B.A. (Prog.) Semester IV

Paper: Environmental Geography

Unit 5. New Environmental Policy of India; Government Initiatives

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NEP of India

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Government Initiative's in various spheres of environment.

Introduction

National Environment Policy 2006 is a response to India's national commitment to a clean environment, mandated in the Constitution in Articles 48 A and 51 A (g), (DPSP) strengthened by judicial interpretation of Article 21.

It is recognized that the maintenance of the Healthy environment is not the responsibility of the state alone. It is the responsibility of every Citizen and thus a spirit of partnership is to be realized through the environment Management of the country. Here is the summary of the National Environment Policy 2006:

Key Environment Challenges

The key environmental challenges that India faces are related to the nexus of environmental degradation with poverty in its many dimensions, and economic growth. Challenges are intrinsically connected with the state of environmental resources, such as land, water, air, and their flora and fauna.

Drivers of Degradation

Proximate drivers of environmental degradation are population growth, inappropriate technology and consumption choices, and poverty, leading to changes in relations between people and ecosystems, and development activities such as intensive agriculture, polluting industry, and unplanned urbanization. Other drivers of degradation are the lack of clarity or enforcement of rights of access and use of environmental resources, policies which provide disincentives for environmental conservation (and which may have origins in the fiscal regime), market failures (which may be linked to shortcomings in the regulatory regimes), and governance constraints.

Impact on Health

Poor environmental quality has adversely affected human health. Environmental factors are estimated as being responsible in some cases for nearly 20 percent of the burden of disease in India, and a number of environment-health factors are closely linked with dimensions of poverty (e.g. malnutrition, lack of access to clean energy and water). Interventions such as reducing indoor air pollution, protecting sources of safe drinking water, protecting soil from

contamination, improved sanitation measures, and better public health governance, offer tremendous opportunities in reducing the incidence of a number of critical health problems.

Objectives of the Policy

- Conservation of Critical Environmental Resources
- Intra-generational Equity: Livelihood Security for the Poor
- Inter-generational Equity
- Integration of Environmental Concerns in Economic and Social Development:
- Efficiency in Environmental Resource Use
- Environmental Governance
- Enhancement of Resources for Environmental Conservation

Principles of National Environment Policy 2006

The Policy evolved from the recognition that only such development is sustainable, which respects ecological constraints, and the imperatives of justice. The Objectives stated above are to be realized through various strategic interventions by different public authorities at Central, State, and Local Government levels. They would also be the basis of diverse partnerships. The principles followed in the policy are:

- Human Beings are at the Centre of Sustainable Development Concerns:
- Right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations.
- In order to achieve sustainable development, environmental protection shall constitute an integral part of the development process and cannot be considered in isolation from it.
- Where there are credible threats of serious or irreversible damage to key environmental resources, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.
- In various public actions for environmental conservation, economic efficiency would be sought to be realized

“Polluter Pays” principle

Impacts of acts of production and consumption of one party may be visited on third parties who do not have a direct economic nexus with the original act. Such impacts are termed

“externalities”. The National Environment Policy promotes the internalization of environmental costs, including through the use of incentives based policy instruments, taking into account the approach that the polluter should, in principle, bear the cost of pollution, with due regard to the public interest, and without distorting international trade and investment.

Legal Liabilities in the Policy

The environmental redressal mechanism based on doctrines of criminal liability, have not proved sufficiently effective, and need to be supplemented. The policy adopts the civil liability for environmental damage that would deter environmentally harmful actions, and compensate the victims of environmental damage.

The alternatives to Civil Liability may also apply viz. Fault Based liability and Strict Liability.

In Fault Based Liability a party is held liable if it breaches a preexisting legal duty, for example, an environmental standard.

Strict liability imposes an obligation to compensate the victim for harm resulting from actions or failure to take action, which may not necessarily constitute a breach of any law or duty of care.

The Doctrine of Public Trust

As per this doctrine, the State is not an absolute owner, but a trustee of all natural resources, which are by nature meant for public use and enjoyment, subject to reasonable conditions, necessary to protect the legitimate interest of a large number of people, or for matters of strategic national interest.

Legislative Reforms

A judicious mix of civil and criminal processes and sanctions will be employed in the legal regime for enforcement, through a review of the existing legislation. The policy calls for identification of the emerging areas for new legislation, due to better scientific understanding, economic and social development, and development of multilateral environmental regimes, in line with the National Environment Policy. It also calls for review the body of existing legislation in order to develop synergies among relevant statutes and regulations.

Environment Impact Assessment

The policy focuses on encouraging the regulatory authorities, Central and State, to institutionalize regional and cumulative environmental impact assessments (R/CEIAs) to ensure that environmental concerns are identified and addressed at the planning stage itself.

