONTENTS OF LITIGATION PLAN

- Agreed and disputed facts
- Deadlines to add parties
- Coordinate litigation in other courts
- Identify jurisdictional issues
- In multi-party cases, defining counsel roles
- Evidence preservation requirements
- Numbering system for documentary evidence
- Procedures for exchanging evidence
- Guidelines and schedules for disclosure
- Deadlines for motions
- Setting trial date
- Identify issues proposed for split trial

This slide identifies the range of topics that can be addressed by litigation plans.

Slide - 18

ALTERNATIVE DISPUTE RESOLUTION (ADR)

NEGOTIATION

MEDIATION

NEUTRAL EVALUATION

ARBITRATION

Another tool in the case management tool kit is Alternative Dispute Resolution. Presentation 10 will focus more extensively on this topic. For now, suffice it to say that the various ADR techniques can, by virtue of their capacity to resolve issues or entire cases, be of great assistance to the court in the case management challenge.

Slide - 19

USE OF COURT-DESIGNATED PERSONNEL TO ASSIST IN CASE MANAGEMENT

What case management functions might be assigned to a non-judge?

1. Meetings for reports on progress;
2. Monitor discovery and identify disputes for Court decision
3. Take phone calls and screen issues for Court decision;
4. Help the parties identify central and peripheral issues;
5. Identify opportunities for settlement or ADR

The court's case management burden can sometimes be alleviated through the assignment of certain ministerial functions to non-judicial personnel appointed or designated by the court. For example, such non-judicial personnel can be used in lieu of the judge to hold regular meetings with the parties to monitor their progress in following the litigation plan and assure that they are moving forward with preparing for trial and appropriately exploring ADR options.

Assignment of this kind of role to a non-judge may be useful in freeing the judge to attend to other cases, while assuring that someone is monitoring the parties' progress. The judge can be brought in to resolve particular disputes, including disputes regarding what must be disclosed or withheld from disclosure.

The judge should decide early in the litigation whether to refer all or any part of pretrial supervision to a subordinate member of the court's staff or an outside "master". In making that decision, the judge needs to consider a number of factors, including the experience and qualifications of the available court personnel, the relationship and attitude of the attorneys, the extent to which a judge's authority may be required, the time the judge has to devote to the litigation, the novelty of the issues presented and the need for innovation, and the judge's personal preferences.

What might be assigned to non-judicial court personnel or an outside special master?

1. Holding regular meetings for reports on progress;
2. Reports on discovery and early identification of possible discovery disputes (in jurisdictions that allow for discovery) that might require court decision;
3. To be available by phone call to address problems that might arise and determine which ones must be brought to the judge's attention;
4. Help the parties identify the central issues for presentation to the judge and peripheral issues not requiring judicial decision;
5. Help the parties identify opportunities for settlement or alternative dispute resolution.

Slide - 20

COURT MANAGEMENT OF EXPERT TESTIMONY

- Restricting areas of expert testimony
- Structuring trial to group expert testimony by topic
- Determining methods for the "vetting" of expert testimony
- Court-appointed experts

Expert testimony can add significantly to the cost and complexity of environmental proceedings. To contain the expert process, and ensure proportionality of proceedings, the court can, among other things:

* Restrict areas of expert testimony – The court can police the process to help ensure that expert testimony is only being directed at those issues which will genuinely be informed by such testimony.

* Structure – There may be certain economies and other advantages that can be realized though grouping expert testimony by topic. For example, if all expert testimony on a given topic is heard in succession at trial, not only may this alleviate repetition of foundational or background testimony, but also may, by virtue of the juxtaposition of the witnesses, give the court a greater capacity to differentiate between the experts in terms of the persuasiveness of their testimony.

* Determining methods for the "vetting" of expert testimony – In many jurisdictions, the primary method for vetting or testing expert testimony is cross examination by either counsel or the court. An innovative approach being utilized in some jurisdictions is the so-called "hot-tubbing" of experts. The idea is to allow opposing experts to peer review or critique one another's testimony in open court. Besides giving the court a side-by-side comparison of experts from the standpoint of credibility and persuasiveness, it can also encourage experts to limit their testimony to their strongest points.

* Many jurisdictions allow for the courts to appoint their own experts on central issues in a case in order to obtain guidance that is free of influence that may be associated with employment by a party.

A question is how to contend with the cost of court-appointed experts. In most jurisdictions, the courts are without resources to cover these costs. Accordingly, the parties must bear the cost as part of the cost of the litigation.

Reference:

* UNEP Judicial Handbook on Environmental Law, 2005, Chapter 5,

Slide - 21

STIPULATIONS

- Stipulations of facts
- Stipulations to admissibility of evidence
- Agreements as to points of law

A key tool in the case management tool kit is the Stipulation. To the maximum extent possible, parties should be encouraged to identify those matters that are not in dispute before trial so that only those matters that are both material and genuinely in controversy will consume time at trial. Matters frequently addressed by way of stipulation include undisputed facts in the case and the admissibility of evidence. In some jurisdictions, parties also stipulate to points of law in some circumstances, as in the case of jury instructions in jurisdictions allowing for jury trials.

The bottom line is, of course, that the removal by way of agreement of the parties of as many issues as possible reduces the trial burden of the case for the court and for the parties.

Slide - 22

OTHER POTENTIAL CASE "EXPEDITERS"

- Summary Judgment
- Bifurcation
- Offers of Judgment

There are a number of other case management tools that may, where available, have promise for expeditiously and fairly resolving environmental cases. Some of them are shown on this slide. While these tools are often authorized by and described in local rules of court, they may, depending on the jurisdiction, fall within the inherent authority of the court to regulate the matters before it.

Summary Judgment: In many jurisdictions, summary judgment procedures are available to allow for early resolution of legal issues with respect to which material facts are not in dispute. Ordinarily precipitated by motion of a party, summary judgment can serve to resolve part or all of a case. Naturally enough, stipulations of fact can greatly facilitate summary judgment. Where the dispute before the court is principally about a point of law rather than the facts to which the law is to be applied, summary judgment procedure can be very helpful in quickly resolving the case.

Bifurcation: Although bifurcation technically means the breaking of something into two pieces, litigation can be "split" into as many segments as necessary to facilitate the orderly trial of a case. A fairly common approach in the environmental context is to bifurcate the liability and remedy phases of trial, with liability tried and resolved before remedy issues are tried. Another common form of bifurcation separates the trial for primary claims from the trial of secondary or derivative claims (e.g., indemnification claims). Apart from helping ensure orderly case flow, bifurcation, by resolving key issues in a phased way, creates additional opportunities for settlement. If, for example, the primary issue in a case is liability, then, with liability resolved, the parties may be able to agree to a remedy flowing from that liability.

Offers of Judgment: Some systems allow a potentially liable party to make an "offer of judgment" to the person prosecuting the case. If the offer is declined and the relief granted by the court to the offeree is less than that specified in the offer of judgment, the offeror may be entitled to costs and/or fees. In a sense, an offer of judgment is like settlement offer with teeth.

Slide - 23

TOOLS IN MULTI-PARTY CASES

- Require attorneys to coordinate filings to avoid duplication
- Require attorneys to select a lead counsel for questioning witnesses
- Require a uniform tracking system for documents

Because environmental cases frequently involve multiple interests and litigants, it bears brief mention that some additional case management tools may come into play in the multi-party context. Here, parties may have similar, but not identical interests and frequently have separate counsel.

Where there are multiple parties with separate attorneys, the court may consider requiring the parties with similar interests to divide litigation responsibilities among the attorneys. For example:

1. One attorney could be designated to contact the court for scheduling matters and administrative matters. This attorney could be responsible for distributing motions, orders, and notices to the other attorneys; for convening meetings among counsel; for resolving scheduling conflicts; and for keeping a document depository.

2. In those jurisdictions allowing for discovery, the court can ask the parties to designate a Discovery Counsel to lead the factual investigation for parties having a common interest.

3. The court can also ask parties with shared interests to designate a Trial Counsel to lead the presentation of a single case at trial.

Slide - 24

PROCEDURAL SANCTIONS AS AN ELEMENT OF CASE MANAGEMENT

- Sanctions for violation of procedural deadlines or disclosure requirements are sometimes necessary.
- Sanctions should be narrowly tailored to punish the violation.
- Reasons for the sanction should be clearly stated.
- They should be imposed only after notice and an opportunity for explanation.

The court's capacity to manage litigation with authority is closely connected to its power to sanction those who run afoul of the court's procedural directives. For example, a basic element of case management is the establishment of time requirements and limitations in the litigation process. Some advocates may attempt to use delay to their advantage, thereby adding to the cost of proceedings. Where delays are neglectful or deliberate, the court needs to have the capacity to impose sanctions.

Sanctions for non-compliance may include orders or judgments against defaulting parties providing that proceedings be stayed or dismissed in whole or in part. Sanctions may also include establishing evidentiary presumptions against a defaulting party or prohibiting the introduction of evidence that should have been disclosed. They may also include awards of costs.

Pre-trial orders can anticipate an automatic sanction of default for tardy filings unless an extension of time has been obtained.

Slide - 25

PROCEDURAL SANCTIONS – GUIDING PRINCIPLES

- Nature and consequence of the misconduct
- Whether it was willful, or by mistake
- Whether it was isolated or a pattern
- Any extenuating circumstances?
- Who should be sanctioned (counsel/client)?
- What the sanction will accomplish?
- Timing of sanctions may disrupt the Case

This slide reflects some of the considerations that tend to influence the assessment of sanctions for procedural misconduct.

Slide - 26

PROCEDURAL SANCTIONS -- TYPES

- Reprimand of Counsel
- Monetary Fine
- Cost shifting
- Denial of Compensation/fees
- Grant/Denial of Extra Time
- Removal/bar Counsel
- Preclusion/waiver/striking
- Judgment Against (i.e., default)
- Referral for Criminal Investigation

Again, here of some of the principal types of sanctions that courts deploy in their efforts to manage the cases before them:

* Reprimand of Counsel – often an oral or written reprimand of counsel is all that is necessary to deter further violations of procedural or scheduling rules or orders.
* Monetary Fine – a monetary fine may serve as additional deterrence of a further violation. The court should be attuned to whether the fine should be imposed against counsel, client, or both.
* Cost Shifting – where the violation has caused other parties to incur substantial additional expenses, the court may consider whether to make the violator pay those expenses.
* Denial of Compensation/Fees – where the violation is caused by counsel whose fees must be approved by the court, it may be appropriate to deny a portion of the fees.
* Grant/Denial of Extra Time – the court may grant the non-violating parties additional time to respond to pleadings, conduct discovery, or prepare for trial.
* Removal/Bar Counsel – in extreme cases where counsel repeatedly violates the court's orders, the court may consider requiring the party to hire a new lawyer. Such action should be taken with caution and careful consideration as to the potential impact on trial preparation and possible further delay as new counsel prepares for participation in the case.
* Preclusion/Waiver/Striking of Claims – a failure to make required disclosures may be sufficient for the court to preclude related evidence, deem certain facts to be admitted and objections waived, strike claims or defenses, or deny motions.
* Judgment Against (i.e., Default) – the party's conduct may be sufficiently damaging to the litigation process that judgment should be entered against the party. The court should be mindful of the policy in favor of allowing cases to be decided on their merits, rather than defaulted for procedural violations.
* Referral for Criminal Investigation – reserved for those circumstances in which during the course of a proceeding counsel or a party has perpetrated a criminal fraud or committed some other criminal act.

Slide - 27

As has been observed, through his or her leadership, the judge sets the tone for a case and can in many jurisdictions play a constructive role in leading the parties to a resolution of their dispute. This capacity is heightened where national law permits judges to exercise case management authority. By actively engaging in the management and direction of the litigation process, the judge can better ensure just outcomes, and also engender respect for the courts and the rule of law, not only from the parties before it, but also from the society the judge serves.

PRESENTATION 8

UNEP GLOBAL JUDGES PROGRAMME

APPLICATION OF ENVIRONMENTAL LAW BY NATIONAL COURTS AND TRIBUNALS

EVIDENCE IN ENVIRONMENTAL CASES

Slide - 1

OUTLINE OF PRESENTATION

- ENVIRONMENTAL EVIDENCE GENERALLY
- MANAGING EXPERT EVIDENCE
- STANDARDS OF PROOF
- THRESHOLDS OF PROOF
- SIGNIFICANT RISK

Trial courts or Courts of the first instance must have the necessary evidence to decide questions of fact in order to resolve disputes. Environmental disputes often involve consideration, in particular, of scientific evidence. Different sides in a case may bring forward different interpretations of the available science and may even cite different bodies of scientific evidence. Thus, whether reviewing government decisions or private sector conduct, courts are increasingly called upon to consider whether the available scientific evidence has received appropriate consideration and whether a particular body of scientific evidence has probative value.

Economic and sociological analysis can also be presented in evidence in a wide variety of disputes, for example, in challenging the adequacy of a social impact assessment within an environmental impact statement, assessing the economic benefit of noncompliance, and valuing natural resources.

If a trial court misinterprets or misapplies the law, its error can be corrected on appeal. However, if it lacks the necessary or relevant facts, and thus makes an inappropriate decision, the result is harder to correct, even where the particular court system allows an appeal on the merits of a particular environmental decision.

This presentation focuses on the practical issues which judges must confront when dealing with technical evidence, given its inescapable importance to the process of judging environmental cases.

An understanding of the intersections between the environmental sciences, economics and law can be vital in producing the appropriate environmental outcomes within the context of sustainable development.

The presentation will begin with a brief overview of the types of expert scientific evidence that might be presented in an environmental case. The potential complexities in this area are too great to provide more than a cursory overview.

This will be followed by briefly highlighting case management methods.

Slide - 2

EVIDENCE IN ENVIRONMENTAL CASES GENERALLY

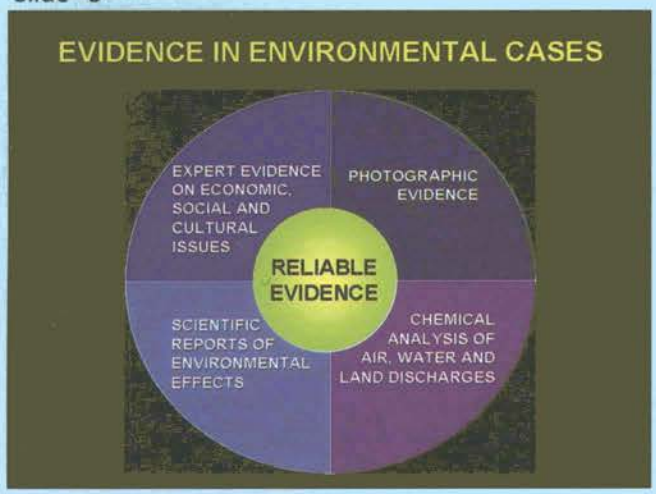
- Technical evidence must be understood
- Courts can appoint experts and make site visits to assist their understanding of the case

In an adversary system, the obligation to present evidence rests on the advocates for each side and it is assumed that they will bring forward all the evidence and legal arguments to support their positions. Nonetheless, judges generally have the authority to appoint experts or to make site visits to obtain the best evidence about the environmental conditions in question. In Kenya, National Environmental Tribunal (NET) cases - five of 2005, have all involved site visits.

See e.g. *Ramiah and Autard v. Minister of the Environment and Quality of Life* (Mauritius Environment Appeal Tribunal, March 7, 1997) (making a site visit to an area whose character as a sensitive wetland was challenged).

Reference:
* UNEP Judicial Handbook on Environmental Law, 2005, Chapter 5

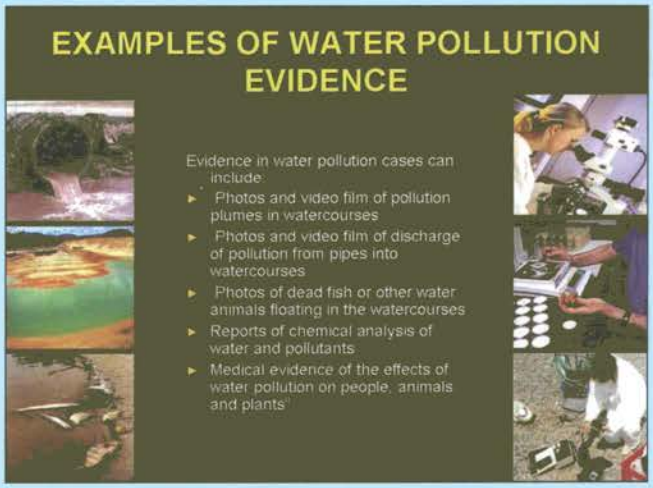
Slide - 3



Evidence in environmental cases can include:

* Photos or video film of pollution events, the destruction of trees or other vegetation or the taking or selling of wildlife
* Chemical analysis of air, water and land discharges
* The identification of species of flora and fauna
* The conduct of tests to be included in scientific reports of environmental effects
* The effects of land degradation on flora, fauna and soil

Slide - 4



Slide - 5

EVIDENTIARY ISSUES IN ENVIRONMENTAL CASES

- Authenticating technical proof
- Evaluating technical evidence

While there are a host of evidentiary matters that arise in the environmental context that appear in comparable form in other types of litigation (issues such as dealing with hearsay evidence, evaluating witness veracity, judicial notice of public documents, etc.), there are several evidentiary areas that surface with particular force in the environmental context. The presentation will deal principally with one general area of significant challenge – evaluating technical evidence and role of expert testimony after dealing briefly with another issue – authenticating environmental proof.

