Research Paper Economics

Status of Environmental Sustainability of Indian states

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ABSTRACT

One of the greatest challenges facing humanity is environmental degradation, including deforestation, desertification, and climate change- an issue of increasing concern for the international community. Environmental degradation increases the vulnerability of the societies it affects and contributes to the scarcity of resources. The people hardest hit by climate change and environmental degradation are those living in the most vulnerable areas, including coastal communities, small island nations, Sub-Saharan Africa and Asian delta regions. It is the poorest of the poor, who lack the resources to prepare, adapt and rebuild, that are the most affected. Environmental degradation leads to a scarcity of resources, such as water and farmable.

This research paper briefly focus on effects of environmental degradation and tracks the environmental performance of States of India and the ability of the States to protect their environment in the coming years.

Keywords : Environment degradation and its effects, environment sustainability in India

Introduction:

Climate change and environmental degradation affects all types of development project in all countries. If development agencies are serious about contributing to the climatic and environmental hazards which impact on their projects. Climate change and environmental degradation are proceeding rapidly and are already affecting many communities in developing countries. Climate change is any long term significant change in the climate over time, caused by nature or human activities. It comprise for instance:

- Unpredictable rainfall patterns leading to lack of access to safe water.
- Rising temperatures and drought leading to crop failure and food insecurity.
- Increased likelihood of hazards, such as floods and landslides and more severe cyclones.

In order to ensure that development work is appropriate and helps people who are the most vulnerable to environmental and other hazards, a deeper awareness of environmental issues is needed. It is not always possible to determine which changes are due to climate change and which are due to environmental degradation. The important thing is to understand what is changing and plan an appropriate response. Now we will talk about in a few words concerning environmental degradation and its impacts, and also visualize the performance of the States of India to attain environmental sustainability.

Environmental degradation and its effects:

Environmental crisis affects everyone on the planet, but the degree to which the inhabitants of different parts of the world contribute to this crisis depends on the level of their economic development. The relationships between population, resources and environment are complex, and are complicated by inequity and inefficiency in industrialized and developing countries alike. Poverty, injustice, and environmental degradation interact to create tension by competition for non renewable resources like land or energy. Serious environmental problems are the result of both short term expediency and long term ignorance. Economic development cannot take place on a deteriorating environmental resource base while environment cannot be protected when growth leaves out of account the cost of environmental destruction. Environmental degradation can lead to a scarcity of resources, such as water and farmable extreme weather events, such as severe flooding, increase the spread of water borne diseases, such as malaria and diarrhea.

The effects of the major environmental problems are as follows:

- High levels of air, water and waste pollution emanating from large industrial centers, in some areas resulting in regional “hot spots” causing serious damage to human health and the natural environment.
- High levels of ambient air pollution in larger settlements due to industrial emission, inefficient heating systems based largely on high sulphur- content coal, fuel oil or lignite and exhaust from old automobiles.
- Inefficient and wasteful use of natural resources such as timber, minerals, fuels, land and water, resulting in various environmental problems.
- Pollution of most surface waters by industrial and agricultural discharges or municipal waste water effluent (heavy metals, toxic chemicals, nitrates). Poor groundwater quality in many areas
- Contaminated soil in some areas due to poor waste management practices, deposition of air pollution and the use of agricultural chemicals; serious soil erosion in some areas due to intensive agricultural practices and related water policies.
- Past environmental pollution from abandoned military or industrial sites (toxic wastes, degraded soils, etc.) environmental liabilities have affected privatization, significantly lowering the value of some privatized property.
- Neglect of nuclear safety. Serious concerns about nuclear safety prevailed throughout the 1990s in the region. These included under solved or improper disposal of nuclear and other hazardous wastes from energy production and military.
- Waste management has been neglected in the past and remains very underdeveloped today in many areas. Numerous uncontrolled, illegal waste dump sites exist. Capacities and facilities to properly dispose and process waste are largely lacking.
- Municipal environmental infrastructure (e.g. water supply, wastewater collection and treatment, district heating, waste management) is often underdeveloped, in disrepair

or simply not existing. Large segments of the population were not connected to sewage systems and in many cases did not have continuous access to safe drinking water.

