INTRODUCTION

A Global Learned Society to Address Earth’s Evolution:
The IUCN Academy of Environmental Law

Nicholas A. Robinson*

Law, as the manifestation of the human drive to live within an ordered society, has been at the center of life in all nations and in all civilization. Law always had a regard for nature, as the ancient Chinese pictogram for the law, FA, makes clear. However, until the late nineteenth century, law took nature for granted. As the industrial revolution emerged, as the scientific revolution brought to Earth the perspectives from space, and as human populations placed unprecedented demands on Earth’s natural resources to meet human needs and wants, humans began to induce an evolution in the planet. Deserts have grown, the Aral Sea has dried up, species have become extinct, urban settlements have become vast conurbations producing ever greater demands for housing, food stuffs, jobs, potable water, and energy.

It is not only natural that the field of law should address these phenomena, as a matter of simple justice law it must. No international authority mandated that the field of environmental law should be established. The field emerged in the 1970s, and now exists in all nations and as a growing element of international law. As the norms of environmental law have made clear,1 it also has become clear that much of the implementation of these norms remains unrealized. Much of this is due to the lack of trained personnel and deficiencies in the legislation comprising the first generation of environmental laws. To provide remedies for these deficiencies, the International Union for the Conservation of Nature and Natural Resources (IUCN), through its Commission on Environmental Law, called upon the university law faculties, law schools, and law departments of this Earth to establish a new learned society. In 2003, at Shanghai Jiao Tong University, over 150 professors from forty-two nations, representing some sixty universities, established the IUCN Academy of Environmental Law.2

The Academy is a learned society examining how law advances a just society that values and conserves nature. Its membership is open to those university law faculties, law schools, and departments that have invested sufficient resources to be able to join together into a consortium of learning, research and teaching. Every year, the Academy gathers in a Colloquium to share research on a given subject. The first such gathering has featured the role and reforms needed if energy law is to provide support for sustainable

2 The documentation recording the decisions and deliberations that resulted in the establishment of the IUCN Academy of Environmental Law can be accessed at http://www.iucn.org/themes/law.
* The IUCN Academy of Environmental Law.
development, as the United Nations World Summit on Sustainable Development (Johannesburg, 2002), defines that term. Each year, also, the Academy invites a distinguished senior scholar of environmental law to share with the academic community her or his reflections on the field of environmental law. This learned synthesis affords perspective and guidance for those scholars critiquing and advancing aspects of environmental law.

THE ACADEMY'S ANNALS

This volume represents the first publication of the Colloquium research and the annual synthesis of the field, as the Annals of the IUCN Academy of Environmental Law. Dr. Charles-Alexandre Kiss organized and published the proceedings of one of the very first international colloquia on “The Protection of the Environment and International Law” in 1973.3 It is fitting that he provides this inaugural set of lectures for the Annals.

Since the demand for energy has guided humans ever since the mastering of fire at an early stage of human evolution, it is also fitting that this inaugural Colloquium focuses on the law of energy for sustainable development. Without law reform to restructure how energy is produced and distributed and used, there will not be a just society and natural systems will be changed in ways unintended and often detrimental to ecology and to human health. The chapters in this volume set forth the case for law reform in the energy law sector.

The Academy is grateful to Shanghai Jiao Tong University, which hosted the inaugural first Colloquium and to the able editors of this volume, Prof. Adrian Bradbrook, Rosemary Lyster, Richard Ottinger, and Wang Xi. The Academy is also grateful to the University of Nairobi and its Faculty of Law and related Institute for Sustainable Development, and Prof. Charles Odidi Okidi and his colleagues, for undertaking to host the second Colloquium of the Academy on October 4–8, 2004, in Nairobi, Kenya. Subsequent annual colloquia are being hosted by the University of Auckland (New Zealand), Macquarie University (Sydney, Australia), Pace University (New York, USA), and a review of environmental law on the fifteenth anniversary of the Rio “Earth Summit” (UN Conference on Environment and Development, 1992) in Rio de Janeiro with the Association of Brazilian Environmental Law Professors and the Institute of Lawyers for a Green Planet. Finally, the Academy is most grateful to Gilbert Kerlin, a renown lawyer and conservationist, whose generous contribution to the Academy through the Pace University Center for Environmental Legal Studies, has underwritten much of the initial organizing for the launch of the Academy. Gil Kerlin was keenly devoted to building the rule of law and strengthening international cooperation, and he took delight in making support for the Academy one of his last constructive works of his own days on this Earth. He died on April 9, 2004.4