Slide - 6

AUTHENTICATION – WHY A NOTEWORTHY ISSUE?

- Many environmental cases hinge on sampling and analysis of various environmental media
- Integrity of samples and laboratory practices is of significant moment
- Environmental cases can draw new forms of technical proof (e.g., satellite imagery)

It is important that scientific evidence be capable of being authenticated or verified in an objective manner.

Slide - 7

AUTHENTICATING SAMPLING DATA

- Samples properly captured
- "Chain of custody" of samples, cradle to grave
- Transportation and storage of samples in manner preserving integrity
- Analysis pursuant to good laboratory practices, including properly calibrated and clean equipment

In order to have an item entered into evidence, a party generally must "authenticate" it, or adduce that the evidence is in fact what it is represented to be. This simple proposition can lead to a challenging chain of proof in an environmental case, the elements of which can include proof that:

* The samples captured according to sampling protocols (i.e., in the right place and the right way)
* "Chain of custody" was maintained for the samples from the point of sampling to the point of analysis (to ensure that the identity of the samples has been maintained throughout)
* The samples were transported and stored in a manner that did not lead to their degradation
* The laboratory analysis of the samples was conducted accordingly to good laboratory practices, which include the use of properly calibrated and clean equipment
* In summary, samples must be collected by a systematic and careful manner to avoid contamination. The samples must be carefully labeled, and must be accompanied by a scientific report or other adequate documentary evidence

Slide - 8

AUTHENTICATING SAMPLING DATA: EASING THE TRIAL BURDEN

- Stipulations of fact
- Allowing opposing party to analyze "split samples"
- Self-impeachment limitations

This process of authentication can consume a good deal of trial time unless the court encourages a more efficient approach. One important vehicle for accomplishing this is an admission of admissibility. As noted in the last presentation, pre-trial hearings and the parties' litigation plan can focus the parties' attention on whether any of the sampling evidence is in fact contested. If it is not, then the parties should be pressed to stipulate to its admissibility.

In the event that the party not in possession of the evidence is unwilling to stipulate to its admissibility, there may, depending on the sampling protocols followed, still be a way to bridge the gap. It is not uncommon for sampling protocols to provide for taking of double samples or at least a larger sample than is needed to perform the necessary analysis. To the extent that more remains of the samples in question, the sample can be "split" with the other party, who can then perform their own analysis. The mere availability of this option may persuade the non-possessory party not to contest the data. If split sample is analyzed and shows comparable results, this may again lead to the desired necessary stipulation.

It also bears note that if the party opposing the admissibility of sampling data is the party who gathered and analyzed the data in the first instance, as in the case of a company required to self-monitor and report instances of noncompliance, some courts have viewed such data as admissions against interest.

Slide - 9

GENERAL RULE OF EVIDENCE AS APPLIED IN ENVIRONMENTAL CASES

- Facts, not opinions
- Direct observation of facts
- Court can thus receive the most reliable evidence

Moving onto the question of evaluating technical proof and the role of expert witnesses, let's start with some general rules of evidence as applied in environmental cases:

* Witnesses must state facts, not opinions. For expert witnesses, see exception – next slide.

* The evidence must involve direct observation of facts -- what the witness saw, heard, smelt, felt or tasted personally.

* The reason for favouring direct observation is so that the court can receive the most reliable evidence.

Slide - 10

EXCEPTION FROM THE GENERAL RULE OF EVIDENCE

- Matters calling for special knowledge – Here, opinion evidence can be sought

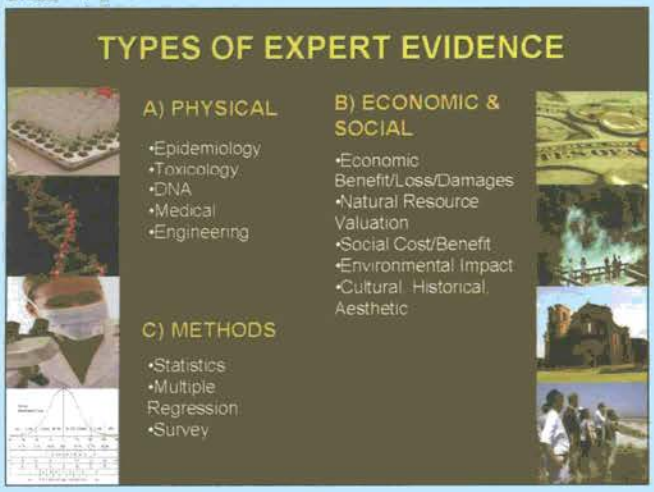
What plant is it?

An exception from the general rule of evidence:

Where matters calling for special knowledge or skill are concerned, the court may not be properly equipped to draw the proper inferences from the facts stated by witnesses. Opinion evidence can then be sought.

An example of an exception to the general rule of evidence is where the primary facts may describe the physical appearance of a plant, but a judge is not able to conclude whether the plant is a member of a threatened species. A witness is able to state an opinion on matters calling for special knowledge or skill, provided the conditions for admissibility of expert opinion evidence are satisfied.

Slide - 11



Scientific evidence is becoming common in many kinds of cases and is nearly universal in environmental matters. Scientific evidence can be drawn from the physical sciences, from the social sciences or from mathematics and statistics. It may be offered by individuals possessing scientific, technical, or experiential-based knowledge or education. In essence, the court might be informed on an issue by anyone whose skill, experience, training, or education may assist the fact finder in understanding the evidence or a disputed fact, or in drawing inferences from facts.

Physical: this can involve the following areas:

- Environmental impact assessment
- Biotechnology assessment
- Endangered species impacts
- Ecosystem management
- The effect of hazardous wastes and chemicals on people and the environment

Economic and social: this can involve the following areas :

- National, regional and local planning
- Calculation of benefits and costs to local economies
- Calculation of natural resource damages
- Calculation of the economic benefits of noncompliance
- Negative and positive effects on employment
- The implementation of statutorily-backed economic instruments such as "load-based" licensing systems for pollution control
- Alternative development scenarios

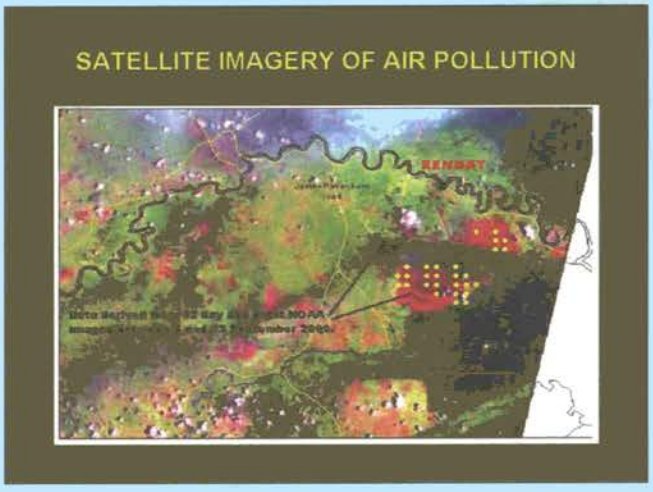
Mathematical: this can involve the following:

- statistics
- multiple regression analysis
- survey data

Reference:

* UNEP Judicial Handbook on Environmental Law, 2005, Chapter 5, "Litigation".

Slide - 12



Satellite imagery can assist in pinpointing causes of air pollution, and can thus be used as evidence in courts in many jurisdictions. However, because of restrictive rules regarding admissibility of evidence, some courts find it difficult to accept such images. One of the issues presented is one of authentication: what is the assurance that the image has integrity as an accurate and temporally correct depiction of facts on the ground? In some jurisdictions satellite imagery is a tool for inspectors rather then courts.

Slide - 13

TOXICOLOGY

- The study of the adverse effects chemicals have on living organisms - symptoms, mechanisms, treatments and detection of poisoning.
- Toxicological evidence may be offered when there are claims that chemical exposure caused a disease or injury.
- Toxicology attempts to determine at what doses chemicals cause disease or injury.
- Toxicology answers this question: What risk or probability of injury is associated with different doses of exposure?

By themselves, toxicology studies rarely provide direct evidence that a disease in an individual was caused by a chemical exposure. Instead, toxicology studies provide information regarding increased risk or probability of contracting a disease from different exposure levels. It also explains how a chemical causes a disease by describing the physiological effects that exposure produces.

Courts will see toxicology evidence generally in two types of cases. First, where an individual or group believes that they have been injured by exposure to a chemical that was released into the environment by others, toxicological evidence will be introduced to show that the chemical can or does cause the type of injury experienced. Second, toxicological evidence will be introduced in regulatory proceedings to show that a particular chemical does or does not pose a risk to the environment or population at a given exposure level.

Toxicology research ordinarily involves exposing animals or tissue to the chemical at different doses, monitoring changes to the animal or tissue, and comparing the results with an unexposed or control group. Because testing on humans is unethical, rarely will the toxicology evidence directly show effects on humans. Instead, inferences must be drawn from the similarity between the test animals or tissue to humans or human tissue.

A central tenant of toxicology is that any substance can be poisonous, or have negative effects, in high enough of a dose. Even consuming too much water can kill or cause other problems. Thus, the question addressed is what dose produces the response? The term LD50 is used to identify the dose at which a compound is lethal to, or kills, 50% of the test animal within an identified period of time. The term "NOEL" means "no observable effect level" and is used to identify the "threshold" of the substance's identified effect.

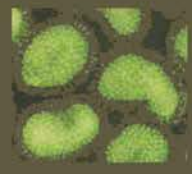
Areas of Dispute:

1. Can the tests on the animal be extrapolated to humans? What is known about similarities and differences between the animal and humans?
2. Does the chemical affect a specific organ of the body? Will humans be affected similarly?
3. Are the studies just of cellular toxicity? Or, do they also show whole body toxicity? Can extrapolation be made from one to the other?
4. What is known about the chemical structure of the substance?
5. Is temporal association between exposure and disease biologically plausible?

Slide - 14

EPIDEMIOLOGY

- Studies the occurrence, distribution, and progress of disease in human populations.
- Epidemiology identifies factors that are associated with increased risk of disease.



Here again, ethical constraints limit the establishment of a controlled study on humans, with random assignment to the test and control groups, and identification of all outside influences. Thus, randomized trials or clinical trial experiments are rarely available.

Most epidemiology studies rely on "observation" of a population that has been exposed to a suspected harmful agent.

Study designs range from the observational to experimental, with the purpose of revealing relationships between exposures to outcomes such as disease, wellness and health indicators.

Epidemiology is a collection of statistical tools used to identify the associations of exposures to health outcomes, and using inferential logic to identify causal relationships.

The following kinds of questions tend to inform epidemiological determinations:

* Is there an observed association between a factor or agent and increased risk of a disease?
* Is the association in the proper temporal relationship (exposure followed by disease)?
* How strong is the association?
* Is there a dose-response relationship (i.e., higher dose associated with higher incidence of the disease)?
* Have the results been replicated?
* Is the association biologically plausible as a cause?
* Are there any alternative explanations?
* What is the effect of ceasing exposure?
* What sources of error in the study may contribute to an inaccurate result?

Slide - 15

ECONOMIC LOSS/DAMAGES

Seeks to determine the difference between the value after the damage causing event and what the value would have been if that event had not occurred.

Economic loss estimates require:

* Characterization, and valuation, of what the situation would have been without the harm/injury.
* Characterization of the causation event – what caused the harm?
* Characterization, and valuation, of what exists after the causal event.

The goal is to identify the difference, or loss of value, between what would have been but for the damaging event and what exists after that event.

Economic calculations of this kind must take into account lost interest or economic return on investment; and "discount" or present value of losses or damage that will extend into the future.

The valuation methods used must also take into account the effects of taxation. In other words, the valuation must recognize that, while income is generally taxed, some tax systems do not impose a tax system on damage awards for loss of future income.

The economic valuation of loss must also take into account the potential for mitigation of the loss.

Slide - 16

NATURAL RESOURCE DAMAGE (NRD)

- Full compensation to the public for the loss, or lost use, of natural resources or the services they provide
- Underlying goal is to reverse loss to the "public trust" (the nation's natural heritage)
- Question is how to restore, replace, rehabilitate, and/or acquire equivalent natural resources.

Where a release of toxic or hazardous substances into the environment has resulted in damage to publicly owned lands or natural resources held in common by the citizens of a country, the Courts are often asked to determine the value of the lost resources and to impose a damage judgment against those responsible. Damages as remedies is discussed more fully in Presentation 9. Here, we look at natural resource damages as an example of an area with respect to which economic evidence and theory is key.

Determining the value to the public of natural resources that are not regularly bought and sold is not easy because there is no readily available price comparison that can be used. Economists have developed a variety of theories and approaches to valuing resources that are valuable, but not traded in the marketplace.

One way of doing this is to look at natural resources as assets that provide a flow of "services" to citizens:

* Human use or direct enjoyment
* Human non-use (or passive use) values: option value, bequest value, existence value
* Ecological benefits to other resources

NRD can focus either on restoring natural resources or on providing replacement services.

Slide - 17

NRD – Contingent Valuation

- Survey asking people to put value on environmental amenities
  - How much would you pay to avoid the harm?
  - How much would you have to be paid to accept the loss?
- Used to calculate both use and non-use values
- Previously used for research and policy studies
- Powerful, but expensive and controversial for NRD

One economics-based methodology that is sometimes used to determine values for benefits that are otherwise not able to be quantified (incalculable), is "contingent valuation" (also known as "conjoint"). This basically involves surveying a community in an attempt to assess the value that the community associates with a given resource or environmental amenity. Survey questions might include:

* How much would you pay to avoid the harm?
* How much would you have to be paid to accept the loss?

The questions will give different answers. The first question – this is bounded by the financial resources of the community and will underestimate the value.

The second question – can depend on peoples' knowledge of value of environment and their preparedness to allow sale of exploitation of the environment

Major issues in constructing contingent valuation approaches:

* Choice of population
* Survey method
* Knowledge/description of resources
* Knowledge/description of harm
* Choice of valuation question
* Evaluating loss of use and enjoyment

The challenge is to approximate the value that individuals place on the resource or environment above and beyond any price they actually have to pay. This value can come from active use of the resource (e.g. fishing), or the presence of mind that comes from knowing that the resource is available in a clean state (e.g. passive use).

While this methodology has been used in other areas of study, its application to natural resource valuation is relatively new and not free from controversy.

Slide - 18

NRD – Other Methods

- Travel Cost
- Hedonic
- Combined Travel Cost / Conjoint
- Benefits Transfer
- Habitat Equivalency

Travel Cost as a quantification measure:

* Mainly Used for Recreational Losses
  - fishing, swimming, hunting, boating
* Basic principle is to use the cost to travel to a recreational site as a proxy for the price of that activity to estimate value
* Measures only one component of total value

Hedonic (i.e pleasure-related):

Seeks to "tease out" value of an environmental amenity (or other attribute) by comparing value when the amenity is present with value when it is absent. How much do the prices of similar houses differ based on proximity to pollution source?

Combined Travel/Conjoint:

* Uses both observed behavior and direct questions on value
* Good to estimate both recreational losses and to compare benefits of restoration options
* Can be used to estimate both use and non-use values
* Raises some of the same issues as contingent valuation in isolation.

Benefits Transfer:

* Uses results from one study (any method) to "transfer" values to a similar situation
* Care needed to determine the appropriateness of the transfer
* Challenge is how to adjust the original study to the current situation

Habitat Equivalency:

* Equation that scales compensatory restoration for ecological losses
* Can be used either for "habitats" or "resources"
* Challenge is choice of "metric" to compare service flows
* Must watch for implicit assumptions about equivalence of injury and restoration sites

Slide - 19

Statistics

- Statistical evidence may be part of many kinds of cases, including part of expert evidence of toxicological, epidemiological, economic and natural resource damage.
- Judges must be prepared to learn the terminology of statistics and to discern the strengths and weaknesses of a given statistical approach.

Here are some examples of statistics terms with respect to which some judicial familiarity might be useful:
Population -- In applying statistics to a scientific, industrial, or societal problem, one begins with a process or population to be studied. This might be a population of people in a country, of crystal grains in a rock, or of goods manufactured by a particular factory during a given period.
Sample -- For practical reasons, rather than compiling data about an entire population, one usually instead studies a chosen subset of the population, called a sample.
Descriptive Statistics – A type of data analysis that deals with the question. Can the data be summarized in a useful way, either numerically or graphically, to yield insight about the population in question? Basic examples of numerical descriptors include the mean, medium and standard deviation.
* Mean -- In statistics, mean has two related meanings: 1. the average, which is also called the arithmetic mean or sample mean, and 2. the expected value of a random variable, which is also called the population mean.
* Standard Deviation – Whereas the mean is just the sum of all the observations divided by the number of observations, the standard deviation is used to describe how the observations differ. More precisely, the standard deviation is the most common measure of statistical dispersion, measuring how spread out the values in a data set are. If the data points are all close to the mean, then the standard deviation is close to zero. If many data points are far from the mean, then the standard deviation is far from zero. The standard deviation is important because the closer the data points are to the mean, the greater their statistical reliability.
Inferential Statistics – A type of data analysis used to model patterns in the data, accounting for randomness and drawing inferences about the larger population. These inferences may take the form of answers to yes/no questions (hypothesis testing), estimates of numerical characteristics (estimation), prediction of future observations, descriptions of association (correlation), or modeling of relationships (regression).
If the sample is representative of the population, then inferences and conclusions made from the sample can be extended to the population as a whole. A major problem area lies in determining the extent to which the chosen sample is representative. Statistics offers methods to estimate and correct for randomness (uncertainty) in the sample and in the data collection procedure, as well as methods for designing robust experiments in the first place.

