

Geo 718-001 ENVIRONMENTAL MANAGEMENT IN DEVELOPMENT

Wed 2-4.45 CB 305

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This seminar will explore the practices of environmental management and development and their theoretical constructs.

Following are the topics which we will discuss:

I. Introduction/ Working Definitions for purposes of this seminar of the following terms:

Development; Economics, Environment, Environmental Management, Paradigm, Resource, Sustainable Development.

II. Evolution of Environmental Management

Nature/Society Relationship in America
Environmentalism from Stockholm (1972) to Rio (1992) and now
Environmental System, Social Economic Structures,
Analytical Tools and Methods
Environmental Policy Impact on Key Sustainable Development Issues
Economywide Policy and Environmental Linkages
Indicators and Causes of Selected Environmental Problems

III. Taxonomy of the Relationship between Environmental Management and Development

Frontier Economics versus Deep Ecology
Environmental Protection
Resource Management
Ecodevelopment

IV. Major Theories of Environmental Degradation and Development

Malthusian and Neo-Malthusian Approaches
Neoclassical Economics
Dependency and Ecological Marxist Approaches
Political Ecology Approach

V. Environmental Management Policy and Development in Selected Areas

United States, Japan, European Union, China, India, Latin America, Africa

Seminar Requirements

The seminar will rely on the use of group discussions and individual presentations. A reading list will be supplied for each of the above topics. Each seminar participant will submit three short critical reviews (not exceeding 5 double spaced typewritten pages) of ideas discussed in each major topic II,III, and IV.

Participants are required to submit a final research paper. The topic for this paper will be chosen by the participant and should be related to his/her research or application interest. Topic for this research paper must be approved by the instructor by February 7.. The outline of the paper will be due on February 14; the first draft will be due on

March 27; the final copy will be due on April 24. This paper must not exceed 25 typewritten pages.

Definitions

Development A process of progressive societal (therefore involving equity and political issues) and economic transformation, the major objective of which is the satisfaction of human needs and aspirations, usually achieved by increasing productive potential (growth) and equality of opportunity. (World Commission for Environment and Development, *Our Common Future*, Oxford and New York: Oxford University Press, 1987)

Ecology As a science the study of the interrelationships between living organisms and their biological, physical, geological, chemical and geographical environment. (McNaughton, S.J., and Larry L. Wolf, 1973, 1979. *General Ecology*, New York: Holt, Rinehart, and Winston.)

Economics The study of allocating the resources available to society in a way that maximizes social well-being (common neoclassical definition; Robbins, Lionel, 1935. *An Essay on the Nature and Significance of Economic Science*. London: Macmillan).

Ecosystem All of the organisms and environment in a single location. (McNaughton and Wolf, 1979).

Environment The complex of physical and biological (biotic, climatic, soil, and other) external conditions that affect the survival, growth, development, and reproduction of organisms (with social organizations, one could add the contextual environment of political, economic, sociocultural, and techno-scientific factors which influence the above functions of social systems).

Environmental Management The field of endeavor that seeks to balance human demands upon the Earth's natural resource base with the natural environment's ability to meet these demands on a sustainable basis.

Paradigm (1) an accepted model or pattern ... as an object for further articulation and specification under new or more stringent conditions; (2) a criterion for choosing problems; (3) the entire constellation of beliefs, values, techniques shared by the members of a given community. (Kuhn, Thomas. S. 1970. *The Structure of Scientific Revolutions*, 2nd edition. Chicago: University of Chicago Press),

Resource Any component of the environment that can be utilized by an organism.

Sustainable Development

(1) A pattern of social and structural economic transformations which optimizes the economic and other social benefits available in the present, without jeopardizing the likely potential for similar benefits in the future. (Goodland, Robert, and George Ledac, 1987. Environmental Management in Sustainable Development, in *International Association of Impact Assessment*, Spring 1987; Goodland, Robert, and George Ledac, Neoclassical Economics and Principles of Sustainable Development, *Ecological Modelling*, 38: 19-46).

(2) A process of change in which exploitation of resources, the direction of investments, the reorientation of technology development, and institutional change are all in harmony and enhance both current and future potential to meet human needs and aspirations. (WCED, 1987)

Question: Does this consider the phenomena of time lags between activities and ecological effects?

What is the distinction between "*sustainable*" and "*sustained*" ? What has been sustained in the past is not necessarily sustainable in the future.

(3) A process in which qualitative development is maintained and prolonged while growth in the biophysical scale of the economy becomes increasingly constrained by the capacity of the socio-ecosystem to perform over the long run two essential functions: to regenerate raw material inputs and to absorb waste outputs of the human economy. (Herman E. Daly, Senior Economist, Environment Department, The World Bank, Washington, D.C.)

Readings for Section II. Evolution of Environmental Management

Please read at least one or preferably two of the following publications and come prepared to discuss the major issues:

- Bandyopadhyaya, J. and Vandana Shiva. 1988. Political Economy of Ecological Movements. *Economic and Political Weekly*. June 11, 1988. 1223-1232.
- Caldwell, L. 1990. *International Environment Policy, Emergence and Dimensions*. Durham: Duke University Press.
- Carson, Rachel. 1962. *Silent Spring*, Boston: Mifflin
- Dobson, A. 1990. *Green Political Thought*. London: Unwin
- Downs, A. 1972. Up and Down with Ecology: The Issue/Attention Cycle. *The Public Interest*. 28, Summer 1972
- Dunlap, R. 1991. Trends in Public Opinion towards Environmental Issues 1965-1990. *Society and Natural Resources* 4: 285-312.
- Hurrell, A. and B. Kingsbury eds. 1992 *International Politics of the Environment*. Oxford: Oxford University Press.
- Karan, P. P. 1994. Environmental Movements in India. *Geographical Review* 84: 32-41.
- Krauss, E. and B. Simrock. 1980. Citizens' Movements: The Growth and Impact of Environmental Protests in Japan, in K. Steiner, E. Krauss, and S. Flanagan, eds. *Political Opposition and Local Politics in Japan*. Princeton, N.J.: Princeton University Press.
- Maddox, J. 1972. *The Doomsday Syndrome*. London: Macmillan
- McCormick, J. 1989. *The Global Environmental Movement*. London: Belhaven Press.
- Porritt, J. and Winners. 1988. *The Coming of the Greens*. London: Fontana
- Springer, J. and E. Constantini. 1974. Public Opinion and the Environment: An Issue in Search of a home, in Nagel, ed. *Environmental Politics*. New York: Praeger
- Tolba, M. et al. 1992. *World Environment 1972-1980*. London: Chapman and Hill.

Following are some of the questions which we will discuss:

What is environmental management? What is the theoretical framework for environmental management?

What are the important activities and structural processes by which society is interfering with environmental systems?

How society is to integrate environmental management with concerns about economic and social development?

What are the basic approaches of environmental management in development? Which type of approach works best with a specific problem and condition? What are the public policy implications of each approach or paradigm?

Is "environmental ethics" at the root of environment/ development problems?

Can tomorrow's world live at today's level of affluence?

How development and environmental management are being restructured in selected industrially advanced countries, former socialist countries, and less developed nations?

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