

CENTRE FOR CIVIL SOCIETY

CCS Review of the NATIONAL ENVIRONMENT POLICY 2004

**Institutions, Incentives, & Communities
in the Environment**



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Introduction

It is an encouraging sign that in its draft of the National Environment Policy 2004, the Ministry of Environment and Forests acknowledges policy failures of omission and commission as the most critical factor in India's environmental mismanagement. The draft NEP 2004 identifies the failed policies but unfortunately falls short in carrying the logic forward in its search for solutions. Its recommendations are a contradictory mixture of the new and old ideas, lacking the clarity and consistency necessary to address the serious problems in our natural resource management.

Outcome of any policy depends on the institutional structure within which the policy operates (North 1990). Institutions and the incentives and disincentives they generate are solely responsible for the success or failure of a policy. Decisions are optimal when decision makers bear the full costs as well as the benefits of their decisions. The fundamental problem in environmental management is that the costs and benefits are shouldered generally by different parties—the tragedy of the commons (Hardin 1968).¹ Thus ownership or stewardship of natural resources by the communities that are affected directly by these resources creates a framework that is able to resolve the perceived conflict between humans and the ecology.

On the Right Path

The NEP 2004 is definitely on the right path with its emphasis on the 'wise-use' approach instead of the western approach of wilderness. Its overarching goal is to find ways to manage the environment so that humans can co-exist and prosper with it and not against it—the right to economic growth and social development.

- The NEP 2004 proposes economic efficiency criterion in environmental conservation. It stresses on the polluter pays principle as well as cost-benefit optimization. These concepts are vital in order to solve environmental problems effectively.
- The draft policy for the first time talks about dealing with environmentally damaging behaviour on the basis of civil suits, as opposed to the current reliance on criminal suits. Civil cases are flexible, with sanctions customised on a case-by-case basis. The burden of proof is reduced, and the cases dealt with relatively speedily.
- The draft policy explains the failure of command-and-control instruments used for environmental compliance and enforcement, and proposes the idea of market-based instruments relying on price incentives. This is a very encouraging step and needs to be explored further.

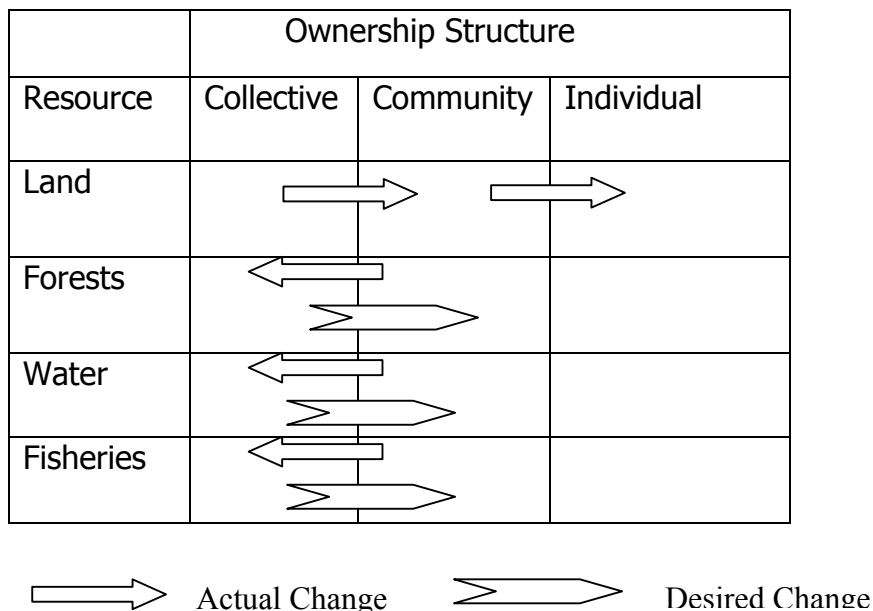
The First Principles

The Centre for Civil Society believes that institutional arrangements are primarily responsible for shaping the behaviour and actions of human beings. If the incentives are compatible with people's self interest, the system would work well. The real challenge in managing our environmental resources is to design and implement right institutions and incentives that are aligned with the well being of the people. The most critical element in the institutional architecture is the allocation of property rights, which is also at the heart of the tragedy of the commons, or more correctly, the tragedy of the collective.