Reference:
* www.Wikipedia.org (Statistics)

Slide - 20

COMPETING SCIENTIFIC EVIDENCE: WHO IS CORRECT?

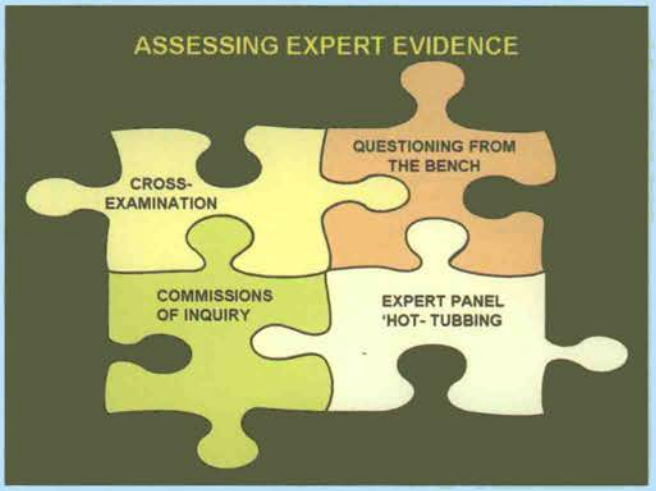
The judge will often need to weigh conflicting testimony by scientific experts. As a practical matter, the issue of expert opinion testimony is most problematic when the experts have been hired and paid by one side or the other. It can give the appearance, and may be the reality, that the expert view is more in the nature of advocacy for the employer than unbiased expert analysis.

In Anderson v. American Smelting & Refining Co., 265 Fed. Rep. 928 (1919), a typical case, the court indicated some of the problems:

"It must not be overlooked that witnesses who give opinion evidence are sometimes unconsciously influenced by their environment, and their evidence colored, if not determined, by their point of view. The weight to be given to such evidence must be determined in the light of the knowledge, the training, the power of observation and analysis, and in general the mental equipment, of each witness, assuming. . . that the witnesses of the respective parties were honest and intended to testify to the truth as they perceived it."

Reference:
* UNEP Judicial Handbook on Environmental Law, 2005, Chapter 5.

Slide - 21



Assessing expert evidence requires the judge to learn the attributes and limitations of the expert's field of expertise and the logic underlying the expert's opinion. This requires the judge to employ many different techniques.
Assessment must begin as part of the early management of the case, and must continue through trial as the judge encourages the parties to define the central factual disagreements and reach agreement on matters not reasonably in dispute.

The narrowing of issues and agreements on undisputed matters should include elements of the expert's reasoning and analysis. For this reason, the presiding judge may consider requiring experts to attend any pre-trial conferences where those issues will be discussed.

Shown on this slide are some of the methods for independently evaluating expert testimony. Commissions of inquiry and "hot-tubbing" are basically means of allowing for peer review or cross-examination of scientific opinion by other scientists independent of the parties to the case.

A range of techniques must be used to assess scientific, technical, economic and social evidence.

Reference:
* UNEP Judicial Handbook on Environmental Law, 2005, Chapters 5, "Litigation".

Slide - 22

"The expert's duty is to provide to the judge or jury "the necessary scientific criteria for testing the accuracy of their conclusions, so as to enable the judge or jury to form their own independent judgment by the application of these criteria to the facts provided in evidence", *Davie v Lord Provost, Magistrates and Councillors of the City of Edinburgh.*

In some jurisdictions, the expert is expected to be a neutral party who gives an objective assessment of a development proposal or the impact of a particular activity on the environment.

Often, however, experts are seen as "hired guns" who appear for one side or the other in a dispute.

This is the reason why many courts, including specialist environmental courts, provide special rules or practice directions to indicate that the expert is there to advise the court.

Reference:
* Davie v Lord Provost, Magistrates and Councillors of the City of Edinburgh 1953 SC 34 at 40

Slide - 23

PRINCIPLES FOR ASSESSING SCIENTIFIC EVIDENCE

- Can the results be tested or verified?
- Has it been peer reviewed? Published?
- Is it widely accepted?
- Is there an identified error rate?

Some factors have been identified as assisting in determinations about the value of scientific evidence by a court:
* Can the scientific theory or technique be tested?
* Has the theory or technique been subject to peer review and publication?
* Is there a known or potential rate of error?
* Has the theory or technique widespread acceptance or only minimum support within the scientific community?
* Is the theory or technique both reliable and credible?

Reference:
* UNEP Judicial Handbook on Environmental Law, 2005, Chapter 5.

Slide - 24

REFERENCE GUIDES

The Court should seek out and use any available reference guide that has been prepared to help judges and lawyers understand the science of particular fields of study.

The U S Federal Judicial Center has one available on the Internet

http://www.fjc.gov/public/pdf.nsf/lookup/sciman00.pdf/$file/sciman00.pdf

Reference guides that are specifically written to aid lawyers and judges understand scientific issues can be very helpful.

The U.S. Federal Judicial Center Reference Guide on Scientific Evidence – available on the internet, at the address on the screen – identifies the typical steps or stages of analysis in different fields. The guide provides questions that the judge can use to explore the methodology and reasoning underlying the expert's opinion.

Slide - 25

EXPERT REPORTS

- Requiring the experts to prepare a detailed written report stating the expert's qualifications, the expert's opinion, and identifying the basis or reasons for the opinion, and supporting data or studies, as well as all information, even if not supportive, considered by the expert.
- Disclosure Order – the one bearing burden of proof should disclose first.
- Follow-Up Pre-trial conference
- Prohibit Admission of Undisclosed Testimony

Because expert reports can be very costly for the parties, the court should not require the preparation of experts reports until after an initial effort to identify the undisputed issues. There is no need for an expert's report on an issue that is not in dispute.

Conversely, the preparation of the expert's report can be very helpful in identifying areas of dispute and agreement. For example, the reports prepared by competing experts might reveal substantial agreement on the central underlying data and analysis.

When requiring the preparation and disclosure of expert's reports, the court should consider whether the disclosures should be taken in stages. For example, requiring reports on the question of liability before analysis of the damages may avoid unnecessary expense, if the court determines that there is not a sufficient case to go forward.

After reports are received from competing experts, the court should consider holding a pre-trial conference or hearing to discuss with the parties and the experts the different assumptions and policy choices reflected in the reports to both help the judge learn the science and help the parties focus and narrow the issues in dispute. The court should focus on each step of the experts' multi-step reasoning process to identify where their analysis diverges. Court may in certain jurisdictions order a joint expert conference and report to the Court.

Slide - 26

WHY REQUIRE EXPERTS' REPORTS?

- Compels parties to focus on the strengths and weaknesses of their own case
- Exchange of reports helps the court learn and helps the parties narrow issues
- Identifies areas of agreement
- Compels improved preparation for trial
- Disclosure may encourage early settlement

Requiring expert reports can be quite useful for the reasons stated above.

Slide - 27

COURT APPOINTED EXPERTS

Where the expert scientific evidence is difficult or incomprehensible, the court may consider:

- Appointing a neutral expert to advise the court
- Appointing a panel of experts to look at an issue and prepare a report

The court must define parameters on the court-appointed experts' communication with the court and with the parties.

As a result of the pre-trial conferences and expert reports, the Court may discover that the parties are not doing an adequate job of explaining the scientific evidence to make it comprehensible to the judge that might hear the case. The judge may thus need to seek assistance in understanding the scientific issues.
It may be helpful to have a neutral expert present a tutorial for the judge on basic aspects of the scientific issue, before the trial evidence from the competing experts is offered.
Example of appointment of court experts:
Rural Litigation And Entitlement Kendera v State Of U.P AIR 1988 Sc 2187 Ranganathan Misra And Murari Mohan Dutt, Jj.
The case arose when the Supreme Court directed a letter received from the petitioner alleging unauthorised and illegal mining in the Dehra Dun area which adversely affected the region's ecology and caused environmental damage, to be registered as a writ petition under Article 32 of the Constitution, and issued notice on the Respondents.
Held:
Having considered several reports made by Committees of Experts appointed by the Supreme Court to examine the environmental implications of limestone mining in the Dehra Dun Valley, the Court, by order dated October 19, 1987, ordered that mining in the area should be stopped, except for three mines in respect of which the leases had not expired. Their operations too, were to be subject to additional conditions set by the Court. In providing reasons for its conclusion, the Court said, "The writ petitions before us are not inter-party disputes and have been raised by way of public interest litigation and the controversy before the Court is as to whether for social safety and for creating a hazardless environment for the people to live in, the mining in the area should be stopped or permitted." The Court remarked that the Doon Valley limestone is a gift of nature to humankind and that forests provide the green belt and are a bequest of the past generations to the present. It also remarked that the problem of forest preservation and protection was no more to be separated from the life style of the tribal people.

References:

* UNEP Judicial Handbook on Environmental Law, 2005, Chapter 5.
* UNEP Compendium of Summaries of Judicial Decisions in Environment-related Cases, 2005, page 139
Rural Litigation And Entitlement Kendera v State Of Uttar Pradesh AIR 1988 Sc 2187 Ranganathan Misra And Murari Mohan Dutt, Jj.

Slide - 28

PLACING LIMITS ON EXPERT EVIDENCE

- Orders limiting expert evidence may be needed to prevent abuse.
- Cumulative evidence may be prejudicial.
- Expert evidence on undisputed issues may be intended to overwhelm a litigant with fewer resources.

The court has an obligation to expedite litigation and control costs in fairness to all parties, and the court has a legitimate interest in protecting against an unnecessarily long trial that would waste the court's time.

Slide - 29

RULINGS BEFORE TRIAL

- Motions to exclude expert testimony based on lack of qualifications, insufficient scientific agreement, unusual or inappropriate methods, etc
- Motions for judgment based on the Experts' Reports

After the Experts' Reports have been prepared and exchanged, the court might consider inviting motions seeking rulings on evidentiary questions of admissibility of the report, or expert testimony, and motions seeking judgment on any issues that can be decided based on the reports.

The court should be particularly attentive to questions of the expert's qualifications, especially if the expert has considerable experience in a specialized area of science, but is being asked to offer an opinion on other areas that may be related but with respect to which the expert has little or no experience.

Slide - 30

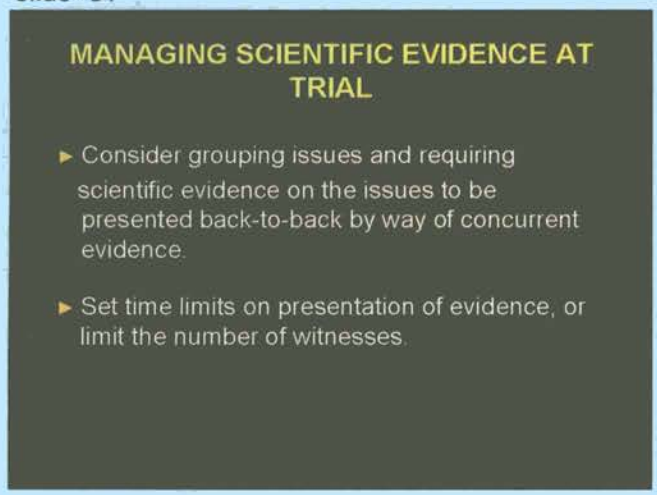
CONDITIONS FOR ADMISSIBILITY OF EXPERT OPINION EVIDENCE

- Four questions:
  - Relevance to proceedings?
  - Is it an area in which expert evidence can be called?
  - Is the witness qualified?
  - Is it otherwise admissible?

When considering whether to admit expert opinion evidence, juges typically ask four questions:-

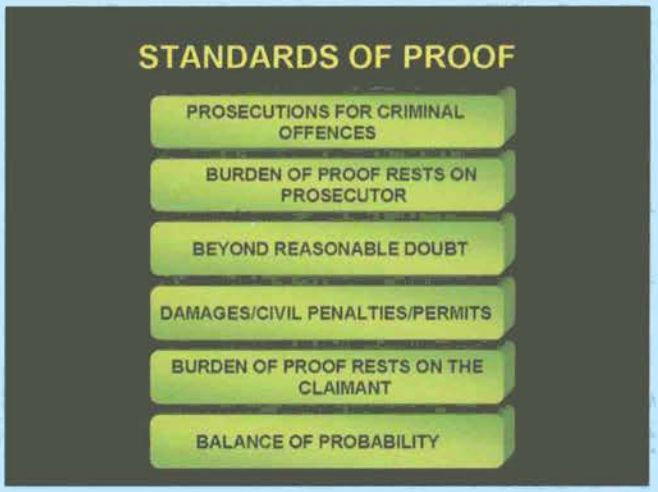
* Is the expert opinion evidence relevant to an issue in the proceedings?
* Is the field of knowledge to which the opinion relates on which expert evidence can be called?
* Is the witness an expert qualified in that field?
* Is the opinion evidence of the expert otherwise admissible?
* That is, are there any reasons why the opinion or the advice of the expert should not be sought?

Slide - 31



Because of the complexity of the subject matter, it may be worth considering to break the evidentiary presentations into discrete elements, allowing complete presentation on one technical area before moving on to another.

Slide - 32



It is worth briefly examining the context in which evidence is offered and, in particular, the standard of proof according to that context.

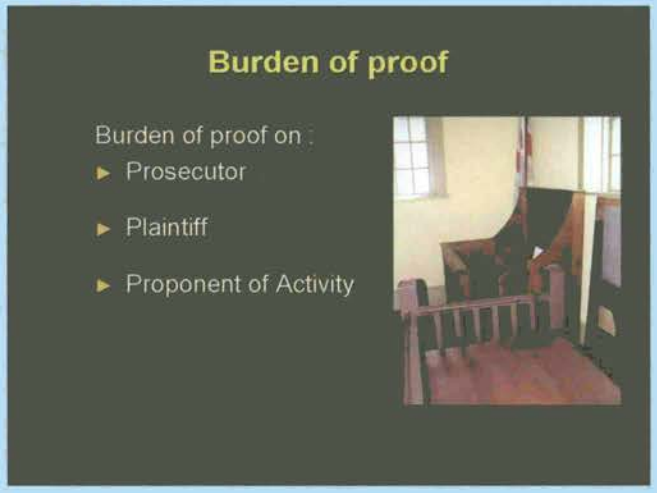
"Beyond reasonable doubt": this is the standard of proof used in most criminal cases, such as criminal prosecutions for violation of environmental laws. The prosecutor must prove each element of the offence beyond reasonable doubt.

"Balance of probability" – more probable than not: this is the standard of proof required in most civil cases, such as civil actions to assess civil penalties, recover natural resource damages, etc.

References:

* UNEP Judicial Handbook on Environmental Law, 2005, Chapter 5.
* UNEP Conservation Council of South Australia v Development Assessment Committee and Tuna Boat Owners Association (No. 2), Trenorden J,

Slide - 33



* In criminal cases the burden of proof rests with the prosecutor
* In civil cases the plaintiff and defendant
* In some environment – related cases burden of proof rests with both

It bears noting that, in keeping with the precautionary approach, some courts have required the proponent of an activity to prove that it will cause no or little harm, rather than demanding that the opponent prove that harm will be caused.

Justice Trenorden, Chief Judge of the Environment, Resources and Development Court of South Australia has stated:

"The question arises as to who has the onus of satisfying us that the proposed development would be carried out in an ecologically sustainable way, and located, sited, designed, constructed and managed to be ecologically sustainable. It is well accepted in the literature, and it stands to reason, that the proponent needs to satisfy us that the development would be ecologically sustainable. In the matter before us, is the proponent called upon to prove this, only when the appellant has proved, on the balance of probabilities, that there is a threat of serious or irreversible damage to the environment? That cannot be the case.. If that is shown, the burden of proof switches to the proponent and it will be necessary for the proponent to show, in order to have his or her development classified as ecologically sustainable, the following:

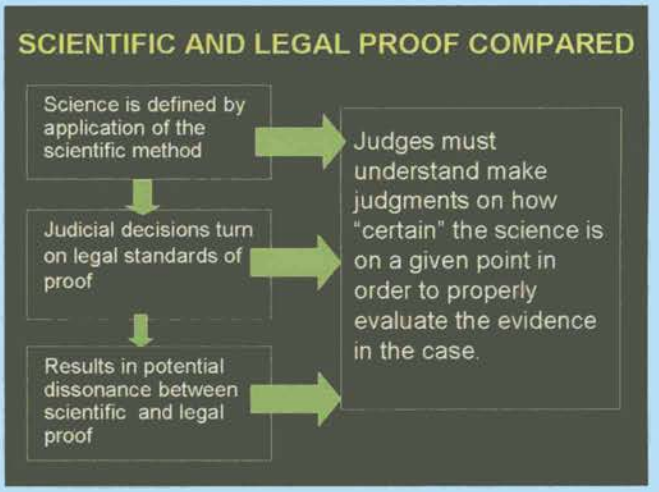
- the measures that the proponent will take (within the limits of practicability) to avoid serious or irreversible damage to the environment; and

- that the risk-weighted consequences of the development assessed together do not suggest that serious or irreversible environmental damage would be sustained"

Reference:

* UNEP Judicial Handbook on Environmental Law, 2005, Chapter 5.
Conservation Council of South Australia v Development Assessment Committee and Tuna Boat Owners Association (No. 2), Trenorden J,

Slide - 34



The very term "scientific" implies a grounding in the methods and procedures of science. Knowledge connotes more than speculative belief or unsupported conjecture. The term applies to any body of known facts or to any body of ideas inferred from such facts or accepted as truthful on solid grounds.

