

SOCIO ECONOMIC COSTS OF ENVIRONMENTAL DEGRADATION SOME POLICY ISSUES

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Introduction

1. Perhaps a concern for the socio economic costs of environmental degradation can be looked at in the context of three issues:

- Poverty and environment
- Development and environment
- Economics and environment

2. It might seem that these three issues are actually one, and are covered under the broad head of development. However, our past experience does not vouch for the fact that development issues are identical to issues of poverty alleviation. Similarly, it is not correct to think that development is only economic development.

3. Perhaps in its original use, the term development was synonymous to 'economic growth'. However, almost from the start, there was a demand to include equity in the definition. It took many years for the term development to start meaning not just economic growth, but growth with equity. In the last three decades, there has been a similar demand to include the notion of environmental sustainability into the meaning of development. However, despite the fact that there is some agreement, at a theoretical level, that development must mean growth which is equitable and sustainable, in India, as in most of the world, the term continues to be used and operated as if it only stands for economic growth.

Caring for the Environment

4. In the on going debate on development and environment, the first task is to identify the still relevant issues. Today, it is no longer necessary to establish that environmentally destructive economic growth can only, at best, be short term; that a neglect of the environment seriously inhibits the potential for socio-economic progress; or that economic growth must be equitable and environ-

mentally sustainable if it is to be seen as development. However, despite broad agreement on these points, the process of protecting and regenerating the environment faces many obstacles in India.

5. Perhaps the most formidable of obstacles is put up by those who attempt to depict conservation efforts as a conflict between the interests of "tigers and trees", on the one hand, and of tribals and poor rural communities, on the other. Such persons argue that wild life protection is against the interest of the local people, whose needs must take predominance.

6. Unfortunately, such arguments not only move governments, but also many "environmentalists". However, in such a debate what is often forgotten is that the conflict is not really between wildlife and people, but between one class of people and another. It is not the protection of wildlife that is causing the impoverishment of the people, it is the protection of the interests of a few rich people which is causing this.

7. When people and their livestock are sought to be kept out of sanctuaries or forests, a hue and cry is raised to allow them in, even though this is illegal, on humanitarian grounds. However, in almost all such areas there are huge tracts of agricultural lands owned by rich landlords, in violation of land ceiling laws. But there is no corresponding hue and cry to distribute these surplus lands to the poor people, even though that would be legal. Besides, if this land was distributed, the poor people would not need to destroy the sanctuaries and forests, and thereby their own future.

8. Recently, the Madhya Pradesh Government has ordered the opening up of all sanctuaries for the collection of non-timber forest products, even though this is in violation of the Wildlife (Protection) Act, as amended in 1991. All appeals to withdraw this illegal order seem to have fallen on deaf ears.

9. The next level of impediments are put by those who believe that all "development" projects are sacrosanct and that the value of even one watt of electricity or one unit of industrial production far surpasses anything found in nature. Such people usually talk about the importance of protecting the environment but quickly add that it should not be at the cost of development. The qualification at the end then becomes the justification for pushing through even the most destructive of "development" projects.

10. Apart from forgetting that economic growth, which is environmentally destructive, is neither sustainable nor development, such people also forget that whereas the environmental destruction they wreak will affect mainly the poor, much of the short term benefits of their "development" projects will go to the rich.

11. The segment of society which thinks like this is willing to totally sacrifice the environment for the production of energy, but are not willing to sacrifice a single air conditioner for the conservation of energy. Such interests will not raise a finger to protect the health of millions of people from the impact of pollution (for example from the Rajghat power station in Delhi) but will move heaven and earth to protect those among themselves who have been responsible for setting up or allowing the operation of such hazardous plants. They will insist on locating "development" projects at the most environmentally inappropriate sites because political, procedural and administrative interests need, in their opinion, greater protection than the environment (for example the proposed power stations at Bawana, Kayamkullam and Dholpur).

