



The Alliance for Global Education, Pune Program Spring 2012

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," "climate change vs economic development" 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 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.

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 one group workshop on a specific theme where each student will have an opportunity to intervene or present ideas.

Students will be evaluated by:

Participation/articulation during the course and	
During in-group discussions	20%
Reflections on rural field visit	10%
Three Assignments	30%
Term paper	40%

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.



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Reading Material:

Reading material for the course will be distributed in spiral bound photocopied reader.

Field Visits:

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| 1. Pataleshwar Temple | 1 session |
| 2. Bhimashankar Sacred Grove | 2 days |
| 3. Nanegaon Organic Farm | 1 day |

Schedule of Topics and Readings:

Section A : Religion & History

Session 1: Western and oriental Perceptions (24th January)

Session 2: Hindu Tradition (31st January)

Session 3: Buddhist Tradition (2nd February)

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. "Religion & Ecology in India & Southeast Asia". David Gosling, Oxford Press, 2001, (Chapters 2 , 3,& 5)
5. "Diversity the Hindustan Way" Vandana Shiva, Radha Bhar. R F S T E - Navadanya, 2001 (Pages 1 To 32)

References:

1. "Ecological Responsibility: A Dialogue with Buddhism" Ed. Julia Martin, Shri Satguru Publications, 1997. (Pages. 102 to 160)
2. "Ecology & Equity": Gadgil M, and Guha R. Penguin. 1995. (Reference)
3. "This Fissured Land" Gadgil. M and Guha. R, Penguin Oxford. University Press, 1993.

Section B : Policies & Laws

Session 4: Environmental Policy and Practice (7th February)

Session 5: Forest Policy and Laws (9th February)



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Session 6: Protected areas and Forest-people Conflicts (14th February)

Readings:

1. 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)

References:

1. National Environment Policy 2006; Government of India, Ministry of Environment and Forests.
2. The scheduled tribes and other traditional forest dwellers (Recognition of forest rights) Act, 2006
3. National Forest Policy 1988, Government of India, Ministry of Environment and Forests, New Delhi.

Section C : Water Resource Management

Session 7: India's National Water Policy, 2002 (16th February)

Session 8: The Watershed (Catchments) Management Approach (23rd February)

Session 9: High Dams on Narmada Valley (28th February)

Readings:

1. The National Water Policy, 2002
2. The National Water Policy : An Alternative Draft for Consideration by Ramaswamy Iyer, Economic and Political Weekly, June 2011
3. 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)

References:

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)



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6. 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)
7. Evaluating the Tehri Dam. Vijay Paranjpye, Intach 1990 (Reference)

Section D : Urban Perspectives

Session 10: Planning for Exploding urban Populations (6th March)

Session 11: Problems of Urban Water and Land Management: Surface and Ground water in Pune (13th March)

Readings:

1. The State of India's Environment, "Habitat," A Citizens Report 1982, Center for Science and Environment, New Delhi (Pages 92 to 111)
2. The State of India's Environment, "Tanks," A Citizens Report 1985, Center for Science and Environment, New Delhi (Pages 37 to 54)

References:

3. 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)
4. The State of India's Environment, A Citizens Report 1999 Statistical Data Volume (Reference)
5. Environmental Status report, Pune Municipal Corporation (2001/02, 2003/04, 2007/08) (Reference)

Section E: Bio-diversity

Session 12: The Bio Diversity, Conservation and protection and action Frame work. (15th March)

Session 13: The Ecological Sensitive Zones—Applications of Criteria to the Mahabaleshwar— Panchgani—Eco sensitive Zone (16th March)

Session 14: The Sanjay Gandhi National Park (a case study) (27th March)

Readings:

1. Concept Notes:
 - a. Access, Benefit-sharing, and IPRs
 - b. Aquatic Ecosystems



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- 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
2. Anil Agarwal and Sunita Narain, “Greening of Aid, Trade and Debt: Policing the Third World's Environment,” in *Towards a Green World* (Center for Science and Environment), pgs. 85-102.
 3. Anil Agarwal and Sunita Narain, “The Action Framework: Building Blocks for Global Environmental Democracy,” in *Towards a Green World* (Center for Science and Environment), pgs. 143-170.

References:

1. The Biological Diversity Act 2002
2. Environment Impact Assessment Notification, Ministry of Environment and Forests
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 15: The aftermath of Green Revolution and organic farming for the sustainable development of rural communities (29th March)

Session 16: The sustainability of organic farming in a globalised market-Economy (3rd April)

Session 17: Contemporising traditional natural farming through precision management of demand-supply (5th April)

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)



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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 : Industrial Disasters and Global Warming

Session 18: The Bhopal Disaster: The Union Carbide Case (9th April)

Session 19: The Global Warming Discourse and India's response and adaptation to global-warming [induced] disaster (10th April)

Session 20: Emission reduction techniques and policy frame work and the Bio-methanation option for an integrated solution (11th April)

Readings:

1. U.N. Framework Convention on Climate Change, Post UNCED Earth Summit Conference, New Delhi 1992 (23 pages).
2. Impacts of Climate Change (India), IPPC—Website—2009 (6 pages).

References:

1. Carbon Credit Trading, Nation & International Perspectives, Sengar D. and Shukla Pailav, 2008/9 (18 pages).
2. Kyoto Protocol: Criticisms & the Road Ahead: Pailav Shukla 2009 Sengar D.S. (21 pages).

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