CRZ

The policy aims to revisit the Coastal Regulation Zone (CRZ) notifications to make the approach to coastal environmental regulation more holistic, and thereby ensure protection to coastal ecological systems, coastal waters, and the vulnerability of some coastal areas to extreme natural events and potential sea level rise. In pursuance with the Policy CRZ Notification 2011 was released recently.

The Problem of LMOs

LMO refers to the Living Modified Organisms. Living modified organisms (known as LMOs) result from modern biotechnology is broadly equivalent to genetically modified organisms.

The difference between an LMO and a GMO is that a Living Modified Organism is capable of growing, and typically refers to agricultural crops. Genetically Modified Organisms include both LMOs and organisms which are not capable of growing, i.e. are dead.

The National Environment Policy says that Genetically Modified Organisms require evaluation of their potential benefits and risks as part of relevant regulatory processes. The subset of LMOs, may, however, owing to their potential for replication, involve environmental concerns in addition. LMOs may pose significant risks to ecological resources, and perhaps, human and animal health. In order to ensure that development of biotechnology does not lead to unforeseen adverse impacts, the policy aims to review the regulatory processes for LMOs so that all relevant scientific knowledge is taken into account, and ecological, health, and economic concerns are adequately addressed.

ESZs

The Environmentally Sensitive Zones are the areas with identified environmental resources having “Incomparable Values” which require special attention for their conservation.

In order to conserve and enhance these resources, without impeding legitimate socio-economic development of these areas, the National Environment policy aims to identify and give legal status to Environmentally Sensitive Zones in the country having environmental entities with “Incomparable values” requiring special conservation efforts. The policy also envisages formulating area development plans for these zones on a scientific basis, with adequate participation by the local communities.

Desert Habitats

The arid and semi-arid region of India covers 127.3 mha (38.8%) of India’s geographical area and spreads over 10 states.

The Indian desert fauna is extremely rich in species diversity of mammals and winter migratory birds. However the pressures of a rapidly increasing population on the natural resource base necessitate adoption of innovative and integrated measures for conservation of desert ecosystems. The policy aims at measures such as Intensive water and moisture conservation through practices based on traditional and science based knowledge, and relying on traditional infrastructure.

Panchayats & Women Participation

The policy aims at working towards giving the legal recognition of the traditional entitlements of forest dependent communities taking into consideration the provisions of the (PESA). This would remedy a serious historical injustice, secure their livelihoods, reduce possibilities of conflict with the Forest Departments, and provide long-termincentives to these communities to conserve the forests.

Wild life

The policy aims to expand the Protected Area (PA) network of the country, including Conservation and Community Reserves, to give fair representation to all bio-geographic zones of the country. In doing so, develop norms for delineation of PAs in terms of the Objectives and Principles of the National Environment Policy, in particular, participation of local communities, concerned public agencies, and other stakeholders, who have a direct and

tangible stake in protection and conservation of wildlife, to harmonize ecological and physical features with needs of socio-economic development.

Wetlands

The Ramsar Convention defines wetlands as, 'areas of marsh, fen, peat land or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six meters', thereby giving a wide scope to the term. Wetlands are under threat from drainage and conversion for agriculture and human settlements, besides pollution. The policy aims at setting up a legally enforceable regulatory mechanism for identified valuable wetlands, to prevent their degradation and enhance their conservation. Develop a national inventory of such wetlands.

Government Incentives

Air Pollution

Notification of National Ambient Air Quality Standards 2009, envisaging 12 pollutants. Implementation of Bharat Stage IV norms in the 63 selected cities and Bharat Stage III norms in rest of the country. National Air Quality index was launched by the Prime Minister in April, 2015 starting with 10 cities Cheap & Clean – How Solar Power May Shape The Future of Modern India Setting up of monitoring network for assessment of ambient air quality

Introduction of cleaner/alternate fuel like CNG, LPG etc. and promotion of public transport network including Metro. Creation of infrastructure for industrial pollution control incorporating cleaner production processes, setting up of common pollution control facilities. Clean India Mission (Swatch Bharat Abhiyan) has been launched CAMPA.

National Clean Air Programme (NCAP) was recently launched by Ministry of Environment, Forest and Climate Change (MoEFCC).

About NCAP

- It is a pollution control initiative to cut the concentration of particles (PM10 & PM2.5) by 20-30% by 2024. It will have 2017 as the base year for comparison and 2019 as the first year.
- It is to be implemented in 102 non-attainment cities. These cities are chosen on the basis of Ambient Air Quality India (2011-2015) and WHO report 2014-2018.
- It is not legally binding.
- Its objectives includeo Stringent implementation of mitigation measures for prevention, control and abatement of air pollution.
- Augment and strengthen air quality monitoring network across the country.
- Augment public awareness and capacity building measures.

