

CLIMATE CHANGE (6 CREDITS)

Course objectives:

- To develop an understanding of the science of climate change, and explore causes and impacts
- To understand the policy and equity issues in the climate change debate
- To understand the action perspectives - international, national and local
- To explore a range of actions possible to address the climate crisis

Science of Climate Change	Climate Equity, Development and Sustainable Living	Action Perspectives
<ul style="list-style-type: none"> • Climate system: an overview • Environment and Climate Change: differences • Insights from the IPCC <p>Causes</p> <ul style="list-style-type: none"> • Impacts: global perspective • Impacts in the Indian context: eco-system based human perspective to understand the needs of the vulnerable communities in every ecosystem: Forest, Coastal, Mountainous, Arid, Urban • Issues of Mitigation(emission reduction and sequestration) and Adaptation • Peak Oil and the post industrial stone-age • Climate Skepticism 	<ul style="list-style-type: none"> • Equity in climate change: emission scenario, current energy use and growth, access to development • Survival v/s luxury emissions: sustainable living • Approaches to equity and burden sharing: contraction and convergence, GDR framework; polluter's pay principle • Need v/s greed: challenging the consumerism culture • Re-ordering the 'global ecological space' equitably (carbon budget approach) • Linkage between Climate Change and poverty • Climate Change: an opportunity to revisit the current economic growth oriented model of development • Global warming in an unequal world: emphasis on political economy – historical emissions and ecological debt of the developed nations • Intergenerational responsibility • Gender and Climate Change. 	<ul style="list-style-type: none"> • United Nations Framework Convention on Climate Change (UNFCCC) and key landmarks in the negotiation process • International climate negotiations: stakes, debates and dilemmas • Climate politics in India: Government's policy perspective, National Action Plan on Climate Change (NAPCC) and States' Action Plan on Climate Change (SAPCC) and driving forces, India in the context of global imperatives; Climate mitigation, Carbon Trading • Technology, sustainable development and the green economy • Global advocacy initiatives by civil society's key players: environment and development NGOs, international organizations, business communities, academic and research Institutions, networks • Influencing national government agenda on Climate Change

Course Outline

Living with Climate Change	Methods and Communication aids envisaged
<ul style="list-style-type: none">• Urbanisation: Transportation, Construction, Waste and Recreation• Industrialization: Power sector, mining and fossil fuel exploration, steel, cement and aluminium• New Economics• Global – Local; Urban – Rural linkages• Science and wisdom of local communities: indigenous knowledge and practices Identifying new livelihood options• Sustainable Development through carbon neutral or low carbon pathway• Sustainable agriculture• Water sharing• Renewable and decentralized energy options• Bio-diversity• Coping and managing increasing health vulnerabilities• Disaster Risk Reduction and Disaster Management: vulnerability assessment and intervention for climate risk reduction• Individual actions: carbon footprint – personal, local, regional• Climate Education and Communication Research.	<ul style="list-style-type: none">• Lectures and interactive presentations with PPTs, video f discussions facilitated by different experts; and exposure around Pune.