



The Alliance for Global Education, Pune Program Spring 2010

ESEI 380 Environmental Perspectives in India

Dr. Vijay Paranjape

Course Description:

The course will give the students a broad understanding of the major environmental issues facing the country today. It will expose the students to case studies and experiences related to the innovative experiments being made by a vibrant and active civil society in India. In addition, it will provide the linkages between the traditional Buddhist and Hindu ecological legacies and their application to modern problems of industrialization, pollution, and degradation of biological diversity. Contentious and complex issues such as “large dams vs. de-centralized water systems,” “chemical farming vs. organic farming,” “intelligent urban planning vs. car-dominated megapolises,” etc. will be de-bundled and explained using real-time examples. Students will have the opportunity to be exposed to rural and forest-dwelling communities, and farmers struggling to maintain their independence and pride. The course takes provides a snapshot of the Indian environment through historical times and converging into the sustainable development paradigm of the 21st Century.

Learning Outcomes and/or Expected Student Competencies:

The course will prepare the students to appreciate the complexities of environmental issues, analyze and understand them systematically, demystify the socio-economic and scientific aspects, and build up a capacity to arrive at personal positions and judgments about contentious environmental issues.

Attendance requirements

Class attendance is mandatory. As this is an intensive program, it is essential that students participate fully in coursework and all required academic activities. Excused absences may only be approved by the Resident Director, and students are expected to make up any missed work. Students may not make up for unexcused absences, and will be given a grade of zero for any missed work.

Course Requirements/ Evaluation:

Each candidate would need to write a Term paper not less than 3000 words on one of the themes selected by them. The course will end with group workshops on specific themes culminating with individual presentations.

Students will be evaluated by:

Participation/articulation in-group discussions	20%
Reflections on rural field visit	10% (22 nd February 2010)
Three Assignments	30% (17 th February 2010, 28 th February 2010, 12 th March 2010)
Term paper	40% (19 March 2010)

Reading Material:

Reading material for the course will be distributed in spiral bound Xerox form

Section A : Religion & History

Session 1 : Hindu and Buddhist perspectives on nature and environment.

Session 2 : Historical Lineage, Ashoka's edict and current traditions (The environmental Paradox).

Readings:

1. "Traditions, Concerns & Efforts in India". National Report to UNCED, M of E, GOI, June 1992 (Rio-Conference) (Pages 29 – 30)
2. "National Strategy for Conservation and Sustainable Development, Mo E and F, GOI, 1990 (Pages 85 to 94)
3. "Environmental Priorities in India & Sustainable Development, T. N. Khoshoo, Presidential Address, ISCA, 1986 (Pages 2-3)
4. " Ecological Responsibility: A Dialogue with Buddhism" Ed. Julia Martin, Shri Satguru Publications, 1997. (Pages. 102 to 160)
5. "Religion & Ecology in India & Southeast Asia". David. Gosling, Oxford Press, 2001 , (Chapters 2 , 3,& 5)
6. "Diversity the Hindustan Way" Vandana Shiva, Radha Bhar. R F S T E - Navadanya, 2001 (Pages 1 To 32)
7. "Ecology & Equity": Gadgil M, and Guha R. Penguin. 1995. (Reference)
8. "This Fissured Land" Gadgil. M and Guha. R, Penguin Oxford. University Press, 1993. (Reference)

Section B : Policies & Laws

Session 3 : Environmental Policy and Practice.

Session 4 : Forest Policy and Laws.

Session 5 : Protected areas and Forest-people Conflicts.

Readings:

1. National Environment Policy 2006; Government of India, Ministry of Environment and Forests.
2. Environmental Law and Policy in India – Cases, Materials and Statutes by Armin Rosencranz, Shyam Diwan, Maratha L. Noble ISBN 81-7118-036-1 (Pages 9 – 29, 39 – 40, 53-55,118-119)
3. The scheduled tribes and other traditional forest dwellers (Recognition of forest rights) Act, 2006
4. National Forest Policy 1988, Government of India, Ministry of Environment and Forests, New Delhi.

Section C : Water Resource Management

Session 6 : Water Policy and Control of Water Pollution Laws.

Session 7 : The Water Balance and Integrated Water Resource Management.

Session 8 : The Myths and Reality about Large Water Dams.

Session 9 : The Watershed (Catchments) Management Approach.

Session 10 : High Dams on Narmada Valley.

Readings:

1. Cultural Dimensions of intersectoral water management By Vijay Paranjpye from the Proceedings of the International Workshop held from 6th – 10th May 1996 in Berlin, Germany: Strategies for Intersectoral Water Management in Developing Countries – Challenges and Consequences for Agriculture. (Pages 23 – 42)
2. National Water Policy – 2002, Government of India, Ministry of Water Resources
3. The State of India's Environment 1982, A Citizen's report , Center for Science and Environment, New Delhi - Water (Pages 15 to 30)