At the basis of the CCS vision of good environmental management is reconfiguration of the resource ownership structure. The forests, water and fisheries should be taken out of collective ownership and be put under community stewardship. Before the advent of the modern, centralizing governments, most of the natural resources were well managed by local communities. Access to a common resource—village pastures for cattle grazing, forests for fruits and fuel wood, wild animals for hunting, river water for agriculture—was controlled by norms and customs, either articulate or inarticulate. Ever increasing demand for these resources due to growing population, accelerating economic development, and improving technologies began to put pressure on the informal norms and customs that managed the

¹ It is actually the 'open access' to the resource that underlies the tragedy. Common property resources with specific set of users who have been free to evolve norms of access and use of the resource are indeed viable and sustainable. Hardin should have labeled it 'the tragedy of the collective'—collectively owned resources with undefined users/owners and managed through the representatives of users and not by users themselves are unsustainable.

access and use of these resources. Unfortunately instead of building on the informal arrangements that had worked well, a completely new method was adopted. The state took over the ownership and management of the common resources. The genuine tragedy is the nationalisation of the commons. And denationalisation—or more aptly, communitisation—is the answer.



Evaluation of Specific Sections in the NEP 2004

Section 5.1.2.ii: Framework for Legal Action

The NEP talks about approaching environmental damages from a civil, rather than a criminal perspective. This change would have the most salutary impact in dealing with environmental damage. For the full effect of this change, the draft policy should include the following two considerations:

- A case of environmental damage can be tried under both civil and criminal law. Many countries have used the dual-track approach successfully. Civil cases offer flexibility and reduce the burden of evidence. They are also relatively speedily concluded and offer (immediate) relief to those affected. The criminal case would serve as further deterrent against such behaviour. Though in some cases punitive damage awards in civil cases could be as if not more effective. The decision of the one case need not be reflected in the other. A conviction under the civil case does not automatically lead to the same in the criminal case.
- The civil cases of environmental harm should be brought by affected parties themselves under a reformed tort law system. The advantage of torts is that no codification is required, and decisions are taken on a case-by-case basis, based on the notion of reasonable behaviour and expectations. The tort approach creates millions of watchdogs (the affected parties) instead of a few vigilant governmental or non-governmental entities.

Section 5.2.1: Land degradation

The NEP 2004 correctly recognises that subsidisation of fertilizers, pesticides, electricity and fuels have led to excessive use of chemicals, changes in cropping pattern and ultimately in alkali-salination, water logging and other problems. However, it falls short of demanding rationalisation and in at least some cases complete removal of such subsidies. Instead of obfuscation on subsidies, NEP 2004 needs to take a clear stand. It must be understood that to be against current subsidies is not to be against helping the poor.

- Subsidies on inputs (fertilizers, pesticides, electricity) have to be immediately stopped. Input subsidies lead to misuse and overuse of inputs with all the attendant impact on the environment.
- A better approach is to provide income subsidy, not input subsidy. Ultimately we want to help the people who earn low incomes from agriculture and other professions, not to increase the use of particular inputs. Income subsidy does not distort the price structure and thereby the choice pattern of farmers and other beneficiaries. One could be against input subsidy and still help the poor by income subsidy.

Section 5.2.2.i: Forests

The NEP 2004 talks about giving legal recognition to traditional rights of forest dwellers. This is indeed a welcome step. The question of how to recognise traditional rights holders remains. The NEP 2004 plans to put into place multi-stakeholder partnerships between communities and forest department officials and argues for universalization of Joint Forest Management.