The Second Colloquium in 2004 will address land stewardship through the analytic lenses of comparative law techniques, and a wide range of other subjects. In closing


this introduction, it may be useful to provide a précis to introduce how the Academy intends to advance its mission.

PRÉCIS: THE IUCN ACADEMY OF ENVIRONMENTAL LAW

University law faculties have provided human society with the capacity to frame and be guided by the rule of law since at least the fifteenth century. In the annals of history, their capacity to endure must be accounted as robust. They address the enduring human thirst to frame just and consistent rules to guide our behavior. Each epoch has recast its rules to cope with the perceived needs of their societies. In doing so, law, akin to the Roman God Janus, has rewarded those who understand this mission with a view to the past, and those who conceive the challenge anew with a view for the future.

Among our society’s many pressing challenges at the start of the twenty-first century, how society responds to the human induced alternation of Earth’s natural systems surely ranks as the most profound in terms of its implication for the future of all life as we understand it. One cannot at once melt the glaciers and polar ice caps, alter the climate, raise the relative levels of the seas, cause extinction of a wide range of species, and watch the rapid growth of the human population in crowded human settlements around the globe, without asking some fundamental questions: How shall we cope? Our past accomplishments are no sure guide for this future, are they?

Since the late nineteenth century, a small cluster of scientists and civic leaders have presaged and worried about these developments. Through their effort, in 1948 a coalition of states, ministries, scientific and other learned societies and nongovernmental organizations established IUCN, the International Union for the Conservation of Nature and Natural Resources. Since then, successive generations of environmental leaders have built IUCN to become the premier international organization devoted to nature conservation and sustainable development. Today, IUCN has more state members than any other international organization that is represented as an official Observer in the United Nations General Assembly, and IUCN is unique in that role in having also over 120 ministries and over 800 nongovernmental organizations among its members. IUCN’s membership altogether eclipses the entire number of organizations in consultative status with ECOSOC, and these numbers are growing. IUCN has become the only fully global system of governments, learned societies, and civic associations united in a mission to “sustain a just society that values and respects nature.”

It should therefore come as no surprise that professors from university law faculties have played key roles in the evolution of IUCN. As the twentieth century concluded, law professors, particularly in Asia and the Pacific, called for establishment of a new academic network through which to coordinate their legal studies to guide the legal foundations for sustainable development through the IUCN Commission on Environmental Law. This led IUCN’s members at the Second World Conservation Congress (Amman, Jordan, 1999) to endorse Commission’s proposal to create a new, international, autonomous, learned society, the “IUCN Academy of Environmental Law.”

The Academy is the first global, learned society dedicated at once both to advancing knowledge of how law advances a just society that values and conserves nature, and to building the capacity of university law faculties to provide legal education to address
the environmental challenges of global change. It does so through three interrelated undertakings:

(a) Annually, through one or more of its member universities, the Academy hosts an annual Colloquium to synthesize advanced research on a significant theme of environmental law, and to engage a senior law professor to reflect on the discipline of this entire field of law. The Cambridge University Press publishes and disseminates these edited Annals of the IUCN Academy of Environmental Law. The Colloquium rotates to a different region of the Earth each year, facilitating participation by professors from universities located in the region. Because environmental law is still a young discipline, dating from around the time of the 1972 Stockholm Conference on the Human Environment, the professors at many law faculties, schools, and departments have not yet had an opportunity to meet with each other, or even get to know each other. Although there are some twenty national environmental law societies, until now there has been no academic environmental law network for law professors and their universities to work through. The Colloquia, and the publications of the Academy, will build this community of knowledge across all regions.