- Economic development pressures on valuable ecosystems and biological diversity.

The impact of environmental disasters can be devastating on the social, Economic, and environmental systems of a country or region as well as the global ecosystems. Environmental disasters do not recognize man made borders, and threaten the legacy left to future generations of a clean and supportive environment.

Status of environmental sustainability in India.

Humanity is facing an increasing number of global-scale problems including climate change, resource depletion, terrorism, intractable poverty and possible pandemics. As these problems become more evident, there are increasing calls for a change in how we manage our affairs and our relationship with the environment, thereby is a move towards sustainable development. At the same time there are scenarios projecting the collapse of rapidly globalizing world. This has brought awareness in the society. As a step to move for sustainable development, it is necessary to continuously ascertain the state of environment, which determines the priorities and helps deciding future policies.

The following information about environmental sustainability of Indian States is based on "environmental sustainability index- 2008 report"- (Rupanwita Dash). From these secondary data, we can visualize the situation of Indian States to attain environmental sustainability and indicators enables states to get a more nuanced picture of their performance. Indicators have not been used in this research paper. The Environmental Sustainability Index is a ranking tool which maps the environment performance of 28 states of India. A state with higher ESI ranking means it has managed its natural resources stock judiciously; face less stress on it environment systems and less impact on human health. On the contrary, a State with lower ESI indicates that it has depleted its stock of natural resources and has a accumulated waste and pollution which has created stress on ecosystem and human health. It is relatively new concept and a pioneer effort with regard to Indian States. The rankings are relative and done on a scale of 0 to 100, allowing for states to see how well they are doing in comparison of other States. The ESI scores and ranks of all the 28 States are as follows

TABLE NO.1: ESI SCORES AND RANKS OF 28 STATES OF INDIA

STATES	ESI SCORES	ESI RANK
Manipur	100.00	1
Sikkim	90.99	2
Tripura	85.81	3
Nagaland	82.08	4
Mizoram	81.58	5`
Arunachal Pradesh	75.45	6
Chhattisgarh	74.09	7
Orissa	71.88	8
Uttranchal	71.18	9
Assam	70.15	10
Meghalaya	66.79	11
Jharkhand	64.33	12
Himachal Pradesh	61.24	13
Karnataka	55.79	14
Kerala	53.71	15
Bihar	51.98	16
Jammu & Kashmir	48.73	17
Goa	45.16	18
Madhya Pradesh	43.01	19
Maharashtra	37.28	20
West Bengal	35.72	21
Tamil nadu	33.75	22
Andhra Pradesh	32.55	23
Rajasthan	26.52	24
Haryana	25.59	25
Uttar Pradesh	21.40	26
Gujarat	10.46	27
Punjab	0.00	28

Most north-eastern States such as Manipur, Sikkim, Tripura, Nagaland, and Mizoram are ranked higher and are on a sustainable trajectory than most other States. The next cluster is formed by Arunachal Pradesh, Chhattisgarh, Orissa, Uttaranchal, Assam, Meghalaya, Jharkhand and Himachal Pradesh; these States have ESI scores in 60.01 to 80.00 range and show moderate sustainability. Six states Karnataka, Kerala, Bihar, Jammu & Kashmir, Goa and Madhya Pradesh are among the average performer with ESI scores between 40.01 to 60.00; these States might face serious concerns in terms of sustainability. ESI score below 40 projects alarming picture for majority of the States like Maharashtra, West Bengal, Tamil nadu, Andhra Pradesh, Rajasthan, Haryana and Uttar Pradesh. Gujarat and Punjab (ESI scores of 10.46 and 0.00 respectively) are in the extremely alarming range.

The index gives a comparative picture of the environmental conditions in each state in terms of water, air, soil, forest and other natural resources, thereby enabling governments to prioritize budgetary allocations in favour of areas where intervention is most urgently required. At the same time it shows the magnitude of pollution and depletion of resources, which should be a signal for Indian industries to pay more attention to their environmental footprints and should create competitive pressure for improved performance.

The ESI score and ranks of each State is only a summary picture of environmental sustainability of the state. While a single score or rank is useful as summary; the real policy and action value is driven by the underlying policy categories and indicators used to construct the ESI for Indian States.

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