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TOPICS IN INTERNATIONAL AFFAIRS: International Natural Resource Management and Policy



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The development of policies that relate to effective management of natural resources has become an increasingly-important part of what governments and international foreign assistance agencies around the world do. In some ways, we have moved far beyond the time in which individuals and corporations could utilize natural resources without considering the environmental and social consequences of their actions. In other ways, as we see from the considerable problems publicized in the news media and by environmental organizations, we still have a long way to go. A further problem is that governments and foreign assistance agencies often take measures to address environmental issues, but without considering the social problems that are intimately linked with environmental degradation.

The principal task of this seminar is to examine international natural resource management and policy. We will come to understand some of the complexity of the issues involved and begin to acquire some of the methodological and analytical skills that will enable us to contribute to developing more realistic and effective natural resource management policies. During the seminar, we will utilize a **case study approach** in which we look at particular natural resource management problems, examining both the environmental and social issues that are involved. These cases will illustrate the real-life "messiness" of attempting to make natural resource management policy in the absence of data, with many varied opinions about "the right answer", the trade-offs that are involved with any potential solution, and the techniques that should be used to begin the steps that will lead to more effective policies.

Students will be expected to write a major case study of their own dealing with a natural resource issue in a particular setting around the world. The range of cases that can be examined is infinite -- ranging across agriculture, forestry, fishing, mining, oil and natural gas extraction, water use, tourism, etc. Beginning approximately half-way through the semester, students will formally present background briefings concerning the results of their research to date. Based on input from these presentations and further research, students will write a final case study report that will be due no later than 5:00 PM on December 12. No incompletes or extensions will be granted.

Course Requirements: My expectation is that, in this course, students will be active participants in identifying resources and materials that will be shared with the instructor and with other students. We will begin each seminar meeting with a discussion of current events, focusing on international natural resource management problems featured in the weekly news. Students will be expected to share with the rest of the class what they have learned about current events. During the first few minutes of each class meeting, students should also share important web sites or other resources they have discovered.

During the course of this semester, each of you will complete a substantial research project. The terms of reference for this research project are found below. In addition to the regular class meetings, I also expect to regularly meet with each of you individually to assist you with the research and writing for your term project. While I have done substantial research on issues related to natural resource management and policy in several Latin American countries, students are encouraged to work on issues in other parts of the world. The comparative study of natural resource management and policy is the objective of this class.

Your investigation of natural resource management and policy issues in a particular country will require considerable independent research. I expect each of you to extensively use the Internet, World Wide Web, and other resources for identifying and getting access to materials. I have begun compiling a list of Home Pages for important sites related to these issues and this will serve as a <u>starting point for your research</u>. Because you may have to make extensive use of interlibrary loans, <u>you should begin your research as soon as possible</u>. During the course of the semester, each of you will be asked to present preliminary results of your investigations.

Your course grade will be based on the following:

- A) Attendance -- Based on previous experience, I have to make attendance a part of the course grade. Each of you will be allowed <u>one absence</u>. For each absence beyond one, I will deduct half a letter grade (e.g. if your work merits a B+, it would be reduced to a B).
- B) Class presentations -- Because you will each be expected to share the results of your investigations with the rest of the class, 25% of the grade will be based on the quality of these written and oral presentations. Timeliness is important; you must hand in each paper on the date that it is due. Another 25% of the grade will be based on the quality of your participation in discussion of common readings.
- C) Final paper -- The final 50% of your grade will be based on the quality of the final paper.

SCHEDULE: Because I want to find out about the countries and issues of interest to each individual in the class, the list of readings for the class may be modified during the course of the semester.

CLASS READINGS -- All of the readings to be done for class are on reserve in the GSPIA/Economics Library or are available on the World Wide Web. Please click <u>here</u> for a list of the readings to be done during the course of the semester.