Significance of NCAP

- First such effort - Framing a national framework for air quality management with a time-bound reduction target.
- Multi-sectoral Collaboration and Participatory approach: It has tried to incorporate measures for urban as well as rural areas. Further, NCAP also identifies the transboundary nature of air pollution.
- Linking Health and Pollution: NCAP has now taken on board the National Environmental Health Profile of 20 cities that the MoEFCC initiated along with the Indian Council of Medical Research with special focus on air pollution and health.

Clean air-India initiative

Clean air India initiative was launched in Delhi by Prime Minister of Netherlands.

About the initiative

• It is a collaborative project between Get in the Ring (a platform for start-ups by the government of the Netherlands), Start-up India and INDUS Forum (an online matchmaking platform of Indian and Dutch businesses).

• Aim: To curb air pollution in Indian cities by promoting partnerships between Indian startups and Dutch companies and build a network of entrepreneurs working on business solutions for cleaner air.

Comprehensive Environmental Pollution Index (CEPI)

- It is measured by Central Pollution Control Board for Monitoring Polluted Industrial Areas (PIAs).
- It is a rational number between 0 and 100.
- CEPI score of 70 or above is considered as critically polluted cluster tag.
- Categorization of industrial sectors based on

CEPI score:

- Industrial Sectors having Pollution Index score of 60 and above - Red category
- Industrial Sectors having Pollution Index score of 41 to 59 – Orange category
- Industrial Sectors having Pollution Index score of 21 to 40– Green category
- Industrial Sectors having Pollution Index score incl. & upto 20- White category (newly introduced)

WAYU (Wind Augmentation Purifying Unit)

- It is developed by Council of Scientific and Industrial Research – National Environmental Engineering Research Institute (CSIR-NEERI) as a part of Technology Development Project being funded by Department of Science and Technology.
- The device works on two principles mainly Wind generation for dilution of air pollutants and Active Pollutants removal.
- It has filters for Particulate Matter removal and activated carbon (charcoal) and UV lamps for poisonous gases removal such as VOCs and Carbon Monoxide.
- It has the capacity to purify air in an area of 500 meter square.

Compensatory Afforestation Bill, 2016

The enactment of the Compensatory Afforestation Act, 2016 has is aimed at ending ad-hocism and help the Centre and State governments utilise funds in a planned manner.

It will facilitate make available more than Rs 6,000 crore per annum to the states and union territories (UTs) for conservation, protection, improvement and expansion of forest and wildlife resources of the country.

According to the government, availability of these amounts will not only help the states and UTs, and local communities, to ensure better management of their forest resources but will also result in creation of more than 15 crore man-days of direct employment.

A major part of these amounts will be used to restock and improve quality of degraded forests, which constitutes more than 40 percent of the total forest cover of the country.

The Act provides for establishment of a permanent institutional framework at the Central at each State and Union territory to ensure utilization of these funds in an expeditious and transparent manner.

It provides for transfer of 90 percent of the accumulated amounts, which presently is of the order of Rs 40,000 crore (excluding about Rs 2,000 crore of interest already accrued on amounts presently being kept as fixed deposits) to the States for creation and maintenance of compensatory afforestation and execution of other activities for conservation, protection, improvement and expansion of forest and wildlife resources of the country.

All fresh amounts to be realised by the States in lieu of forest land to be diverted for non-forest purpose will be deposited directly into the funds to be created under public account of the respective State.

The remaining 10 percent, retained at the national level, will be used for monitoring and evaluation of activities to be undertaken by the states, UTs and the Centre from these funds and to provide, research and technical support to the states so as to ensure that these amounts are used in the technically best possible manner.

Central Government while according prior approval under the Forest (Conservation) Act, 1980 for diversion of forest land for non-forest purpose stipulates conditions to the effect that the State Government shall realize funds from the user agency for compensatory afforestation, catchment area treatment plan, wildlife management plan etc. to mitigate impact of diversion of forest land.

In most of the States, funds received from the user-agencies were deposited in consolidated fund as revenue receipts which were made available to the Forest Department through budgetary provisions.

The Central Government in exercise of powers conferred under Section 3 (3) of the Environment (Protection) Act, 1986 constituted Compensatory Afforestation Fund Management and Planning Authority (CAMPA).

However, the CAMPA could not be operationalized, until the Bill's passage in Parliament in 2016.

River Conservation

The Water Resources Information System (WRIS) database developed by Central Water Commission along with Indian Space Research Organisation includes 15,615 numbers of identified rivers/streams in the country.