The nature of science is that it is characterized by uncertainty. Scientific studies only report on the data and tentative conclusions drawn from the data. Typically questions for further research or study are identified.

Scientific testimony need not be known to a certainty, but inferences and assertions should be derived by the scientific method. Judges are asked to apply rules of evidence where ambiguities exist and experts differ. Evidence should generally assist the trier of fact to understand the issue and should rest upon reliable, scientifically valid principles. The judge may be required to make findings of fact on the reliability of complicated scientific methodologies.

The judge will often need to weigh conflicting testimony by scientific experts. The judge should be aware that scientists, in formulating their opinions, may not be working with probability concepts that match up neatly with legal standards of proof for criminal and civil proceedings. The degree of certainty that they attach to a given proposition may or may not easily translate to a "balance of probability" or "beyond a reasonable doubt" standard of proof. Judges need to be aware of this potential dissonance and try to ensure that the expert testimony offered allows for the necessary correlation between scientific opinion and legal standards of proof.

Reference:

* UNEP Judicial Handbook on Environmental Law, 2005, Chapter 5.

Slide - 35

CONCLUSION

- Scientific issues are a central part of much environmental litigation
- Special rules and practice directions are needed for hearing of expert evidence
- Court-appointed experts may be one solution to alleged bias in expert evidence

- JUDICIAL FAMILIARITY WITH TECHNICAL STANDARDS AND EVIDENCE
- UNDERSTANDING OF DIFFERENTIATED STANDARDS OF PROOF
- INNOVATIVE FACT-FINDING AND ASSESSMENT TECHNIQUES
- PRINCIPLES FOR DEALING WITH FACTUAL UNCERTAINTY

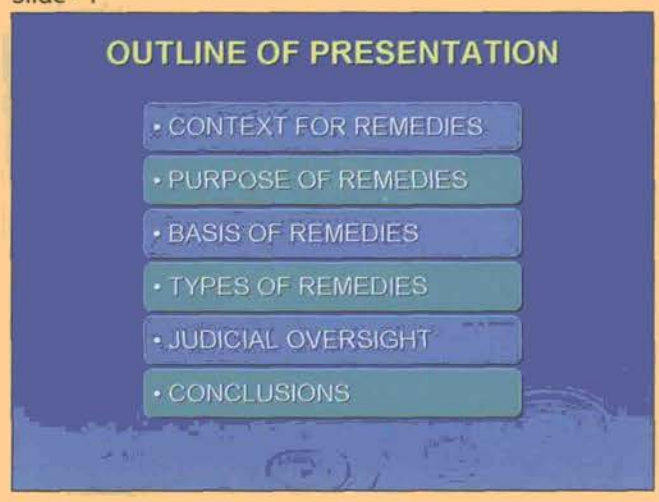
PRESENTATION 9

UNEP GLOBAL JUDGES PROGRAMME

APPLICATION OF ENVIRONMENTAL LAW BY NATIONAL COURTS AND TRIBUNALS

REMEDIES IN ENVIRONMENTAL CASES

Slide - 1



Courts approach the issue of remedies by applying specified remedies where mandated and invoking inherent powers where not. In either case, actions that are brought based upon harm to the environment require appropriate remedies.

The remedial challenge presented by a given case will depend on the nature of the case. Many environmental remedies require judicial discretion and creativity.

In terms of examples of remedies in environmental cases, judges may:
- order a halt to unlawful conduct,
- direct that specific remedial actions be undertaken,
- penalize environmental misconduct,
- compensate for past wrong, and/or,
- provide for a complex, prolonged regime of performance.

These remedies and others are discussed in greater length in this presentation.

Reference:
* UNEP Judicial Handbook on Environmental Law , 2005, Chapter 6.

Slide - 2

In a sense, it is in the fashioning of remedies that judges work most directly with the principles of sustainable development. It is in this setting, for example, that judges practise prevention (by, e.g., enjoining environmentally injurious behaviours) and give substance to the polluter pays principle (by forcing internalization of pollution control costs and by ensuring that polluters, rather than public at large, bear the financial burden of corrective measures). It is also through the fashioning of remedies that judges reinforce the rule of law in the environmental setting by ensuring that violators do not gain advantage by virtue of their misdeeds.

With respect to sustainability, it is in the fashioning of remedies that the judge contends with the confluence of concerns regarding economic growth, social progress and environmental protection. Judges encounter difficult questions in this regard, such as:

- Should an enterprise be allowed to begin or continue operations?
- What are the social/environmental costs of remedy choice?
- How should the available environmental capital be deployed?

Slide - 3

ASSUMPTIONS IN DISCUSSING REMEDIES

- The legal and factual means to establish liability are present
- Courts have either statutory authority or inherent equitable power to fashion judgments
- Courts have coercive power to enforce judgments through monetary and penal sanctions

In discussing remedies, we have to make certain predicate assumptions, including:

* That the legal and factual means to establish liability are present,
* That courts have either statutory authority or inherent equitable power to fashion judgments, and
* That courts have coercive power to enforce judgments through monetary and penal sanctions

Slide - 4

CASE MANAGEMENT CONSIDERATIONS

- Remedy issues can be complex
- Technical assistance/expertise commonly required
- Bifurcation may be advisable
- Court supervision of remedies is often necessary
- Continuing jurisdiction and docket management issues

It bears noting at the outset, and will become clearer during the course of this presentation, that remedies in environmental cases can be technically complex. Indeed, it is challenging for a court to manage the myriad issues without technical assistance.

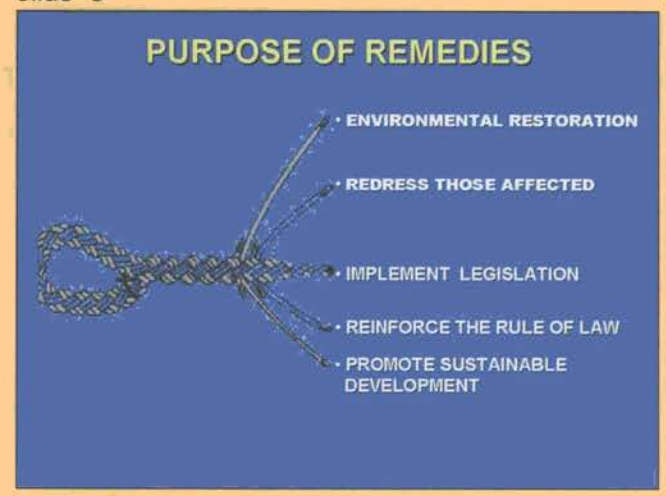
Options for accessing needed expertise in this area include:

* Relying on advocacy of parties
* Seeking government assistance
* Court appointed experts, special masters, or commissions
  - Impose costs on polluter?
* Requiring the polluter to finance or conduct studies:
  - Need mechanism for assuring independence of results
  - impose cost on polluter?

Remedy issues are so complex that the court may want to split the proceeding to address liability issues first so that questions of remedy need be addressed only if liability can first be established.

Remedies in environmental cases can take a long period of time to implement, and may require continued supervision by the court. This must be taken into account managing the listing of cases by the court.

Slide - 5



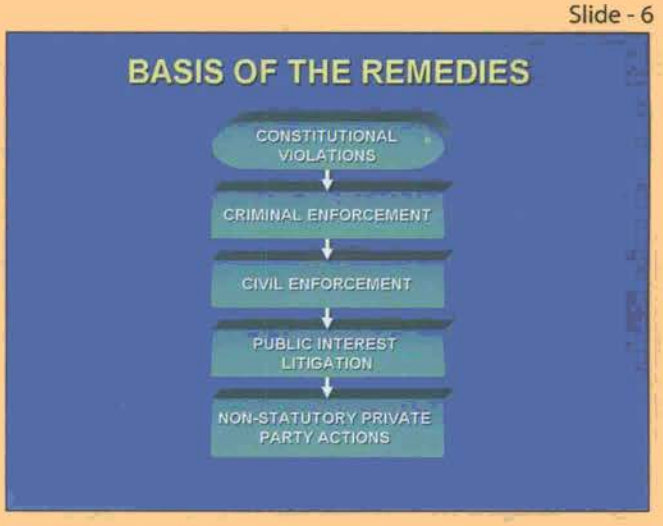
Perhaps the primary purposes of remedies in environmental law are to ensure that the environment is restored as far as possible and that preventative environmental norms are honored. A secondary but nonetheless important objective is to provide redress to those suffering financial or property damage from environmental degradation.

The provision of remedies has the incidental result making environmental law effective, as the imposition of the injunctions and penalties serves as a warning to other persons not to violate the environmental statutes.

They also serve to reinforce the rule of law by ensuring that environmental violators do not benefit financially or otherwise from their wrongful actions.

Ultimately, remedies can assist in the promotion and achievement of development that is sustainable.

Slide - 6



An increasingly common basis for remedies in environmental law are constitutional violations such as right to life provisions. These cases are often brought by citizens and non-governmental entities.

The most common basis for remedies in environmental matters are actions brought by government agencies concerning violations of environmental legislation or administrative regulation. These cases can be framed as criminal prosecutions or, where the legal authorities allow for it, as civil prosecutions.

In the past three decades, actions brought by non-government organisations or individuals, usually known as public interest litigation or citizens suits have been used to stop environmental harm. How these suits function depends on the pertinent jurisdiction. In some jurisdictions, these actions can be brought only against governmental entities; in others, they can also be brought against violators of environmental laws. In some jurisdictions, they can seek only injunctive or declaratory relief; in others, they can also seek the imposition of financial sanctions (such as penalties).

Another important basis for remedies are actions brought by corporations or individuals concerning property damage and economic loss arising from environmentally harmful activity. These normally result in a claim for damages.

Reference:

* UNEP Judicial Handbook on Environmental Law, 2005, Chapter 6

Slide - 7

CONSTITUTIONAL VIOLATIONS AND ENVIRONMENTAL LAW

- Constitutional mandates are typically expressed generally and without remedial guidance.
- Remedies for constitutional violations may require judicial discretion and creativity

The nature of constitutions is such that, ordinarily, no specific obligations or duties are spelled out. For this reason, remedies in cases involving constitutional violations may, in particular, require judicial discretion and creativity. For example, judges may:

* order a halt to unconstitutional conduct
* direct that specific remedial actions be undertaken
* compensate for past wrong, and/or
* provide for a complex, prolonged regime of performance to address environmental degradation. Court orders may include monitoring and self-auditing.

Remedies to address constitutional violations, particularly provisions such as the right to life, have been devised in a range of jurisdictions.

A good example of a broad range of orders is found in the Sri Lankan constitutional case *The Environmental Foundation v The Attorney-General*. The petitioners had alleged that they suffered serious injury to their physical and mental health, and serious damage to property, as a result of large scale blasting in a rock quarry. The Petitioners claimed violations of their rights under various articles of the Constitution: Article 3 (sovereignty is in the people and is inalienable and includes fundamental rights); Article 11 (no person shall be subjected to cruel, inhuman or degrading treatment); Article 14(1)(g) (every citizen is entitled to freedom to engage in any lawful occupation); Article 14(1)(h) (every citizen is entitled to freedom of movement and choosing his residence).
A settlement was negotiated and approved by the court, and the application was dismissed without the award of costs. The Court set out detailed terms of the settlement. These included limiting blasts to three days a week and the setting up of a Monitoring Committee nominated by the parties and local community to approve changes in the blasting regime. Detailed orders were made concerning the intervals between each blasting, and the court specified that the electronic detonation and the safety fuse method must be used. The police were to maintain a monthly report of the detailed operations of the blasting. The settlement also discussed secondary blasting, maximum noise and vibrations, as well as the operation of the crusher and the sounding of warning signals.

In this way, the court was able to specify detailed provisions for the operation of the quarry , which are not otherwise addressed by the regulatory system in Sri Lanka.

References:

* UNEP Judicial Handbook on Environmental Law, 2005, Chapter 6.
* UNEP Compendium of Summaries of Judicial Decisions in Environment-related Cases, 2005, page 192.

Slide - 8

ENFORCEMENT OF STATUTES AND ADMINISTRATIVE REGULATIONS

- Actions brought by government departments normally involve criminal enforcement of environmental statutes
- In addition to the criminal enforcement provisions, many jurisdictions now provide for civil enforcement and appropriate civil remedies under the environmental statutes

The majority of environmental law cases arising in the courts in most jurisdictions involve the enforcement of statutes, generally by way of criminal prosecutions, or the enforcement of administrative regulations, generally using civil suits.

In this setting, judges are frequently called upon to resolve different interpretations of the law, and the resulting decision can have implications beyond the case at hand.

The technical complexity of many environmental laws can lead to statutory ambiguity or a decision by the framers of such laws to settle on broad and general terms that mask disagreement over the detailed substance of the law. It is the role of judges to understand and resolve the ambiguities, in order to come up with a consistent application of the statute from one case to the next.

Reference:

* UNEP Judicial Handbook on Environmental Law, 2005, Chapter 6.

Slide - 9

PUBLIC INTEREST LITIGATION

- Non-government organisations or individuals bring actions (citizen suits) to prevent or stop a harmful activity
- Remedies injunction, or a declaration on a point of law
- Normally monetary damages not sought
- Civil penalties sought when allowed by law
- Order for costs typically requested

Public interest litigation has become a popular form of enforcing environmental statutes. Public interest litigation is referred to in some jurisdictions as "citizen suits."

Remedies in public interest litigation include: preliminary, temporary or permanent injunction, or a declaratory judgment which sets out the rights, duties and obligations of the parties without ordering any action or awarding any damages.

Normally monetary damages not sought although, in some jurisdictions, citizens can seek the imposition of civil penalties through such suits.

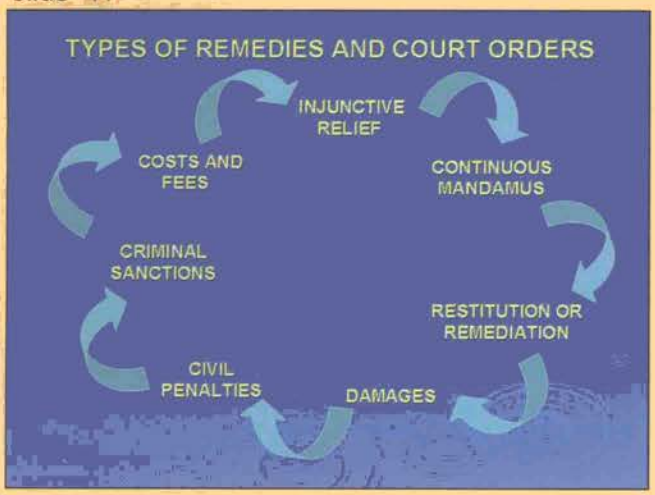
Often public interest litigants will seek an order for costs of the litigation.

Slide - 10

PRIVATE ACTIONS BY CORPORATIONS OR INDIVIDUALS

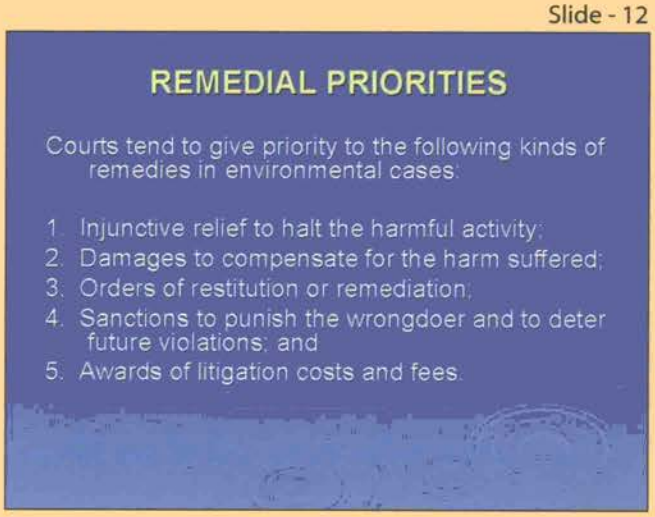
- In common law countries, these actions can be brought in nuisance or negligence
- These actions are generally brought for property damage, economic loss, and personal injury arising from environmentally harmful activity
- The main remedy sought is usually monetary damages

Slide - 11



Having reviewed the types of actions that come before the court, the various types of remedies that tend to be available in the environmental context are now examined. The primary remedies are listed here.

Slide - 12



The judges handbook referred to the remedial tool kit this way. The major categories of environmental remedies are examined next.

Reference:

* UNEP Judicial Handbook on Environmental Law, 2005, Chapter 6

Slide - 13

INJUNCTIVE RELIEF TO HALT THE HARMFUL ACTIVITY

Types of injunctions:

1. Preliminary or interim injunction
2. Temporary injunction
3. Permanent injunction

Injunctions are perhaps the most common remedy in environmental cases. Simply put, injunctions stop, on a temporary or permanent basis, potentially injurious behaviors.

Wherever possible, prevention of harm should be the court's primary objective, especially where there is a constitutional or legislative obligation to protect the environment. The principle of prevention will most likely necessitate injunctive relief where the threat of harm is imminent or harmful activity is on-going.

Types of injunctions:
Preliminary or interim injunction: to halt the activity until the case is fully heard. The process for a preliminary injunction varies by jurisdiction. In most, it requires an expedited hearing of some kind. In some jurisdictions, this can be done by telephone. Examples of preliminary injunction cases in the environmental context might include actions to stop demolition of an asbestos-laden building or the bulldozing of a wetland.