- FINAL PAPER: Following are the Terms of Reference for your term paper in this International Natural Resource Management Policy Seminar. These are similar to actual terms of reference that you might receive in doing a background literature paper for the World Bank or other international foreign assistance agency. Each of you will choose a single natural resource management issue on which to focus during the course. In most cases, the issue will be drawn from within a country (e.g. oil expolitation in Ecuador; shrimp development in Mexico), but in some cases the issue may cut across national boundaries (e.g. the development of the waterway along the Paraguay and Parana Rivers in South America). From published and unpublished literature, you will produce a review concerning this important natural resource mangement policy issue. You will provide a report addressing the topics listed below.
- GLOBAL -- You are a consultant hired by a major international foreign assistance organization. This organization has been working with the government of a developing country (or group of countries). The country (or countries) are faced with a series of problems related to one of its major natural resources. Broadly defined, the problems are two. First, how can the natural resource be exploited in a managed way so as to either: result in sustainable yields of the resource (e.g. an agricultural crop, forest products), **or** minimize disruptions/pollution of other parts of the ecosystem (e.g. mining, oil exploitation, dam construction)? Second, how can the benefits from exploitation of the resource be managed so as to yield the greatest benefits to the country and its population? The foreign assistance organization and the country recognize that they do not understand all of the problems and difficulties that relate to the resource. They are thus asking you as a consultant to produce an analysis of the situation. Your task is to develop a background paper on the particular natural resource in question that will include the following specific elements:
- A. **The Natural Resource**. Describe the natural resource that exists. What does it consist of in terms of such factors as: over how great an area does it extend, what is its potential production, how much demand is there for it on the world market, how accessible is it, what are competing sources of the resource? What are the current proposals for the utilization of the resource?
- B. **Existing Use of the Resource** Describe the existing use and/or exploitation of the resource. Who are the individuals who are using the resource and/or the surroundings in which the resource exists? What is the legal framework (or lack thereof) for the current exploitation of the resource?
- C. **Stakeholders** -- Who are the stakeholders who are currently concerned with the resource? These should include local people, corporate interests, local, regional, and international environmental groups, government entities, etc. Describe each of these groups and their relationship to the resource? What are their main concerns about the resource and how it is used?
- D. **Conflicts Concerning the Resource** -- What are the biggest conflicts concerning the resource? How do these relate to the different stakeholders involved? What are the likely costs and benefits to each of the stakeholders if current uses continue (or if proposals for exploitation of the resource are implemented?

- E. **Ecological Concerns** -- What are the potential ecological effects of the use of the natural resource? What kinds of documentation exist concerning the potential ecological effects? Are there competing claims about the economic benefits of the utilization of the resource in comparison with the potential environmental damage? Have environmental impact assessments been done? Have they dealt adequately with the concerns being raised? Are there issues that the environmental impact assessments should address?
- F. **Social Concerns** -- Are there potential social and/or economic concerns that will arise with the exploitation of the natural resource? Have social impact assessments been carried out? Have these adequately addressed the issues raised? What kinds of issues should be addressed by a social impact assessment?
- G. **Policy Recommendations** -- Based on your previous analyses, what are the policy recommendations that you have for the organization and the country? What ought to be done, who should do it, and how should it be done? Please be sure that your recommendations are feasible given the current circumstances that exist in the country and the development organization.

DUE DATES FOR WRITING ASSIGNMENTS

Writing Assignment for September 30 -- Please produce a 4 to 8 page paper on the issue you have chosen country that deals with the following topics. Be prepared to discuss your results in class.

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Existing Use of the Resource Describe the existing use and/or exploitation of the resource. Who are the individuals who are using the resource and/or the surroundings in which the resource exists? What is the legal framework (or lack thereof) for the current exploitation of the resource?

Writing Assignment for October 14-- Please produce a 4 to 8 page paper that deals with the following issues. Be prepared to discuss your results in class.

