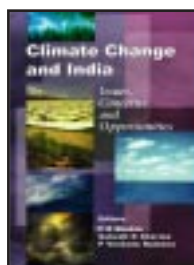


Annex-V

Publications under the Aegis of India's Initial National Communication

Books



Climate Change and India: Issues, Concerns and Opportunities

A Tata McGraw Hill Publication, Delhi, 2002

Editors:

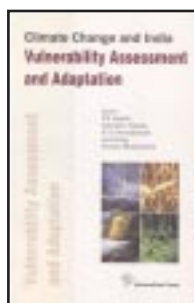
P. R. Shukla

Subodh K. Sharma

P. Venkata Ramana

India's commitment to the United Nations Framework Convention on Climate Change is reflected in the various initiatives which have been taken at the national level for sustainable development and climate change. Environmental protection and sustainable development have emerged as key national priorities and manifest in India's planned approach to socio-economic development and poverty eradication. Conservation and resource management are integral to the country's development plans. A sound environmental policy and law framework is also in place. Recent economic liberalization policies have seen new strides in technology upgradation, cleaner fuels, efficiencies in production and environmentally sound practices. At the same time, Indian society's traditional respect for the ecology, rivers and nature remains as strongly rooted as ever in the country's quest for sustainable and climate friendly development.

Ministry of Environment and Forests, Government of India organized a seminar at New Delhi to articulate the issues, concerns and opportunities for India resulting from climate change. Eminent experts were invited to contribute papers towards this objective. The book consolidates the papers presented at the seminar. The themes included integrated perspectives on climate change in terms of GHG inventory status and projections; sustainable development issues; climate change impacts and adaptation for India; climate change and Indian forestry and agriculture sectors; mitigation options using renewable energy technologies; and challenges, opportunities and responses of the Indian industry vis-a-vis climate change.



Climate Change and India: Vulnerability Assessment and Adaptation

A Universities Press Publication, Hyderabad, 2003

Editors:

P. R. Shukla

Subodh K. Sharma

N. H. Ravindranath

Amit Garg

Sumana Bhattacharya

The global scientific assessments present the picture of a warming world and other changes in the climate system. There is increasing evidence to attribute the warming to human activities, which will continue to change atmospheric composition throughout the 21st century. This book provides assessments of the impacts, vulnerabilities and adaptation needs for the key economic and ecological sectors of India. The assessments are undertaken keeping in view the regionally disaggregated projections of climate change over the Indian sub-continent. The sectors assessed include water, agriculture, forestry, eco-systems, health, coastal zones, energy and infrastructure. The complexity of the assessments in India derives from geographical diversity, close interface of economy and culture with monsoon, diverse and unique ecosystems, rising trends of population and economy, and relative scarcity of natural resources compared to growing demand. The book includes the state-of-the-art assessments by recognized

Indian experts from diverse disciplines. The four key contributions of the book are: first, the use of formal assessment tools under developing country contexts; second, the articulation and quantification of climate change and emissions scenarios for India; third, the consistency of assessments vis-à-vis future climate change projections; and fourth, the focus on development for delineating conclusions and tasks. The contents of the book shall be of interest to policy-makers; researchers and modelers engaged in impact assessment; global environmental assessment programs and development experts. The book is an excellent addition to the growing literature on global environmental assessment methodology, policies and perspectives.

Climate Change and India: Uncertainty Reduction in GHG Inventories (jn press)



A Universities Press Publication, Hyderabad, 2004

Editors:

A. P. Mitra

Sukumar Devotta

Kalyan Sen

Subodh Sharma

Sumana Bhattacharya

Amit Garg

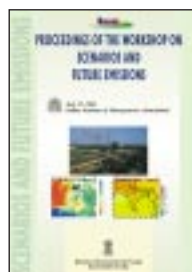
The critical factors on which the reliability of GHG inventory depends are emission coefficients and activity data used. The reliability of the activity data depends on the sources from where it is derived and the statistical reliability of the sampling made to ascertain the total activity in a country. Similarly, country-specific emission coefficients representing indigenous conditions are more appropriate for use for developing a national inventory. Considering these concerns, an effort was made under the aegis of India's Initial National Communication, to reduce uncertainty in GHG inventory estimates from the country. Measurements were conducted to derive GHG emission coefficients for some key source categories that contribute significantly to the total national GHG inventory. These include determination of NCV of different types of coal in India, CO₂ emission coefficients for the cement manufacturing process, GHG emission from transport sector, CH₄ from fugitive emissions in coal mining, N₂O emission from nitric acid production, CH₄ emissions from agricultural activities such as rice cultivation and enteric fermentation and CH₄ from solid waste management. The activity data which have been closely scrutinized for reducing uncertainty include allocation of fuel in the road transport sector and activities related to the land use and land cover change and forestry sectors. This book synthesizes sectoral papers contributed by participating experts and also suggests future activities that will help in strengthening India's emissions inventories further. The effort, considering the limited time available was remarkably extensive and productive.

