

MSP-E5.2

45 Hours

### POPULATION, ENVIRONMENT AND SUSTAINABLE DEVELOPMENT

**Learning objectives:**

This paper attempts to address the theoretical and empirical advancements and the strategies and concerns regarding population-environment-development linkages. After the successful completion of this paper, students will be able to:

- 1) Define the concept of sustainable development and explain how the idea of sustainability and development has changed over time.
- 2) Understand how the policies have evolved in line with the concept of sustainable development and population trends.
- 3) Critically examine the recent trends in sustainable development with specific focus on population changes.
- 4) Apply sustainable development concepts and policies to current population, environmental and developmental issues.

**Modules**
**I. Sustainable development: Conceptual and Theoretical issues**

Importance of Studying Sustainable development; Meaning, Concepts and Definitions; Inter-linkages between ecology and development; Economic growth and ecological degradation; Indicators and processes involved in its achievement; Brundtland Report on Environment and development and agenda.

**II. Innovations for Sustainable Development**

Conventional perspectives on development; Critics of Conventional Development perspectives; Case studies based on experiences from developed and developing countries; How the concept of sustainability has influenced the policy, programme practice in development sectors

**III. Population-environment linkages**

Ecological and environmental dimensions of sustainable development; Approaches to environment; Gandhian approach, Marxian/Socialist

approach, Neo-classical approach, Market approach; Population growth and climate change; Population matters to sustainable development and environment (growth, age structure, spatial distribution)

**IV. Population and Quality of Life**

Quality of life: definition and measurement; Resource creation, management and distribution of water, air, housing, etc; Land, Cattle and open Space linkages; Sanitation, Health and health care; Education and Information.

**V. Environmental Degradation and Poverty**

Sustainable livelihoods; Population and common property resources; Population, poverty and vulnerability; gender dimensions; Grass-root perspectives – Environment-Development struggle; Development and displacement; Alienation of tribal; Tribal land encroachment; Forest Depletion; Case studies – Narmada and Vedanta (Orissa) Projects.

**VI. Environmental issues in the context of migration and displacement**

Regional Development; Green Movements; Chipko movement; Silent valley movements etc; Natural Calamities – Flood, Droughts, Landslide, Earth Quakes, Tsunami etc; Urbanization-new challenges- environmental health hazards (water or air pollution); Solid Waste Management; Rain Harvesting; Mobility and Patterns of settlement; Development and urban ecology; Slums, Urban Poverty and Rehabilitation.

**VII. Governance for Sustainable Development**

Issues related to natural resources management; Forest management; Mining of natural resources, Ground Water, River and Ocean Pollution; Different institutional arrangements for environmental protection and their limitations; Creating and managing emission related norms; Some success models of efficient environmental management – CNG, Smokeless Choolah, and other successful green models; The Challenges for International Environmental Governance; Emerging new institutions of environmental protection; Capacity Building, Technology Transfer for Sustainable Development.

**VIII. Population, Society and Sustainable development**

Population and resources; Human versus land 'carrying capacity'; 'Population stabilization' to 'Population balance'; Critiques of sustainable development

perspectives; Role of social institutions; Individual behavior in the context of social costs and benefits; Gender and environment; Indigenous population and traditional methods of environmental sustainability; Sociological approaches to sustainable development; Vulnerability of Indigenous population; Case Studies – Sacred forests, Anti-Eucalyptus movement

#### IX. Contemporary issues

Affluence and environment: How rich countries are also responsible for the sad state of affairs?; NGOs and Development issues; Civil society initiatives and involvement; International Agencies; Population and Biodiversity; Research Methods to examine Population, sustainable development and environment nexus.