Stakeholders -- Who are the stakeholders who are currently concerned with the resource? These should include local people, corporate interests, local, regional, and international environmental groups, government entities, etc. Describe each of these groups and their relationship to the resource? What are their main concerns about the resource and how it is used?

Conflicts Concerning the Resource -- What are the biggest conflicts concerning the resource? How do these relate to the different stakeholders involved? What are the likely costs and benefits to each of the stakeholders if current uses continue (or if proposals for exploitation of the resource are implemented?

Writing Assignment for November 4 -- Please produce a 4 to 8 page paper that deals with the following issues. Be prepared to discuss your results in class.

Ecological Concerns -- What are the potential ecological effects of the use of the natural resource? What kinds of documentation exist concerning the potential ecological effects? Are there competing claims about the economic benefits of the utilization of the resource in comparison with the potential environmental damage? Have environmental impact assessments been done? Have they dealt adequately with the concerns being raised? Are there issues that the environmental impact assessments should address?

Social Concerns -- Are there potential social and/or economic concerns that will arise with the exploitation of the natural resource? Have social impact assessments been carried out? Have these adequately addressed the issues raised? What kinds of issues should be addressed by a social impact assessment?

Writing Assignments for November 25 and December 15

Produce a draft of your final paper, one that incorporates all of the elements that are specified in the original terms of reference on the syllabus. Deliver three copies of the paper by the beginning of class on November 25. Each of you will be responsible for reading and commenting on the papers of two other students. These will be distributed during the class on November 25. You should make written comments on these papers and hand them back to your fellow students by December 2. I will also make extensive comments on the draft of your paper so you will have an opportunity to make revisions before handing in the final version of the paper. The class discussion on December 9 will include a discussion of the drafts of your papers. Your final paper will be due at 5:00 PM on December 15.

Some Useful Addresses on the World Wide Web

<u>EnviroLink</u> Envirolink bills itself as the largest online environmental information resource on the planet. EnviroLink is a non-profit organization, a grassroots online community that unites hundreds of organizations and volunteers around the world with millions of people in over 130 countries.

The World Bank The World Bank Group comprises five organizations: the International Bank for Reconstruction and Development (IBRD), the International Development Association (IDA), the International Finance Corporation (IFC), the Multilateral Investment Guarantee Agency (MIGA), and the International Centre for the Settlement of Investment Disputes (ICSID).

The Interamerican Development Bank The Interamerican Development Bank, the oldest and largest regional multilateral development institution, was established in December of 1959 to help accelerate economic and social development in Latin America and the Caribbean.

<u>The Asian Development Bank</u> The Asian Development Bank, a development finance institution consisting of 56 members, is engaged in promoting the economic and social progress of its developing member countries in the Asian and Pacific region.

The World Wildlife Fund The World Wildlife Fund bills itself as leading worldwide efforts to protect the world's threatened wildlife and the habitats they need to survive. World Wildlife Fund is part of the international WWF network, which has national organizations or representatives in more than 50 countries across five continents. WWF says that "We are uniquely positioned to act quickly when conservation emergencies arise, such as the need to save a highly endangered species or habit at or to acquire valuable land for a park or protected area."

The Nature Conservancy The Nature Conservancy bills itself as "Nature's real estate agent." Among environmental organizations, TNC fills a unique niche: preserving habitats and species by buying the lands and waters they need to survive. The Nature Conservancy operates the largest private system of nature sanctuaries in the world--more than 1,500 preserves in the United States alone. Some are postage-stamp size, others cover thousands of acres. All of them safeguard imperiled species of plants and animals.

<u>United States Agency for International Development</u> USAID is the organization charged with carrying out bilateral development projects around the world. Environment is one of the key emphases of the agency.

<u>United Nations Environment Programme</u>: "Geneva is a leading center for international treaties and major programmes dealing with the environment and sustainable development. Most of these activities are sponsored by the United Nations Environment Programme (UNEP) or by the UN Department for Policy Coordination and Sustainable Development (DPCSD). This Web site is maintained by UNEP's Information Unit for Conventions (IUC) to make information from secretariats more widely available."