4. The State of India's Environment 1982, A Citizen's report , Center for Science and Environment, New Delhi - Dams, (Pages 57 to 70)
5. High Dams on the Narmada, By Vijay Paranjpye, Indian National Trust for Art and Cultural Heritage 1990 ISBN 81-900061-6-9 – History of Development Projects (Page 13 to 30) & The Narmada water disputes tribunal award (52 to 90)
6. Damming the Three Gorges, What Dam Builders Don't Want You to Know Probe International 1993 ISBN 0-919849-18-0 Economic and Financial Aspects by Vijay Paranjpye (Page 145 to 160)
7. The Value of Nature: Ecological Politics in India, 2003 ISBN 81-86962-62-X – The Value and Politics of Water in India by Vijay Paranjpye (Pages 123 to 140)
8. River Water Sharing, Transboundary Conflict and Cooperation in India – Edited by N. Shanta Mohan, Sailen Routray, N Sashikumar 2010 – ISBN 978-415-55155-7 - Evolving a Negotiated Approach to Sharing of Transboundary Rivers by Vijay Paranjpye (Pages 121 to 139)
9. Sardar Sarovar Dam Project – Hearing before the Subcommittee on Natural Resources, Agricultural Research and Environment of the Committee on Science, Space and Technology U. S. House of Representatives one hundred first congress, first session; October 24, 1989. (Pages 120 – 150, 153 –157)
10. Evaluating the Tehri Dam. Vijay Paranjpye, Intach 1990 (Reference)

Section D : Urban Perspectives

Session 11 : Problem of Urban Water Management: surface and ground water : The case of Pune Metro area.

Session 12 : Urban Solid –Waste Management (Pune).

Session 13 : Urban Traffic and Transportation.

Session 14 : Planning for Exploding urban Populations.

Readings:

1. The State of India's Environment, A Citizens Report 1982, Center for Science and Environment, New Delhi - Habitat (Pages 92 to 111)

2. The State of India's Environment, A Citizens Report 1985, Center for Science and Environment, New Delhi - Tanks (Pages 37 to 54)
3. Concept note for a Comprehensive Transport Policy for the Pune Metropolitan Region, Patankar P.G., Parisar publication 2006
4. Presidential Address, Environmental Priorities in India and Sustainable Development 1986; Indian Science Congress Association, New Delhi; Ecologically Compatible Human Settlements and Slum Improvement, (Pages 177 to 189)
5. Know your cyclists – A survey report by Parisar.
6. The State of India's Environment, A Citizens Report 1999 Statistical Data Volume (Reference)
7. Environmental Status report, Pune Municipal Corporation (2001/02, 2003/04, 2007/08) (Reference)

Section E : Bio-diversity

Session 15 : The Bio Diversity, Conservation and protection and action Frame work.

Session 16 : The Ecological Sensitive Zones—Applications of Criteria to the Mahabaleshwar—Panchgani—Eco sensitive Zone.

Session 17 : The Ecological assessment and management of bio diversity in the Metro cities.

Session 18 : The Sanjay Gandhi National Park (a case study).

Readings:

Part A

1. The Biological Diversity Act 2002
2. Environment Impact Assessment Notification, Ministry of Environment and Forests
3. Concept Notes:
 - a. Access, Benefit-sharing, and IPRs
 - b. Aquatic Ecosystems
 - c. Culture and Biodiversity
 - d. Domesticated Biodiversity

- e. Economics and Valuation of Biodiversity
- f. Health and Biodiversity
- g. Livelihoods and Biodiversity
- h. Micro-organism Diversity
- i. Policies, Laws, and Planning related to Biodiversity
- j. Research, Education, Training related to Biodiversity
- k. Technology and Biodiversity
- l. Terrestrial Ecosystems
- m. Wild Biodiversity

Part B

1. Towards a green world by Anil Agarwal, Sunita Narain; Center for Science and Environment; Greening of Aid, Trade and Debt: Policing the Third World's Environment; Chapter 2 (Pages 85 to 102)
2. Towards a green world by Anil Agarwal, Sunita Narain; Center for Science and Environment; Building Blocks for Global Environment Democracy Chapter 5 (Pages 143 to 170)
3. Extracting of sand from forests and riverbeds; Circular Govt. of Maharashtra, Revenue and Forest Department, Govt. Circular No. Gokhani 1098/no. 141/kh
4. Land Acquisition Act 1894; Government of India.

Section F : Green Revolution

Session 19 : The aftermath of Green Revolution.

Session 20 : Organic farming for the sustainable development of rural communities.

Session 21 : The sustainability of organic farming in a globalised market-Economy.

Session 22 : Contemporising traditional natural farming through precision management of demand-supply.

Readings:

1. Tending the earth: Traditional, sustainable Agriculture in India, Winin Pereira, Earthcare Books, ISBN – 81-85861-28-5; Pages 1 to 24, 187 to 195
2. The Violence of the Green Revolution By Vandana Shiva, Other India Press, ISBN 81-85569-32-0; (Pages 11 -59)
3. Seeds of Plenty: Seeds of Hope; On-farm conservation of Indigenous Genetic Resources: The Asian Experience; edited by K. Vijayalaxmi and A. V. Balasubramaniam. Center for Indian Knowledge Systems, Dec 2004 (Pages 15 – 32)

Section G : Global Warming

Session 23 : The Global Warming Discourse and India's response.

Session 24 : Emission reduction techniques and policy frame work.

Session 25 : The Bio-methanation option for an integrated solution.

Session 26 : Response and adaptation to global-warming [induced] disaster.

Readings:

1. U.N. Framework Convention on Climate Change, Post UNCED Earth Summit Conference, New Delhi 1992 (23 pages).
2. Carbon Credit Trading, Nation & International Perspectives, Sengar D. and Shukla Pallav, 2008/9 (18 pages).
3. Impacts of Climate Change (India), IPPC—Website—2009 (6 pages).
4. Kyoto Protocol: Criticisms & the Road Ahead: Pallav Shukla 2009 Sengar D.S. (21 pages).

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