- While the present policy of JFM encourages participation of local communities in forest management, it falters badly in assuring long-term stake to communities in the improvement of forests (Ostrom 1999). Access to a little amount of minor forest produce is unlikely to illicit the kind of intensive and sustained effort necessary to nurse the forests back to good health. Besides the promised sharing of revenues is rarely legally enforceable against the forest department. This engenders perverse behaviour on the part of communities to grab as much as possible now since the future benefits are uncertain. The JFM needs to move towards Community Forestry Management (CFM) in the style of Nepal and Zimbabwe (Mehta 2002; Hobey, Campbell and Bhatia 1996).
- Nepal's CFM has been a resounding success in improving the forest cover as well as the livelihood options for forest dwellers. The forest department of Nepal has transformed itself into the role of an advisor and consultant, leaving the actual decisions, implementation, and responsibilities to communities (Master Plan 1988). The CFM approach eschews the green vision of protecting the environment by separating it from the people. It endorses the terracotta vision of coexistence of humans in the ecology. The CFM achieves two objectives simultaneously, which no other approach promises even in theory: protection and enhancement of the ecology and improvement in the livelihood and dignity of forest dwellers.
- Under community forestry, the communities are not outright owners but custodians or stewards of forests. In recognising their custodial rights, the government may specify norms related to the nature and density of forests, biodiversity, and general use of forest resources. The communities become stewards of forests. The forest department becomes facilitator and advisor, with supervisory responsibilities with respect to monitoring and assessing the stipulated 'better stewardship benchmarks' agreed upon by the communities in their stewardship contracts.
- The issue of identifying traditional rights holders has been very contentious. Despite the several guidelines issued by MoEF in the late 1980s, the general approach has been to reply upon the official violation or eviction notices given to forest dwellers as the basis of rights claim. Many activists however have cogently argued that the identification should be on the basis of field surveys, community interviews, and other qualitative indicators of settlement and long-term use (Kothari 2002). In order to make this enormous task of identification manageable, activists suggest that all pre-1980 cultivation and settlement by forest dwellers should be regularised immediately.
- The CFM approach provides a different solution to this identification problem. Actually it completely bypasses the problem. It does not try to establish validity of traditional claims by separating 'genuine forest dwellers' from 'encroachers.' It takes the existing community of forest dwellers as the legitimate claimants of stewardship rights. The diversity that exists among today's forest dwellers becomes an asset instead of a liability under the CFM approach. The diverse backgrounds would allow the community to deal with the 'outside' world more effectively and to protect their stewardship rights against the slippery government.
- An understanding of the historical settlement of private property rights further supports the CFM approach. The land that is privately owned today was at some point in time common property, probably a forest. Someone clear-cut it later, the mixing of labour with land led to the recognition of private property right by the government. Those who converted forests into agricultural land

and then into residential or commercial land received property title to that land. But those who let the forests stand are now told that those forests belong to all people, not just to them. The society refuses to recognise any claim of forest dwellers on the forests they sustained all these centuries. Actually the current interpretation of the law views them as encroachers on the society's land. This simply is grave injustice.

- By recognising limited user rights (mainly to minor forest produce) of forest dwellers, the JFM approach attempts to mitigate this injustice. Compared to the CFM approach of broader stewardship rights, the JFM approach perpetuates the injustice unnecessarily and insults the dignity of forest dwellers. It also violates the basic principle of a rule-of-law society—all are equal in the eye of the law—by rewarding forest slashers and punishing forest saviours. Actually the full justice would require the society to go further from stewardship rights and grant full property rights to forest dwellers.
- Unfortunately for forest dwellers, even their own champions and spokespersons do not support the logic of the full justice. Interestingly, they consider any claim further than user rights as against the tribal custom and tradition. It is indeed a gross misfortune that the tribal norms that sustained the forests are now used to deny tribals stewardship or property rights. Is the society worse off by recognising private property rights in non-forest land? Would we be better off if all the land was commonly owned and jointly managed, that is, if there was no private land at all? Who benefits—tribals or non-tribals—by blocking the normal evolution of property rights over forest lands?
- The CFM approach of stewardship rights is moral, just, and practicable than the JFM approach. Moreover, the stewardship rights retain the possibility of full ownership rights if and when that becomes acceptable and viable.
- Some activists have argued that the Section 28 of the Indian Forest Act that recognises 'village forests' can be used to expand user rights of forest-dependent communities. We believe that no sleight of hand is necessary or prudent—the forest dwellers have a moral and legal claim and the society has a moral and legal obligation to honour that claim. Let the matter be discussed openly and widely and arrive at a just resolution.

Section 5.2.4.i: River Systems

The NEP 2004 recognizes that improper or absence of pricing policies for water, electricity and fuels has led to the misuse and overuse of water. However, it does not clearly articulate the routes to rationalise these policies. And it fails to emphasise that the issue of pricing is but a subset of the issue of the user or stewardship or ownership rights to water. The attempt to address the problem of pricing without tackling in some manner the question of rights would mitigate but not resolve the water crisis (Anderson & Snyder 1997; Livingstone 1995).