12. Then there are those who profess to follow the ideology represented by the oft quoted statement "poverty is the greatest polluter". They immediately reduce any discussion on the environment to a discussion on the population, especially the poor population. To them, the masses of poor people are not only the polluters but also the pollutants. They throw up their hands and

announce that nothing can be done to save the environment unless the population is controlled. They sit in well lighted, wood panelled offices, with mounds of paper around them, and show you pictures of poor rural women carrying head loads of fuel wood out of forests. Unless this can be stopped, they argue, the forests are doomed. Over mutton curry, you are told that it is the goats which are ruining the forests of India.

13. Incredibly, they see no connection between their own life styles and environmental destruction. They don't recognise that, as far as the environment goes, it is not the number of people but the number of consumption units that matter. And, that, a family living in affluence in the city consumes thirty to forty times the resources, and generates many times the waste, that a poor village family does. So, the important issue is not the controlling of the population, but the controlling of consumption. The same Americans and Europeans who write heart rending articles and make moving films about the destruction of rain-forests in Brazil, also eat the enormous number of hamburgers that necessitate the conversion of agricultural lands in Brazil into grazing lands, and the consequent destruction of the rain-forests.

14. There are also those who constantly talk of the financial and economic costs of conservation. They use fancy cost benefit analysis techniques to show that destruction of the environment is economically justified and, therefore, in public and national interest.

15. The fact that their techniques can find justifications for destroying the environment does not reflect on the value of the environment but in fact on the value of economics as a science.

16. Unfortunately, economics can only ascribe value to those "goods and services" which are either an input to, or an output of, an economic activity. It can only ascribe such value by calculating the "replacement costs". For example, the value of a tree, in economic terms, would be nothing more than the replacement cost of those "functions" of a tree (timber, fuel wood, etc.) which can be replaced by some other economic process or product. But what about all the irreplaceable functions of a tree, or of the environment in general. These cannot be measured, therefore instead of being treated as invaluable, they get treated as valueless.

17. Also, the environment is essentially a factory or industry, which needs no commercial energy, no costly raw-materials, maintains itself and reproduces itself, for infinity, consequently, whatever economic price you put to its product, when you multiply it with infinity, the value becomes infinite. But, economics, as a science, cannot handle such notions.

18. The proponents of such a view put their faith totally in "cost - benefit" analysis. However, what is required even more urgently is "class - benefit" analysis. The fact that a project has more benefits than costs does not make it socially viable. The important question is, who gets the benefits and who pays the costs. This is rarely talked about.

19. Perhaps the greatest impediment is put up by the government itself. India has among the most comprehensive environmental policies and laws in the world (See Annexure for details). However, they are comprehensively ignored and violated every day. Some argue that perhaps the reason why such progressive policies and laws are allowed to be formulated is because there is confidence that they would never be enforced.

20. For one, the task of looking after the environment is left almost totally to the ministries and departments of environment, with all other sectors of the government acting as adversaries. There is almost no internalisation of environmental concerns within much of the government.

21. Secondly, though there is budgeting of financial resources in the government, there is no budgeting of natural resources. As a result, there is a constant demand for natural resources without the ability to properly plan and ensure that they are allocated on the basis of optimality rather than on a first come first serve basis.

22. Thirdly, in order to protect itself from the consequences of violating its own laws, the government operates in almost total isolation and secrecy. Information that could be even minimally embarrassing for the government is zealously guarded. This essentially makes it impossible for the people and their organisations to play the watch dog role allocated to them by the government itself; or of even exercising their basic rights as citizens in a democracy. People's participation is, therefore, an element of those same policies which are enunciated but not implemented.

23. Finally, whereas there is a lot of talk about the environment, within the government, there is not much money. The paucity of funds is also an important impediment to environmental conservation and regeneration.

Annexure

The Indian Situation

24. To understand the practice and potential of establishing in India a developmental model which is in harmony with the natural environment and thereby sustainable, it is essential to understand various processes, institutions and instruments of governance, across different levels. These include:

- The integrated and sectoral plans at the national level
- Laws concerning the environment in terms of
 - i) Conservation, including protection and sustainable use
 - ii) Regeneration
- Policies and guidelines related to
 - i) The environment
 - ii) Sectors having a significant impact on the environment
 - Energy
 - Agriculture
 - Industry
 - Finance
 - Science & Technology
 - Water and Irrigation
 - Health
 - Urban Development
 - Mining

Transport
Labour
Tourism
Rural Development

Integrated and Sectoral Plans

25. Unfortunately in the overall objectives of the Eighth Plan, contained in Objectives, Thrusts and Macro-Dimensions of the Eighth Plan, brought out by the Planning Commission in December, 1991, there is no mention of the environment or of environmentally sustainable development.