Temporary injunction: to halt an activity for a definite time for particular reasons. An example might be the cessation of open fires during periods of poor air quality.

Permanent injunction: to stop an activity altogether; for example, an ongoing polluting activity.

"Injunctive relief is a long-standing remedy that can abate pollution or other environmental harm. Injunctions . . . typically issue according to an evaluation of several factors: irreparable harm, the absence of other remedies, practicability of compliance, threats to public health, financial effect on the defendant. Preliminary or emergency injunctions, which are frequently issued according to expedited procedures, can be particularly appropriate in environmental cases where urgent action is needed. The decision to issue an injunction and the form of the injunction are left to the trial judge as an exercise of equitable discretion. In some instances, injunctions can be important to securing compliance with the law and requiring affirmative remediation of harmful environmental conditions. Administrative agencies frequently participate in setting out a detailed schedule of required actions designed to cure the violation and remediate the harm."

Reference:
* UNEP Judicial Handbook on Environmental Law, 2005, Chapter 5

Slide - 14

MORE ON PRELIMINARY INJUNCTIONS

PRELIMINARY INJUNCTIONS TYPICALLY REQUIRE:

- Irreparable Harm to party seeking relief
- Movant's likelihood of success on merits
- Risk of Harm to the party required to comply
- Public Interest

As noted, in many countries, the courts are authorized to issue orders designed to maintain the status quo while the case is pending and before a final judgment is entered.

The standards for preliminary injunctions are sometimes not defined by statute or rule and, thus, the precise verbal formulations often vary from jurisdiction to jurisdiction. Nevertheless, generally, the following factors are relevant: (1) the moving party's likelihood of success on the merits; (2) irreparable harm to the moving party if the preliminary injunction is improperly denied; (3) irreparable harm to the non-moving party if the preliminary injunction is improperly granted; and (4) the "public interest."

These rules for protecting the parties from "irreparable harm" while the court is deciding the case represent a form of precautionary principle at work protecting the status quo, at least for the time that it takes the court to fully hear the case.

Irreparable harm to a plaintiff can be to the environment sought to be protected by the plaintiff. Increasingly Courts are less inclined to make a narrow view of harm to the plaintiff.

An example of a preliminary injunction is the case of *Sibaji Waiswa v. Kakira Sugar Work Ltd.* (High Court of Uganda). The applicant sought a preliminary or interim injunction to restrain the defendant from uprooting a protected forest reserve and evicting residents to establish a sugar cane plantation. A prior case was pending but the defendant had begun to take out trees and seed nurseries. The High Court issued a temporary injunction on the basis that the alleged harm could not be remedied by an award of damages alone and on balance the conduct should be restrained until the case could be decided on its merits.

References:
* UNEP Judicial Handbook on Environmental Law, 2005, Chapter 5,
* UNEP Compendium of Summaries of Judicial Decisions in Environment-related Cases, 2005, Sibaji Waiswa v. Kakira Sugar Work Ltd. 2001 (High Court of Uganda), page 35; Sierra Club v Coleman, 1975, page 66.

Slide - 15

CONTINUOUS MANDAMUS

- Orders of mandamus are mandatory orders to force public officials to take an action or to enjoin them from taking an action in order to comply with statutory obligations

An example of a mandamus order is found in a Supreme Court of Nepal decision which issued a series of mandatory orders to protect the environment and religious and cultural sites of importance. *Prakash Mani Sharma & Others Pro Public v. HMG, Cabinet Secretariat & Others,* Writ No. 3017 (1995) (SC, Nepal). These orders included mandamus writs issued to:-

- the Ministry of Youth, Sport, Culture and Archaeological Department, to make proper arrangements for the protection of temples and other archaeologically and historically important places under the Ancient Monuments Protection Act 1956;
- the Trust Corporation to keep accounts of ancient cultural assets under the Trust Corporation Act 1977;
- the city of Katmandu to fulfil its obligation to protect the environment and cultural assets under the Municipality Act 1991;
- regional water authorities to establish a treatment plant to purify drainage water; and
- the national authorities to protect religious, cultural and archaeologically important assets and to promote a healthy environment through making the Bagmati River free of pollution.

Note that order of Mandamus is not available under civil law.

Reference:

* UNEP Judicial Handbook on Environmental Law, 2005, Chapter 6.

Slide - 16

OBSERVATIONS ABOUT MANDAMUS: CHIEF JUSTICE KIRPAL OF INDIA

- "The judiciary has, in the recent times had to give directions which may give the impression to some people that it is an encroachment on a field demarcated for others. The label of judicial activism is given for this process by them. Nothing can be further from the truth. The directions which have been issued in various cases have the effect, in the nature of continuous mandamus, of directing the authorities and the industries to discharge duties and fulfil obligations as contained in the laws."

This inspiring statement from former Chief Justice Kirpal, Supreme Court of India, underlines the fact that judges in many countries have grasped the message of environmental law, and have forged new procedures in their courts in order to achieve substantive environmental justice, both in relation to people and their communities, as well as in relation to the natural environment.

Reference:

* Honourable Justice B.N. Kirpal, former Chief Justice of India, paper to UNEP's South Asian Chief Justice Symposium on the Role of the Judiciary in Promoting the Rule of Law in the Area of Sustainable Development, which was held in Colombo, Sri Lanka, in July 1997, as quoted in Kurukulasuriya, Lal "The Role of the Judiciary in Promoting Environmental Governance and the Rule of Law"
http://www.yale.edu/gegdialogue/docs/dialogue/oct03/papers/Kurukulasuriya%20final.pdf

Slide - 17

RESTORATION AND REMEDIATION

- The preferred remedy in many cases is the restitution of the environment to the condition it was in before the harmful activity

In many legal systems, including the international system, restoration (also known as restitution) which is a form of a mandatory injunction is the preferred remedy if it is possible for the injury to be fully redressed and the situation restored to its pre-injury state. Indeed, in environmental cases, courts often order environmental harm to be cleaned up or the damaged ecosystem returned to a healthy state. Such orders, which are closely related to injunctions in the sense that they compel action, may substitute for compensation and will often produce a better result for the environment. For example, where the defendant was found to have dumped wastes on a neighbour's property, the High Court of Kenya ordered the wrongdoer to clean up the waste. See *Paul K. Nzangu v. Mbiti Ndili* (High Court of Kenya at Machakos, Case 8/1991).

In deciding on restoration or remediation as the appropriate remedy, courts generally take into consideration not only the possibility, but also the cost, of remediation. Some jurisdictions limit remediation costs to the fair market value of the property (in restored condition). Other jurisdictions simply order restoration without regard to cost; the Supreme Court of Illinois, for example, upheld a trial court judgment enjoining a public nuisance (a chemical waste disposal site) and ordering defendant to remove all toxic waste along with contaminated soil found at the disposal site and to restore and reclaim the site. *The Village of Wilsonville v SCA Services, Inc.,* 426 N.E.2d 824 (Sup. Ct. Ill. 1981).

Courts can make a wide variety of orders to promote the restoration of the damaged environment, including, for example:

* Clean-up orders for industrial pollution
* Groundwater pump and treat remedies
* Dredging of contaminated sediment
* Removal and or capping of contaminated soil
* Rebuilding or repair of a demolished or partially demolished structure
* Restoration of a drained wetland

Reference:

* UNEP Judicial Handbook on Environmental Law , 2005, Chapter 6

Slide - 18

PHASES OF LONG-TERM REMEDIATION

- Phase I: Scientific study to assess extent of damage and options for addressing damage
- Phase II: Identification and pricing of remedial options
- Phase III: Remedy selection
  - Often multi-year projects
- Phase IV: Monitoring for remedy efficacy
- Phase V: Determination on completion

Some of the remedial options mentioned (e.g., clean-up orders for industrial pollution, groundwater pump and treat, dredging of contaminated sediment, restoration of a drained wetland) are long-term propositions that occurs in multiple phases.

This slide shows the phases often associated with long-term environmental remedies.

A key question for the court is how to structure the remedy and how significantly to be involved from a management and oversight standpoint during the implementation of the remedy.

Slide - 19

CHALLENGES WITH LONG-TERM REMEDIES

- Who does the work?
  - Polluter?
  - Third-party?
  - Government?
- Acquiring needed expertise
  - Use of special experts or "masters"
- Declaring completion
- Continuing jurisdiction

Who will do the necessary work? Possible approaches:

* Require polluter to do the study/work?
* If so, there may be a need to ensure impartiality through peer review or independent oversight.

* Impose burden on polluter to fund third-party work?
* If so, how is the third-party selected? It may be necessary to have the third party report to the court and not to the polluter.

* Can the relevant government agency do the study/work or provide the necessary oversight?

Acquiring needed expertise

* Use of special experts, "masters" or commissions appointed by the court
  - Funded by polluter?

Declaring completion – how do you know when the remedy is finished? This needs to be anticipated and addressed with some precision in the court's order.

Dealing with continuing jurisdiction – Courts generally want to move cases off their docket or case list, which can conflict with the need to maintain continuing jurisdiction for oversight purposes.

Slide - 20

DAMAGES

- Types of damages:
  - Natural resource damages (NRD)
  - Traditional private party damages:
    - Actual or compensatory
      - property damages
      - physical injury and health damages
    - Punitive damages (where available)

There are two general classes of damages actions in the environmental arena: those involving natural resource damages and those involving more traditional damages claims flowing from damage to property and health.

Natural resource damage claims have the following objectives:

* Compensation to the public for the loss, or lost use, of natural resources or the services they provide.
* Damages are used to restore, replace, rehabilitate, and/or acquire equivalent natural resources.

Natural resource damage claims are frequently asserted by governmental agencies as natural resources trustees. The underlying goal of such claims is to reverse loss to the "public trust" (the nation's natural heritage). Restoration and replacement (versus compensation) is the priority wherever practicable.

As with long-term remedial actions, natural resource damage remedies can be multi-phase, multi-year undertakings which require technical assistance. Phases typically include:

Phase I - Damage Assessment
- Identifies both lost and damaged resources
- There are some challenging environmental economics issues here regarding valuing loss.

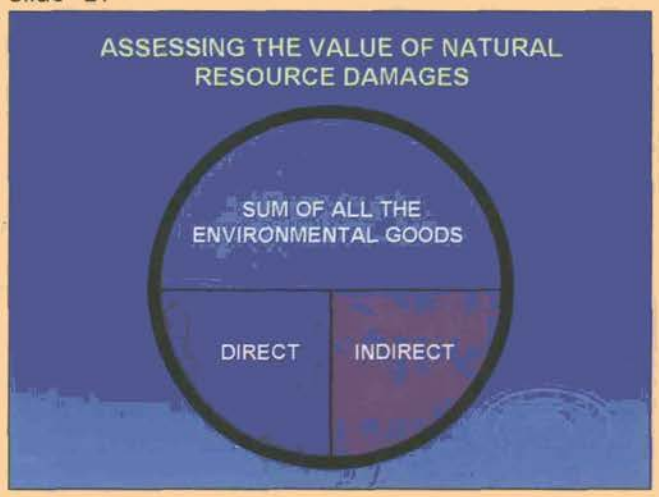
Phase II - Natural resource compensation, restoration or replacement
- Restoration and replacement are long-term remedies

Both phases often require technical assistance.

While establishing causation and measuring damages can be challenging in private party damage actions relating to the environment, private party actions seeking property and health-related damages otherwise generally operate in much the same way as damages cases originating from non-environmental causes.

Punitive damages –
Whether the defendant's conduct is found to be intentional or wilful or wanton or malicious, the courts may permit an award of punitive damages in addition to compensatory damages. Punitive damages are intended to punish the defendant and to discourage the conduct of the type the defendant engaged in.

Slide - 21



Valuing natural resources is not a straight forward proposition, simply because not all parts of the environment can easily be ascribed a value. There are many environmental components that have no market value because they are not openly traded or are considered public goods (e.g. clean air), public trusts (beaches) or national patrimony (national parks). Abstract but crucial environmental services, such as life-support systems or pollination by bees, have not been generally considered in economic terms.

In general, however, the economic value of the environment as a whole can be considered as the sum of all the goods (food, lumber, medicinal plants, shelter) and services (life support, recreation, assimilation of contaminants) provided during the time a given activity is taking place. Any diminution in the quality or quantity of the flow of goods and services associated with an alteration of the environment due to the activity can be considered as environmental harm. These economic values must be approximately known in order to estimate the economic value of the harm caused by a damaging activity.

Reference:

* UNEP Judicial Handbook on Environmental Law, 2005, Chapter 6

Slide - 22

As we have noted, the total economic value of environmental harm incorporates both values of use, direct and indirect, and values not based on use or exploitation. Uses can involve consumption (trees, fish) or non-consumptive actions (bird-watching). Indirect uses include, for example, prevention of erosion and flooding by preserving ground-cover and maintenance of plankton as part of the marine food chain. Preservation of options for future services is also a use that is impaired by environmental harm. Non-use values include preserving nature for its intrinsic value and conservation on behalf of future generations. Various valuation methods can be used. For products derived from environmental components, such as fish or timber, market value can usually be determined for losses sustained. For non-market goods and services, indirect methods must be used. One is the cost of rehabilitation or restoration where this is possible. Another is the so-called "contingent valuation", which uses public surveys as a way of attributing a value to an environmental amenity. There may be associated economic costs such as lost earnings or hedonic damages associated with the pleasure derived from recreational or landscape benefits from the harmed environment. All damage awards require determining the base line of evaluation, the pre-harm value.

Valuation methods must be adapted according to the nature of the environment and the type of harm suffered (for example, loss of value, loss of profits, loss of rental value, cost of clean-up, repair or remediation).

Because assessing the extent of natural resource damage can itself be an expensive undertaking, some systems include as part of the damage award the cost incurred in assessing the damage.

In the Trail Smelter Arbitration between the US and Canada over damage caused in the US by air pollution coming from the Canadian smelter, the tribunal considered the problem of assessing damages for environmental harm and the relevant principles of law. The tribunal quoted with approval a national decision that said: "Where the tort itself is of such a nature as to preclude the ascertainment of the amount of damages with certainty, it would be a perversion of fundamental principles of justice to deny all relief to the injured person, and thereby relieve the wrongdoer from making any amend for his acts. In such case, while the damages may not be determined by mere speculation or guess, it will be enough if the evidence shows the extent of the damages as a matter of just and reasonable inference, although the result be only approximate."

Reference:

* UNEP Judicial Handbook on Environmental Law, 2005, Chapter 6.

Slide - 23

PRIVATE PARTY DAMAGES SUITS

- Court can award indemnities or monetary damages to compensate for property damage or personal injury associated with environmentally destructive activity under traditional legal authorities
- Level of damages depends on the nature of the harm or injury
- Judges must quantify economic value of the losses
- Aggravated circumstances allow for punitive damages in some jurisdictions

In addition to natural resource damages, a court can, depending on the nature of the cause of action, award indemnities or monetary damages to parties injured by environmentally destructive activity under traditional legal authorities. In common law jurisdictions, for example, the cause of action will ordinarily sound in tort (e.g., negligence, nuisance or trespass).

The basic function of an award of damages is to compensate for the full losses suffered as well as the expenses that have been incurred due to the environmental harm. The level of damages necessarily depends on the nature of the harm, the capacity to repair the damage, etc. Judges must be able to quantify, as far as possible, the economic value of the losses, as they would other claims of damage to persons or property.

Aggravated circumstances allow for "punitive damages" in some jurisdictions. Punitive damages are to be distinguished from the types of punitive remedies available through civil and criminal environmental prosecutions.

Reference:

* UNEP Judicial Handbook on Environmental Law, 2005, Chapter 6

Slide - 24

PUNITIVE SANCTIONS

Basic Tools

- **Criminal sanctions**
  - **Incarceration**
  - **Monetary fines**
- **Civil penalties**

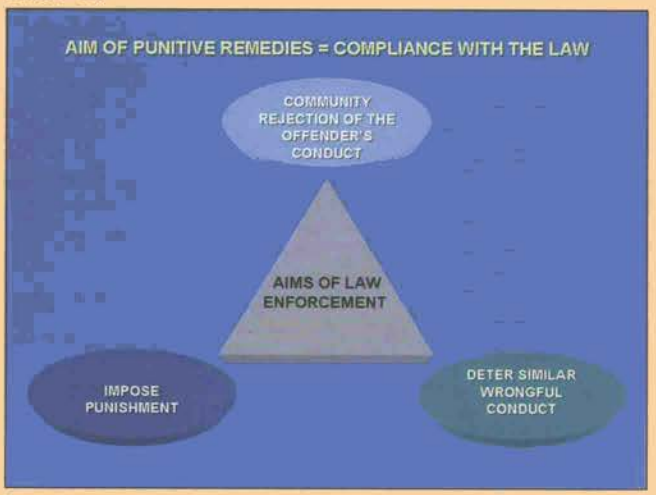
An important aspect of an enforcement case concerns the types of penalties, sanctions, and remedies that judges have at their disposal. Some jurisdictions set the types of penalties and sanctions out in some detail. In some cases, judges have been innovative in devising appropriate penalties and sanctions.

In some jurisdictions, courts have the authority to fashion financial punishment only in the context of a criminal case. In others, civil penalty authorities have been created that allow for assessment of financial sanctions in the context of a civil enforcement case.