- A practical way to allocate water rights would be to firm up the system of 'project allocations' used by the government today (Mehta, forthcoming; Thobani 1998).
 - Project authorities generally enter into long term contracts with municipal corporations and other government agencies for supply of fixed quantities of water for various purposes. The major categories of project water use are rural (domestic/irrigation) and urban (domestic/industrial).
 - These quantitative allocations should be converted to legally enforceable proportional allocations of tradable water rights (Holden and Thobani 1996).
 - Once the project allocations are decided, Water User Associations should be given the responsibility of operating and managing the delivery systems, either on their own as cooperatives or by contracting with management agencies (Shah 1991).
 - With respect to any new water project, the government should undertake it only after the concerned water user groups have been formed and have agreed to take on the responsibility of repair and maintenance of the project. (Pangare 2001).
- It must be highlighted that the proposed approach based on project allocations is very different from the emerging practice of privatising river waters by leasing several kilometres of a river to a private company. We vehemently oppose this form of privatisation. Our approach does not create any new claimants; it simply firms up the existing claims so that they become reliable guide to plan long-term water use.

- With the project allocations converted into tradable rights, the delivery of water for (rural and urban) domestic and industrial use can be left to communities, water user groups, or companies. We suspect that for rural areas, communities and water user groups would be more suitable delivery agents, while for urban areas, small and large companies.
- For urban domestic consumption, the suggestion of handing over water delivery to one or two private companies is without real merit. Turning one government monopoly supplier into a private monopoly or duopoly is not much of an improvement. This type uncompetitive privatisation should be avoided at all costs.
- One way to create competition in urban water delivery is to privatise at the ward level. Authorise each ward-level water user group to contract with a private company for the delivery of water within the ward. A contestable market in water delivery would emerge with multiple delivery companies. In case of electricity, countries like Austria have an infrastructure where each household is able to choose its own electricity supplier. This is one end of the choice spectrum. At the other end is the common practice of handing over the whole city to one or two private suppliers. Between these two—the household and the city-level privatisation—is the idea of ward-level privatisation. It is an efficient compromise.
- The problem of families who cannot afford to pay the rate at which their ward has contracted for water delivery can be dealt with in at least two ways. One, decide on ‘free’ allocation per person or per family and then pay for that amount of water from general tax revenue. The charges for the water that is consumed above the ‘free’ quota will be paid by each family. Under this method, the ‘free’ quota is free to all families in the ward—the rich as well as the poor. The second method then subsidises only the poor, while making the rich pay for every drop of water they consume. The ward identifies the poor and pays for their water bill fully or upto the limit of the ‘free’ quota.
- Those who think that it would be difficult to meter water use at the level of each household should ponder about how they are charged for every call that is made from their house, even when there are multiple telephone lines in the house. The telephone bill lists each and every call with the duration, time, and the day. Could the future water bill list for each tap in the house the amount, time and the day of the water consumed? Would the rate for the water consumed during ‘pick hours’ be higher?² Wonders of the private sector greed to charge for every drop of the water they provide!
- It shouldn’t now be difficult to convince that the effective way to control inefficient use of water is to rationalise, reduce, and eliminate the multitudes of input subsidies. In the place of input subsidies, income support could be provided to the target group.

Section 5.2.7.i: Air Pollution

The NEP 2004 correctly argues that inefficient pricing of fossil fuels along with the regulatory and enforcement failures have been the root cause of air pollution in India. It also proposes a renewed focus on incentive based price instruments.

- In a wide ranging discussion on various exotic fuels and stoves to meet the energy needs of rural India, the NEP 2004 fails to mention the ordinary natural gas as a cost-effective cooking fuel for rural areas. The major hurdle in the path of natural gas is not the supply or the price, but the regulatory barriers that the government has placed on its storage and distribution. Large parts of rural Gujarat have small bottles of cooking gas just because a company was able to ‘burn’ the barriers.
- A step that can be taken to control industry generated air pollutants is to put into place a system of tradable permits. China has enjoyed more than double digit economic growth for more than twenty years without suffocating its people in industrial air pollution. It has effectively implemented the idea of tradable pollution permits. A ‘pollution offset’ scheme, in which sources of emissions are free to trade emissions permits subject to non violation of pre determined air quality standard at any receptor point, would work well. It would achieve the pre determined air

² The differential pricing can be implemented for electricity by including a clock in the electricity meter. With the new pre-paid meters, a clock could link the timing of electricity consumption and the charge deducted from the card.

quality at minimum aggregate abatement cost, while making modest demands on both sources and administering agencies. (Krupnick, Oates and Verg 1983).