26. Though there is a separate section on the environment and forests, there is no section which indicates how, if at all, environmental concerns are to be integrated into planning and implementation of the other sectors.

27. The document also contains a section on "Emerging Issue of Planning and the Needed Policy Correctives". It identifies the issue as follows:

The most glaring problem that faces planning is that the essence of the planning process has been eroded. If planning is to be a prioritised application of resources-human, material and financial-to the needs of development, the process has to keep enough operational efficiency to make adequate and timely investments in priority programmes and to have reserves to take up new initiatives in short, medium and long term development.

28. Even at this level, there is no mention of natural resources. This section goes on to list, as priority sectors, Energy, Physical Infrastructure, Irrigation, Agriculture, Social Services, and Poverty Alleviation. However, the description of these priority sector goals contains no mention of environmental sustainability or protection.

Laws

29. Some of the Constitutional provisions and laws which seek to control environmental degradation, are:

— Constitutional provisions relating to the protection of environment

By the Constitution (42nd Amendment) Act, 1976, Article 48A was inserted in Part IV of the Constitution. Article 48A of the Constitution reads as under:-

"48A: protection and improvement of environment and safeguarding of forests and wild life:- The State shall endeavour to protect and improve the environment and to safeguard the forests and the wild life of the country".

By the Constitution (42nd Amendment) of 1976, Article 51-A has been added as Part IV-A of the Constitution of India. Article 51-A reads as under:-

"51A: Fundamental duties - It shall be the duty of every citizen of India:

(g) to protect and improve the natural environment including forests, lakes, rivers, and wild life and to have compassion for living creatures;"

— The Environment (Protection) Act, 1986.

This is a comprehensive act which seeks to control environmental pollution, to prevent environmental degradation, and to regulate hazardous substances and processes.

The Act States:

"... The Central Government shall have the power to take all such measures as it deems necessary or expedient for the purpose of protecting and improving the quality of the environment and preventing, controlling and abating environmental pollution".(Section 3(i))

— The Water (Prevention And Control of Pollution) Act, 1974 (as amended in 1978 and 1988).

Apart from laying down and enforcing water quality standards, this act also regulates the setting up of new industries as it stipulates the necessity of getting a No Objection Certificate from the concerned Pollution Control Board. As per the provisions of Section 25 of the Water (Prevention and Control of Pollution) Act, 1974, without the previous consent of the State Pollution Control Board no person shall bring into use any new or altered outlet for the discharge of sewage effluent or trade effluent into a stream or well or sewer or on land or begin to make any new discharge of sewage effluent or trade effluent into a stream or well or sewer or on land.

In case the industry falls in the list of 20 highly polluting industries , an environmental clearance is also required to be obtained from the respective Director of Industry of the State where the factory/plant is being set up.

— The Air (Prevention And Control of Pollution) Act, 1981 (as amended in 1987).

This act lays down and enforces air pollution standards and regulates the setting up of new industry by laying down the necessity of getting a no objection certificate from the concerned pollution control board. It has other provisions similar to the 'Water Act'.

— The Water (Prevention and Control of Pollution) Cess Act, 1977

This Act provides for the levy and collection of a cess on water consumed by persons carrying on certain industries and by local authorities with a view to augment the resources of the Central and State Pollution Control Boards.

— The Indian Forest Act, 1927

This Act demarcates forests into different categories, with differing levels of protection and management. The Act regulates the use of forests and the extraction of timber and other forest products.

— The Forest (Conservation) Act, 1980

This Act prohibits the diversion of forest land for non forestry use, except with the prior permission of the Central Government.

- The Wildlife (Protection) Act, 1972

This Act protects wilderness areas and wild plants and animals. Under the Act areas with unique or representative ecosystems are protected as national parks and sanctuaries.