Judges can take into account a wide range of considerations in imposing penalties and sanctions. The level of penalties and sanctions can depend on the behavior of the defendant, including the degree of contrition, early pleas of guilty, attempts to clean up pollution or remediate land. It can also take into account any economic benefit realized by the violator by virtue of its violation.

Penalties and sanctions are ordinarily assessed after trial, although they can be established via settlement in the civil context or, where permitted, by way of plea agreement in the criminal context.

Slide - 25



The general aim of law enforcement in environmental matters is to produce the maximum state of compliance with environmental requirements. In other words, the objective in punishing violators is not so much punishment for punishment's sake. Rather, it is to express community rejection of the conduct and send a message of "deterrence" that discourages similar misconduct in the future both on the part of the violator (specific deterrence) and others similarly situated (general deterrence). Penalizing environmental wrongdoing is thus a vital function, and it falls to judges to fashion appropriate penalties, sanctions, remedies and orders.

The two principal means of penalizing environmental misdeeds are civil penalties, where available, and criminal sanctions, such as fines and imprisonment.

Other sanctions may include alternative sentencing, such as community service, and the performance of supplemental environmental projects that have some nexus with the wrong at issue in the case.

Also, compensation can be mandated for the damage resulting from environmental degradation.

Reference:

* UNEP Judicial Handbook on Environmental Law, 2005, Chapter 6

Slide - 26

As a reflection of growing awareness among the judiciary of the seriousness of environmental wrongdoing, environmental laws increasingly include imprisonment as a punitive remedy and courts are increasingly utilizing this remedy.

In South Australia, the Environmental Protection Act of 1993 establishes a sanction of up to 4 years imprisonment and/or a $250,000 fine for causing serious environmental harm. The Environmental Protection (Water Quality) Policy of 2003 prohibits discharge or deposit of listed pollutants into waters or onto certain land and has a mandatory sanction for intentional or reckless contravention of $30,000 and/or 7 years imprisonment.

Canada's Environmental Protection Act (CEPA) includes penalties of fines or imprisonment or both, court orders to accompany a fine or imprisonment, and court orders governing conditional discharge of the offender. Upon conviction of an offender for a violation of CEPA 1999, enforcement officers recommend that Crown prosecutors request penalties that are proportionate to the nature and gravity of the offence. When making recommendations to prosecutors, enforcement officers apply the criteria found in CEPA 1999. Those criteria include the harm or risk of harm, corrective actions already taken, negligence, and deterring effect of the proposed sentencing. With respect to toxic substances, persons who contravene the act and intentionally or recklessly cause a disaster or show wanton or reckless disregard for the safety of other persons, may be liable to an unlimited fine and up to five years imprisonment under the Criminal Code. If death results from such criminal negligence, the maximum penalty is life imprisonment.

In Australia, a private party found to be wilfully pumping sewage into an adjacent river in violation of environmental laws was convicted and sentenced to 12 months imprisonment. He also had to pay $250,000 fine and the prosecutor's costs of $170,000. *Environment Protection Authority v. Charles Gardner,* Land and Environment Court of New South Wales, Matter No. 50072/96 and 50074/96.
http://www.austlii.edu.au//cgibin/disp.pl/au/cases/nsw/NSWLEC/1997/169.html?query=Gardner

In *United States v. Hansen,* 262 F.3d 1217 (11th Cir. 2001), the court sentenced two officers and managers of LCP Chemicals of Brunswick, Georgia, to lengthy prison sentences for their environmental crimes. One was sentenced to serve nine years in prison and pay a $20,000 fine; the other was sentenced to six and one-half years in prison. Both defendants were convicted on one count of conspiring to operate the plant in violation of environmental laws, one count of knowing endangerment under the U.S. hazardous waste laws, and a variety of other environmental offenses. Workers at the Brunswick plant were repeatedly exposed to imminent danger of death and serious bodily injury by working conditions which exposed them to possible chemical burns, electrocution, and poisoning from inhalation of mercury vapours and from other contacts with mercury-contaminated and corrosive wastes.

Reference:

* UNEP Judicial Handbook on Environmental Law, 2005, Chapter 6

Slide - 27

FINANCIAL SANCTIONS

- Financial sanctions
- Civil Penalties
  - Less commonly available under law than criminal fines
  - Can be negotiated in some jurisdictions

Increasingly, courts are imposing serious criminal fines for environmental wrongdoing. For example, the Canadian case *R. v. Tioxide Canada Inc.* (Quebec Court, 1993) indicates how motive, damage, and intent play a role in penalties. The company deliberately chose to violate authorizations and continue operating despite having no authorization. Criminal charges were brought against the company and its directors. The directors entered into a plea bargain. The company was assessed the highest Canadian penalty for pollution to that date. It had to pay Can$1 million as a fine and Can$3 million into a special account administered by the Ministry of the Environment for fish and fish habitat protection. The court also ordered the section of the company's plant responsible for the pollution to remain closed.

Civil penalties are less common than criminal sanctions as a general rule, but are a useful tool where available. Usually they are based upon statutory authority. Civil penalties may be imposed alone or, more frequently, in connection with remedial measures to ensure corrective of the violation and non-repetition of the violative behavior.

Civil penalties can be negotiated in some jurisdictions. For example, In *United States v. Icicle Seafoods, Inc.*, (D. Alaska, June 27, 2003), a seafood company settled a Clean Water Act complaint in federal court by agreeing to pay an $85,000 civil fine and improve its waste handling practices to prevent the build-up of wastes, in part by rendering waste parts into fish meal, substantially reducing the amount of waste discharged.

A Norwegian shipping line agreed to pay more than $2 million in civil sanctions in connection with a fuel oil spill off the coast of South Carolina in January 1999. The company agreed to pay $1.9 million to a wildlife restoration fund, a $95,207 penalty to the Department of the Interior, and a $28,847 penalty to the South Carolina Department of Natural Resources. Other economic sanctions were imposed in a related criminal proceeding, and these amounts were also ordered paid to environmental trusts and conservation funds. *United States v. Billabong II Ans.*, (D.S.C. July 1, 2003).

Reference:

* UNEP Judicial Handbook on Environmental Law, 2005, Chapter 6

Slide - 28

ECONOMIC BENEFIT OF NONCOMPLIANCE (EBN) – A FLOOR FOR FINANCIAL SANCTIONS?

- Increasingly, legislators and courts alike recognize that financial sanctions, whether civil or criminal in nature, should disgorge the "economic benefit of noncompliance"

"Whether a judge is assessing a criminal fine or a civil penalty, it is valuable for the judge to consider the deterrence value, and measure of consistency in approach, offered by assessing fines and penalties that, at a very minimum, disgorge the economic benefit that a polluter realized by virtue of its noncompliance."

Recapturing the economic benefit of noncompliance through the assessment of fines and penalties accomplishes two principal objectives.

First, it ensures that the violating entity did not profit by virtue of its noncompliance. In this sense, it falls within the rubric of the Polluter Pays principle. It is also key to concept of deterrence. Simply put, if violators perceive that, even if apprehended, they will save money through their noncompliance, then they will be more inclined to violate the law. This is particularly true where the costs of compliance are significant, which is often the case with environmental protection measures.

Second, recovering the economic benefit eliminates distortion and unfairness in the market place between those who comply with the law, thereby internalizing the cost of environmentally responsible behaviors in their goods and services, and those who do not comply, thereby offering the same goods and services at a lower cost of production that does not reflect internalized environmental costs.

From a deterrence standpoint, recovery of EBN may be most important in cases in which financial sanctions are the only remedy and are not coupled with other more severe and stigmatizing measures (e.g., imprisonment).

Note that recovery of EBN should be regarded as a penalty "floor." Ordinarily, the sanction should do more than simply return the violator to where it would have been had it timely complied with the law. Rather, it should leave the violator disadvantaged in some meaningful way by virtue of its unlawful acts. To accomplish this, it will be necessary in most cases to augment the EBN-based penalty with an additional punitive assessment.

Reference:

* UNEP Judicial Handbook on Environmental Law, 2005, Chapter 6

Slide - 29

CALCULATING EBN

- Deferred Costs
  - Value to violator of deferred compliance
    - Money that should have been spent on environmental improvements was presumptively invested elsewhere, earning a rate of return on an annual basis
  - Formula: Amount deferred **x** annual rate of return **x** years of violation = deferred cost EBN
- Avoided Costs
- Deferred cost EBN + Total Avoided costs = Total EBN

EBN works like this. There are certain costs that are "deferred" costs. These most commonly relate to capital expenditures on pollution control equipment or devices that have been deferred through noncompliance. If a mining company was required by law to construct in year 1 a settling pond to allow separation and sedimentation of heavy metals before discharge to a river, but ignored the legal obligation until forced to adhere to it through an enforcement action in year 6, then the cost of constructing the pond would be a deferred cost. The EBN realized through a deferred cost like this is basically the investment value of the money during the period of violation. Money that should have been spent on environmental improvements was presumptively invested elsewhere, earning a rate of return on an annual basis. The annual rate of return will be a number specific to the country or province in question, but is often in the range of 5-10%.

The formula then for calculating a deferred cost EBN is Amount deferred x annual rate of return x years of violation = deferred cost EBN

The other element of EBN is avoided costs. Avoided costs are costs that a violator saved for all time because of its violation. If, for example, after the construction of the settling pond, the mining company was required by law periodically to sample and analyze effluent discharged from the pond into receiving river and periodically to remove and properly dispose of the sediment in the pond, then, by virtue of its noncompliance, it is has avoided the costs of monitoring and sediment disposal altogether during the period of violation. These savings should be recaptured as avoided cost EBN.

The formula, then, for calculating Total EBN is: Deferred cost EBN + Total Avoided costs = Total EBN

Slide - 30

ALTERNATIVE SANCTIONS

- COMMUNITY SERVICE
- RESTORATION AND PREVENTIVE ACTION
- COSTS, EXPENSES AND COMPENSATION
- ORDERS TO PUBLICISE THE OFFENCE AND ITS ENVIRONMENTAL AND OTHER CONSEQUENCES
- ORDERS TO CARRY OUT SPECIFIED ENVIRONMENTAL PROJECTS
- ORDERS TO CARRY OUT A SPECIFIED ENVIRONMENTAL AUDIT

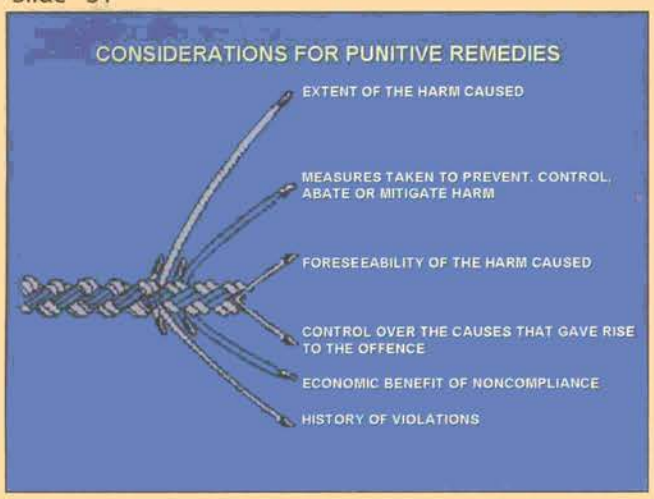
In addition to fines, penalties, and imprisonment, a number of alternative sanctions have emerged in the environmental arena.

Community service orders are becoming more common as alternative to more severe criminal remedies. They can be adapted to the nature of the environmental offense, such as the cleaning up of rubbish from a waterway every month.

Many jurisdictions have some or a combination of the following types of alternative sanctions authority:

* Orders for restoration and prevention
* Payment of costs, expenses and compensation after offence is proved
* Payment of costs and expenses of investigation
* Orders concerning monetary benefits as a result of offence
* Orders concerning specified action to publicise the offence and its environmental and other consequences
* Orders to carry out specified environmental projects
* Orders to carry out a specified environmental audit of activities conducted by the offender
* Orders to appoint an environmental manager or receiver
* Orders to undertake training or establish a training course
* Orders to pay money into an environmental trust or an environmental organization

Slide - 31



There are a range of considerations that judges typically take into account in fashioning punitive remedies. These include:

* The extent of the harm caused.

* Efforts by the defendant to prevent, control, abate or mitigate the harm.

* The extent to which defendant could reasonably have foreseen the harm caused.

* The extent to which defendant had control over the causes that gave rise to the offence.

* The extent to which the defendant realized an economic benefit as a result of the violation.

* The defendant's history of like violations.

* An early plea of guilt or other indication of guilt or remorse.

In some jurisdictions, these considerations are addressed in remedial or sentencing guidelines developed for environmental cases.

Slide - 32

The role of assessment of costs and fees should not be overlooked as an element of a judge's remedial tool kit. Such awards, particularly in the context of public interest litigation, can greatly facilitate environmental accountability.

Where awards are allowed, they generally turn on prevailing party status (i.e., costs and fees can be ordered to be paid by the losing party).

An emerging issue in some jurisdictions is whether public interest litigation should be subject to the same rules as private litigation or whether the public is better served by having such cases brought. There is a concern that the fear of costs may be a disincentive to public interest litigation. Some courts have decided that bona fide public interest litigation cases will not bear the costs of litigation. This will avoid discouraging public interest applicants.

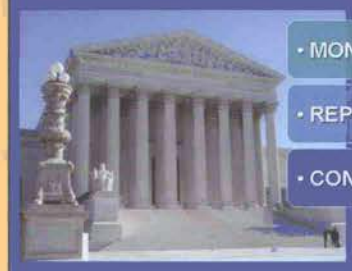
In some jurisdictions, the award of costs and fees is not as of right, but rather is in the discretion of the judge.

Reference:

* UNEP Judicial Handbook on Environmental Law, 2005, Chapter 6

Slide - 33

JUDICIAL OVERSIGHT OF REMEDY IMPLEMENTATION



- MONITORING BY COURT
- REPORTS TO COURT
- CONTEMPT OF COURT

In many environmental cases, the fashioning of a remedy is only the first phase for the court, giving way to a phase of remedial judicial supervision and oversight.

Slide -34

TECHNIQUES FOR JUDICIAL OVERSIGHT OF REMEDY IMPLEMENTATION

- Requiring parties to report back
- Regular monitoring by the court
- Appointment of oversight commission
- Contempt proceedings

Judges in some jurisdictions have developed systems to ensure that compliance with court orders is regularly monitored. This may be particularly necessary where governmental enforcement mechanisms are not strong.

The monitoring of remedies can be done in a variety of ways. Those held responsible for violations of environmental laws or causing environmental harm may be directed to return to court with plans for compliance or remediation and targets and timetables for completing the tasks set forth. They may also be required to file regular status reports with the court regarding progress in implementation.

As noted, where court orders are not followed, courts can hold a party in contempt of court. In extreme cases the court may place an environmental operator in receivership.

Courts in India and Pakistan, inter alia, have appointed oversight commissions to monitor compliance and report back to the court on measures needed or adjustments that may be required. Often considerable judicial oversight is needed to ensure fulfilment of structural injunctions.

The following are examples of remedial judicial supervision and oversight:

In *General Secretary, West Pakistan Salt Mines Labour Union (CBA) Hkewra, Jhelum v. The Director, Industries and Mineral Development, Punjab, Lahore,* 1994 SCMR 2061, the petitioners sought enforcement of the right to clean and unpolluted water. The mine's operations threatened contamination of the water catchment area, the water course, reservoir and pipelines. The Supreme Court directed the mining company to shift their operations within four months to avoid water pollution and appointed a commission of four persons to oversee compliance. The Commission was given the power of inspection, recording evidence, and examining witnesses and was directed to report back to the court. If compliance was not forthcoming or possible, the Court retained jurisdiction to determine whether the operation of the mine should be completely halted. The court directed the company and all miners operating adjacent to the water catchment area to take such measures to the satisfaction of the commission to prevent pollution of the water source reservoir, stream beds and water catchment area. The Court further ordered administrative authorities to refrain from any issuing any new or renewed licenses for mining in the region without the Court's prior approval.

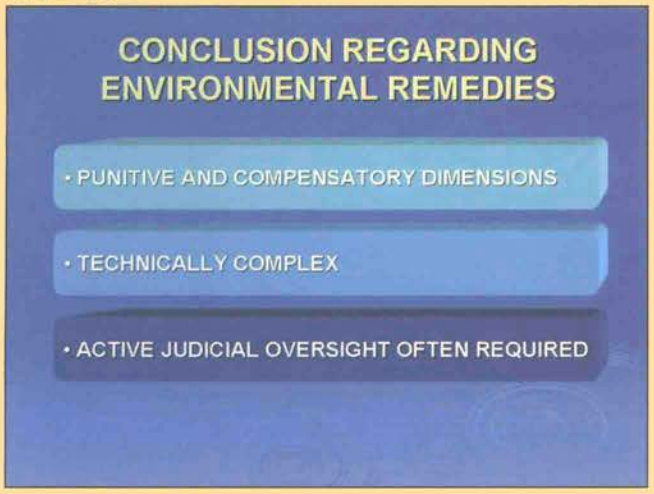
* The High Court of Justice of Antigua and Barbuda, for example, sentenced defendants to one month in prison for violating an injunction that prohibited their company from mining sand in a designated area. *The Barbuda Council v Attorney General and Others,* High Court of Justice of Antigua and Barbuda, Civil AD 1993.

* The High Court of Jammu and Kashmir at Srinagar issued a show cause order regarding contempt of court proceedings when the state was found to have permitted logging in violation of a Supreme Court injunction. *M/S Aziz Timber Corp. and Others v. State of Jammu & Kashmir through Chief Secretary and Others,* Continuing Petition No. 51/96.