- In the name of protecting the environment, the government typically runs common effluent treatment plants at industrial estates. This is unnecessary corporate subsidy. The industrial estates should build and run their own treatment plants—the polluter pays, not the taxpayer. Can this corporate welfare. Apply the principle of polluter pays equally and uniformly.
- As regards vehicular pollution, older vehicles can be made to pay higher annual taxes since the age of the vehicle is an important factor in determining the quantity and quality of emissions.

Managing Fishery Resources

The NEP 2004 surprisingly omits any direct discussion on the management of fisheries. A relatively new approach that provides a sustainable solution is to bestow fishing rights to traditional fishing communities (Alessi 1998). A system of Individual Tradable Quotas (ITQs) can be implemented to allocate fishing rights among communities, along the lines of Iceland and New Zealand (Gissurarson 1983; Runolfsson 1999). The government in Iceland first calculated the average amount of fish caught by the family over last several years. Then it gave a legal title to catch that amount of fish from the area forever. These individual/family quotas or legal entitlements were also tradable. The families then formed their own system to enforce the legal quotas, the government's responsibility ended with the one-time allocation of fishing rights.

In the Indian context, however, it seems that the given the number of individuals/families involved in earning their livelihood from fisheries and the wide variation in the average yearly catch, it would be difficult to calculate and to rely on the historical catch. The following variation of ITQ is one model for Indian fisheries:

- Calculate the maximum sustainable yield (MSY) in a given area.
- All families can be given an equal percentage of the MSY as a quota, irrespective of the differences in their historical catch. This would be an egalitarian allocation of fishing rights. The commercial fishing companies would get only their family quota, just as other fishing families.
- The new communities with fishing rights would form cooperatives to monitor and enforce the legal quotas.

Monitoring and Compliance under the New Institutional Structures

In the framework of community ownership/stewardship and market-based instruments, the daunting job of monitoring and compliance becomes decentralised and hence much easier.

- With property/stewardship rights clearly defined, owners/stewards have a personal stake in protecting and expanding their resources.
- Civil cases and the tort law offer flexibility to deal with environmental misdeeds promptly and effectively.
- The government does not have to be involved in filing civil cases. It can simply enable the affected parties to access the judicial system that works efficiently.
- With the implementation of market based instruments—tradable permits—for industry generated air and water pollution, monitoring and compliance is effectively decentralised.

Clearance and Approvals

The NEP 2004 raises serious concerns about the routine delays in the approval and clearance of projects. These delays indeed impact the growth and development. However, it is dangerous to speed up clearance and approval procedures just for the sake of economic development. The following would serve to speed up clearance and also put in safeguards to ensure that projects perceived as harmful by communities are not approved:

- The government should come up with a set of specific minimum standards that have to be met when a project of a certain kind is being undertaken. These standards can be proposed by the union government but should finally be determined by local governments. Every potential entrant in any economic field knows clearly and exactly the standards he has to meet (Dasgupta, Laplante, Wang and Wheeler 2002).

- Before the local government gives final approval to the proposed project, it should make an announcement about the project and invite reactions of the communities, and take the final decision accordingly.
- If the involvement of communities slows down the process of clearance, there should be no objection to that since the main purpose of development is enhancement of community welfare. It is also irrational to assume that communities do realise the costs of the delay—fewer job opportunities, slow improvements of income and standards of living. As long as communities are clear about the costs and benefits, it should be their decision to clear or not clear a proposed project.

Conclusion

As India moves further on the path of economic growth, concerns about the state of the environment are bound to increase. While the process of economic growth involves direct or indirect use of environmental resources, it also brings about more sophisticated techniques of production and better instruments for monitoring and compliance. We need to put in place the institutional framework that creates incentives for environmentally friendly processes and actions (Coase 1960). The rights—of ownership, stewardship, use, maintenance—should be vested as close as possible in the hands of those who are directly affected by the exercise of those rights (Ostrom 1990). In this light, stewardship of natural resources should be vested in the hands of local indigenous communities. Firms should be made to bear the cost of their polluting activities, both by buying the permits to pollute, and also by paying for damages caused.

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