(b) When the professors gather together, they have the opportunity to further their individual collaboration on teaching and research in environmental law. Gathered during the Colloquia, the Academy encourages professors to collaborate on curriculum development and course texts, develop visitorships among universities, team teaching of courses, and distance learning.

(c) Through knowing the respective expertise and research interests of their member university law faculties, the Academy works to structure joint research into the legal aspects of significant environmental challenges, to build an understanding of how society may cope with them, and to develop new concepts about how law can assist society worldwide. This conceptual law development has been a hallmark of IUCN's Environmental Law Programme, producing in the past the original studies for the Convention on International Trade in Endangered Species (CITES, 1973), the UN World Charter for Nature (UN Res. 37/7, 1986), and the Convention on Biological Diversity (1992). Research for conceptual law development is undertaken in dialogue with IUCN, and the Academy's research recommendations are provided to IUCN for its Programme and its Members. The Academy's research has an immediate audience, beyond the community of academics around the world. IUCN's Environmental Law Programme, with the worldwide Commission on Environmental Law, the Union's global Environmental Law Centre located in Bonn, Germany, which is the hub for partner centers around the world, are positioned to respond to the Academy's recommendations and focus on their implementation. By the time researched proposals for conceptual law development are in print, responses to them will be under way. This link between research and action is important if states around the world are to be assisted in coping with the effects of the profound global changes reported by scientists in other disciplines.

The Academy's stimulated collaboration in teaching and research also builds the strength of universities around the world. Innovations in information technology and the Internet allow universities to share their resources in designing new, electronic “knowledge’ bases. They can also combine the talents of individual professors to collaborate in new interregional research projects. This can link universities north/south/east/west. The Academy can help broker research partnerships among interested universities, thereby overcoming the regional or national isolation that too
often exists. Some universities lack capacity to undertake fundraising needed to sustain research, while others lack the contacts to build the partnerships with universities in distant parts of the world that are essential to making effective use of capabilities provided by the revolution in information technology. University law faculties in developed states too often lack firsthand knowledge of even urgent sustainable development needs of developing states. In like vein, law faculties in states with economies in transition, as in many developing countries, often lack access to their colleagues from developed regions, who would have an interest in collaborating with them on issues such as how liberalized trade agreements impact on environmental management, or how zoonotic diseases can be better managed across regions to protect public health.

In short, while it works to build knowledge about how environmental law can better serve sustainable development and cope with global change, the IUCN Academy also strengthens the environmental law capacity within each university, and across universities. It adds value to the participating universities in multiple dimensions, and thereby helps to ensure that the historic mission of the law school is renewed in the coming years as the effects of global change are realized.

These Annals are a modest first step toward building the collaboration that this new learned society seeks. Those interested in participation in the work of the Academy can contact the Academy through the IUCN Centre for Environmental Law, in Bonn, Germany.
Public Lectures on International Environmental Law

Alexandre Kiss*

LECTURE 1: INTRODUCTION – THREE QUESTIONS

Allow me to tell you how much I appreciate and admire the organization of the present conference, the contribution of the Shanghai Jiao Tong University and the huge preparatory work done by Professor Wang Xi and his outstanding team. I am very grateful for having been invited.

It is a great honor for me to deliver the First Academy Public International Lecture of Environmental Law. While I am very proud of this distinction, I am even more pleased that IUCN and its Commission of Environmental Law were able to create that Academy. I know the considerable difficulties that the initiative of that creation had to overcome and the immense talent and energy which the President of that Commission, Professor Nicholas Robinson, invested in this enterprise.