- The Insecticides Act

This Act regulates the production and utilisation of insecticides.

- The Factories Act This Act regulates the safety aspects of factories.

Policies and Guidelines

30. For the purpose of this paper, two types of policies and guidelines need to be assessed :

- Environmental Policies
- Policies relating to other sectors relevant to the environment, like the Industrial Policy, Water Policy and the Technology Policy.

Environmental Policies

31. The recently announced Policy Statement on Environment and Development comprehensively covers most of the important aspects of environmental conservation and regeneration. It identifies important areas of environmental concern and lists environmental issues of concern to other factors of the government.

32. Another important policy statement is the " Policy Statement for Abatement of Pollution", tabled in Parliament in the beginning of 1992. Given below are extracts from this statement :

The objective is to integrate environmental considerations into decision making at all levels. To achieve this, steps have to be taken to :

- prevent pollution at source;
- encourage, develop and apply the best available practicable technical solutions;
- ensure that the polluter pays for the pollution and control arrangements;
- focus protection on heavily polluted areas and river stretches; and
- involve the public in decision making.

33. The Policy Statement goes on to address the crucial issue of integrating environmental concerns into all sectors of development. It also has the following section on the environmental audit of industries :

Environmental Audit : Industrial concerns and local bodies should feel that they have a responsibility for abatement of pollution. The procedure of an environmental statement will be introduced in local

bodies, statutory authorities and public limited companies to evaluate the effect of their policies, operations and activities on the environment, particularly compliance with standards and the generation and recycling of waste. An annual statement will help in identifying and focusing attention on areas of concern, practices that need to be changed and plans to deal with adverse effects. This will be extended to an environmental audit. The measures will provide better information to the public.

The Ministry has followed it up by recently issuing a notification making environmental audit of industry compulsory.

34. There is also a *National Forest Policy* which seeks to regulate the protection and "working" of forests.

35. *Guidelines for Environmental Clearances* : At present, all public sector projects above a certain investment limit, or requiring funding from the Central Government, need environmental clearance. Even private sector projects which either need forest clearance (under the Forest (Conservation) Act (discussed earlier under Laws), or involve foreign assistance, require prior environmental clearance.

36. The Ministry of Environment and Forests (MOEF) is responsible for assessing these projects and accepting or rejecting them from the environmental angle. For this purpose the Ministry has drawn up environmental guidelines for different sectors.

37. The recent notification of January, 1992, if it is finally gazetted, would have expanded the scope of these guidelines and made them applicable to both public and private sector and to a larger range of activities and investment levels. It would also delegate some of the authority to the State Governments.

Other Sectoral Policies

38. It is not possible, in the time available, to do an analysis of all the relevant policy statements of the Government of India. As such a few of the most relevant ones have been selected.

39. *Industrial Policy*: The Government of India tabled a Statement of Industrial Policy in the Lok Sabha (Lower House of Parliament) on 24 July, 1991. This statement contains the following sections about the environment:

Government will continue to visualise new horizons. The major objectives of the new industrial policy package will be to build on the gains already made, correct the distortions or weaknesses that may have crept in, maintain a sustained growth in productivity and gainful employment and attain international competitiveness. The pursuit of these objectives will be tempered by the need to preserve the environment and ensure the efficient use of available resources.

40. Again, in para 23 the statement talks about abolishing industrial licensing except for specified industries because these are, among other things, having "problems related to safety and over-riding environmental issues." Finally, while talking about industrial location, the statement says :

In respect of cities with population greater than 1 million, industries other than those of a non polluting nature such as electronics, computer software and printing will be located outside 25 kms. of the periphery, except in prior designated industrial areas.

A flexible location policy would be adopted in respect of such cities (with population greater than 1 million) which require industrial re-generation.

Zoning and Land Use Regulation and Environmental Legislation will continue to regulate industrial location.

The statement also has a section on technology but, without any reference to environmentally friendly technologies.