References:

* UNEP Judicial Handbook on Environmental Law, 2005, Chapter 6
* UNEP Compendium of Summaries of Judicial Decisions in Environment-related Cases, 2005, pages 275-310

Slide - 35



As we have seen, remedies in environmental cases include both punitive and compensatory dimensions, and can be quite complex, protracted, and expensive. As a result, the active hand of the court is often needed to ensure follow-through in the individual case, without which respect for the rule of law in the environmental arena is not possible.

PRESENTATION 10

UNEP GLOBAL JUDGES PROGRAMME

APPLICATION OF ENVIRONMENTAL LAW BY NATIONAL COURTS AND TRIBUNALS

RESOLVING ENVIRONMENTAL DISPUTES

Slide - 1

OUTLINE OF PRESENTATION

DISPUTE RESOLUTION TECHNIQUES

DISPUTE RESOLUTION BODIES

It is important to point out that only a small percentage of environmental disputes are decided by courts and tribunals. The same applies to breaches of environmental legislation, especially concerning pollution.

In the case of disputes concerning planning, the vast majority of cases are dealt with by individuals, not necessarily represented by lawyers, negotiating a satisfactory solution between the parties. For example, a local authority that imposes conditions which are seen as too restrictive by the proponent of a development activity can enter into negotiations, which may result in alternative conditions being imposed. Mediation services are also being increasingly used to resolve both major and minor environmental disputes. Generally, if the parties can be encouraged to settle their disputes, they often will be more satisfied with the outcome and the court can turn its attention to other matters.

In the case of breaches of pollution control legislation, as seen in previous presentations, the environmental protection authorities will often issue a stop notice or a clean-up notice to address a pollution problem. Often, parties are only prosecuted when softer techniques have failed to curb the activity causing the pollution.

Thus courts and tribunals, for the most part, deal with cases that have not been able to be resolved by other means.
However, courts and tribunals are themselves also increasingly using mediation techniques to resolve disputes. Court mediation is usually conducted on a voluntary basis. The result of the mediation can be the subject of a consent order by a court, and, where necessary, the order can be enforced. Other techniques can involve arbitration, where a neutral third party , agreed to by the disputants, will arbitrate a dispute. The decision of the arbitrator is, by agreement between the parties, binding on the parties.

Slide - 2

ALTERNATIVE DISPUTE RESOLUTION TECHNIQUES

- MEDIATION SERVICES
  - COMMERCIAL DISPUTES
  - COMMUNITY JUSTICE CENTERS FOR NEIGHBOURHOOD DISPUTES
- ARBITRATION
- NEUTRAL EVALUATION

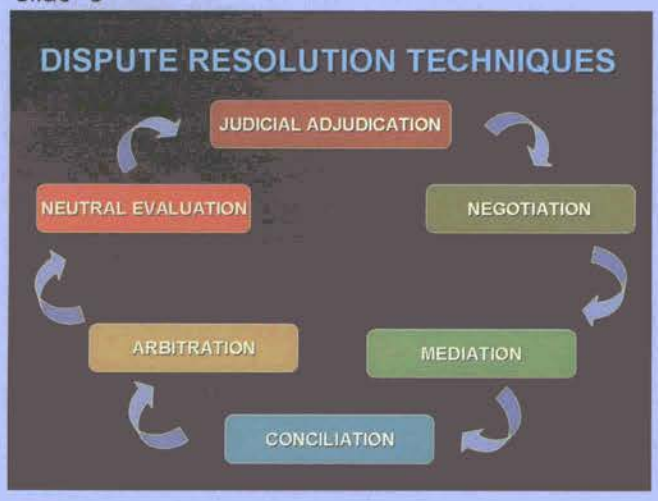
Many legal systems are based on a preference for negotiation, compromise and settlement of disputes. Even where settlement is not formally encouraged, settlements can be seen to further justice, expedite the flow of cases and promote efficiency. Judges can promote settlement either by urging negotiations between the parties or by actively participating in them. In some instances, court staff conduct the negotiations and present any settlement reached to the judge for approval. In others, a "settlement judge" independent from the presiding judge will be assigned to the case for purposes of exploring settlement with the parties.

Even after litigation in court has commenced, a judge may still be able to work with the parties to negotiate a settlement acceptable to all sides. This may be especially important in complex litigation where proof of damages can be difficult.

There exist a number of alternative dispute resolution (ADR) options that can provide parties with an efficient way to address problems and at the same time alleviate over-burdened court dockets or case lists. The two most common types of ADR are mediation, conciliation and arbitration. References to arbitration and mediation appear in the national laws or court rules of many countries. Examples of countries having laws endorsing or requiring the use of ADR include: Colombia, Mexico, Chile, Indonesia, Australia, the United Kingdom, and the United States. Notably, over 130 countries have signed the 1958 United Nations Convention on the Recognition and Enforcement of Foreign Arbitral Awards, known as the "New York Convention". The Convention facilitates enforcement of arbitral awards in all contracting states.

An additional device sometimes used is "neutral evaluation". Neutral evaluation, which is often deployed with the encouragement of a court. means a process of evaluation of a dispute in which the evaluator seeks to identify and reduce the issues of fact and law in dispute as a way of determining which parties to a dispute may have a better case. The opinion of the neutral evaluator can often facilitate negotiation between the parties and settlement.

Slide - 3



This slide depicts graphically the various forms of dispute resolution.

Slide - 4

The benefits of ADR can be significant. ADR is generally viewed as increasing efficiency in terms of the time and resources needed to resolve disputes.
It also frequently reduces the time to reach a final outcome, which in environmental cases can serve to help minimize or contain environmental damage.
ADR encourages constructive approaches to problem-solving and reconciliation around mutually beneficial solutions.
It also places the solution process in the hands of the parties themselves, giving them a sense of vested ownership in the outcome.

Additional advantages in using ADR exist for environmental cases. Certain ADR methods such as consensus building, facilitation, or conflict management dialogues have proven particularly effective in the kind of multi-party litigation that typifies environmental disputes.

ADR is also especially effective in environmental disputes where parties have an ongoing relationship, such as neighbours, where parties significantly benefit from improving their interrelationships in the long run. ADR has been effective, for example, in addressing land-use and riparian disputes between neighbours.

Finally, because of the procedural flexibility it affords, ADR allows for retention of subject matter experts, such as conciliators and arbitrators, which in complex environmental cases can assist the process in moving forward. A mediator is not a subject matters expert, rather a problem facilitator.

Importantly, even where cases are settled outside the courtroom through ADR, they often come before judges, either for review, to obtain a consent decree, or for enforcement. At that stage, judges can, if necessary or required by law, review the substance of the settlement reached and the process that produced it. This maybe important where the case raises public interest considerations. The court should ensure that not only is peace between the parties achieved, but justice.

Reference:
* UNEP Judicial Handbook on Environmental Law, 2005, Chapter 5, page 49.

Slide - 5

MEDIATION IN ENVIRONMENTAL DISPUTES

- Mediation is facilitated negotiation, by a third party
- Mediators' role is to assist parties to agree on a solution

Mediation is facilitated negotiation in which a skilled, impartial third party seeks to enhance negotiations between parties to a conflict or their representatives by improving communication, identifying interests, and exploring possibilities for a mutually agreeable resolution.

The disputants remain responsible for negotiating a settlement, and the mediator lacks power to impose any solution; the mediator's role is to assist the process in ways acceptable to the parties. Typically this involves supervising the bargaining, helping the disputants to find areas of common ground and to understand their alternatives, offering possible solutions, and helping parties draft a final settlement agreement.

While mediation typically occurs in the context of a specific dispute involving a limited number of parties, mediative procedures are also used to develop broad policies or regulatory mandates and may involve dozens of participants who represent a variety of interests.

Mediation most often is a voluntary process, but in some jurisdictions, mediation is a required step in the litigation process mandated by court order or statute.

Reference:
* UNEP Judicial Handbook on Environmental Law, 2005, Chapter 5

Slide - 6

ARBITRATION IN ENVIRONMENTAL DISPUTES

- Arbitration is done by a neutral third party
- It is a quasi-judicial function
- Parties agree to submit to arbitration and to be bound by the result

Arbitrators play a quasi-judicial role, in that they typically render a decision or outcome with respect to the disputed matter, but there are some crucial differences. Arbitration is usually the result of an express, binding agreement between the parties to submit their dispute to a neutral third party whom they select, often from a roster of specialists.

The parties determine the scope of the arbitrators' authority and the rules by which they shall proceed.

In some legal systems, courts may assign selected civil cases to arbitration as a precondition to or substitute for trial. In general, arbitration is seen as less formal and more rapid than judicial proceedings.

Reference:
* UNEP Judicial Handbook on Environmental Law, 2005, Chapter 5

Slide - 7

WHEN SHOULD ADR BE DEPLOYED?

- Early in the process may be optimal
- But may bear fruit any time during the trial process
- ADR during appeal?

ADR works best in settings in which parties are not constrained by tight timeframes or deadlines, such as the case with administrative challenges in some jurisdictions where litigation is amenable to ADR.

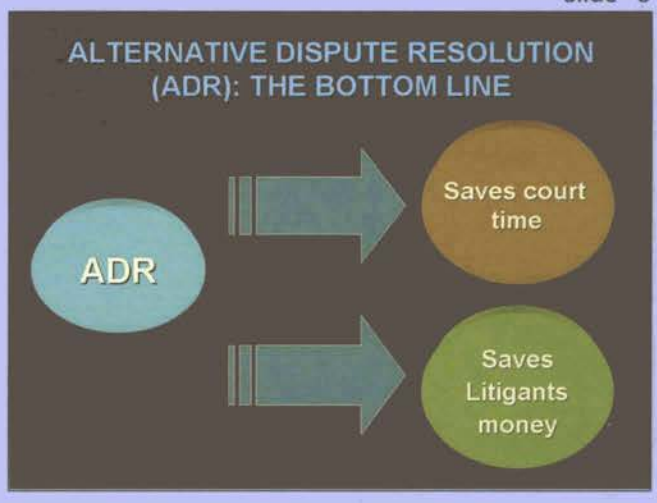
ADR has potential anytime during litigation, but is perhaps most successful at early stages in the process, before positions harden and before parties have invested substantial resources in the process of litigation. For this reason, many courts discuss the potential of ADR with parties early in the pretrial process, such as during the initial pretrial conference.

This being said, even if ADR is not initially invoked, there may be utility in checking in with the parties on the possible use of ADR throughout the trial process – right up until the time the court renders judgment. Each phase of the litigation has the potential to expose case weaknesses or vulnerabilities that may cause parties to reassess their openness to an ADR process and to the idea of settlement generally.

Once the trial court renders judgment, the settlement dynamics shift in a fairly stark way, in that there is now a prevailing party who may view itself as having no incentive to explore settlement. Nonetheless, settlements sometimes occur during an appeal simply because of the lack of certainty regarding the outcome of an appeal, and because of the expense inherent in the appellate process. The dynamic becomes even more favorable towards settlement if the trial court's judgment is viewed as vulnerable because of errors.

It should be noted that the capacity of courts to direct or order the use of ADR techniques is constrained in some jurisdictions, particularly countries which follow the civil law tradition.

Slide - 8



To conclude, alternative dispute resolution (ADR) can provide parties with an efficient way to address problems and at the same time alleviate over-burdened court dockets or case lists. It has been put to good use in many jurisdictions in environmental cases.

Example of dispute resolution by negotiation
The case *In re Sause Brothers Ocean Towing Concerning an Oil Spill from the Barge The "Nestucca" off the Coast of British Columbia,* 769 F. Supp. 1147 (D. Oregon, 1991), provides an example of resolution by negotiation. Due to negligence involving an oil tanker being towed by another vessel owned by the same company, the tanker spilled some 850,000 litres of oil off the north Pacific coast, causing damage to the coastline of Canada by killing half a million migratory birds, as well as otters, seals and sea lions.
Shellfish and crab fisheries were closed and various sea grasses destroyed. Claims were filed by the Federal government of Canada, the provincial government of British Columbia, and two Native American tribal groups living in Canada. One of the tribal groups claimed Can$23,656.344 for cleanup and lost opportunity costs, collective food loss and environmental damage to members of the group. The governmental claims were Can$4,382,000 for cleanup costs and Can$ 3,349,500 for environmental damage.
Three of the four claims settled through negotiations supervised by the District Court; the company agreed to pay the full clean up costs and environmental damage claim to the governments, to be used for purposes of restoration of the environment. The $23,000,000 indigenous claim was settled for Can$1,205,000, covering environmental claims, commercial fishing claims and cleanup claims. The fourth claim remained to be decided in litigation because the company claimed it was filed too late.

Reference:
* UNEP Judicial Handbook on Environmental Law, 2005, Chapter 5

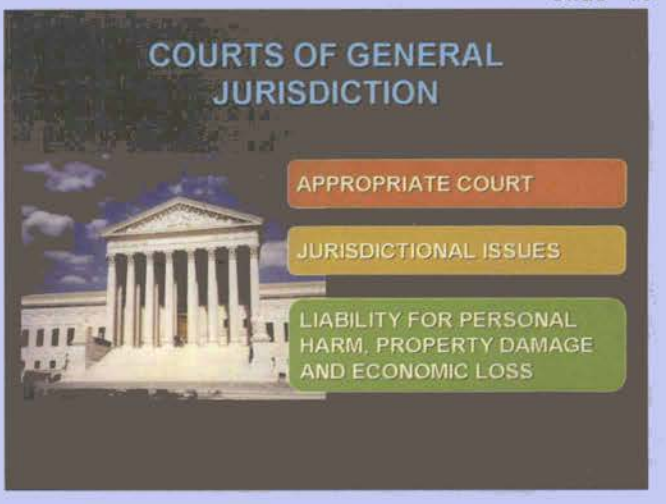
Slide - 9

DISPUTE RESOLUTION BODIES

- COURTS OF GENERAL JURISDICTION
- ADMINISTRATIVE TRIBUNALS
- SPECIALIST ENVIRONMENTAL COURTS
- TRIBUNALS FOR RESOLVING INTERNATIONAL ENVIRONMENTAL DISPUTES

If settlement of a dispute without litigation is not possible, then courts and tribunals inevitably become involved. This section briefly considers the range of courts involved in the environmental dispute resolution process.

Slide - 10



The courts of general jurisdiction, by definition, deal with a broad spectrum of matters, and, in most jurisdictions, environmental, natural resources, land and property issues are dealt with by these courts.

In terms of environmental crimes, the level of presiding court sometimes depends on the gravity of the offence. For example, minor pollution offences can often be prosecuted by police in local or magistrates courts; major pollution events are prosecuted in the superior courts.

In civil matters, the value of the property can determine the level of court used. Major disputes, for example, concerning planning and development, are in some jurisdictions dealt with by middle level and superior courts.

Slide - 11

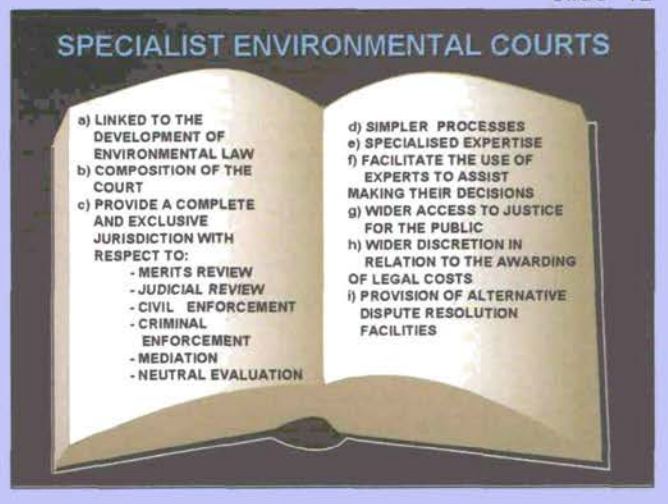
Generalist administrative tribunals are charged with dealing with environmental matters in many jurisdictions. They are called Administrative Appeals Tribunals, or a similar name. In many jurisdictions, such bodies normally do not have members with specialist expertise in environmental matters, although in some of these jurisdictions, experts in environmental matters can be specially empanelled to deal with environmental cases.

A smaller number of jurisdictions have specialist environmental administrative tribunals. An example is the Environmental Appeals Board in the United States. See www.epa.gov/eab

Administrative tribunals often function in much the same manner as courts. In some systems, there are both trial level and appellate level administrative processes. Because they are typically creatures of the executive branch of government rather than the judicial branch, however, their judgments and determinations are most often subject to appeal to the traditional courts.

Although many administrative tribunals are structured to deal with minor matters, such as disputes concerning building permits, or non-conformity with conditions of a consent for development, the jurisdictions of administrative tribunals is highly variable, and can and often does include matters as complex and significant as those brought in court. Some administrative tribunals, for example, have the capacity to assess substantial administrative penalties via administrative enforcement cases.

Slide - 12



Some jurisdictions have specialist environmental courts as part of the judicial branch of government. In some circumstances, the courts were created by legislation; in others, they were created by the court system itself as part of a reorganization of court functions, with the objective of efficiently addressing this new area of the law.

The emergence of specialist environmental courts reflects the increasing sophistication of environmental decision making, as well as a broader environmental awareness of the need to place environmental constraints on development.

It also reflects the development of environmental law. In addition, specialist courts contribute to the development of environmental law itself. This occurs through the building up of precedents (especially in common law countries, and increasingly in civil law countries).