The Central Pollution Control Board (CPCB) in association with the State Pollution Control Boards is monitoring the water quality of rivers in the country on a regular basis.

According to a report published by CPCB in February, 2015, 302 polluted river stretches have been identified on 275 rivers based on Bio-chemical Oxygen Demand (BOD) level in rivers, a key indicator of organic pollution.

Various rivers have been identified under the programmes of National River Conservation Plan (NRCP) and NGRBA (National Ganga River Basin Authority) for implementation of projects on cost sharing basis between Central and State Governments.

The NGRBA programme along with work of Ganga and its tributaries has been transferred to Ministry of Water Resources, River Development and Ganga Rejuvenation from August 2014.

Currently, NRCP (excluding Ganga and its tributaries) has covered polluted stretches of 31 rivers in 75 towns spread over 14 States involving a sanctioned cost of Rs 4,517.82 crore.

The National River Conservation Directorate (NRCD) in the Ministry of Environment, Forests and Climate Change is implementing the centrally sponsored schemes of (NRCP) and

National Plan for Conservation of Aquatic Eco¬systems (NPCA) for conservation of rivers, lakes and wetlands in the country.

Forest Conservation

The National Afforestation Programme (NAP) is the flagship scheme under the Ministry of Environment, Forest and Climate Change.

According to the India State of Forest Report-2013, the total forest cover in the country is 697,898 square kilometers, which is 21.23 percent of the total geographical area of the country. There is a net increase of 5871 square kilometers in the forest cover of the country as compared with India State of Forest Report-2011. It is also a fact that the density of population has increased in the State of Maharashtra, Karnataka, Chhattisgarh, Odisha and Jharkhand.

In order to increase the forest and tree cover and improve the quality of existing forest, afforestation in the country is taken up under various centrally sponsored schemes such as NAP, Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS), Integrated Watershed Management Programme (IWMP), National Bamboo Mission (NBM) and under Compensatory Afforestation Fund Management and Planning Authority (CAMPA) among others.

The National Afforestation Programme (NAP) of the Ministry of Environment and Forests is a 100 percent centrally sponsored scheme for afforestation and tree plantation and eco-restoration of degraded forests and adjoining areas in the country.

The Scheme is being implemented through a decentralized mechanism of State Forest Development Agency (SFDA), Forest Development Agency (FDA) and Joint Forest Management Committees (JFMCs) at village levels.

National Green Tribunal

The National Green Tribunal (NGT) was established on October 18, 2010 under the National Green Tribunal Act 2010.

It has been set up for effective and expeditious disposal of cases relating to environmental protection and conservation of forests and other natural resources including enforcement of any legal right relating to environment and giving relief and compensation for damages to persons and property and for matters connected therewith or incidental thereto.

It is a specialized body equipped with the necessary expertise to handle environmental disputes involving multi-disciplinary issues. The Tribunal is not bound by the procedure laid down under the Code of Civil Procedure, 1908, but is guided by principles of natural justice.

The Tribunal's dedicated jurisdiction in environmental matters is aimed at providing speedy environmental justice and help reduce the burden of litigation in the higher courts.

The Tribunal is mandated to make and endeavour for disposal of applications or appeals finally within 6 months of filing of the same.

Solar And Renewable Energy

The government has launched the LED project, where the government is replacing the lighting load of the country with LEDs, will reduce the carbon dioxide emissions by the tune of 80 million tonnes per annum and the economically prudent project will help the consumer save around Rs 40,000 crore in electricity bills annually.

India is trying to move from a highly thermal power generation dependent economy towards renewable energy, the Minister said. The solar power programme has been scaled up from a 20 GW target to 100 GW by 2022 and put together all the renewable energy sources, including the large hydro projects, India will have 225 GW of renewable and clean energy sources by 2022.

The government is looking to process every litre of water that comes out of the mines in the country so that clean drinking water may be provided to all the people living in the area as well as be used to rejuvenate rivers and underground water table.

For thermal power plants, the government has made it mandatory for any waste water processing unit in the 50 km radius of the plant to compulsorily use the waste water discharged from the plant and the recycled water would have to be compulsorily used by the thermal power plant so that the clean water is available to serve the people living around the plant.

Conversion of India's vehicles to electrical vehicles has a potential to save fossil fuels worth about USD 100 billion annually, which in turn would save the country precious foreign exchange, prevent the dependence on imported petroleum products and reduce the pollution in cities by 80-90 percent.

AEEE

The Alliance for an Energy Efficient Economy (AEEE) under the leadership of the Bureau of Energy Efficiency (BEE) and NITI Aayog has recently released the first Nationwide ‘State Energy Efficiency Preparedness Index’.