41. *Technology Policy*: The Technology Policy Statement was announced by the Government in early 1983. This statement contains the following sections relevant to the environment :

Energy : Energy constitutes an expensive and sometimes scarce input. Therefore, the energy requirements both of a direct and indirect nature from each product and each production activity and the associated technology employed will be analysed. Measures will be devised to avoid wastage or non-optimal use of energy. Fiscal measures as necessary will be introduced to ensure these. Research and Development in the energy sector will aim at improving the efficiency of its production, distribution and utilisation, as well as improvement of efficiency in processes and equipment.

Efficiency and Productivity : Technologies already employed will be evaluated on a continuing basis to realise maximum benefits in terms of increased production and lower costs, specially in the public sector enterprises. Every effort should be made to utilise by-products and wherever possible to recycle waste materials, especially those from urban areas. Programmes to make use of the easily available and less costly materials will be supported.

Environment : Development should not upset the ecological balance for short as well as long-term considerations. Poorly planned efforts to achieve apparently rapid development, ignoring the long-term effect of many technologies on the environment, have resulted in serious ecological damage. It is, therefore, essential to analyse the environmental impact of the application of each technology. Due regard will be given to the preservation and enhancement of the environment in the choice of technologies. Measures to improve environmental hygiene will be evolved.

42. *National Water Policy* : This policy has various sections dealing with the environment, notably :

In the planning, implementation and operation of projects, the preservation of the quality of environment and the ecological balance should be a primary consideration. The adverse impact, if any, on the environment should be minimised and should be off-set by adequate compensatory measures.

There should be an integrated and multi-disciplinary approach to the planning, formulation, clearance and implementation of projects, including catchment treatment and management, environmental and ecological aspects, the rehabilitation of affected people and command area development.

Water quality : Both surface water and ground water should be regularly monitored for quality. A phased programme should be undertaken for improvements in water quality.

Conservation of Water : The efficiency of utilisation in all the diverse uses of water should be improved and an awareness of water as a scarce resource should be fostered. Conservation consciousness should be promoted through education, regulation, incentives and disincentives.

Conclusion : In view of the vital importance of water for human and animal life, for maintaining ecological balance and for economic and developmental activities of all kinds, and considering its

increasing scarcity, the planning and management of this resource and its optimal, economical and equitable use has become a matter of the utmost urgency. The success of the national water policy will depend entirely on the development and maintenance of a national consensus and commitments to its underlying principles and objectives.

43. Unfortunately, the water allocation priorities, listed in the policy, do not acknowledge the need to allocate water for ecological needs. The order of priorities is :

Drinking water, irrigation, hydro-power, navigation, industrial and other uses.

44. Fiscal Policies : Some of the existing fiscal measures, especially financial incentives, are :

- (i) Depreciation on air pollution and water pollution control equipment used in industries and other business is allowed at a special rate of 50% instead of the normal rate of 33.33%.
- (ii) Section 35CCB allows a deduction to an assessee having income from business or profession in respect of expenditure incurred, subject to certain conditions, for conservation of natural resources. This section has been recently amended by the Finance Act, 1990, to include expenditure incurred on afforestation also. Section 80GGA allows deductions for similar payments made by assesseees who are having income from sources other than business or professions.
- (iii) Section 5G exempts capital gains arising on sale of land, building, plant and machinery etc. when an industrial undertaking is shifted from urban areas. This is intended to promote shifting of polluting industries from urban areas.
- (iv) Concessional customs duty of 40% has been prescribed in respect of 35 specified pollution control instruments/equipments.
- (v) Further 26 specified pollution control instruments/equipments enjoy concessional excise duty of 5%
- (vi) Under the Water Cess Act, 1977, a rebate of 70% is provided for treating the effluent to the prescribed standards.
- (vii) In order to encourage industries to implement pollution control measures in their units, a scheme of awards has been instituted from 1990-91. Under this scheme awards will be given to units for achievements in pollution control over and above the statutory requirements of pollution control, particularly for adopting pollution prevention technologies.
- (viii) There is also a proposal to award "ecomarks" to those products and industries which are environmentally friendly. This would entitle the Industry to display this mark on its products thereby having an edge in the market. The proposal is expected to be operationalised soon.