By their judgments, the courts can also contribute to better implementation of environmental legislation by government departments, by pointing out deficiencies and ordering the monitoring of the orders made in their judgments.

Judges and other members of specialist courts build up particular expertise in environmental matters. Where there are non-lawyer members of courts and tribunals with special expertise in various aspects of the environment, they can sit with judges and advise on those matters.

Even in jurisdictions with specialist environmental courts, certain kinds of cases with environmental dimensions -- such as cases involving financial liability for personal harm, property damage and economic loss arising out of environmental pollution, loss of natural resources or land degradation – are still addressed in the general courts.

Slide - 13

POTENTIAL ADVANTAGES OF SPECIALIST COURTS

- More direct access to environmental justice: the one-stop shop
- Greater expertise; efficiencies in judicial administration of environmental cases
- Potentially wider discretion in relation to the awarding of legal costs
- Provision of Alternative Dispute Resolution facilities
- Better to develop environmental jurisprudence

The potential advantages of specialist courts and tribunals are:

* They are frequently designed to provide a one-stop shop for merit appeals, judicial review and criminal and civil enforcement.
* Because of their expertise, they are positioned to move more quickly through complex environmental cases, achieving efficiencies and reducing the overall cost of litigation.
* Depending on their design, they can often develop innovative costs orders, so that public interest litigation is not discouraged.
* They can encourage, and by virtue of their expertise facilitate, use of alternative dispute resolution facilities in the environmental context, as an alternative to litigation as well as during court proceedings.
* Lawyers bringing environmental cases, and judges hearing those cases, will develop specialized knowledge of the area, and will be responsible for creating a specialized body of precedent and environmental jurisprudence.
* May allow for cases to be decided more consistently.
* Scientific expertise of judges and lawyers will be enhanced; expert witnesses will develop further expertise over a period of time, leading to enhanced knowledge of judges.
* Specialist courts may, by virtue of their expertise, be better positioned to develop innovative remedies and solutions and develop environmental jurisprudence.

Slide - 14

POTENTIAL DISADVANTAGES AND CHALLENGES

- Possible loss of transferability from other areas of law
- Resource drain
- Loss of jurisdiction by courts of general jurisdiction
- Courts of general jurisdiction will still likely need to deal with collateral environmental dimensions of non-environmental cases
- Constructing appeal pathways
- Will environment court have criminal jurisdiction?

Disadvantages and challenges may include:

* Judges and lawyers specializing in the field may lose contact with other areas of law.

* Resources to be invested in specialty courts, including both judges and administrative capacity, often must be taken from the court system's overall resources.

* Courts of general jurisdiction may not be keen on surrendering part of their judicial turf.

* The shift of jurisdiction is unlikely to be perfectly clean: Courts of general jurisdiction will still likely need to deal with collateral environmental dimensions of non-environmental cases.

* Thought needs to be given to paths for appeal of the decisions of specialty courts and whether such courts will be given jurisdiction over environmental crimes.

Bottom Line: Efficiency is a primary concern in terms of whether to set up an environmental specialty court. The imperative may be greatest in jurisdictions in which a good deal of environmental litigation is anticipated and/or where the guidance afforded by environmental legislation is imprecise. Where the environmental caseload is small and/or where the law is fairly precise in its application, the economies of scale may not be sufficiently present to warrant the creation of a specialist court.

Slide - 15

EXISTING SPECIALIST ENVIRONMENTAL COURTS AND TRIBUNALS

- There are now a range of specialist courts and tribunals, as well as "green benches" for environmental cases
  e.g. Brazil
- The following countries and jurisdictions have specialist courts:
  Australia, Bangladesh, India, Ireland, New Zealand, Sweden, Denmark, Canada: Ontario, USA: Vermont, Mauritius

Examples of specialist courts and tribunals:
New Zealand: Environment Court (1991): http://www.justice.govt.nz/environment/
Ireland: Specialist Planning Appeals Tribunals
Mauritius: Environment Appeal Tribunal (1991)
Province of Ontario, Canada: Environmental Review Tribunal (1974) : http://www.ert.gov.on.ca/ERT_new_index30.htm
State of Victoria, Australia: Administrative Appeals Tribunal (Planning Division) (1980)
State of Tasmania, Australia: Resource Management & Planning Appeal Tribunal (1993): http://www.rmpat.tas.gov.au/
State of New South Wales, Australia: Land and Environment Court (1979) http://www.lawlink.nsw.gov.au/lec
State of Western Australia: Town Planning Appeal Tribunal
State of Vermont, United States of America: Environmental Court
Sweden: Regional Environmental Courts and Environmental Court of Appeal :http://www.dom.se/templates/DV_InfoPage____2328.aspx
Green benches have been established by court order in various states of India,
Special original jurisdiction of High Court: Bangladesh, Guyana , Trinidad and Tobago, Kenya and Tanzania

See also: The Environment Court Project (2000) - U.K. proposals by Cambridge University

Slide - 16

New Zealand

Environmental Court (1991)

Constituted by the Resource Management Amendment Act 1996

Not bound by the rules of evidence and the proceedings are less formal than the general courts

Mostly involves public interest questions

The Environment Court, formerly called the Planning Tribunal, is constituted by the Resource Management Amendment Act 1996.

Except for hearing enforcement proceedings that involve questions of law, sittings are usually constituted by one Environment Judge and two Environment Commissioners.

The Court is not bound by the rules of evidence and the proceedings are often less formal than the general courts. Most of the Court's work involves public interest questions.

Slide - 17

Kenya

National Environmental Tribunal (NET)

(under Environmental Management and Coordination Act, No. 8 of 1999 operational – January 2000.
First NET was appointed effective 2002)

The Tribunal was established under the Environment Management and Coordination ACT(EMCA) of 1999. The Act took effect in 2002, but it took three years to put the personnel and procedures in place before the Tribunal could convene to hear a matter.

The Tribunal is an independent body charged with reviewing the administrative actions and decisions of the National Environmental Authority (NEMA). In any appeal, the Tribunal may exercise the same powers as NEMA in the determination of proceedings. In addition, it can respond to certified questions regarding legal interpretation posed by NEMA. So far the Tribunal has issued rulings in three appeals and is in the final stages of the fourth.

The Tribunal consists of five members: a Chairman, appointed by the Judicial Service Commission; two lawyers, one nominated by the law society of Kenya and the other appointed by the Minister for Environment and Natural Resources; and two persons, appointed by the Minister, with competence in environmental conservation.

Slide - 18

Sweden

Regional and Environmental Courts of Appeal

Environmental Supreme Court

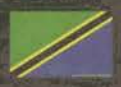
Environmental Courts – similar to earlier set up Water Courts (under Water Act 1983)

Slide - 19

Austria

Specialist Planning Appeals Tribunals

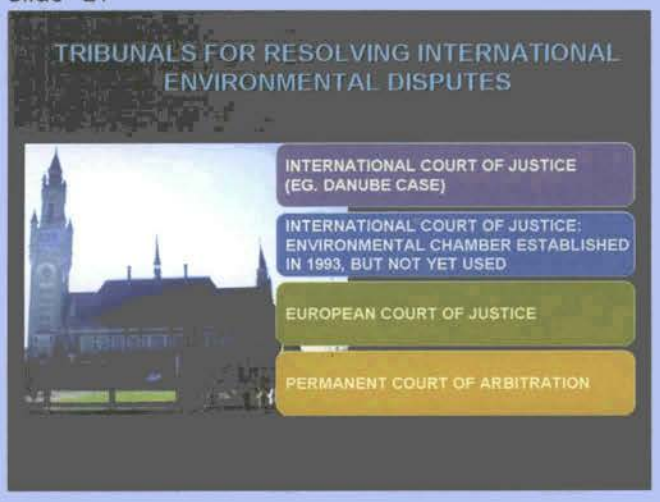
Slide - 20



Tanzania

Environmental Appeals Tribunal
(Under Environment Management Act, 2004; came into effect February 2005)

Slide - 21



The International Court of Justice was established under the auspices of the United Nations in 1945. It operates under the Statute of the International Court of Justice 1945.

The Court has heard a range of environment-related cases since its establishment.

The most significant environment-related case was Case Concerning The Gabcikovo-Nagymaros Project (Hungary/Slovakia).

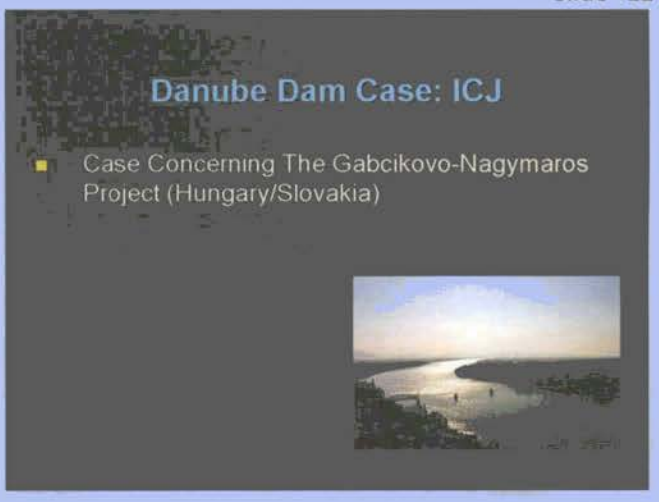
In 1993, an Environment Chamber composed of seven-members was established by the court to deal with environmental cases falling within its jurisdiction.

The Permanent Court of Arbitration published its "Optional rules for arbitration of disputes relating to natural resources and/or the environment" in 2001.

References:

* UNEP Compendium of Summaries of Judicial Decisions in Environment-related Cases, 2005, pages 275-310: Case Concerning The Gabcikovo-Nagymaros Project (Hungary/Slovakia) General List No. 92, 25 September 1997; pages 267-268 Nuclear Test Cases of 1974 and 1995.
* International Court of Justice Cases: http://www.icj-cij.org/icjwww/decisions.htm"

Slide - 22



This case concerned a series of locks on the Danube River and their consequences for water flow and navigation.
The case arose out of a treaty signed in 1977 between Hungary and Czechoslovakia. Following the partition of Czechoslovakia in 1993 Slovakia took the place of Czechoslovakia under the Treaty. The Treaty provided for the construction and operation of a barrage system on the section of the Danube River within the two countries. This was to be a joint investment to produce hydroelectricity, improve navigation on the relevant section of the Danube and protect areas along the banks against flooding. The Parties undertook to ensure that the Project did not impair the quality of the water in the Danube, and that nature would be protected in the course of the construction and operation of the system.
The Treaty provided for the building of two series of locks, one at Gabcikovo (in Slovak territory) and the other at Nagymaros (in Hungarian territory). The two locks were to constitute "a single and indivisible operational system of works." The cost of the joint investment was to be borne by the two parties in equal measure and parties were to participate in equal measure in the use of the system.
Work on the project started in 1978. Due to domestic criticism focusing on the economic and environmental implications of the project, Hungary suspended the works at Nagymaros in May 1989 pending the completion of various studies. Later, in October 1989 it abandoned the works altogether. By this time work on the Gabcikovo sector was well advanced, with the most advanced sections being 95% complete while the least advanced were up to 60% complete. On the Nagymaros sector, on the other hand, very little work had been done.
With Hungary's abandonment of the works, Czechoslovakia started investigating alternative solutions. One of them, "Variant C", entailed a diversion of the Danube by Czechoslovakia on its territory and the construction, also on its territory, of a reservoir with a storage capacity about 30% less than that of the one initially contemplated. Work on Variant C began in November 1991 and, in October 1992, Czechoslovakia put it into operation without the involvement of Hungary.
In April 1993 the parties agreed to submit the dispute to the ICJ. They requested the Court to decide, first, "whether the Republic of Hungary was entitled to suspend and subsequently abandon, in 1989, the works on the Nagymaros Project and on the part of the Gabcokovo Project for which the Treaty attributed responsibility to the Republic of Hungary." Secondly, the parties asked the court to decide whether "the Czech and Slovak Republic was entitled to proceed, in November 1989, to the provisional solution, and put it into operation in October 1992."
Hungary relied on a "state of ecological necessity" as justifying its termination of the treaty in 1989. It saw several ecological dangers from the works: the quality of the water would be impaired due to erosion and silting, there were risks of eutrophication and the fluvial fauna and flora would become extinct. Slovakia, on the other hand, denied the existence of a "state of ecological necessity." It argued that whatever ecological problems might have arisen could have been remedied. A "state of necessity" is "the situation of a State whose sole means of safeguarding an essential interest threatened by a grave and imminent peril is to adopt conduct not in conformity with what is required of it by an international obligation to another state."
With respect to Variant C, Hungary argued that this approach was a contravention of the 1977 Treaty, the convention ratified in 1976 regarding the water management of boundary waters, the principles of sovereignity, territorial integrity, the inviolability of state borders, as well as the general customary norms on international rivers and the spirit of the 1948 Belgrade Danube Convention. For its part, Czechoslovakia considered that recourse to Variant C had been rendered inevitable for economic, ecological and navigational reasons because of the unlawful suspension and abandonment of the works by Hungary.

The ICJ held as follows:
The Court observed that the Project's impact upon, and implications for, the environment were a primary issue in the case. The Court stated that the state of necessity is a ground recognised by customary international law for precluding the wrongfulness of an act not in conformity with an international obligation. The Court accepted that Hungary's concerns about the effects of the project on its natural environment related to its essential interest: safeguarding the ecological balance has come, in the last two decades, to be considered an essential interest of all states. It held, however, that given the uncertainties as to the ecological impact of the project, Hungary could not establish the objective existence of a peril that could justify invoking state of necessity. The environmental dangers highlighted by Hungary were mostly of a long term nature, and remained uncertain. Therefore, on the first question, the Court held that Hungary was not entitled to suspend and subsequently abandon the project, and that it's notification of termination of the Treaty did not have the legal effect of terminating it.
With respect to the second question concerning Variant C, the Court, while acknowledging the serious problems facing Czechoslovakia on account of Hungary's actions, held that Variant C failed to meet the cardinal condition of the 1977 Treaty, that the project was to be a "joint investment constituting a single and indivisible operational system of works." This could not be carried out by unilateral action, such as Slovakia's. Moreover, the operation of Variant C led Slovakia to appropriate for its own use and benefit between 80 and 90% of the waters of the Danube before returning them to the main bed of the river, despite the fact that the Danube is not only a shared international watercourse but also an international boundary river. The Court held that the implementation of Variant C by Slovakia was in this respect an internationally wrongful act. Czechoslovakia, by unilaterally assuming control of a shared resource, thereby deprived Hungary of its right to an equitable and reasonable share of the natural resources of the Danube failed to respect the proportionality which is required by international law. Czechoslovakai'a diversion of the river was therefore not a justified countermeasure.
Notably, the Vice-President of the Court, Justice Weeramantry, wrote a separate opinion that included an analysis of the role of sustainable development in "balancing the competing demands of development and environment protection."

Reference:

* UNEP Compendium of Summaries of Judicial Decisions in Environment-related Cases, 2005, pages 275-310: Case Concerning The Gabcikovo-Nagymaros Project (Hungary/Slovakia) General List No. 92, 25 September 1997

Slide - 23

SPECIAL ARBITRAL TRIBUNALS

- Trail Smelter Tribunal set up by special treaty in 1937 to arbitrate dispute on sulphur emissions from British Columbia to the State of Washington

The Columbia River rises in Canada and flows past a lead and zinc smelter at Trail, British Columbia. The climate from beyond Trail on the United States boundary is dry, but not arid. The smelter had been built under U.S. auspices, but had been taken over by a Canadian company in 1906. In 1925 and 1927, stacks, 409 feet high, were erected and the smelter increased its output, resulting in more sulphur dioxide fumes.

The higher stacks increased the area of damage in the United States. From 1925 to 1931, damage had been caused in the State of Washington by the sulphur dioxide coming from the Trail Smelter, and the International Joint Commission recommended payment of $350,000 in respect of damage to 1 January, 1932.

The United States informed Canada that the conditions were still unsatisfactory, and an Arbitral Tribunal was set up to "finally decide": whether further damage had been caused in Washington and indemnity due; whether the smelter should be required to cease operation; what measures were to be adopted to this end; and what amount of compensation was due.

Considering the circumstances of the case, the Tribunal held that Canada was responsible by international law for the conduct of the Trail Smelter and had a duty to see to it that this conduct was in conformity with Canada's obligations under international law.

Reference:

* UNEP Compendium of Summaries of Judicial Decisions in Environment-related Cases, 2005, pages 273 Trail Smelter Arbitration (1938/1941) 3 R.I.A.A. 1905 Arbitral; Tribunal: U.S. And Canada.

Slide - 24

CONCLUSION

MOVEMENT TOWARDS SPECIALIST COURTS

NEED FOR FLEXIBILITY IN ADJUDICATING ENVIRONMENTAL DISPUTES

RESTRICTION: ONLY APPLIES TO CASES THAT ARE BROUGHT UP AS "ENVIRONMENTAL CASES"

OTHER COURTS AND TRIBUNALS WOULD NEED TO EXAMINE THE ENVIRONMENTAL DIMENSION, IF ANY, IN CASES THAT COME BEFORE THEM.

www.unep.org
United Nations Environment Programme
P.O. Box 30552 Nairobi, Kenya
Tel: (254 20) 7621234
Fax: (254 20) 7623927
E-mail: uneppub@unep.org
web: www.unep.org

UNEP

ISBN: 978-92-807-2830-9
Job No: DEL/0956/NA