<u>International Rivers Network</u> The IRN web site says that it is a global resource for all people who share concern for protecting and restoring the world's rivers and ensuring respect for the rights of riverine communities. The site provides important, in-depth background and current information on river campaigns around the world.

<u>The Ecosystem Home Page</u>The Ecosystem features full text updates organized by topic from the comprehensive news service of The Environment Digest, the Conservation Foundation's media diary of forthcoming events, and information about The Ecologist magazine.

The International Conservation Networking Systems Software (ICONS) Project. ICONS will run on any Windows-based platform (Windows 3.1, Windows 95 and Windows NT), and is compatible with GIS -- users can use GIS to query the database. For example, drawing a square around an area in Baja Norte and pointing at the Organizations database will compile a list of organizations in that area.

<u>The National Spatial Data Infrastructure</u> (NSDI) encompasses policies, standards, and procedures for organizations to cooperatively produce and share geospatial data. The Federal Geographic Data Committee(FGDC) has assumed leadership in the evolution of the NSDI in cooperation with state and local governments, academia, and the private sector.

G7 Environment and Natural Resources Management Prototype System. The G7 ENRM project's main objective is to create a global virtual distributed library of ENRM data and resources. This prototype is an initial step towards that goal. Entry and registration is completely free and will stay that way.

A home page that contains information about the <u>Hidrovia Paraguay-Parana</u>, a massive project to construct a waterway on the Paraguay and Parana Rivers that will facilitate transportation of goods and services in the Southern Cone of Latin America.

<u>Aquaculture Network Information Center</u> Provides lots of information and links to aquaculture sites around the world.

Documents from the <u>Summit of the Americas on Sustainable Development</u> that occurred December 7 - 8, 1996. The meeting took place in Santa Cruz de la Sierra, Bolivia, with the participation of Heads of State from 34 participating countries in the Hemisphere.

The Committee for the National Institute for the Environment (CNIE) has a web site. CNIE is a national non-profit organization with a mission to improve the scientific basis for making decisions on environmental issues through the creation of a nonregulatory federal science agency known as the National Institute for the Environment (NIE). They are developing a prototype National Library for the Environment, an on-line source of environmental information. This information resource has been recognized as a Webcrawler Select web site. CNIE has put on-line over 100 Congressional Research Service (CRS) documents related to the environment, agriculture, and natural resources.

The publications of the <u>Commission for Environmental Cooperation</u> are available at no cost on the Internet. This is the commission that was established as a result of the "environmental side agreement" in the establishment of the North American Free Trade Agreement (NAFTA). The CEC facilitates cooperation and public participation to foster conservation, protection and enhancement of the North American environment for the benefit of present and future generations, in the context of increasing economic, trade and social links among Canada, Mexico and the United States.

The <u>Eco Travels</u> website has been named one of the Internet's Top 1,001 by PC Computing magazine in the December 1996 issue. It bills itself as "the Internet's foremost clearinghouse of environmental news and ecotourism information for the Americas!"

The Land Tenure Center Library, housed in the Steenbock Memorial Library, is a comprehensive collection of documents on land tenure, agrarian reform, and agrarian structure in Africa, Asia, Latin America, the Caribbean, the Middle East, and Oceania. In addition, the library collects extensively on the subjects of agricultural economics and rural development for these regions. LTC maintains a specialized library with approximately 65,000 titles (including research reports, government and international agency documents, unpublished studies, and published research) and 20,000 indexed articles on items dealing with land tenure, agrarian reform, rural development, and related areas. The library also subscribes to more than 150 journals and newsletters. Over 53,000 of these citations are included in the University of Wisconsin on-line catalog, which is accessible through Internet.

The <u>Lincoln Institute of Land Policy</u> has as its mission to study and teach about land policy, including land economics and land taxation. The Institute is located in Cambridge, MA and was established in 1974.