The present conference concerns international environmental law. I propose to you to examine separately the three terms that figure in this phrase: “international,” “environmental,” and “law.” I will, however, modify this order and start with “environment” and then discuss successively “law” and “international.”

1 WHY DO WE SPEAK OF THE ENVIRONMENT?

The term “environment” can describe a limited area, the entire planet, or even include a part of the outer space that surrounds the Earth. The term “biosphere,” used in particular by the United Nations Educational, Scientific, and Cultural Organization (UNESCO), is more precise, if still broad. It designates the totality of the human environment, the part of the universe where, according to present knowledge, all life is concentrated. In fact, the biosphere includes a very narrow stratum encircling the globe. It comprises the Earth and several thousand meters above and under the surface of the earth and oceans.

Although respect for the Earth and the benefits it offers to humankind is deeply rooted in different religions and philosophies, the awareness that we can severely harm it by destroying its components is relatively recent. Indeed, the term “environment” is new in many languages, at least as it is defined today. In French, its origins go back to the

* Professor of Law, University of Strasbourg, France; President of the European Council for Environmental Law.
medieval verb "environner," but the term has been regularly used only since the begin-
nings of the 1960s. In other languages new words were created during the same decade
to express the concept: "Umwelt" in German, "Milieu" in Dutch, "Medio ambiente" in
These inventions indicate that less than forty years ago the world simultaneously dis-
covered a new phenomenon that represented a major challenge to modern society and
which had to be labeled and studied.

Let us recall two images or, rather, two representations of our planet, the Earth. The
first is rather old and was much used at the beginning of the "ecological era," which
started at the end of the 1960s. It has a specific current significance nowadays for China,
after the remarkable achievement of the first Chinese cosmonaut. The Earth can be
compared to an inhabited spaceship navigating in the outer space. The members of
the crew know and must realize that they have a given amount of oxygen, water, and
food for the whole journey and that they will have no more supply until they land. Our
planet can be compared to a certain extent to that spaceship, but only to a certain extent
because first, we do not know how long humanity will have to continue the journey and
second, we, the occupants of our spaceship, become more and more numerous. During
the last century our number was multiplied by three and according to UN estimations,
the number of the inhabitants of the planet could increase in the coming decades
by a third at least of the present six billion persons.

The second image is taken from a novel that had a great success several years ago
and was made into an even more popular movie, *Jurassic Park* by Michael Crichton.
The most interesting component of the book is not the description of the island where
dinosaurs were recreated or that of the disastrous events that annihilated this Disney-like
enterprise. A statement by a scientist in the course of a final discussion on the disaster
gives us a precious second key for further thinking:

Our planet is four and half billion years old. There has been life on this planet for
nearly as long. Three point eight billion years…. Great dynasties of creatures arising,
flourishing, dying away. All this happening against a background of continuous and
violent upheaval, mountain ranges thrust up and eroded away, cometary impacts,
voleanic eruptions, oceans rising and falling, whole continents moving…. Endless,
constant and violent change.…. The planet has survived everything, in its time. It
will certainly survive us…. Let’s say we have had a bad (radiation accident), and all the
plants and animals died, and the earth was clicking hot for a hundred thousand
years. Life would survive somewhere…. And after all those years, when the planet
was no longer inhospitable, life would again spread over the planet. The evolutionary
process would begin again. It might take a few billion years for life to regain its present
variety; And of course, it would be very different from what it is now. But the earth
would survive our folly. Only we… think it wouldn’t…..

My point is that life on Earth can take care of itself…. To the Earth a hundred
years is nothing. A million years is nothing. This planet lives and breathes on a much
vaster scale…. We have been residents here for the blink of an eye. If we are gone
tomorrow, the Earth will not miss us…. Let’s be clear. The planet is not in jeopardy.
We are in jeopardy. We haven’t got the power to destroy the planet – or to save it.
But we might have the power to save ourselves.