#### Reading List

##### Suggested Readings :

1. Bongaarts, John. (1992). Population growth and global warming. *Population and Development Review*, 18: 299-319.
2. Bründtland , G.H. (1987). *Our Common Future: The World Commission on Environment and Development*, Oxford, Oxford University Press.
3. Clarke, John I. (1996): “The Impact of Population Change on Environment: An Overview.” in Bernardo Colombo, Paul Demeny, and Max F. Perutz, (Eds.), *Resources and Population: Natural, Institutional, and Demographic Dimensions of Development*. Clarendon Press, Oxford, pp. 254-268.
4. Davis , Kingsley and Mikhail S. Bernstam (eds.) (1991), *Resources, Environment, and Population: Present Knowledge, Future Options*. New York: Oxford University Press.
5. Dawson, P. J, and R. Piffin, (1998), Is there a long run relationship between Population growth and living standards? The case of India, *Journal of Development Studies*, 34. 149-156.
6. Demeny, Paul. (1989). Demography and the limits to growth. In Michael S. Teitelbaum and Jay M. Winter (eds), *Population and Resources in Western Intellectual Traditions*. Supplement to *Population Development Review*. New York: Population Council.
7. Diana Liverman, Emilio F. Moran, Ronald R. Rindfuss, and Paul C. Stern, (Eds). (1998): *People and Pixels: Linking Remote Sensing and Social Science*. Committee on the Human Dimensions of Global Change, Commission on

- Behavioral and Social Sciences and Education, National Research Council, National Academy Press: Washington DC.
8. Dietz, Thomas and Eugene A. Rosa.(1997): "Effects of population and affluence on CO<sub>2</sub> emissions." *Proceedings of the National Academy of Sciences*. Vol. 94l pp. 175-179.
  9. Government of India (1999): *Silent Revolution for Environmental Conservation*, Ministry of Environment and Forests, New Delhi.
  10. Guha, Ramachandra and Martinez-Alier,J ( 1998): *Varieties of Environmentalism*, Oxford University Press, New Delhi.
  11. Hardin, Garrett.(1968): "The Tragedy of the Commons." *Science*. Vol. 162, No. 13, reprinted in Rex R. Campbell and Jerry L. Wade, (Eds), *Society and Environment: The Coming Collision*. Allyn and Bacon, Inc: Boston, MA, pp. 1243-1248.
  12. Harris, J.M. (2004) *Basic Principles for Sustainable Development*, Global Development and Environment Institute, working paper 00-04. (Available at [http:// ase.tufts.edu/gdae/publications/Working\\_Papers/Sustainable% 20 Development.PDF](http://ase.tufts.edu/gdae/publications/Working_Papers/Sustainable%20Development.PDF)).
  13. Holdren, J. P., and P. R. Ehrlich.( 1974). Human population and the global environment. *Am. Sci.* 62: 282-292.
  14. Kem, R., Parto, S. and Gibson, R.B.(2005). Governance for Sustainable Development: Moving from theory to practice, *The International Journal of Sustainable Development*, 8(1/2), 12-30.
  15. Keyfitz, N. (1991). Population and development within the ecosphere: one view of the literature. *Population Index*, 57: 5-22.
  16. Lafferty.W. (ed.) (2004). *Governance for Sustainable Development. The Challenge of Adapting form of Functions*, Cheltenham: Edward Elgar, (chapter 1 and 11).
  17. Lutz, Wolfgang, A.Prskawetz and W.C.Sanderson (eds.) (2002). *Population and Environment: Methods of Analysis*. Supplement to Population and Development Review. New York, Population Council.
  18. McNicoll, Goefferey.( 2005). *Population and Sustainability*. Working paper No.205. New York, Population Council.
  19. Pebley, Anne R. (1998): "Demography and the Environment." *Demography*. Vol. 35, No. 4; pp. 377-389.

20. Pimental, David, et al. (1999). Will limits of the Earth's resources control human numbers? *Environment, Development and Sustainability* 1: 19-39.
21. Preston, Samuel H. (1994). *Population and Environment: From Rio to Cairo*. Liège: International Union for the Scientific Study of Population (IUSSP).
22. Simon, Julian L. (1996). *Population Matters: People, Resources, Environment, and Immigration*. Transaction Publishers: New Brunswick, NJ.
23. UNFPA (2009): *State of World Population- 2009: Facing a changing world: Women, Population and Climate*, UNFPA, New York.
24. Zelezny, Lynnette C., Poh-Pheng Chua, and Christina Aldrich (2000): "Elaborating on Gender Differences in Environmentalism." *Journal of Social Issues*. Vol. 56, N. 3; pp. 443-457.