Workshop proceedings



Proceedings of the NATCOM workshop on Vulnerability Assessment and Adaptation due to climate change on Water Resources, Coastal Zones and Human Health
June 27-28, 2003, Delhi

Proceedings contain the results of the investigations in the sectors water resources, coastal zones and human health. The proceedings include papers on impact of climate change on Chhota Shigri glacier, Chenab basin and Gangotri glacier, Ganga headwater in the Himalaya; ground water resources of Deccan Basalt and Ganga basin; malaria in India with emphasis on selected cities; impact of sea level rise on surface inundation and salt water intrusion in Goa; biogeochemical modeling studies of the Achankovil river basin; vulnerability assessment and adaptation for water sector, sea level rise along the Coast of India; lower Ganga-Brahmaputra-Meghna Basins, assessment of climate drivers controlling malaria, Sundarban island system; and increasing community resilience for adaptation to adverse impacts.



Proceedings of the NATCOM workshop on Scenarios and Future Emissions
July 22, 2003, Ahmedabad

Proceedings contain the results of the investigations for climate and emission scenarios and future green house gas emissions. The proceedings include papers on national circumstances for a sustainable future; regional climate change scenarios; future scenarios of extreme rainfall and temperature, emission scenarios and CO₂ emission projections; estimation of present and future emissions of HFCs, PFCs and SF₆ from Indian industry; future methane and N₂O emissions; impacts of climate change on energy, industry and infrastructure.



Proceedings of the NATCOM workshop on Vulnerability Assessment and Adaptation due to climate change on Agriculture, Forestry and Natural Ecosystems
July 18-19, 2003, Bangalore

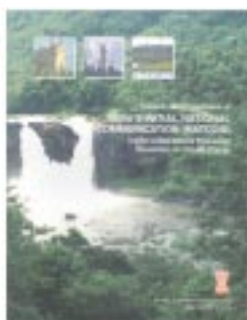
Proceedings contain the results of the investigations in the sectors agriculture, forestry, and natural ecosystems. These include papers on impact of enhanced CO₂ concentration on crop growth; assessment of impacts of climate change on crop yields; irrigated and rainfed crop production systems; forests; mangrove forests along the southern west coast; meadows and mountain ecosystems; marine ecosystems; natural ecosystems; lotic ecosystem; Garhwal Himalayan forests; wet evergreen and shola forests of Kerala; Kachchh district of Gujarat; case study of sequestration of carbon through afforestation; and GIS based evaluation of climate change impacts on hydrology.



Proceedings of the NATCOM Workshop on Uncertainty Reduction in GHG Inventory Estimates
March 4-5, 2003, Delhi

Proceedings contain papers on uncertainty reduction in estimation of greenhouse gas inventories from coal fired power plants & integrated steel plant; thermal power plants; coal mining and handling activities; road transport sector; rice fields; CO₂ emissions in cement plants; lime production process; dolomite mineral use; N₂O emission coefficient from nitric acid production; rice cultivation; CH₄ and N₂O emission from flooded rice soils; CH₄ emissions from livestock; CH₄ and N₂O emission from agricultural soils; field burning of agricultural crop residue; CH₄ emission from municipal solid waste landfills; quality assurance, and the LULUCF sector.

Brochures



Towards the preparation of India's Initial National Communication (NATCOM) to the United Nations Framework Convention on Climate Change
June 2002



Towards the preparation of India's Initial National Communication (NATCOM) to the United Nations Framework Convention on Climate Change
November 2002

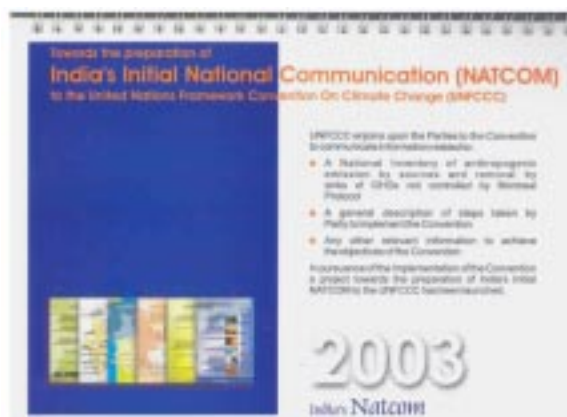


A Compendium of Activities: India's NATCOM on the World Wide Web
May 2003



India's Initial National Communication (NATCOM) to the United Nations Framework Convention on Climate Change
November 2003
Publicity material

Calendar 2003



Posters