This long quote is self-explanatory and answers the first question we asked: Why do we
speak of the environment and of its protection?
2 WHY IS LAW NECESSARY TO PROTECT THE ENVIRONMENT?

Every human society elaborates norms that express and tend to protect the common concern (“common interest,” “intérêt général”) of the group or of the whole species. Other species develop instinctive traits that show similar concerns. The basic components of such concerns are the need to survive and the need to ensure the survival of the species or of the group. Despite their evolution and the sophisticated stage they reached, humans have the same basic needs, only transposed to more sophisticated forms.

In the first place, they should ensure their own survival, by avoiding trying to destroy each other, in other words, by trying to maintain peace. This was the primary aim of the UN Charter, in whose Preamble the peoples of the United Nations express their determination “to save succeeding generations from the scourge of war.” Human beings also need to survive by having access to the necessities of life and those things required for a decent life. This leads to the guarantee of fundamental economic and social human rights. Such rights, when they are accepted as creating an obligation or, at least, a target, lead to development that should allow every human being to have food, shelter, health care, and education. Development must, however, be sustainable, which means that the resources of the planet are used and managed so that they will be sufficient for ensuring satisfaction of the needs of humanity not only now, but for an indefinite future. Clearly, the protection of the environment is a basic factor in such development. Finally, historic experience shows that all these requirements cannot be ensured in human societies without the respect of the fundamental rights and freedoms of the individuals, men and women, who compose the communities. Thus, peace, development, preservation of the environment, and respect for human rights are the fundamental and interdependent values on which societies must be built and managed. They constitute the main components of the common concern of humanity.

Coming back to the role of law, its first aim must be to express, impose, and protect the common concern of humanity. Specifically, as far as the environment is concerned, law has the privilege to ensure its respect and preservation by imposing mandatory norms which can be enforced by public authority. It must be stressed that law not only means regulations that must be obeyed. It also has the task to help build adequate institutions having the mandate to draft and adopt specific rules, to implement them, and to control whether such implementation is correctly ensured.

Of course, law is not the only tool necessary to preserve the environment. The very nature of the environment imposes that we know what it is, its nature, its state, how it is deteriorated, and how to remedy such deterioration. Without almost the whole range of scientific disciplines no answer can be given to such questions. We should also not forget scientific branches that focus not on natural data but on the state and the evolution of human societies or on economic mechanisms and their dynamism which may orient or even govern them. There is thus an entire interdisciplinary chain that has to care for the preservation of fundamental values identified and protected by law. Law is the last link of the chain, because it must know and often use the findings of all the other scientific branches.

Consider the following example. The people living in a village in the proximity of a river complain of diseases that they never had before. A young man who just came home after having studied in the school of a nearby town thinks that this might be caused by some poison contained in the water of the wells. He persuades the members of the city
council to ask his former professor of science to come and make a test. The professor accepts and, after having examined the water, decides that an analysis is necessary. A chemical laboratory finds the presence of pesticides in the wells. The peasants of the region, however, do not use pesticides. The laboratory contacts the authorities of the region who charge a geologist to find out where is the source of the pollution. The geologist finds that the pesticides come from the underground water shed, connected to a river which is several kilometers away. The analysis of the water of the river is positive so that more investigation is needed. Geographers are asked to study the situation of the region. After having examined the agricultural lands along the river they find out that the upstream landowners do not use pesticides either, but there is a factory of chemicals near a smaller river that flows into the main river. Hydrologists establish the probability of pollution coming from that industry and estimate that rain water coming from that place makes new chemical analysis necessary. The analysis discovers that the waste dump of the factory contains an important amount of residues of pesticides. The regional authorities are asked to ensure the cleaning up of the dumping place. They have, however, no legislative instrument that could be used, since the factory has ceased its activities and nobody knows who owns the polluted piece of land and where the owner is. They submit the case to the national government which, after having consulted economists, decides to prepare a draft law to be introduced in the Parliament in order to modify the existing laws on environmental pollution so that the problem of pollution caused by waste dumped on land which was later abandoned would be solved. The necessary legal provisions are to empower the authorities to investigate industrial sites, to order their cleaning up, to use penal responsibility against the owner or whoever can be held responsible, and to make it possible for the victims of the pollution to ask for damages in civil courts.

This story is not entirely imaginary. It is based, at least partly, on the heavy pollution of the Rhine caused by an industrial accident in Switzerland in 1986 that also raised the problem of international cooperation between affected river states – Switzerland, Germany, and France.

The relationship between law and other branches of science is a major problem. Sciences such as geology, chemistry, physics, botany, zoology, and many other scientific branches play an important role as sources of knowledge in the formulation of legal norms. In concrete cases scientific expertise can also solve or help solve environmental problems. The level of scientific knowledge, however, presented as scientific certainty or uncertainty must be taken into account. This is one of the main elements of the precautionary approach formulated for the first time less than fifteen years ago.

Another important point to discuss is the relationship of economics with law, which needs to be clarified. After an initial focus on environmental regulation that dominated in the 1960s and 1970s, a reaction in certain countries condemned what it called the "command and control" system. Instead, it advocated restricting the role and the importance of law in favor of using economic instruments for the protection of the environment.

Two responses can be given to such criticism. First, as a rule economic activities need a legal framework. Absolute freedom of trade, industry, finance, does not, cannot exist. The experience of the European Common Market, which is based on the freedom of trade inside the Community, shows by its thousands of progressively adopted regulations, directives, and decisions, many of which are related to environmental protection,
ALEXANDRE KISS

that such freedom is a daydream – and not even necessarily a dream. Second, the adoption of economic instruments, such as taxes, subsidies, permit trade, certification, auditing, and quotas, cannot be used outside regulatory, legislative, or other norms that must invest them with the necessary legality and even legitimacy and ensure the availability of judicial control.

The situation is similar when environmental policy is to be drafted and applied. In past decades the importance of environmental policy was often stressed. It should not be forgotten that the definition of policy goals and principles needs the social consecration that only law can confer, because it expresses and protects fundamental values and has a permanent character. At the end of the day, legal norms are equally needed to implement goals and provide the means to implement environmental policy. The social mechanism of environmental protection can thus be characterized by a three-stage approach:

- In the first stage, law – mainly national constitutions, broad environmental laws, and major international conventions or declarations – defines the environmental values to be protected.
- In the second stage, environmental policy determines the objectives and strategies that should be used in order to ensure respect for environmental values, taking into account the prevailing economic, social, and cultural situations.
- In the third stage, legal or other instruments are used or have to be adopted to reach the objectives fixed by the environmental policy. The content of such instruments can be economic, political, social, or educational, but the form will be legal. As a feedback, the implementation of such instruments often needs the support of public opinion, the consensus of which was the very basis for recognizing the environment as a fundamental value.

Finally, we must mention a concept that has been very often used in recent years: environmental governance. Its contents are not very clear, but we may define it as the method of organizing the activities of and cooperation between national and international authorities, actors, and stakeholders, in order to ensure the good management and preservation of the environment.1 Very clearly, governance must also be built on and aim at the foundation of the value system expressed and enforced by law. In that perspective it must use the tools of social architecture such as the creation of institutions, of partnerships, capacity building, public information and participation, establishment of systems of remedies and reparation. At the end of the process here again legal norms have to determine the rights and the obligations of everybody, from the different authorities to the different components of civil society.

3 WHY DO WE NEED INTERNATIONAL ENVIRONMENTAL LAW?

Globalization, an understanding of the solidarity which links countries, regions, continents, and the entire world, developed progressively during the twentieth century. One of its main aspects was the protection of the environment, whose transboundary and later global dimensions were discovered incrementally. The development of law followed this evolution.

1 See D. C. Esty and M.H Ivanova, eds. Global Environmental Governance, Yale School of Environmental Studies, 2000.